NASA
National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
Houston, Texas 77058

DMS-DR-2493
NASA-CR 167,665

Volume 1 of 2

RESULTS OF INVESTIGATIONS OF THE
0.010 SCALE ØV-102 CONFIGURATION SPACE SHUTTLE
VEHICLE ORBITER MODEL 72-Ø IN THE USAF/AEDC
VKF TUNNEL B
(OA259)

SPACE SHUTTLE AEROTHERMODYNAMIC DATA REPORT

Data Management Services
HUNTSVILLE ELECTRONICS DIVISION CHRYSLER CORPORATION

July 1983

DMS-DR-2493
NASA-CR 167,665

Volume 1 of 2

RESULTS OF INVESTIGATIONS OF THE 0.010 SCALE ØV-102 CONFIGURATION SPACE SHUTTLE VEHICLE ORBITER MODEL 72-Ø IN THE USAF/AEDC VKF TUNNEL B (OA259)

by

M. E. Nichols
Rockwell International
Space Transportation & Systems Division

Prepared under NASA Contract Number NAS9-16283

by

Data Management Services
Chrysler Huntsville Electronics Division
Michoud Engineering Office
New Orleans, Louisiana 70189

for

Systems Engineering Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number:	AEDC V42B-145/V43B-14
NASA Series Number:	OA259
Model Number:	72-Ø
Test Dates:	18 Feb. 1981 to 20 Feb. 1981
Occupancy Hours	16

FACILITY COORDINATOR:

L. L. Trimmer
Arvin/CALSPAN
VKF/Projects
Arnold, TN 37389

Phone (615) 455-2611, Ext.7640

TEST DIRECTOR:

J. M. Underwood
NASA Johnson Space Center
Mail Code ET3
Houston, TX 77058

Phone (713) 483-4228

PROJECT ENGINEERS:

R. H. Burt, W. Crosby
J. T. Best
AEDC
VKF-CALSPAN
Arnold, TN 37389

Phone (615) 455-2611

R. H. Spangler
M. E. Nichols
Rockwell Int'l
STS D&P Div.
12214 Lakewood Blvd.
Downey, CA 90241

Phone (213) 922-5352

A. C. Mansfield
Rockwell Int'l
SRO
3322 S. Memorial Pkwy.
Suite 143
Huntsville, AL 35801

Phone (205) 882-2200

DATA MANAGEMENT SERVICES:

Prepared by: Liaison - S. R. Houlihan
Operations - G. W. Klug

Approved: J. L. Glynn, Manager
Data Operations

Concurrence: N. O. Kemp, Manager
Data Management Services

Chrysler Corporation Huntsville Electronics Division/Michoud Engineering Office assumes no responsibility for the data presented other than display characteristics.

RESULTS OF INVESTIGATIONS OF THE
0.010 SCALE ØV-102 CONFIGURATION SPACE SHUTTLE
VEHICLE ORBITER MODEL 72-Ø IN THE USAF/AEDC
VKF TUNNEL B (OA259)

by

M. E. Nichols
Rockwell International
Space Transportation & Systems Division

ABSTRACT

The 0.010 scale SSV Orbiter Model 72-Ø was tested in the USAF/Arnold Engineering Development Center VKF 50-inch continuous flow hypersonic Tunnel B from February 18 to 20, 1981. Testing was conducted at Mach 6 at Reynolds numbers between 2.0×10^6/ft. and 4.4×10^6/ft. in order to obtain model-to-model and tunnel-to-tunnel repeatability in longitudinal and lateral directional stability. Other tests in this series include LA141, LA144, ØA258 and ØA257 (References 7-10).

The test program consumed approximately 16 occupancy hours, following about 17 days of special model measurements, balance checkloadings, on-site model rework and preparations, and installation.

Test runs were made in both point-pause and continuous-sweep modes for both pitch and yaw polars. Angle-of-attack ranges were 14.5° to 41.5° and 0° to 27°; angle-of-sideslip range was -4° to $+4^\circ$. Speedbrake/rudder, elevon/aileron, and bodyflap deflections remained constant throughout the test.

Upright and inverted runs were made to study tunnel flow angularity, and a series of runs was dedicated to diagnostic investigations on the star-tracker door recesses. In addition, aerodynamic hysteresis and the effects of model temperature on aerodynamic coefficients were studied in several specially devised runs.

TABLE OF CONTENTS

	Page
ABSTRACT	iii
INDEX OF MODEL FIGURES	2
INDEX OF DATA FIGURES	3
INTRODUCTION	7
NOMENCLATURE	8
CONFIGURATIONS INVESTIGATED	12
INSTRUMENTATION	16
TEST FACILITY DESCRIPTION	17
TEST PROCEDURES	20
DATA REDUCTION	22
REMARKS	23
REFERENCES	25
TABLES	
I. TEST CONDITIONS	26
II. DATA SET/RUN NUMBER COLLATION SUMMARY	27
III. MODEL DIMENSIONAL DATA	35
IV. CONTROL SURFACE BRACKET DEFLECTION VALUES	41
V. ESTIMATED UNCERTAINTIES	42
VI. LOAD UNCERTAINTY COMPARISONS	43
FIGURES	
MODEL	44
DATA (Volume I)	56
APPENDIX (Volume II)	
TABULATED SOURCE DATA	56

INDEX OF MODEL FIGURES

Figure	Title	Page
1.	Axis Systems	44
2.	Model Sketches	
	a. Model Installation in VKF Tunnel B	45
	b. Orbiter Nomenclature	46
	c. Orbiter Base Pressure Locations	47
3.	Model Photographs	
	a. Orbiter on Straight Sting	48
	b. Orbiter on 27° Prebent Sting	49
	c. Orbiter Installation (Front View)	50
	d. Orbiter Close-up (Front Quarter)	51
	e. Orbiter Close-up (Top View)	52
	f. Orbiter Close-up (Rear View)	53
	g. Balance Checkloading	54
	h. Balance Checkloading with Automatic Leveling Device	55

INDEX OF DATA FIGURES

FIGURE NUMBER	TITLE	COEFFICIENT SCHEDULE	CONDITIONS VARYING	PAGES
1	REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING A BASELINE CONFIGURATION	A	RN/L, S-MODE S-DIR, BETA	1- 16
2	REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B (A) BASELINE CONFIGURATION	A	RN/L, S-MODE S-DIR, BETA	17- 36
	(B) COOLED MODEL	A	RN/L	37- 40
3	REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A (A) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION	B	RN/L	41- 44
	(B) ALPHA = 17.5	B	RN/L	45- 52
	(C) ALPHA = 20.0	B	RN/L	53- 60
	(D) ALPHA = 22.5	B	RN/L	61- 68
	(E) ALPHA = 25.0	B	RN/L	69- 76
	(F) ALPHA = 27.5	B	RN/L	77- 80
	(G) ALPHA = 30.0	B	RN/L	81- 84
	(H) ALPHA = 32.5	B	RN/L	85- 88
	(I) ALPHA = 35.0	B	RN/L	89- 92
	(J) ALPHA = 37.5	B	RN/L	93- 96
	(K) ALPHA = 40.0	B	RN/L	97- 100

INDEX OF DATA FIGURES (Continued)

FIGURE NUMBER	TITLE	COEFFICIENT SCHEDULE	CONDITIONS VARYING	PAGES
4	REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B (A) ALPHA = 0.0 DEGREES, BASELINE CONFIGURATION	B	RN/L	101- 108
	(B) ALPHA = 5.0	B	RN/L	109- 112
	(C) ALPHA = 10.0	B	RN/L	113- 116
	(D) ALPHA = 12.5	B	RN/L	117- 120
	(E) ALPHA = 14.0	B	RN/L	121- 124
	(F) ALPHA = 15.0	B	RN/L	125- 132
	(G) ALPHA = 17.5	B	RN/L	133- 140
	(H) ALPHA = 20.0	B	RN/L	141- 148
	(I) ALPHA = 22.5	B	RN/L	149- 152
	(J) ALPHA = 25.0	B	RN/L	153- 156
5	REYNOLDS NUMBER EFFECT IN ROLL, STING B BASELINE CONFIGURATION	C	RN/L,S-DIR	157- 168
6	HYSTERESIS EFFECTS IN YAW PLANE, STING A (A) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION	B	S-DIR,RN/L	169- 176
	(B) ALPHA = 17.5	B	S-DIR,RN/L	177- 184
	(C) ALPHA = 20.0	B	S-DIR,RN/L	185- 192
	(D) ALPHA = 22.5	B	S-DIR,RN/L	193- 200

INDEX OF DATA FIGURES (Continued)

FIGURE NUMBER	TITLE	COEFFICIENT SCHEDULE	CONDITIONS VARYING	PAGES
	(E) ALPHA = 25,0	B	S-DIR,RN/L	201- 208
	(F) ALPHA = 27.5	B	S-DIR,RN/L	209- 216
	(G) ALPHA = 30.0	B	S-DIR,RN/L	217- 224
	(H) ALPHA = 32.5	B	S-DIR,RN/L	225- 232
	(I) ALPHA = 35.0	B	S-DIR,RN/L	233- 240
	(J) ALPHA = 37.5	B	S-DIR,RN/L	241- 248
	(K) ALPHA = 40.0	B	S-DIR,RN/L	249- 256
7	INVERTED MODEL DATA IN PITCH PLANE, STING A	A	-	257- 260
8	INVERTED MODEL DATA IN YAW PLANE, STING A	B	ALPHA	261- 300
9	EFFECT OF MODEL INVERSION ON DATA IN PITCH PLANE, STING A COOLED MODEL	A	S-DIR,CONF.	301- 304
10	COOLED MODEL DATA IN YAW PLANE, STING B	B	ALPHA	305- 312
11	STAR TRACKER DOOR FILLED MODEL DATA, STING B MODEL HEATING EFFECTS	A	CONFIG	313- 316
	(A) ALPHA = 15.0	B	S-DIR	317- 324
	(B) ALPHA = 17.5	B	S-DIR	325- 332

INDEX OF DATA FIGURES (Concluded)

FIGURE NUMBER	TITLE	COEFFICIENT SCHEDULE	CONDITIONS VARYING	PAGES
	(C) ALPHA = 20.0	B	S-DIR	333- 340
	(D) ALPHA = 32.5	B	S-DIR	341- 344
	(E) ALPHA = 35.0	B	S-DIR	345- 348
12	DATA REPEATABILITY IN PITCH, STING A (A) BASELINE CONFIGURATION	A	RN/L	349- 364
13	DATA REPEATABILITY IN PITCH, STING B (A) BASELINE CONFIGURATION	A	RN/L,S-DIR, SMODE	365- 380
14	DATA REPEATABILITY IN YAW, STING A (A) BASELINE CONFIGURATION	B	RN/L, ALPHA	381- 400
	(B) MODEL INVERTED	B	RN/L, ALPHA	401- 404

Plotted Coefficient Schedule:

A)	C_A	VS	α	B)	C_Y	VS	β	C)	C_A	VS	ϕ
	C_N	VS	α		C_n	VS	β		C_N	VS	ϕ
	C_m	VS	α		C_ℓ	VS	β		C_m	VS	ϕ
	C_ℓ(BODY)	VS	α		C_m	VS	β		C_Y	VS	ϕ
	C_n(BODY)	VS	α		C_N	VS	β		C_n	VS	ϕ
	C_Y	VS	α		C_A	VS	β		C_ℓ	VS	ϕ

INTRODUCTION

The 0.010 scale 72-Ø SSV Orbiter Model was used in test OA259 at the USAF/AEDC VKF Tunnel B continuous flow hypersonic facility between February 18 and 20, 1981.

This test was primarily intended to provide lateral directional force and moment data on the Orbiter for comparison with OA258 test results in this tunnel using the 0.020 scale 106-Ø model, to verify aerodynamic similarity between Models 72-Ø and 106-Ø, and to provide a data comparison baseline for the subsequent OA257 test of Model 72-Ø at NASA/LaRC 20-inch Mach 6 tunnel. However, this test also became part of a larger study of tunnel to tunnel repeatability for hypersonic tests, a source of additional GRTLS trajectory verification data, and an investigation of data uncertainty factors for lateral directional stability testing in general.

Pitching moment anomalies observed between earlier tests LA141 and LA144 were also studied in this test, with the result that additional model temperature history runs were devised and conducted.

Additional information may be obtained from References 5-10.

NOMENCLATURE

SYMBOL	MNEMONIC	DEFINITION
A	AF	axial force, orbiter main balance
C_A	CA	axial force coefficient, total orbiter including base, with sting-cavity correction
C_{A_B}	CAB	orbiter base axial force coefficient
C_{A_C}	CAC	adjusted sting-cavity pressure axial force coefficient
C_{A_F}	CAF	orbiter forebody axial force coefficient
C_{A_t}	CA_T	uncorrected orbiter balance axial force coefficient
C_D	CD	orbiter drag coefficient
C_L	CL	orbiter lift coefficient
C_ℓ, C_ℓ(BODY)	CBL	orbiter body axis rolling moment coefficient
C_m	CLM	orbiter pitching-moment coefficient
C_{m_u}	CMU	uncorrected orbiter-pitching moment coefficient
C_N	CN	orbiter normal force coefficient
C_{N_u}	CNU	uncorrected orbiter normal force coefficient
CP_{B_A}	CPBAVG,CPPA	average orbiter base pressure coefficient
CPB_{1-2}	CPB1,2	individual orbiter base pressure coefficients
C_Y	CY	orbiter side force coefficient
C_n, C_n(BODY)	CYN	orbiter yawing moment coefficient, body axis
C_{Y_β}	CYB	side force derivative with respect to beta
CP_C	CPSC	sting-cavity pressure coefficient

NOMENCLATURE (Continued)

SYMBOL	MNEMONIC	DEFINITION
	CPWB,CPWT	Bottom and top tunnel wall static pressure coefficients, respectively (if not designated (i.e. CPW), bottom is implied)(PWB or PWT - P-INF)/Q-INF
	CODE	Model configuration number
	CONFIG	Model configuration designation
	CW,BREF	Model wing reference mean aerodynamic chord, in. (See Data Reduction Section)
C_Y	CY	Side force coefficient, body axes, side force/Q-INF·SW
	DCLL/DBETA	Slope of CLL versus BETA curve at BETA = 0 calculated from a linear least-squares curve fit over BETAs from -0.5 to 0.5 deg., deg^{-1}
	DCLN/DBETA	Slope of CLN versus BETA curve at BETA = 0 calculated from a linear least-squares curve fit over BETAs from -0.5 to 0.5 deg, deg^{-1}
	DCY/DBETA	Slope of CY versus BETA curve at BETA = 0 calculated from a linear least-squares curve fit over BETAs from -0.5 to 0.5 deg, deg^{-1}
ΔC_n(BODY)	DCYN	yawing moment incremental difference between measured coefficient data minus data values at $\beta = 0$, DCYN $= C_{n\beta=\beta} - C_{n\beta=0}$
ΔC_ℓ(BODY)	DCBL	rolling moment incremental difference between measured coefficient data minus data values at $\beta = 0$, DCBL $= C_{\ell_{\beta=\beta}} - C_{\ell_{\beta=0}}$
C_{Y_β}	CYB	side force coefficient derivative with respect to beta, calculated from two methods; for alpha-sweep data, incremental differences between measured data values used; for beta-sweep data slopes of the measured data
C_{n_β}(BODY)	CYNB	yawing moment coefficient derivative with respect to beta calculated from two methods; for alpha-sweep data, incremental differences between measured data values used; for beta-sweep data slopes of the measured data

NOMENCLATURE (Continued)

SYMBOL	MNEMONIC	DEFINITION
C_{ℓ_β}(BODY)	CBLB	rolling moment coefficient derivative with respect to beta calculated from two methods: for alpha-sweep data, incremental differences between measured data values used; for beta-sweep data, slopes of the measured data
$C_{Y_{\delta_r}}$	DCY/DR	side force coefficient derivative with respect to actual rudder deflection calculated using incremental data
$C_{n_{\delta_r}}$(BODY)	DCYNDR	yawing moment coefficient derivative with respect to actual rudder deflection calculated using incremental data
$C_{\ell_{\delta_r}}$ (BODY)	DCBLDR	rolling moment coefficient derivative with respect to actual rudder deflection calculated using incremental data
RN/L, Re	RN/L, RE	unit Reynolds number million per foot
	LAMDAV	sweep angle of vertical tail, degrees
L/D	L/D	orbiter lift to drag ratio
M	MACH	Mach number, v/a
N	NF	orbiter normal force
m	PM	orbiter pitching moment
ϕ	PHI	model roll angle, degrees
P_∞	P-INF	free stream static pressure, psia
P_o	PO	tunnel total pressure, psia
P_t	PT	tunnel stagnation pressure, psfa
Q_∞	Q-INF	free stream dynamic pressure, psi
q	Q,Q(PSF)	free stream dynamic pressure
ℓ	RM	orbiter rolling moment

NOMENCLATURE (Concluded)

SYMBOL	MNEMONIC	DEFINITION
S-DIR	S-DIR	sweep direction; 1 - increasing 2 - decreasing
S-MODE	S-MODE	sweep mode; 1 - continuous 2 - pitch/pause
Y	SF	orbiter side force
T_{M_T}	TMT	upper MPS nozzle surface temperature
T_{B_T}	TBT	bodyflap mounting plate inner-surface temperature
T_p		plenum temperature, ^oF
T_o	TO	tunnel total temperature, ^oR
T_t	TT	tunnel stagnation temperature, ^oF
X_{CP}/L_B	XCP/LB	longitudinal location of the orbiter center of pressure in percent of body length
n	YM	orbiter yawing moment
α	ALPHA	orbiter angle of attack
β	BETA	orbiter angle of sideslip
δ_a	AILRON	aileron deflection, (ELV-L - ELV-R)
δ_{BF}	BDFLAP	bodyflap deflection, positive trailing edge down, deg
δ_{EL}	ELV-L	left-hand elevon deflection angle
δ_{ER}	ELV-R	right-hand elevon deflection angle
δ_R	DR,RUDDER	rudder deflection angle
δ_{SB}	DSB,SPDBRK	speedbrake deflection angle
δ_e	ELEVON	elevon deflection, (ELV-L + ELV-R)/2, deg.
ΔC_Y	DCY	side force incremental difference between measured coefficient data minus data values at $\beta = 0$, DCY = $C_{Y_{\beta=\beta}} - C_{Y_{\beta=0}}$

CONFIGURATIONS INVESTIGATED

The 72-Ø SSV Orbiter Model is a 0.010 scale representation of the ØV-102 configuration. A primary requirement for its use in this lateral-directional stability test was that it exhibit a high degree of symmetry. Toward this end, the model was subjected to an extensive series of modifications, recontourings, and Cordax-machine measurements. These resulted in what has since been referred to as "medium fidelity" to the ØV-102 configuration, defined by the 14414.1 C/C design trajectory OML lines (except in the fuselage/elevon gaps, where 14414.1 C/D lines were used). The model's conformance to these specifications was established by the percentage of "control-point" measurements within certain tolerances:

76% within ± 1 inch full-scale

44% within $\pm 1/2$ inch full-scale

The Orbiter model was of a blended wing/body design with a double delta planform ($81^{\circ}/45^{\circ}$ leading edge) wing of 12 percent thickness and full-span elevons with gaps between the outboard and inboard panels and between the inboard panels and the fuselage. A single centerline vertical tail with rudder/speedbrake capability was mounted between the Orbital Maneuvering System (OMS) pods on the aft fuselage, and a bodyflap was fitted to the lower trailing edge of the fuselage. The Main Propulsion System (MPS) nozzles were simulated, but were trimmed to clear the sting support through the base. The OMS nozzles and all Reaction Control System (RCS) thruster ports in the forward fuselage and OMS pods were simulated.

Fuselage Outer Mold Line(OML) penetrations and protuberances which were simulated include:

- Recessed windshields
- Simulated forward and aft RCS nozzles
- Star-tracker door recesses

The upper surface flipper door panels which blend the wing to the elevon at all deflections were not simulated. A smooth fairing between wing and elevon upper surfaces simulated the flipper door panel.

The Orbiter was constructed primarily of 7076-T6 aluminum, with Armco 17-4 CRES used in certain control surface brackets, the right wing attachment bracket, the balance adapters and the nose attachment sleeve.

The mid/aft upper fuselage was fabricated from a single block with a longitudinal bore, into which this balance adapter(s) could be inserted. The OMS pods and vertical tail were in turn attached to this block. The nose/forward fuselage was fabricated as a detachable separate block. Another separate plate-like aft/lower fuselage cover provided the attachment points for the bodyflap, which was fixed at zero degrees deflection.

The Orbiter was configured at nominal elevon and aileron settings of 0°, a rudder setting of 0°, and a speedbrake setting of 87.2° throughout this test. Table II indicates the measured deflection values for all the available and approved control surface settings for Model 72-Ø.

CONFIGURATION DESCRIPTIONS

Conf. 2	OV102 Baseline (Upright)
Conf. 1	OV102 Baseline (Inverted)
Conf.13	OV102 Baseline (Upright) Cooled
Conf.14	OV102 Baseline (Inverted) Cooled
Conf. 5	OV102 Baseline Sting B
Conf.15	OV102 Baseline Sting B Cooled
Conf.16	Star Tracker Door Filled - Cooled
Conf.17	Star Tracker Door Filled - Uncooled

The following nomenclature, illustrated in Figure 2b was used to designate model components:*

Symbol	Description
B_{75}	OV-102 fuselage, including forward RCS nozzle recesses
C_{16}	Canopy, including recessed windshield panels
E_{64}	Elevons, including elevon/elevon and elevon/fuselage gaps
F_{16}	Bodyflap
M_{52}	OMS pods
N_{108}	Forward RCS thruster nozzle ports
N_{109}	Main propulsion system nozzles (inner surface cut away for sting clearance)
N_{110}	OMS nozzles
N_{111}	Aft RCS thruster nozzle ports
R_{20}	Rudder, incorporating left and right speedbrake panels
V_{27}	Vertical tail
W_{131}	OV-102 wing

*See Table III for additional descriptive information.

The model was sting mounted through its base and supported on the 0.89 inch diameter AEDC/VKF-074 force-and-moment balance, as shown in Figure 2a. The sting was the AEDC/VKF 4.06-Z-21-084 article, in turn attached to the Martin Marietta 13° bend independent roll mechanism and a 14° pitch knuckle assembly mounted to the tunnel sector system.

INSTRUMENTATION

Model instrumentation for test OA259 consisted of the AEDC 6 Component 0.89 inch diameter -074 force and moment balance (with -049 as the back-up); 2 base pressures plus 1 sting-cavity pressure, measured by external facility transducers through hardline tubing from the model; and 2 copper-constantan thermocouples, 1 (one) located in the lower structure of the model above the bodyflap attachment plate (on centerline at approximately station X_0 = 1387) and 1 (one) located on the simulated center (upper) MPS nozzle gimbal heatshield surface.

In addition to the normal facility pretest balance calibrations, the -074 balance was subjected to several extensive pretest and follow-up checkloadings, both in the laboratory and in the tunnel itself, using both the balance calibration body and the model and its loading/leveling block. Tables V and VI present the results of these checkloadings.

Standard tunnel pressure and temperature instrumentation was in operation for control and monitoring of flow parameters. Schlieren photography and video recording were also employed, and still and motion color photography were used to document installation and configuration details.

TEST FACILITY DESCRIPTION

Tunnel B (Fig. 2) is a closed circuit hypersonic wind tunnel with a 50-in. diameter test section. Two axisymmetric contoured nozzles are available to provide Mach numbers of 6 or 8 and the tunnel may be operated continuously over a range of total pressure levels from 20 to 300 psia at Mach number 6, and 50 to 900 psia at Mach number 8, with air supplied by the VKF main compressor plant. Stagnation temperatures sufficient to avoid air liquefaction in the test section (up to 1350°R) are obtained through the use of a natural-gas-fired combustion heater. The entire tunnel (throat, nozzle, test section, and diffuser) is cooled by integral, external water jackets. The tunnel is equipped with a model injection system, which allows removal of the model from the test section while the tunnel remains in operation.

The tunnel pitch-roll sector mechanism provides the capability of obtaining pitch angles from -15° to +15°, with some restrictions due to model positioning in the test section. Roll limits are ±180°. These configurations of roll and pitch produce required sideslip angles.

Tunnel general operating conditions are as follows:

CLOSED-CIRCUIT OPERATING CONDITIONS

Tunnel	Nominal Mach Number	P_t psia		T_D °F	q, psia		Re/ft x 10^{-6}	
		Min.	Max	Max	Min	Max	Min	Max
B	6	20	270	390	0.3	4.1	0.3	4.7
	8	50	850	890	0.3	3.8	0.3	3.7

OPEN-CIRCUIT OPERATING CONDITIONS

Tunnel	Nominal Mach Number	Pt psia	R_e/ft x 10^{-6}
B	6	25	0.5
		60	1.1
		175	3.1
	8	125	0.7
		250	0.7
		850	3.7

This test section is equipped with six fused quartz windows. The two on either side are used for the shadowgraph or Schlieren system and the two on top are used for either photographic purposes or overhead test support and boundary-layer survey equipment. The viewing area of each window is about 17.25 in. in diameter. Two additional 12-in. diameter window ports are provided in each test section for auxiliary lighting and photographic purposes. These windows are located on top, ±45 deg, off vertical axis, and near downstream edges of the large viewing windows.

Models are generally supported from the rear by stings which attach to the roll mechanism on top of the single-ended support strut. The support system will accommodate a vertical load of 1500 lb. or a horizontal load of 1000 lb. applied at the nominal center of model rotation. The relationship of the model support and the windows is shown in Fig. 3a.

TEST PROCEDURES

The standard tunnel pitch/roll mechanism was employed using the 4.06-Z-21-084 staight-axis water-cooled sting attached to the 13° prebent Martin Marietta roll drive mechanism, with a removable 14° knuckle joint combination. This permitted angle-of-attack ranges of either $14\frac{1}{2}^{\circ}$ to $41\frac{1}{2}^{\circ}$ or 0° to 27° with fairly simple knuckle changes and complete -180° to $+180^{\circ}$ roll around capability for flow angularity checkouts.

The tunnel's built-in roll mechanism was locked except when inverting or righting the model manually. The Martin Marietta roll-drive was then used to obtain pitch/yaw attitudes in automatic coordination with the tunnel's pitch sector. The sideslip angle range was generally limited to $\pm 4^{\circ}\beta$.

The 72-ϕ model itself was mounted (through its base) on the AEDC/VKF -074 0.89-inch diameter 6 component balance and -042 (modified) water jacket assembly. This assembly was in turn attached to the -084 sting section.

A relatively thorough pitch/yaw matrix was completed in the course of the testing, within the attitude ranges indicated above. Two Reynolds numbers, 2.0 and 4.4×10^{6}/ft., were investigated.

Model was tested both with and without the two star-tracker door recesses simulated, and approximately 18 repeat runs were made for data uncertainty analyses. Model control surface deflections remained fixed throughout the test at a specified "neutral" configuration of $\delta_e = 0^{\circ}$, $\delta_a = 0^{\circ}$, $\delta_{BF} = 0^{\circ}$, $\delta_R = 0^{\circ}$, $\delta_{SB} = 87.2^{\circ}$. No component buildup studies were made.

Additionally, two special temperature effects runs were made in the course of this test to determine the nature of the pitching moment variations observed with respect to model time-in-tunnel. Both were constant-attitude runs at $\alpha = 31^{\circ}$, $\beta = 0^{\circ}$; one was injected at the designated angle of attack, the other was rapidly pitched up to that angle of attack following injection. As a result of these investigations, data runs have since been divided into "hot" and "cold" model runs, based on time-in-tunnel considerations and the thermocouple data.

Several repeat runs were also made to provide both "hot" and "cold" model data for certain test conditions.

Hysteresis effects were examined in several series of pitch and yaw polars with consecutive positive and negative sweeps.

Flow angularity conditions (flow tares) were investigated by running the model both upright and inverted at comparable conditions. Using the Martin Marietta roll drive system, the tunnel operators were also able to roll the model $\pm 180^{\circ}$ at $\alpha = 0^{\circ}$, $\beta = 0^{\circ}$, in a continuous motion, for high resolution flow-tare data.

DATA REDUCTION

Force and moment balance data were converted to standard coefficient form, in both body and stability axes, and base and sting-cavity pressures were converted to their respective pressure coefficients and applied to longitudinal corrections. Moment Reference Center (MRC), Balance Reference Center (BRC), and model constants are given below:

Symbol	Definition	F.S. Value	M.S. Value
AB	Fuselage Base Area	436.7 ft^2	0.04367 ft^2
AC	Fuselage Sting-Cavity Area	167.0 ft^2	0.01670 ft^2
SW(SREF)	Wing Reference Area	2690.0 ft^2	0.26900 ft^2
LB(LREF)	Body Reference Length	1290.3 in	12.903 in
MRC			
Xo		1076.7 in	10.767 in
Yo		0.0 in	0.000 in
Zo		375.0 in	3.750 in
BRC			
Xo		1028.6 in	10.286 in
Yo		0.0 in	0.000 in
Zo		390.0 in	3.900 in

Base and Sting-Cavity Pressure
Corrections Equations

$$CPBA = \frac{CPB1+CPB2}{2}$$

$$CAC = (CPBA-CPSC)AC/_{SW}$$

$$CA = CAT-CAC$$

$$CAB = -(CPBA)AB/_{SW}$$

$$CAF = CA-CAB$$

REMARKS

Significant variations in pitching moment and lateral directional stability derivatives were observed as a function of the amount of time the model was exposed to tunnel flow. These were soon isolated to model temperature effects. However, these effects were not easily or immediately attributed to either model deformation with temperature or to hot-wall boundary-layer factors.

Nevertheless, the thermocouple data showed a definite, if qualitative relationship to shifts in forces and moments. In particular, model temperatures above approximately 200°F coincided with increases in axial force and more negative pitching moments, as well as shifts in lateral directional stability coefficients calculated in real time. Balance temperature changes were determined to be insignificant and not related to these coefficient variations.

The two special thermal effects runs, #15 and #16, also indicated rapid changes in model aftbody temperatures and corresponding coefficient changes, especially in the first moments after model injection, as would be expected. So, it was thereafter possible to establish "hot-model" conditions before beginning each series of runs.

Although the in-tunnel balance checkloadings generally demonstrated excellent repeatability with respect to calibrations and the lab checkloadings, the rolling moment component continued to show the most error and was rechecked more thoroughly. A recalibration of the Martin Marietta roll drive mechanism was also required (post test) to establish

model roll error contributions to the balance roll component error/ uncertainty.

After the completion of the test, it was observed also that the bottom edge of the left speedbrake panel was incorrectly filled/faired with model plaster from forward of the "dog leg" at the conical hinge edge up to the vertical fin surface. This contributed a very small additional area to the left speedbrake; later testing at the LaRC 20-inch Mach 6 tunnel showed the effect of this additional segment to be negligible (ØA257).

Extensive hysteresis runs, using reversed sweep directions in both the pitch and yaw axes, showed no repeatable aerodynamic hysteresis effects. Flow-angularity calibrations of the tunnel, made by rolling the model through 360° and by running it both upright and inverted, showed no evidence of unusual flow phenomena or irregularities.

REFERENCES

1. Rockwell International, I.L., SAS/AERO/81-213, "Model Design Dimensional Verification (MDDV) of the 0.01-Scale Orbiter Wind Tunnel Model 72-Ø", March 10, 1981.

2. Rockwell International, Report SOD80-0473-B, "Pretest Information for Lateral/Directional Stability Wind Tunnel Test OA257 of the 0.010-Scale Orbiter Vehicle Model 72-Ø in the NASA/Langley Research Center 20-Inch Mach 6 Facility, Revision B,"June 26, 1982.

3. Rockwell International, Report STS81-0348, "Pretest Information for the 0.010-Scale SSV Orbiter Vehicle Model 72-Ø in the AEDC VKF B Hypersonic Wind Tunnel - Test OA259", Jan. 5, 1981.

4. Rockwell International, Report SOD80-0439, "Pretest Information for the 0.020-Scale SSV Orbiter Vehicle Model 106-Ø in the AEDC VKF B Hypersonic Wind Tunnel - Test OA258," October 1980.

5. W. A. Crosby: "Static Stability Tests ØA258 and ØA259 on the NASA/RI Space Shuttle Orbiter at Mach Numbers 6 and 8," AEDC-TSR-81-V12

6. Best, J.T.: "Comparisons of Aerodynamic Data Obtained in two hypersonic wind tunnels on the same Space Shuttle Orbiter Model," AEDC-TMR-82-P34, July 82.

7. NASA-CR-167,663, DMS-DR-2466, "Results of Investigations of the 0.010-Scale OV-102 Configuration Space Shuttle Vehicle Orbiter Model 72-0 in the NASA/Langley Research Center 20 Inch Mach 6 Tunnel (OA257)"

8. NASA-CR-167,659, DMS-DR-2491, "Results of Investigations of the 0.020-Scale OV-102 Configuration Space Shuttle Vehicle Orbiter Model 106-0 in the USAF/AEDC VKF Tunnel B (OA258)"

9. NASA-CR-160,825, DMS-DR-2477, "Results of Investigation on an 0.004-Scale 140C Modified Configuration Space Shuttle Vehicle Orbiter Model (74-0) in the NASA/Langley Research Center 20-Inch Mach 6 Tunnel (LA141)"

10. DMS-DR-2484, LA144 (LTV HSWT 742). Not yet published.

TEST : OA259

DATE : Feb. 1981

TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
6.0	2.0×10^6/ft.	1.771	390
6.0	4.4×10^6/ft.	3.866	390

BALANCE UTILIZED: AEDC VKF-074

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF	200 lbs	see Tables V & VI	
SF	200 lbs		
AF	100 lbs		
PM	310 lbs		
RM	100 lbs		
YM	310 lbs		

COMMENTS:

TABLE II

TEST: ΦA259 (AEDC V41B-14)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 2-19-81 GWK

DATA SET IDENTIFIER	CONFIGURATION	α	β	φ	SWEEP MODE	SWEEP DIR	δ_E	δ_a	δ_{SB}	δ_R	δ_{BF}	MACH	CONF	RN/L 2.0	RN/L 4.4	TEST RUN NUMBERS
RT3001	ΦV102 BASELINE	A	0	NO	1	1	0	0	87.2	0	0	6.0	2	53	17	
02		-A	0		1	2								54	18	
03		A	-.4		2	1								72	19	
04		A	.6		2	1								*73	20	
05		15	B	–	1	1								70	23	
06		15	-B			2									24	
07		17.5	B			1								68	25	
08		17.5	-B			2								69	26	
09		20	B			1								66	27	
10		20	-B			2								67	28	
11		22.5	B			1								55	29	
12		22.5	-B			2								56	30	
13		25	B			1								64	31	
14		25	-B			2								65	32	
15		27.5	B			1								63	33	
16		27.5	-B			2									34	
17		30	B			1								57	21	
18		30	-B			2									22	

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

COEFFICIENTS IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES

A) 15° → 40° Δα = 1°

B) -4 → -2 Δβ = .5°, -2 → -.5 Δβ = .25°, -.5 → +.5 Δβ = .10, +.5 → 2 Δβ = .25°, 2 → 4 Δβ = .5°

SWEEP MODE: 1 - Continuous
2 - Pitch/Pause

SWEEP DIRECTION: 1 - Increasing
2 - Decreasing

*TWO POINTS ONLY α = 15°, 16° φ = 2°

NASA-MSFC-MAF

TABLE II (Continued)

TEST: ΦA259 (AEDC V418-14)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 2-19-81

DATA SET IDENTIFIER	CONFIGURATION	α	β	φ	SWEEP MODE	SWEEP DIR	δ_E	δ_a	δ_{SB}	δ_R	δ_{BF}	MACH	CONF	RN/L 2.0	RN/L 4.4	TEST RUN NUMBERS
RT3019	ΦV102 BASELINE	32.5	B	–	1	1	0	0	87.2	0	0	6.0	2	61	37	
20		32.5	-B			2									38	
21		35	B			1								60	39	
22		35	-B			2									40	
23		32.5	B			1								59	41	
24		32.5	-B			2									42	
25		40	B			1								58	43	
26		40	-B			2									44	
RT3027	ΦV102 BASELINE INVERTED	-A	0	180	1	2	0	0	87.2	0	0	6.0	1		11	
28		15	B	–		1									3	
29		20	B												4	
30		22.5	B												5	
31		25	B												6	
32		27.5	B												7	
33		30	B												2	
34		32.5	B												8	
35		35	B												9	
36		40	B												10	

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

α OR β SCHEDULES

COEFFICIENTS

IDVAR (1) IDVAR (2) NDV

SWEEP MODE: 1 - Continuous
2 - Pitch/Pause

SWEEP DIRECTION: 1 - Increasing
2 - Decreasing

NASA-MSFC-MAF

TABLE II (Continued)

TEST: ΦA259 (AEDC V41B-14)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 2-19-81

DATA SET IDENTIFIER	CONFIGURATION	PARAMETERS α	β	φ	SWEEP MODE	SWEEP DIR	δ_e	δ_a	δ_{BB}	δ_R	δ_{BF}	MACH	CONF		RN/L				TEST RUN NUMBERS
RT3037	COOLED MODEL (UPRIGHT)	A	0	0	1	1	0	0	87.2	0	0	6.0	13			2.0	4.4		
38	(INVERTED)	-A	0	180	1	2							14				49		
39	ΦV102 BASELINE (INV)	17.5	B	-	1	1							1				1		
40	ΦV102 BASELINE (UPR)	24	B	-	1	1							2				14		
41	COOLED MODEL (UPR)	31	0	0	3	-							13				51		
RT3042		31	0	0	4	-	0	0	87.2	0	0	6.0	13				15		
																	16		

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

α OR β SCHEDULES

COEFFICIENTS

IDVAR (1) IDVAR (2) NDV

SWEEP MODE:
1 - Continuous
2 - Pitch/Pause
3 - Injected and swept to alpha = 31°
4 - Injected at alpha = 31°

SWEEP DIRECTION:
1 - Increasing
2 - Decreasing

NASA-MSFC-MAF

TABLE II (Continued)

TEST: ΦA259 (AEDC V416-14)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 2-19-81

DATA SET IDENTIFIER	CONFIGURATION	α	β	φ	SWEEP MODE	SWEEP DIR	δ_e	δ_a	δ_{SB}	δ_R	δ_{BF}	MACH	CONF	RN/L 2.0	RN/L 4.4
RT3101	ΦV102 BASELINE (REPEAT RUNS)	A	0	0	1	1	0	0	87.2	0	0	6.0	2	74	45
102		-A	0	0	1	2								75	46
105		15	B	–	1	1									52
113		25	B	–	1	1									50
117		30	B	–	1	1								71	35
118		30	-B	–	1	2									36
133	(INVERTED)	30	B	1	1	1							1		12
138	(INVERTED)	-A	0	180	1	2							1		13
RT3217	ΦV102 BASELINE REPEAT (UPRIGHT)	30	B	–	1	1	0	0	87.2	0	0	6.0	2	62	47
218		30	-B	–	1	2							2		48

TEST RUN NUMBERS

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

α OR β SCHEDULES

COEFFICIENTS

IDVAR (1) IDVAR (2) NDV

SWEEP MODE: 1 - Continuous
2 - Pitch/Pause

SWEEP DIRECTION: 1 - Increasing
2 - Decreasing

NASA-MSFC

TABLE II (Continued)

TEST: ΦA259 (AEDC V418-14)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 2-19-81

DATA SET IDENTIFIER	CONFIGURATION	α	β	φ	SWEEP MODE	SWEEP DIR	δ_E	δ_a	δ_{SB}	δ_R	δ_{BF}	MACH	CONF			RN/L 2.0	RN/L 4.4	
RT3043	ΦV102 BASELINE	C	0	NO	2	1	0	0	87.2	0	0	6.0	5			114	80	
44	(STING B)	D	-.44		2	1										115	81	
45		D	.56		2	1										116	82	
46		D	0	0	1	1										117	83	
47		-D	0	0		2										113	79	
48		0	E	90		1										119	86	
49		0	-F	-90		2										120	87	
50		5	-B	-												121	88	
51		10	-B	-												122	89	
52		10.6	G	-													78	
53		12.5	-B	-												123	90	
54		14	-B	-												124	91	
55		15	B	-		1										126	93	
56		15	-B	-		2										125	92	
57		17.5	B	-		1										128	95	
58		17.5	-B	-		2										127	94	
59		20	B	-		1										130	97	
60		20	-B	-		2										129	96	

TEST RUN NUMBERS

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

α OR β SCHEDULES — COEFFICIENTS — IDVAR (1) — IDVAR (2) — NDV

C) 0 → 25° Δα = 5° D) 0 → 25° Δα = 1° E) 0 → .5 Δβ = .1, .5 → 2.0 Δβ = .25, 2 → 4 Δβ = .5

F) -4 → -2 Δβ = .5, -2 → -.5 Δβ = .25, -.5 → -.2 Δβ = .1 G) 2 → .5 Δβ = .25 .5 → -.5 Δβ = .1 -.5 → -2 Δβ = .25

SWEEP MODE: 1 - Continuous
2 - Pitch/Pause

SWEEP DIRECTION: 1 - Increasing
2 - Decreasing

NASA-MSFC-MAF

TABLE II (Continued)

TEST: ΦA259 (AEDC V41B-14)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 2-19-81

DATA SET IDENTIFIER	CONFIGURATION	α	β	φ	SWEEP MODE	SWEEP DIR	δ_E	δ_a	δ_{SB}	δ_R	δ_{BF}	MACH	CONF	RN/L 2.0	RN/L 4.4
RT3061	ΦV102 BASELINE (STING B)	22.5	-B	-	1	2	0	0	87.2	0	0	6.0	5	131	98
62		25	-B	-	1	2								132	99
63		0	0	H		1								134	101
64		0	0	-H		2								133	100
65	(COOLED MODEL)	D	0	0		1							15	112	77
66		17.5	-B	-		2								136	
67		25	-B	-		2									84
68	STAR TRK DR FILLED (COOLED MODEL)	-D	0	0		2							16		102
69	STAR TRK DR FILLED (UNCOOLED)	-D	0	0		2							17		111
70		15	B	-		1									104
71		15	-B	-		2									103
72		17.5	B	-		1									106
73		17.5	-B	-		2									105
74		20	B	-		1									108
75		20	-B	-		2									107
76		22.5	-B	-		2									109
77		25	-B	-		2									110

TEST RUN NUMBERS

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

α OR β SCHEDULES: H) -180 → 180 Δφ = 10°

COEFFICIENTS

IDVAR (1) IDVAR (2) NDV

SP MODE: 1 - Continuous
2 - Pitch/Pause

SWEEP DIRECTION: 1 - Increasing
2 - Decreasing

NASA-MSFC-M...

TABLE II (Continued)

TEST: ΦA259 (AEDC V41B-14)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 2-19-81

DATA SET IDENTIFIER	CONFIGURATION	α	β	φ	SWEEP MODE	SWEEP DIR	δ_E	δ_a	δ_{SB}	δ_R	δ_{BF}	MACH	CONF	RN/L 2.0	RN/L 4.4
RT3143	ΦV102 BASELINE UPRIGHT	I	0	0	2	1	0	0	87.2	0	0	6.0	5	137	
↓ 46	(STING B REPEAT RUNS)	D	0	0	1	1	↓	↓	↓	↓	↓	↓	↓	135	
↓ 47	↓	-D	0	0	1	2	↓	↓	↓	↓	↓	↓	↓	118	85

TEST RUN NUMBERS

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

α OR β SCHEDULES: I) 15 → 20 Δα = 1°

COEFFICIENTS

IDVAR (1) IDVAR (2) NDV

SWEEP MODE: 1 - Continuous
2 - Pitch/Pause

SWEEP DIRECTION: 1 - Increasing
2 - Decreasing

NASA-MSFC-MAF

TABLE II (Concluded)

Dataset 1st Character	Independent Variables		Dependent Variables										
R	RN/L	ALPHA/BETA	CN	CA	CLM	CY	CYN	CBL	CL	CD	L/D	XCP/LB	
S	RN/L	ALPHA/BETA	BETA/ALPHA		PHI	CAT	CAB	CAC	CAF	CPB1	CPB2	CPBAVG	CPSC
T	RN/L	ALPHA/BETA	PO	P-INF	Q-INF	TO	CPWB	CPWT	CYB	CYNB	CBLB		

Sweep Modes:

1 Continuous

2 Pitch/Pause

Sweep Direction:

1 - Increasing

2 - Decreasing

TABLE III

MODEL DIMENSIONAL DATA

MODEL COMPONENT : BODY - B_{75}

GENERAL DESCRIPTION : Orbiter Vehicle 102-OML Baseline

MODEL SCALE: 0.0100

DRAWING NUMBER : VL70-000003C VC70-000002B

DIMENSIONS :	FULL SCALE	MODEL SCALE
Ref. Length (OML: Fwd Sta. X_o=235), In.	1293.3	12.933
(IML: Fwd Sta. X_o=238), In.	1290.3	12.903
Max Width (@ X_o = 1528.3), In.	264.0	2.640
Max Depth (@ X_o = 1464), In.	250.0	2.500
Fineness Ratio	4.899	4.899
Area		
Max. Cross-Sectional, ft^2	340.885	0.03409
Planform		
Wetted		
Base		

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT : CANOPY - C_{16}

GENERAL DESCRIPTION : OV-102 Orbiter Canopy

MODEL SCALE: 0.0100

DRAWING NUMBER : DCD V70-30-950-01 (VC70-000002B)

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length, in (X_o 432.0798 to X_o 670)	237.920	2.379
Max Width, in (@ X_o 594)	194.067	1.941
Max Depth, in. (@ X_o 492)	59.790	0.598
Fineness Ratio (length/max width)	1.226	1.226
Area		
Max. Cross-Sectional @ X_o 520	ft^2 45.66	0.004566
Planform		
Wetted		
Base		

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT : ELEVON - E_{64}

GENERAL DESCRIPTION : Elevon for OV-102 configuration. Hingeline at X_o = 1387, elevon split line X_o = 312.5, 6.0" tips with 8° beveled edges, and centerbodies same as E63 but includes bevel Tip.

MODEL SCALE: 0.0100

DRAWING NUMBER : VC70-000002B

DIMENSIONS	FULL SCALE	MODEL SCALE
Ref. Area - Ft^2	210.00	0.02100
Area - Ft^2	206.57	0.02066
Span (equivalent), In	346.44	3.464
Inb'd equivalent chord, In	116.500	1.165
Outb'd equivalent chord, In	55.219	0.552
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	.2137	.2137
At Outb'd equiv. chord	0.3999	0.3999
Sweep Back Angles, degrees		
Leading Edge	0.0	0.0
Trailing Edge	-10.056	-10.056
Hingeline	0.0	0.0
Area Moment (Product of area)	1540.74	0.001541
Mean Aerodynamic Chord, In.	89.50	0.0895
Hingeline dihedral (origin at Z_o = 261.3509), deg.	5.229	5.229

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT : BODYFLAP - F_{16}

GENERAL DESCRIPTION : Orbiter OV-102 Baseline OML at X_o = 1532, X_o = 287

MODEL SCALE: 0.0100

DRAWING NUMBER : VC72-000003C VC70-000002B

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (X_o = 1525.5 to X_o = 1613), In	87.50	0.875
Max Width (@ L.E., X_o = 1525.5), In	256.00	2.560
Max Depth (X_o = 1532), In.	19.798	0.198
Fineness Ratio		
Areas - Ft^2		
Max. Cross-Sectional (@ H.L.)	35.196	0.003520
Planform	135.75	0.013575
Wetted		
Base (X_o - 1613)	4.89	0.000489

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT : OMS POD - M_{52}

GENERAL DESCRIPTION : OV-102 Baseline Same as M_{18}

MODEL SCALE: 0.0100

DRAWING NUMBER : VC70-000003C, VC70-000002B

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length, (OMS FWD Sta X_o = 1311.0), In. includes DCS Package	258.64	2.586
Max Width (@ X_o = 1511), In.	135.55	1.356
Max Depth (@ X_o = 1511), In.	74.36	0.744
Fineness Ratio	1.475	1.475
Area		
Max. Cross-Sectional, ft^2	59.091	0.005909
Planform		
Wetted		
Base		

TABLE III (Concluded)

MODEL COMPONENT: WING-W131

GENERAL DESCRIPTION: OV-102 OML Configuration

NOTE: Includes Wing ELevon Stubs. Dihedral angle is along trailing edge of wing. Geometric Twist = 0°

MODEL SCALE: 0.0100

TEST NO: _____ DWG. NO.: VC70-000002B

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.) Ft^2 Planform	2690.0	0.26900
Span (Theo.) In.	936.68	9.367
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees	3.500	3.500
Incidence Angle, degrees	0.500	0.500
Aerodynamic Twist, degrees		
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	-10.056	-10.056
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo) B.P.0.0.	689.24	6.892
Tip, (Theo) B.P. 468.34	137.85	1.379
MAC	474.81	4.748
Fus. Sta. of .25 MAC	1136.83	11.368
W.P. of .25 MAC	290.58	2.906
B.L. of .25 MAC	182.13	1.821
EXPOSED DATA		
Area (Theo.) Ft^2	1721.60	0.17216
Span, (Theo.) In, BP111.8	713.003	7.130
Aspect Ratio	2.051	2.051
Taper Ratio	0.193	0.193
Chords		
Root BP111.8	557.56	5.576
Tip 1.00 $\frac{b}{2}$	137.85	1.379
MAC	389.92	3.899
Fus. Sta. of .25 MAC	1187.71	11.877
W.P. of .25 MAC	295.27	2.953
B.L. of .25 MAC	254.23	2.542
Airfoil Section (Rockwell Mod NASA) XX-64		
Root $\frac{t}{c}$ =	0.1137	0.1137
Tip $\frac{t}{c}$ =	0.120	0.120
Data for (1) of (2) Sides		
Leading Edge Cuff		
Planform Area Ft^2	145.4	0.1454
Leading Edge Intersects Fus M.L. @ Sta.	427.75	4.278
Leading Edge Intersects Wing @ Sta.	1084.00	10.840

TABLE IV

CONTROL SURFACE BRACKET DEFLECTION VALUES

δ_{SB}/δ_R	δ_e/δ_a
$0.09^\circ/-0.16^\circ$	$\equiv 0.00^\circ/0.00^\circ$
$23.87^\circ/-0.39^\circ$	$-0.02^\circ/+3.04^\circ$
$54.28^\circ/+0.19^\circ$	$-0.02^\circ/+5.29^\circ$
$68.61^\circ/+0.53^\circ$	N/A
$86.60^\circ/-0.18^\circ$	N/A

TABLE V

ESTIMATED UNCERTAINTIES

M_∞	Balance #	RN/L	U/u	C_N	C_{AT}	C_m	C_ℓ	C_n	C_Y
OA258 2% MODEL AEDC									
6.0	-073	0.96	U	0.0276	0.0025	0.0048	0.00045	0.00088	0.0039
			u	0.0128	0.0015	0.0017	0.00016	0.00059	0.0058
6.0	-073	2.20	U	0.0137	0.0012	0.0022	0.00035	0.00038	0.0017
			u	0.0054	0.0064	0.0007	0.00013	0.00025	0.0016
6.0	-073	3.83	U	0.0139	0.0011	0.0017	0.00035	0.00024	0.0010
			u	0.0032	0.0004	0.0004	0.00004	0.00015	0.0009
6.0	-072	3.83	U	0.0209	0.0016	0.0036	0.00072	0.00037	0.0019
			u	0.0037	0.0013	0.0030	0.00040	0.00024	0.0018
8.0	-073	0.96	U	0.0277	0.0022	0.0047	0.00039	0.00087	0.0039
			u	0.0112	0.0013	0.0015	0.00014	0.00053	0.0034
8.0	-073	2.20	U	0.0189	0.0014	0.0021	0.00033	0.00035	0.0015
			u	0.0049	0.0006	0.0007	0.00006	0.00023	0.0014
8.0	-073	2.92	U	0.0190	0.0014	0.0019	0.00037	0.00026	0.0012
			u	0.0037	0.0004	0.0005	0.00005	0.00017	0.0011
OA259 1% MODEL AEDC									
6.0	-074	2.00	U	0.0069	0.0017	0.0023	0.00070	0.00041	0.0015
			u	0.0036	0.0014	0.0018	0.00012	0.00028	0.0012
6.0	-074	4.40	U	0.0130	0.0016	0.0018	0.00020	0.00034	0.0022
			u	0.0017	0.0007	0.0004	0.00006	0.00013	0.0006
OA257 1% MODEL LaRC									
6.0	2029	2.00	u	0.0054	0.0016	0.0017.5	0.00029	0.00045	0.0069
6.0	2029	4.40	u	0.0032	0.0010	0.0011	0.00017	0.00027	0.0041
6.0	2029	7.60	u	0.0019	0.0006	0.0006	0.00010	0.00016	0.0024

U - Uncertainty includes tunnel parameters

u - Uncertainty of balance coefficients only

TABLE VI

LOAD UNCERTAINTY COMPARISONS

Balance # & TEST		F_N	F_A	m	ℓ	n	F_Y
-072 OA258	P	0.782	0.261	6.135	1.184	1.170	0.293
	B	-0.107	0.163	2.425	-1.152	-0.002	0.354
	U	1.671	0.685	14.695	3.893	2.346	0.940
	LOAD	1500	300	7575	800	5050	1000
-073 OA258	P	0.754	0.094	0.638	0.117	0.644	0.204
	B	-0.123	-0.002	0.838	0.033	-0.163	-0.089
	U	1.631	0.190	2.114	0.387	1.445	0.497
	LOAD	700	150	3640	300	3640	700
-074 OA259	P	0.125	0.045	0.126	0.037	0.084	0.038
	B	0.000	0.008	0.011	-0.002	0.015	-0.012
	U	0.250	0.098	0.263	0.076	0.183	0.088
	LOAD	200	50	680	100	680	200
2029 OA257	Δ	0.500	0.150	0.770	0.250	0.390*	0.640*
	LOAD	300	75	350	50	75	50

P - Precision Index
B - Bias
U - Uncertainty
Δ - Error between Applied and Calculated Load

* Large errors due to slippage between cal body and balance

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

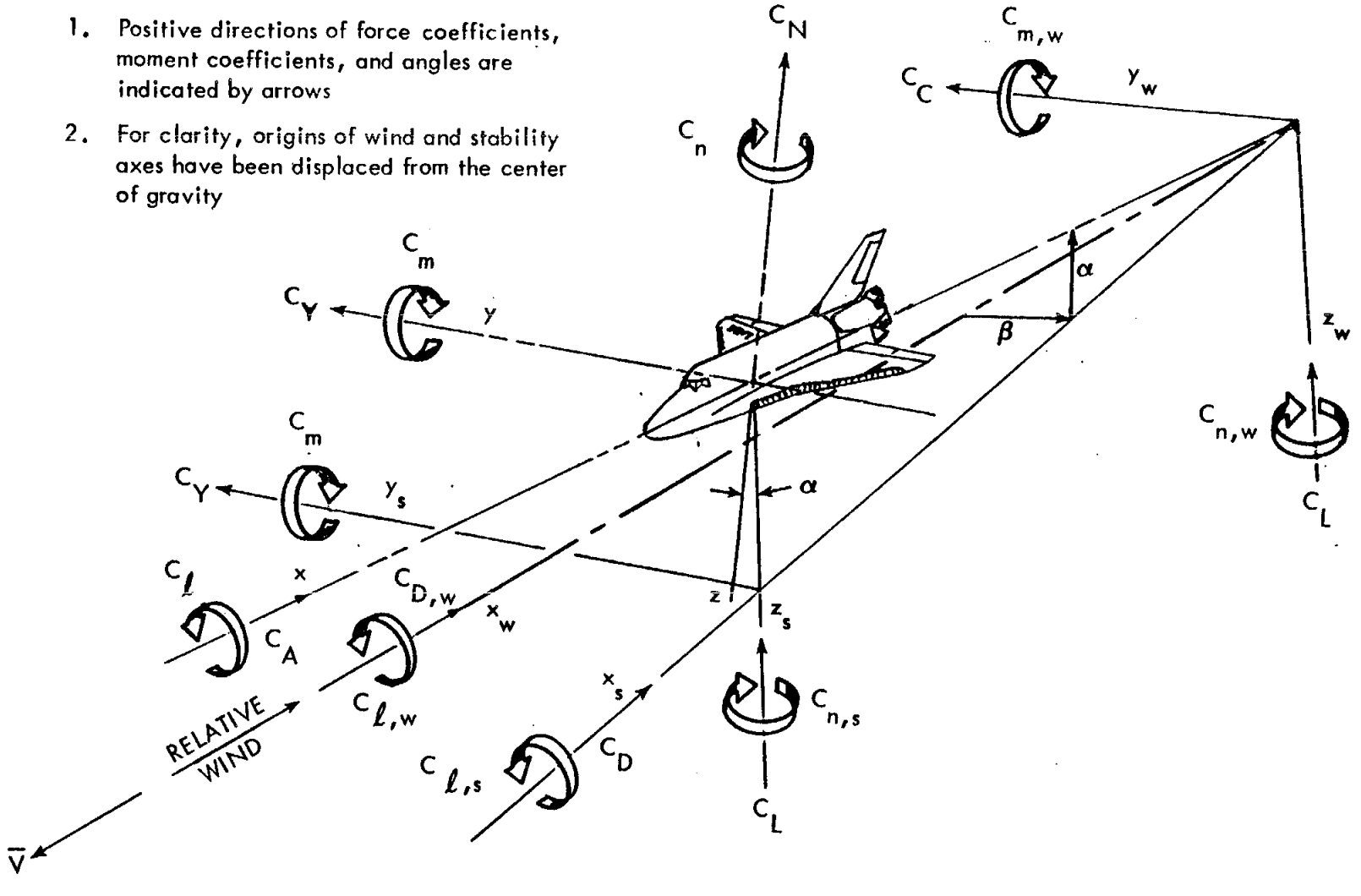
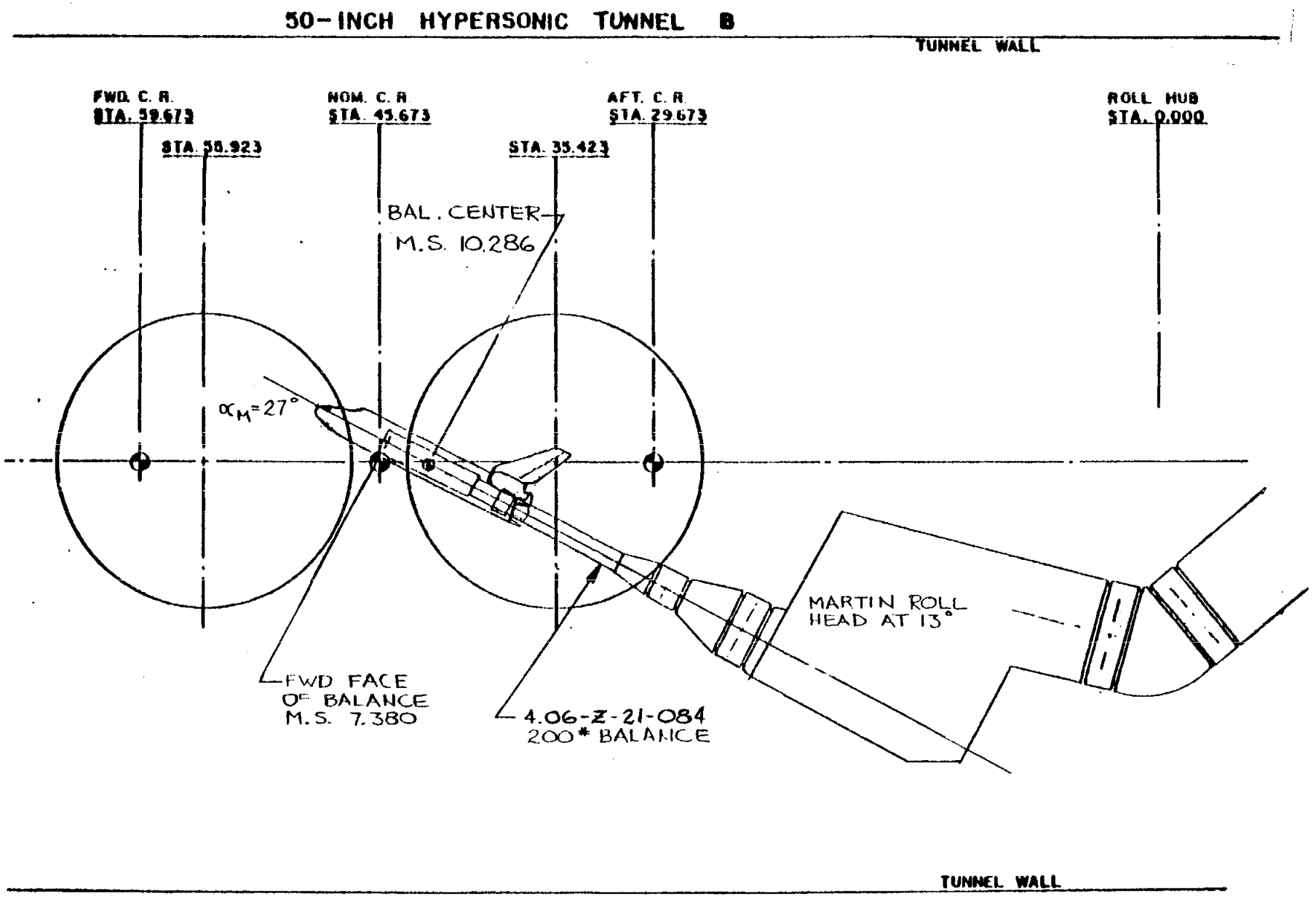
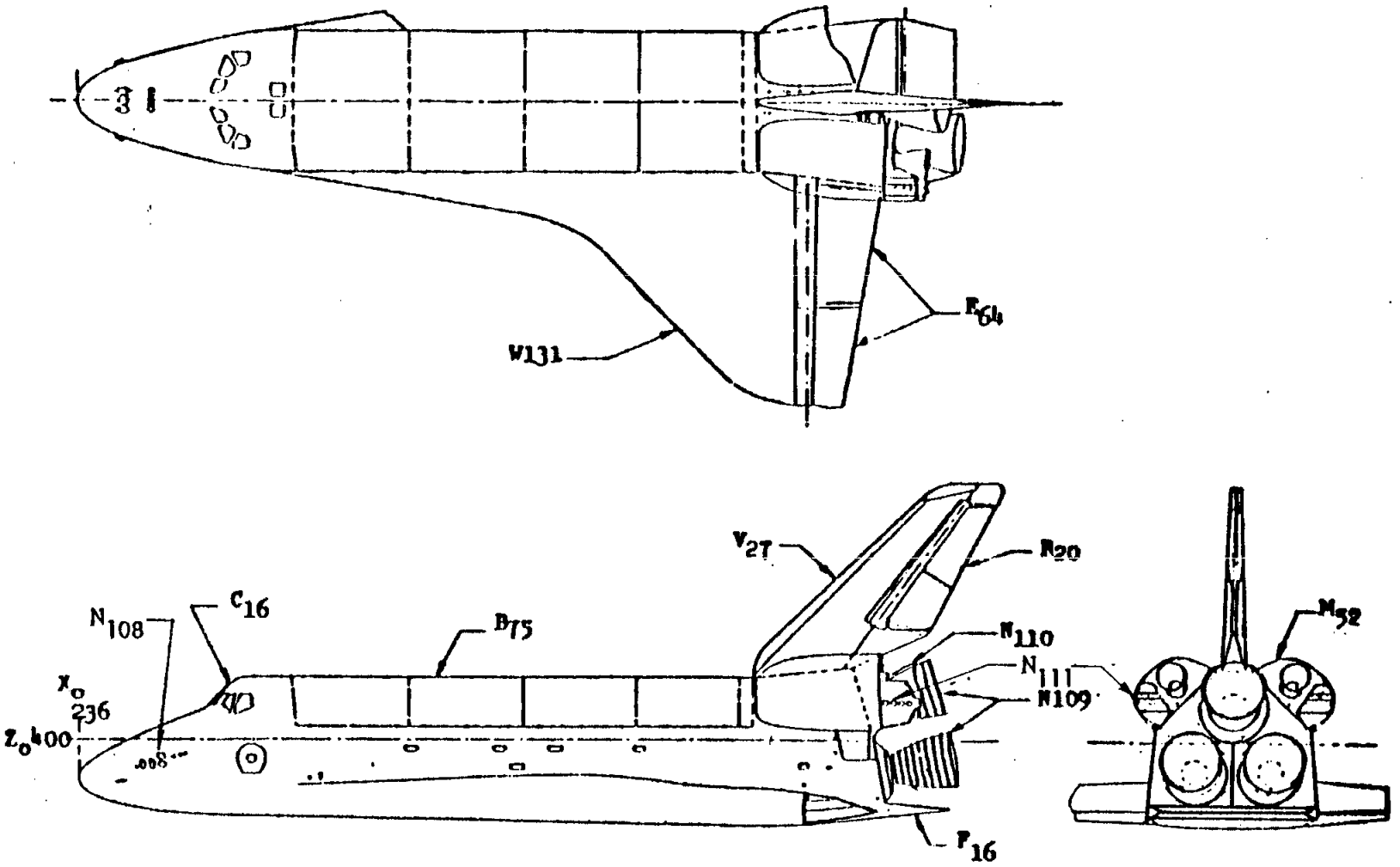


Figure 1. 's Systems



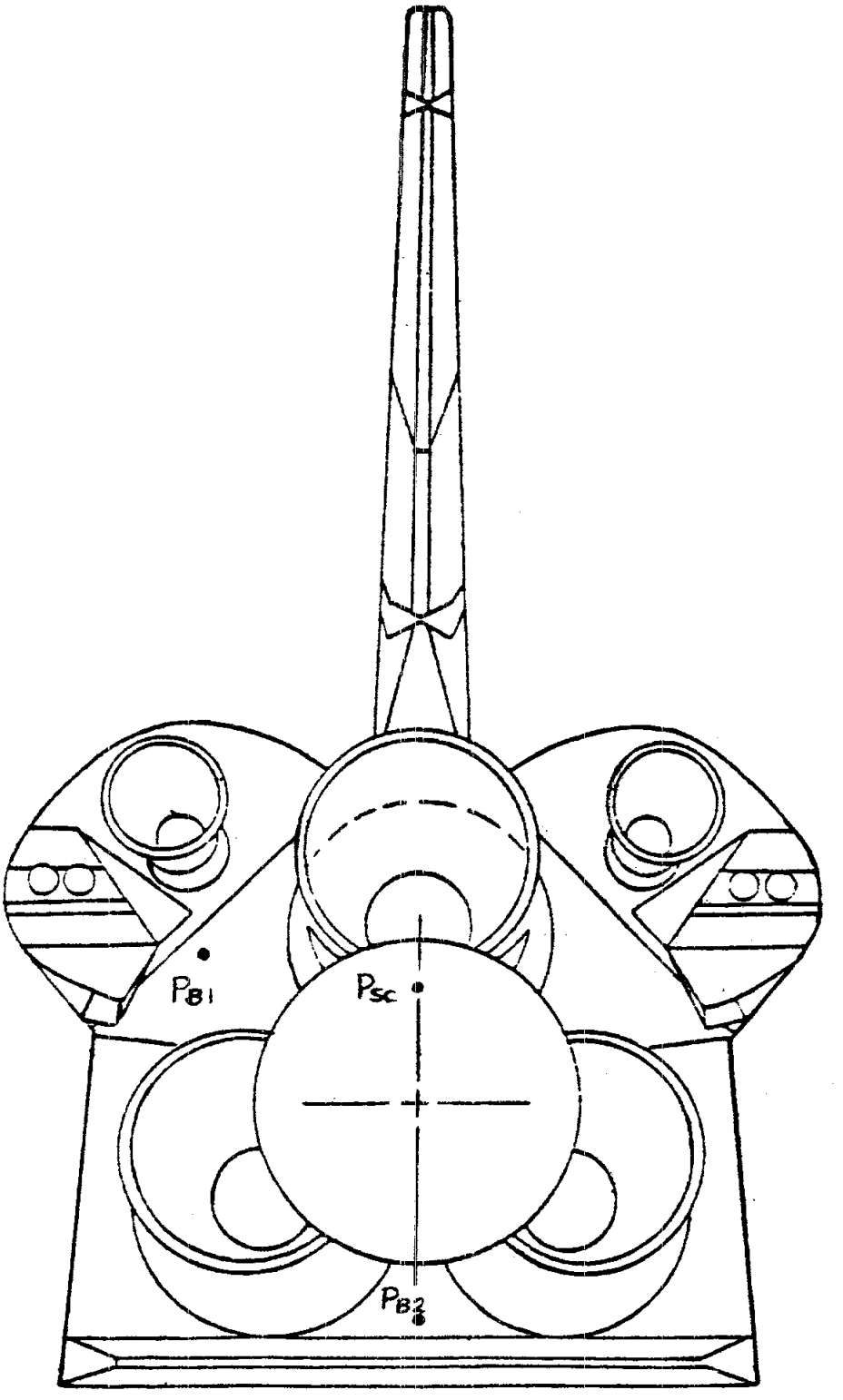
a. Model Installation in VKF Tunnel B

Figure 2. Model Sketches



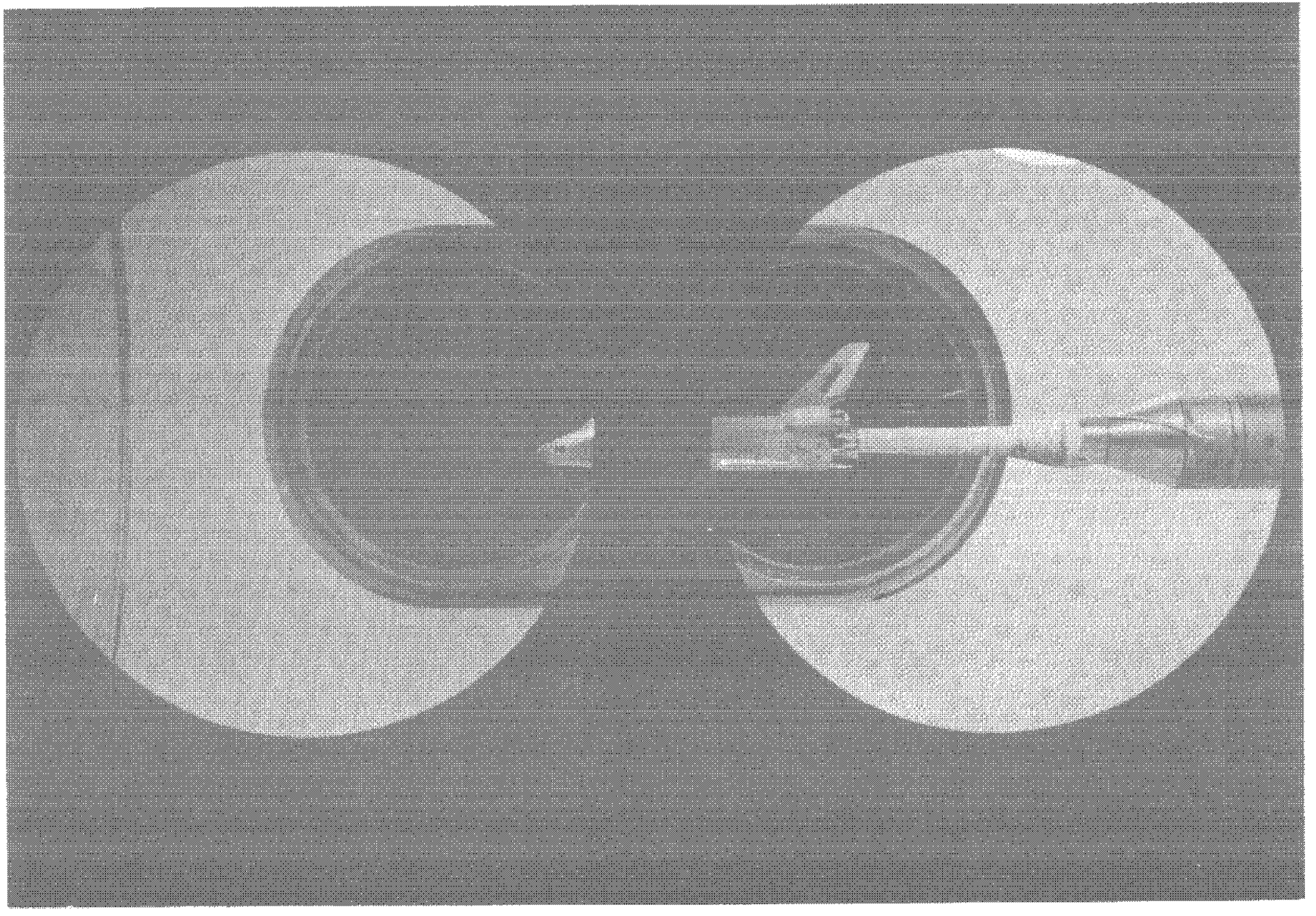
b. Orbiter Nomenclature

Figure 2. (Continued)



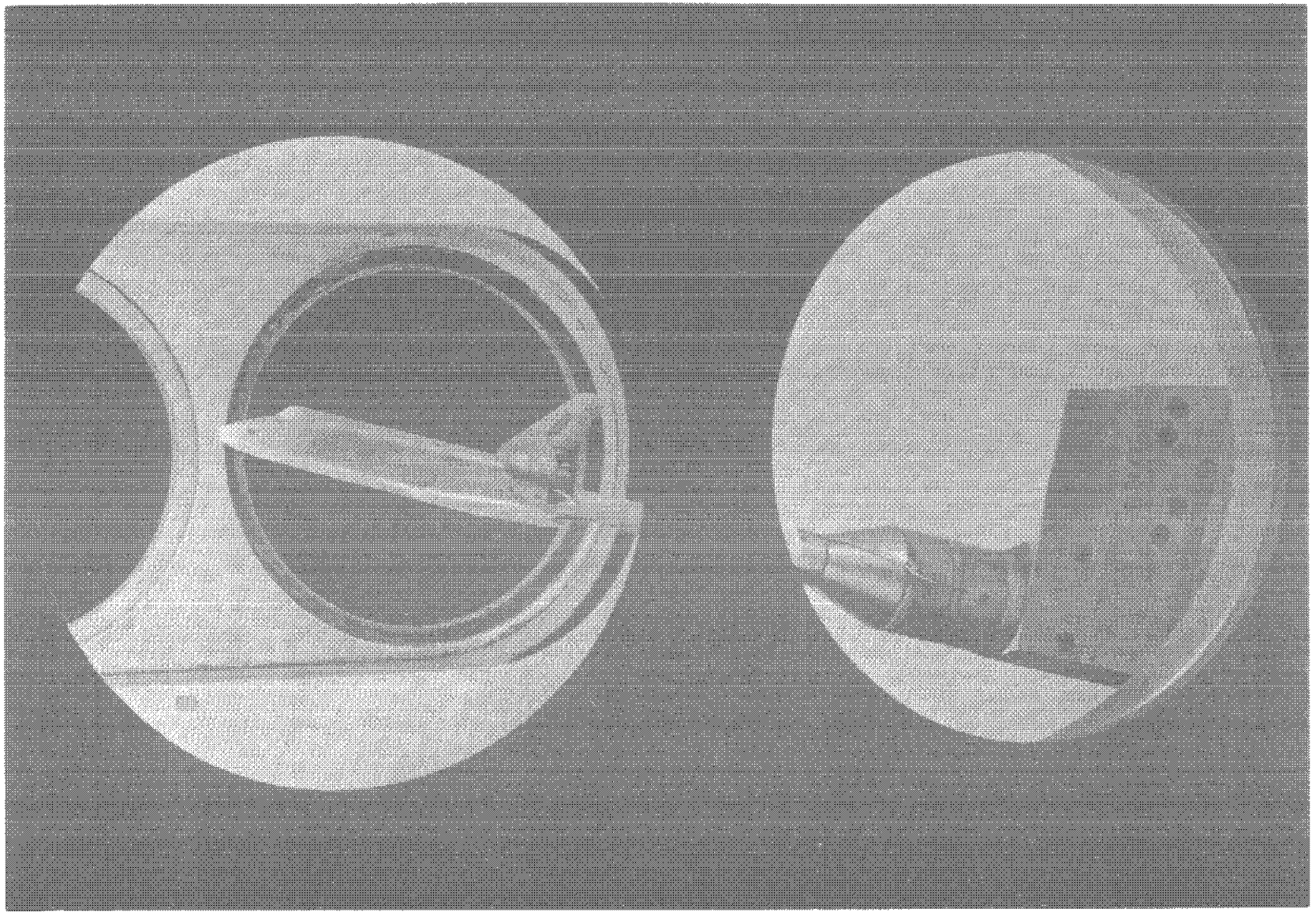
c. Orbiter Base Pressure Locations

Figure 2. Model Sketches (Concluded)



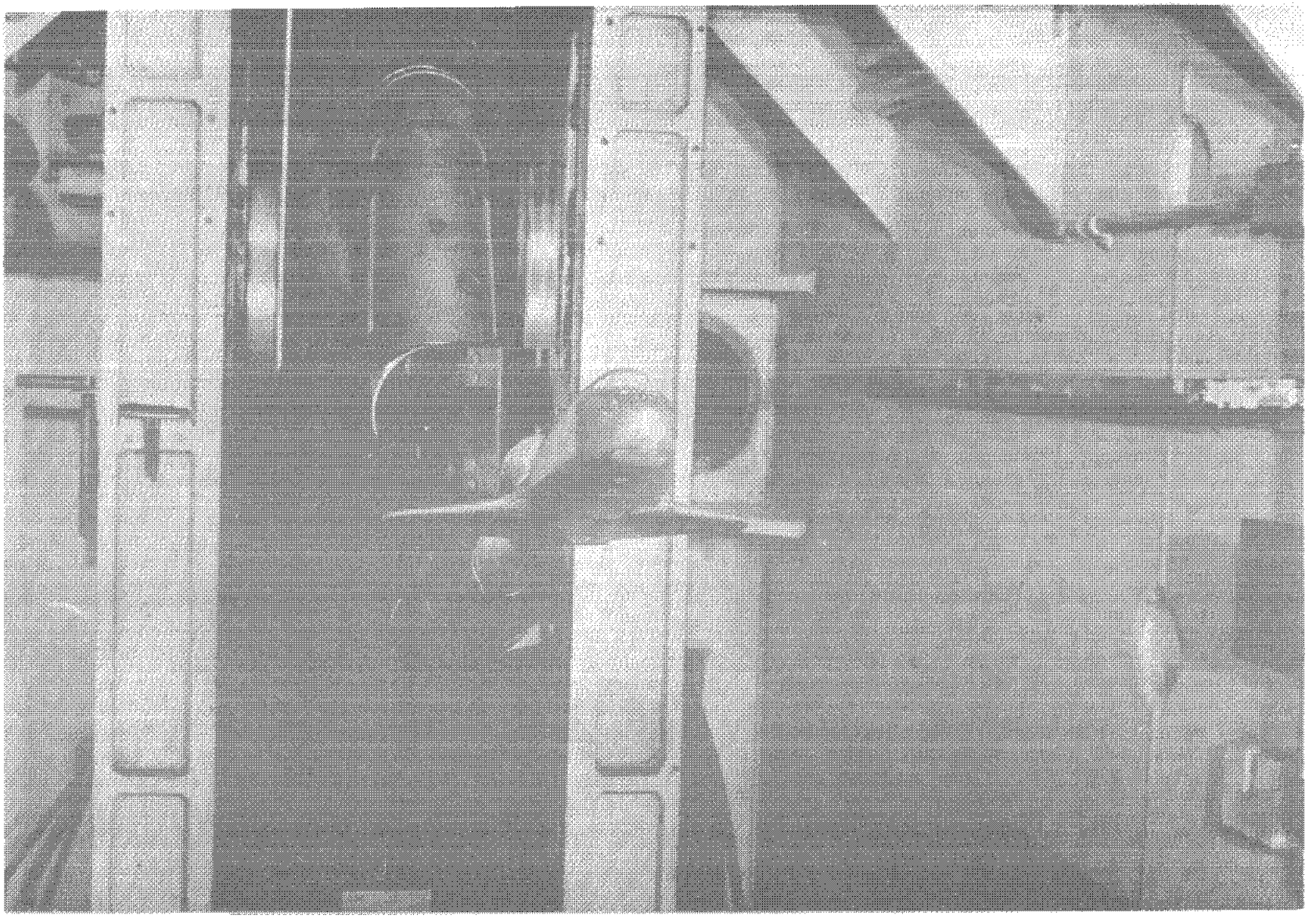
a. Orbiter on Straight Sting

Figure 3. Model Photographs



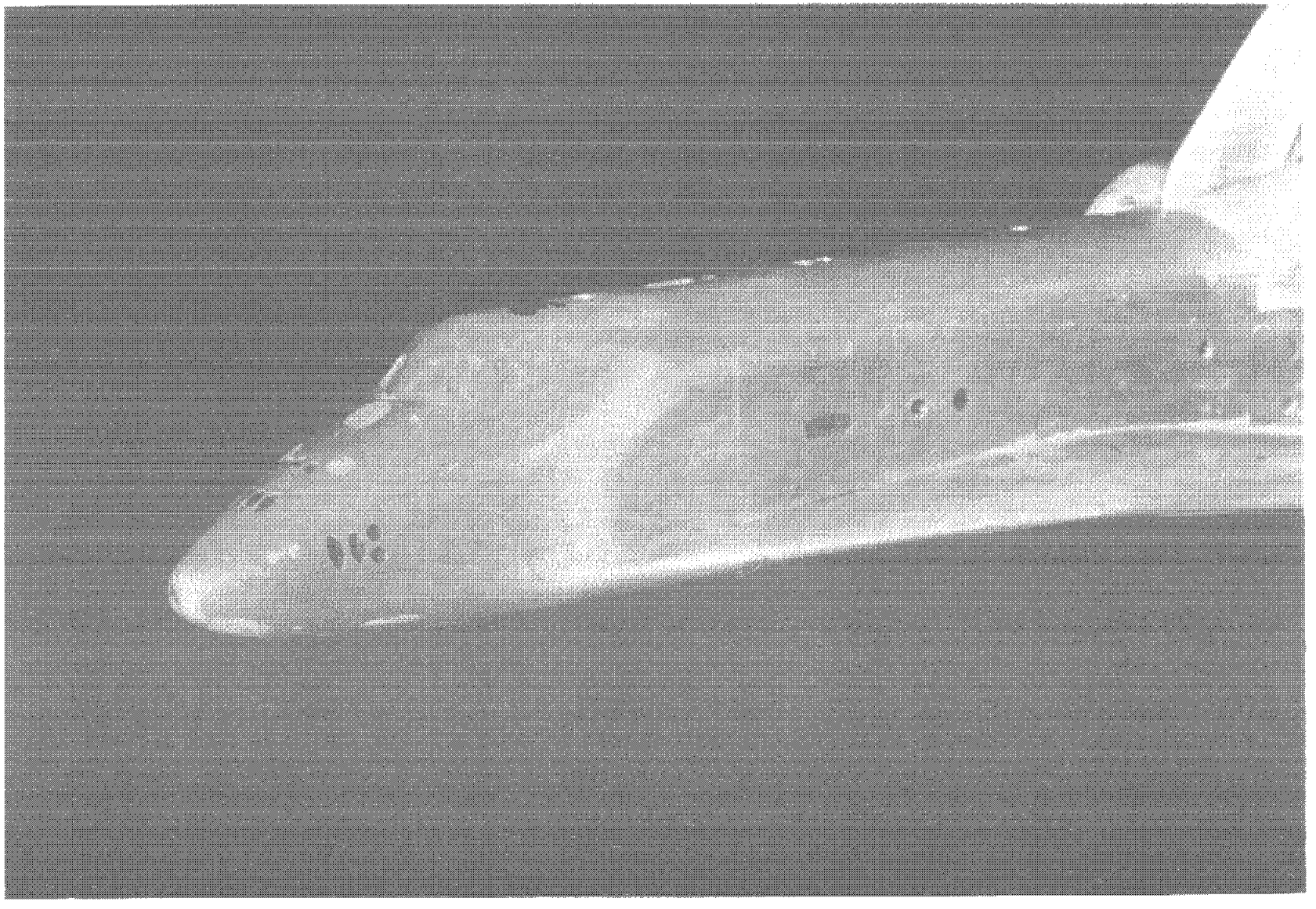
b. Orbiter on 27° Prebent Sting

Figure 3. (Continued)



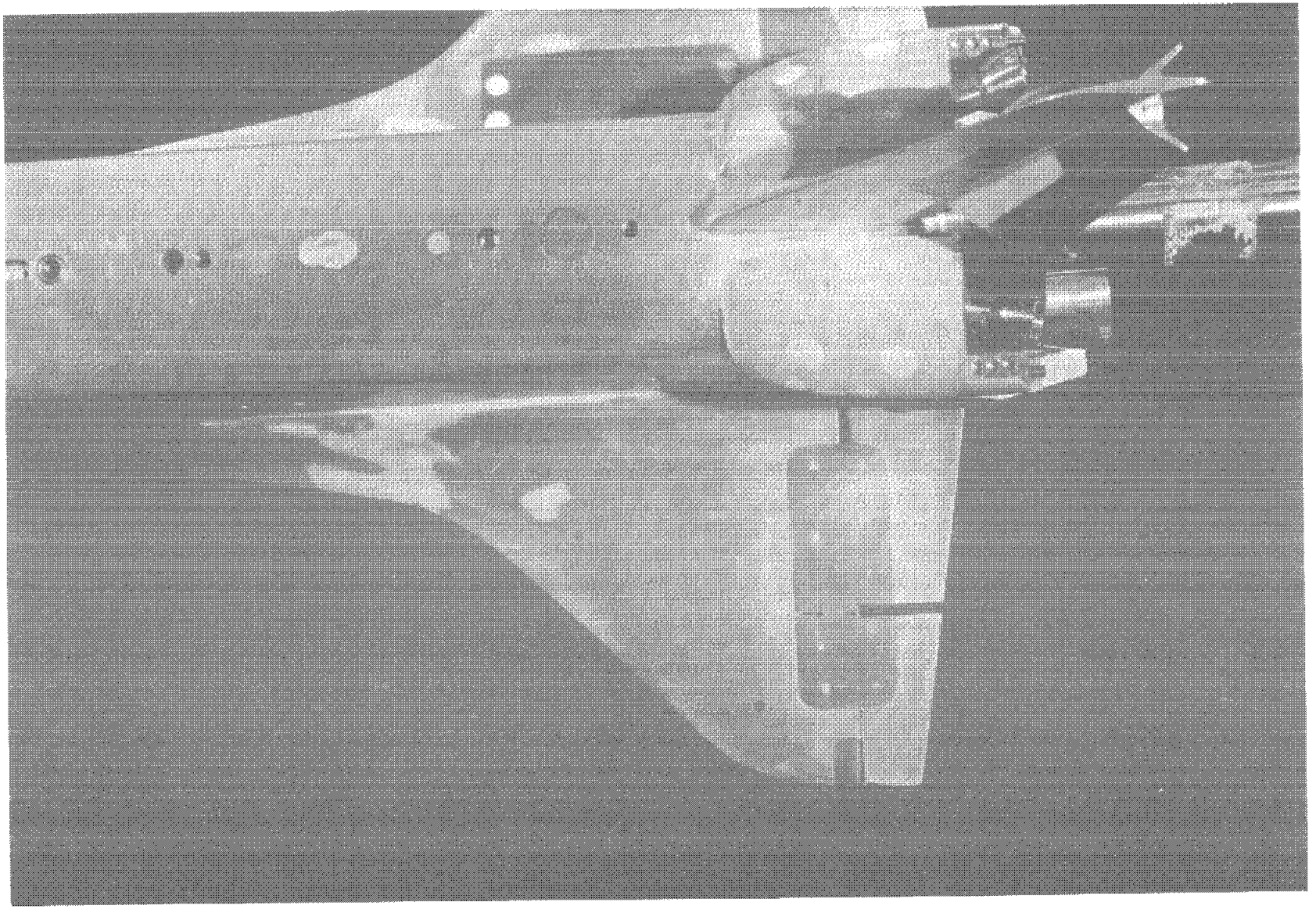
c. Orbiter Installation (Front View)

Figure 3. (Continued)



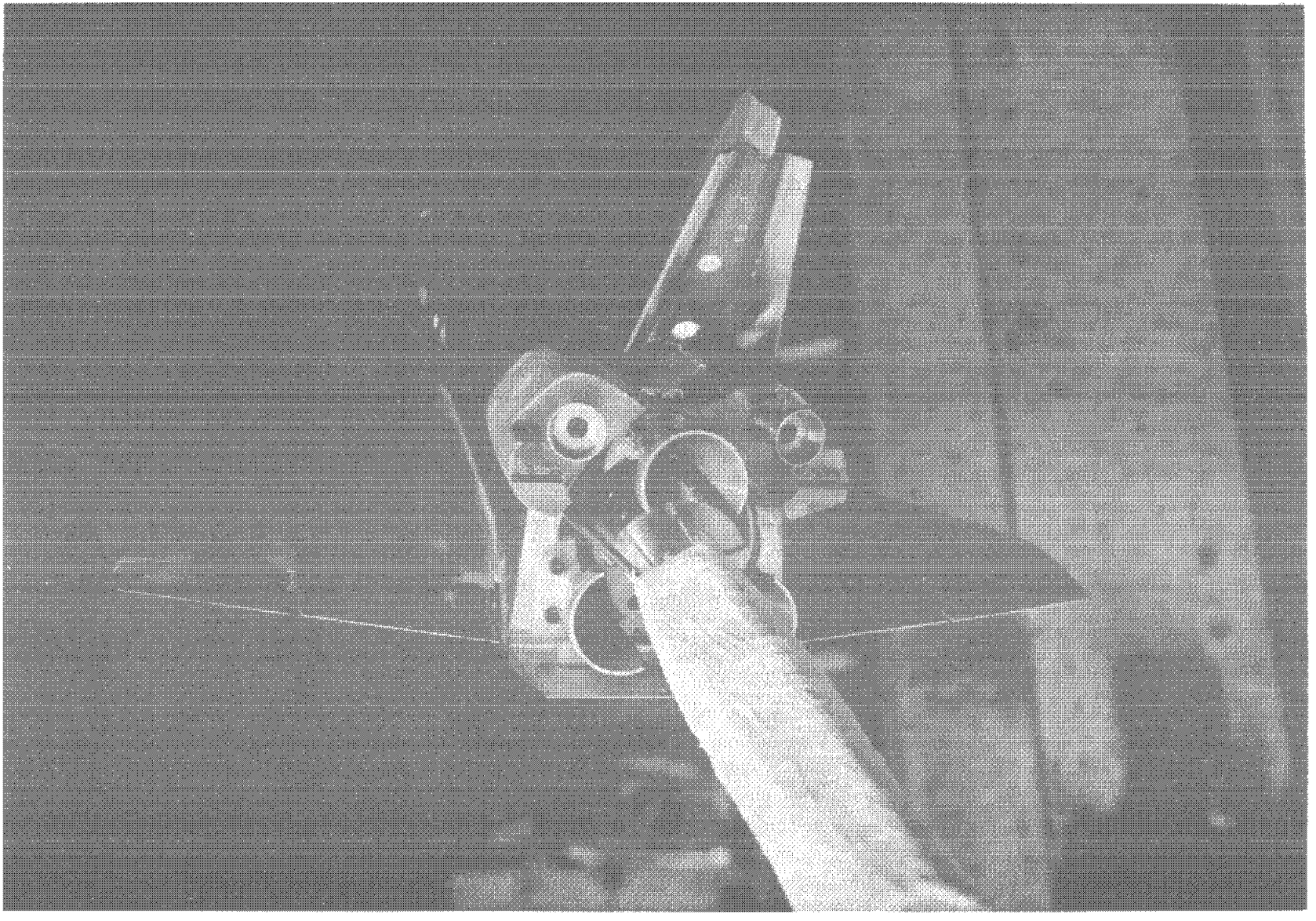
d. Orbiter Close-up (Front Quarter)

Figure 3. (Continued)



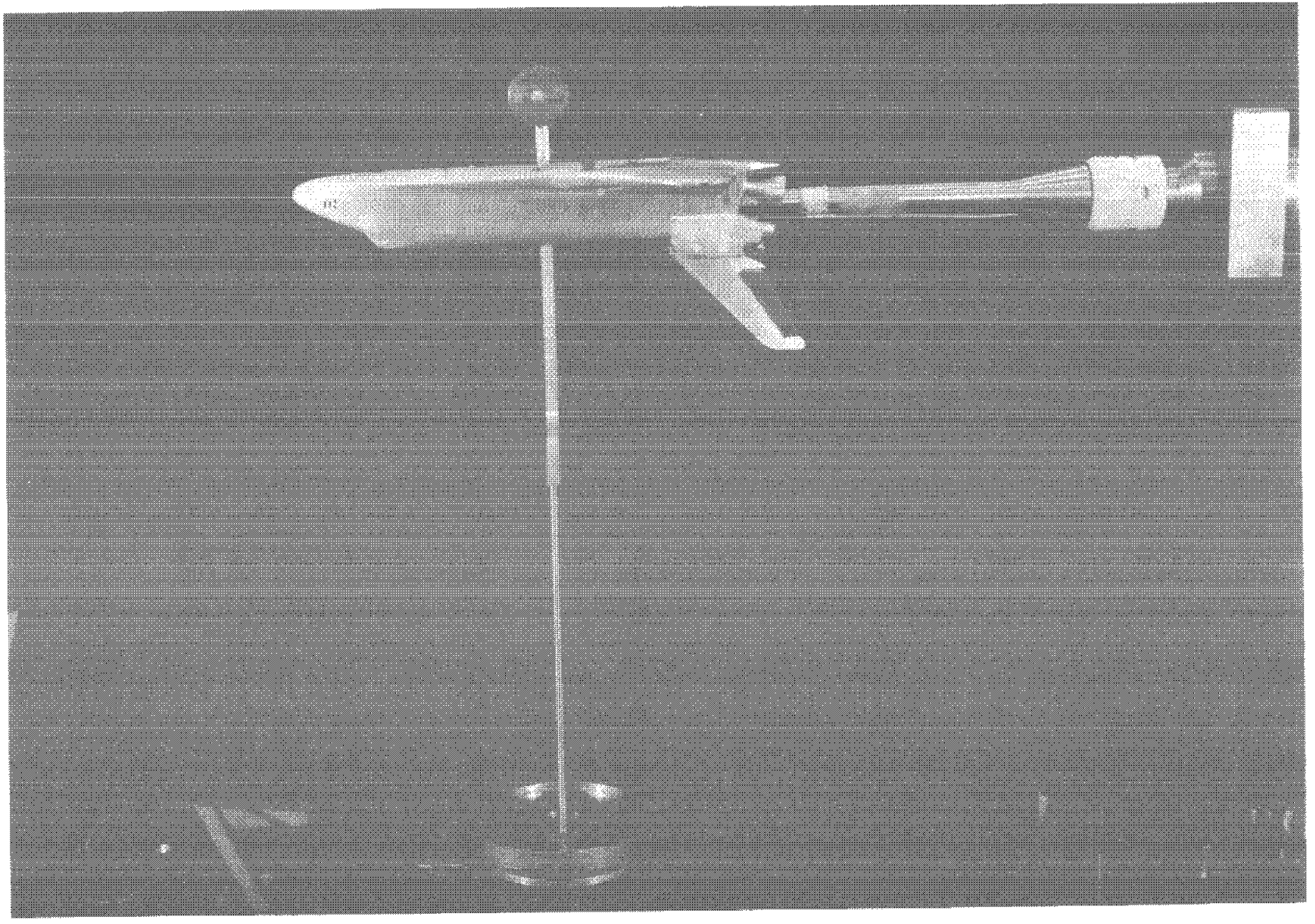
e. Orbiter Close-up (Top View)

Figure 3. (Continued)



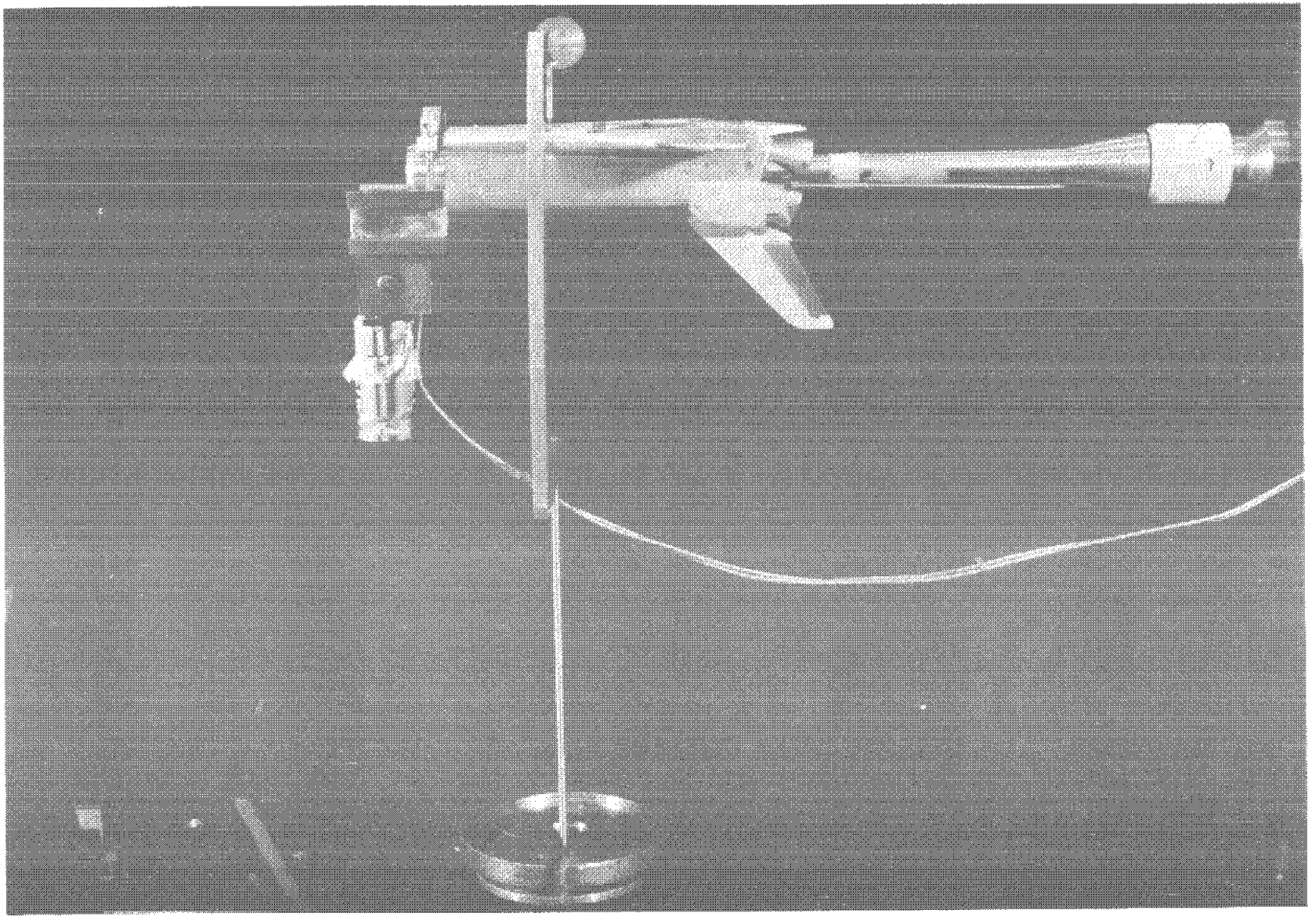
f. Orbiter Close-up (Rear View)

Figure 3. (Continued)



g. Balance Checkloading

Figure 3. (Continued)



h. Balance Checkloading with Automatic Leveling Device

Figure 3. (Concluded)

Plotted Data Figures

Tabulations of plotted data figures may be found in Volume II of this report.

RT3001 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	1.991
□	4.367

PARAMETRIC VALUES

CONFIG	2.000	SPCBRK	87.200
BETA	.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

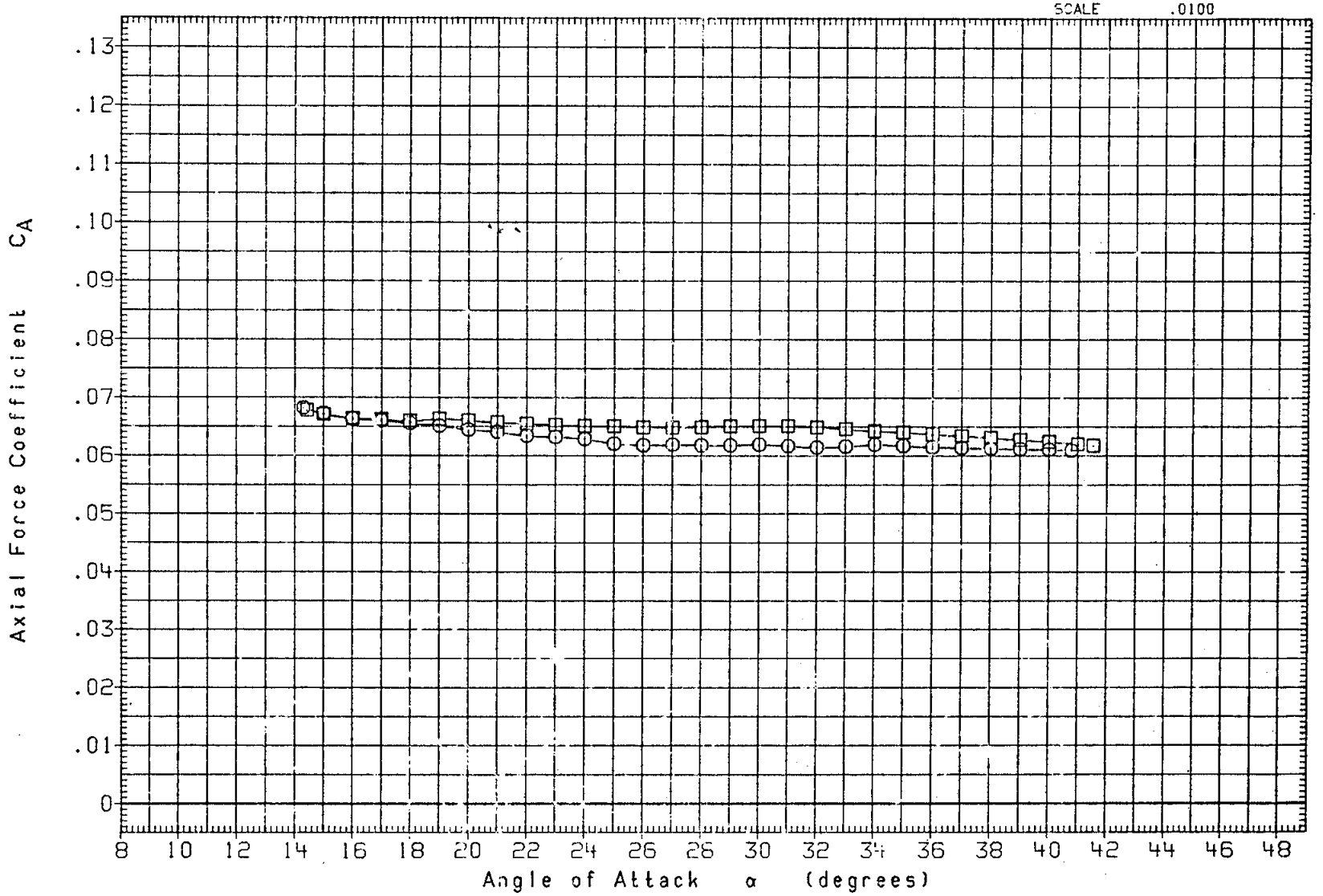


FIG. 1 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING A BASELINE CONFIGURATION

DATE 02 MAR 81

RT3001 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	1.991	CONFIG	2.000	SPDBRK	87.200
□	4.367	BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

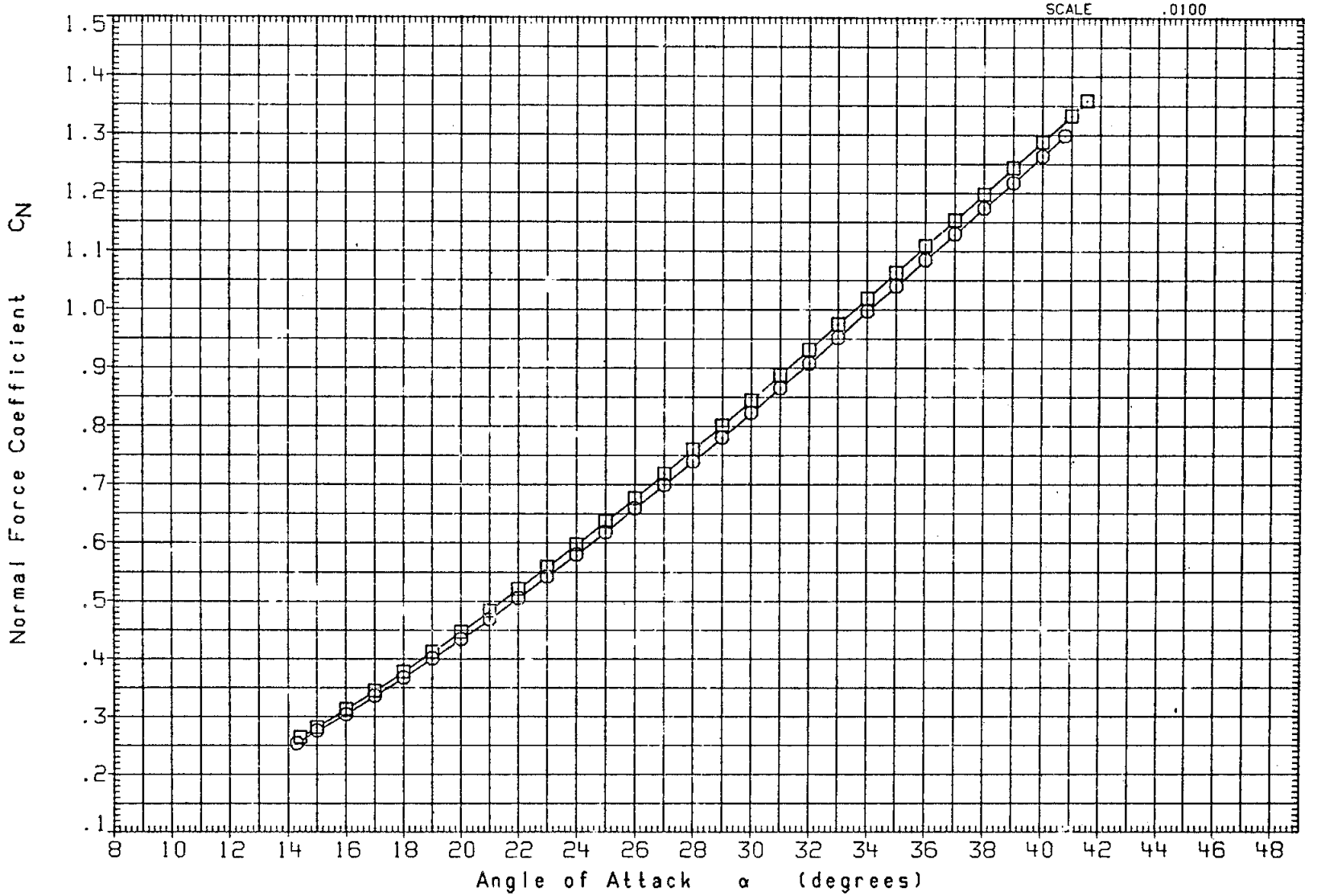


FIG. 1 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING A BASELINE CONFIGURATION

DA 02 MAR 81

PAGE

RT3001 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	1.991
□	4.367

PARAMETRIC VALUES

CONFIG	2.000	SPOBRK	87.200
BETA	.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

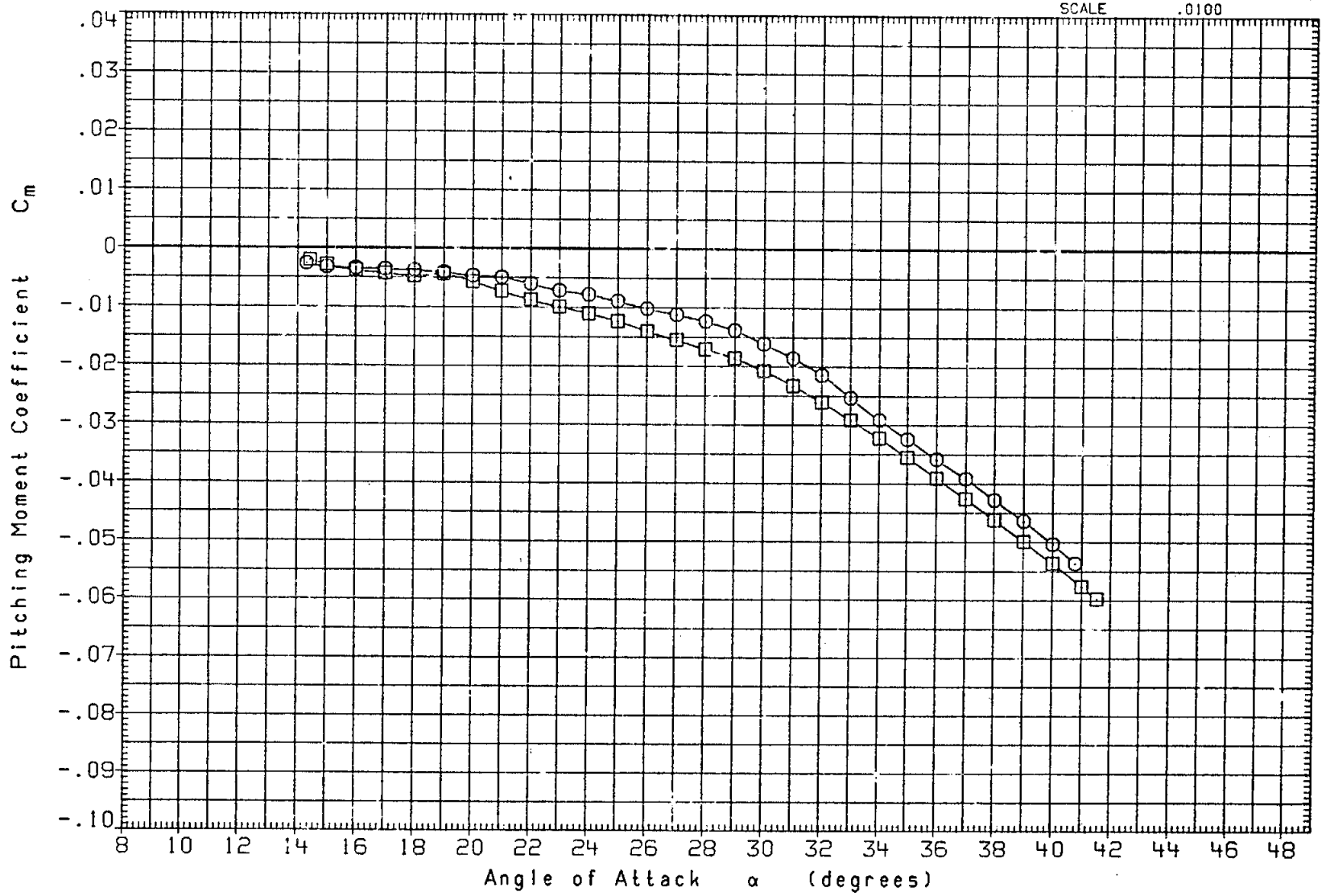


FIG. 1 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING A BASELINE CONFIGURATION

DATE 02 MAR 81

RT3001 CONFIGURATION OA259 (AEDC V41B-14) OV1J2, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	1.991	CONFIG	2.000	SPDBRK	87.200
□	4.367	BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

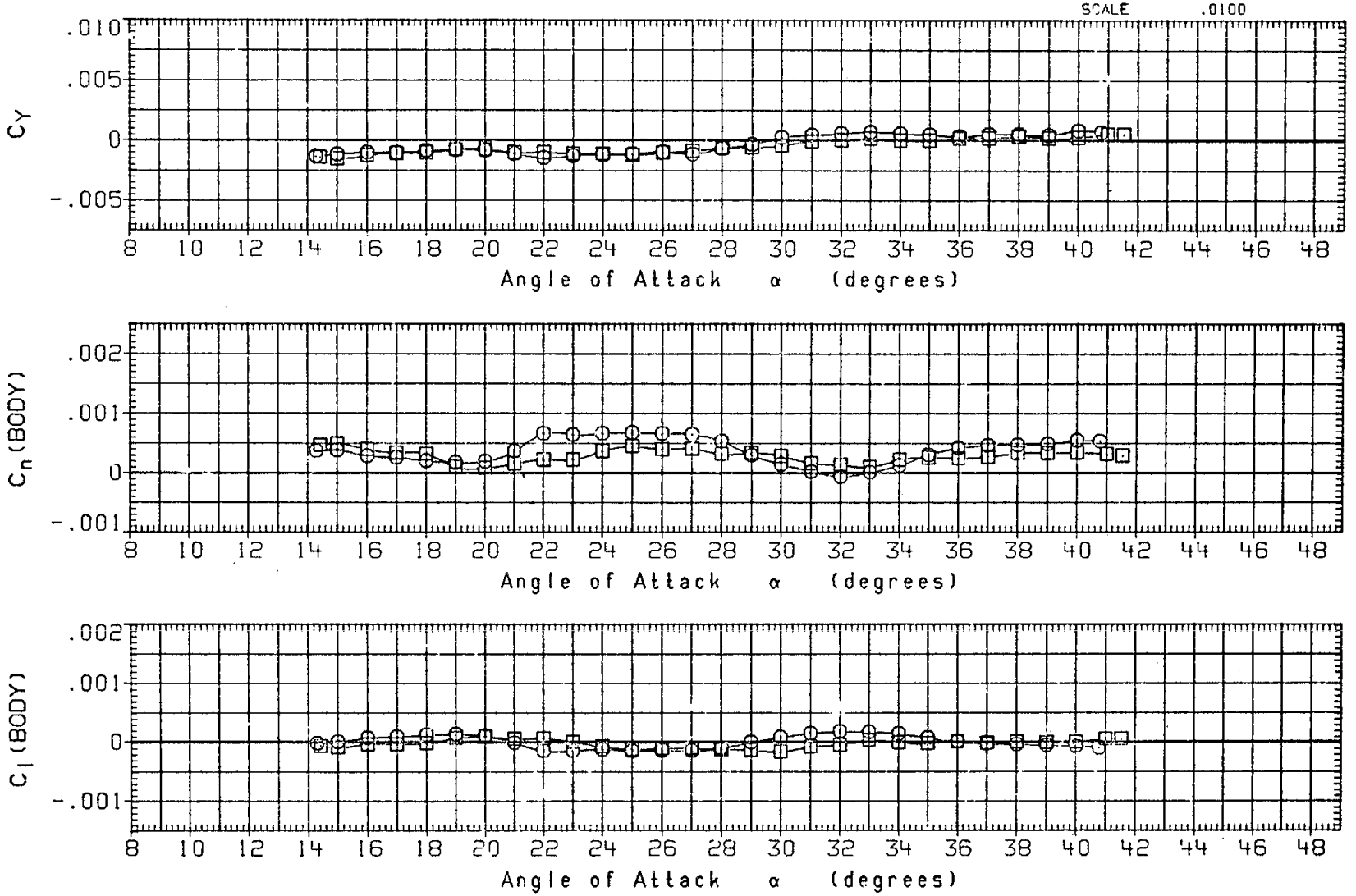


FIG. 1 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING A BASELINE CONFIGURATION

DAT' 02 MAR 81

PAGE

RT3002 CONFIGURATION OA259 (AEDC V41B-14 OV102, STING A UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.010	CONFIG	2.000	SPDBRK	87.200
□	4.379	BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

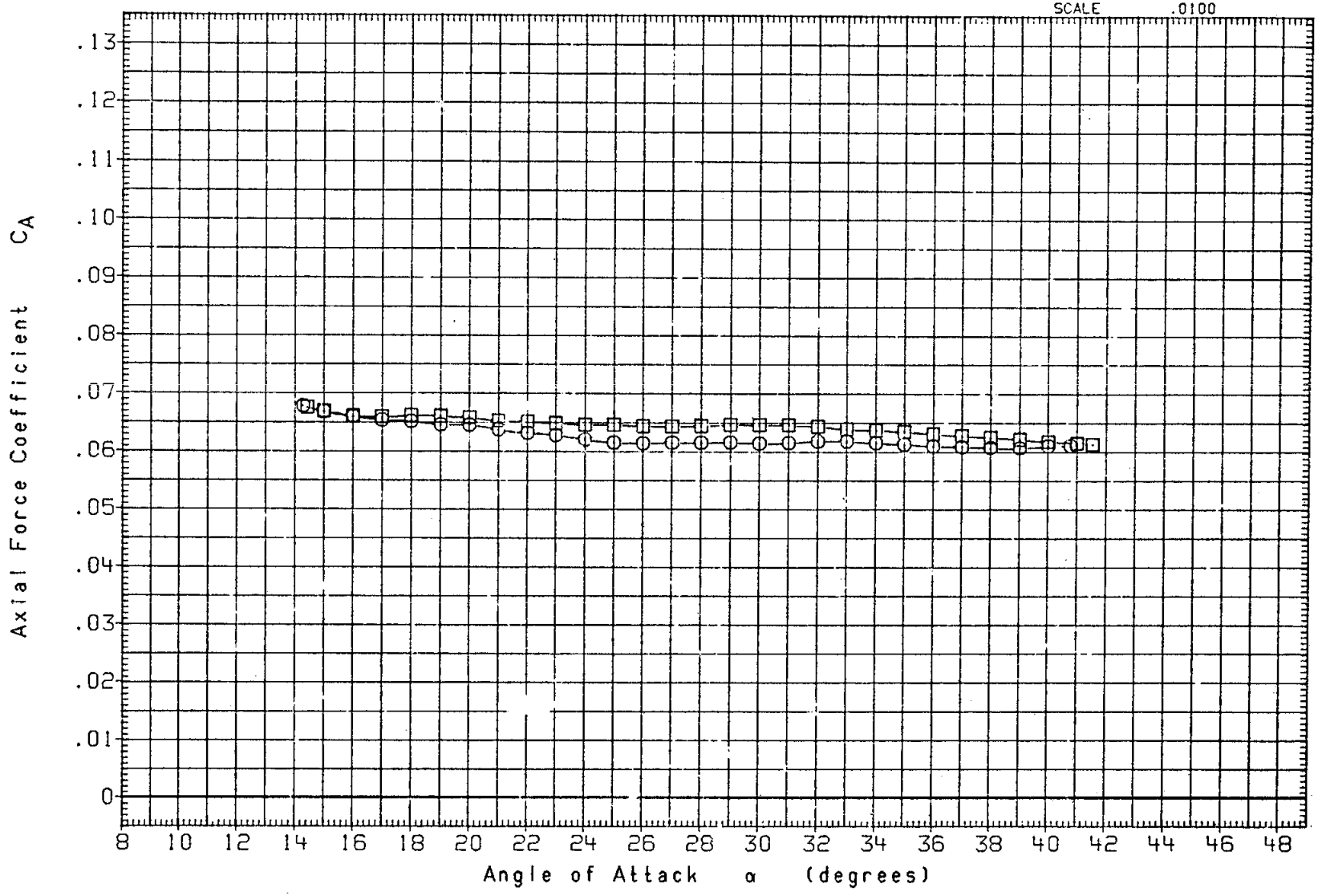


FIG. 1 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING A BASELINE CONFIGURATION

DATE 02 MAR 81

RT3002 CONFIGURATION 0A259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L -	PARAMETRIC VALUES			
○	2.010	CONFIG	2.000	SPDBRK	87.200
□	4.379	BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

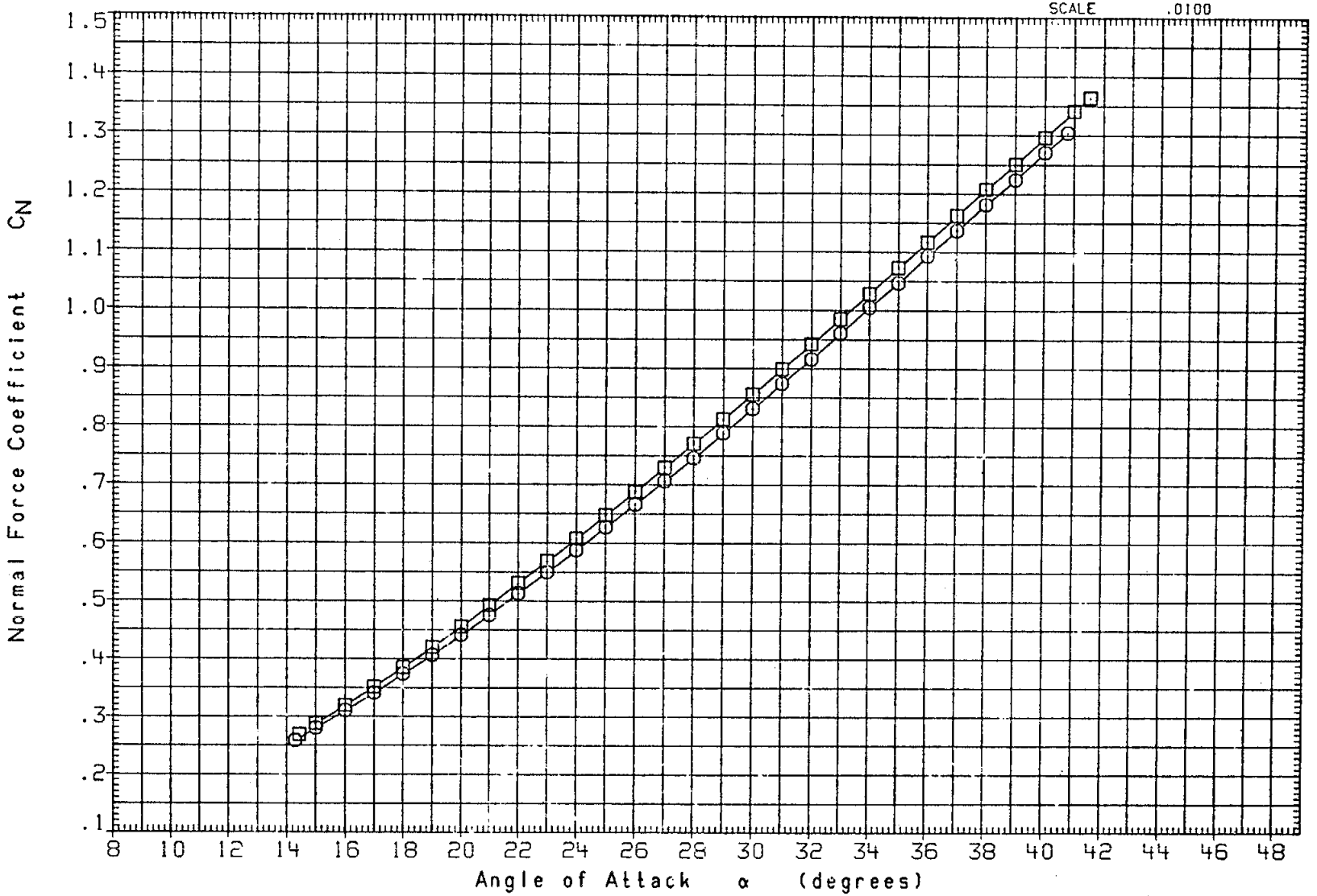


FIG. 1 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING A BASELINE CONFIGURATION

DA 02 MAR 81

PAGE

RT3002 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.010
□	4.379

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
BETA	.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

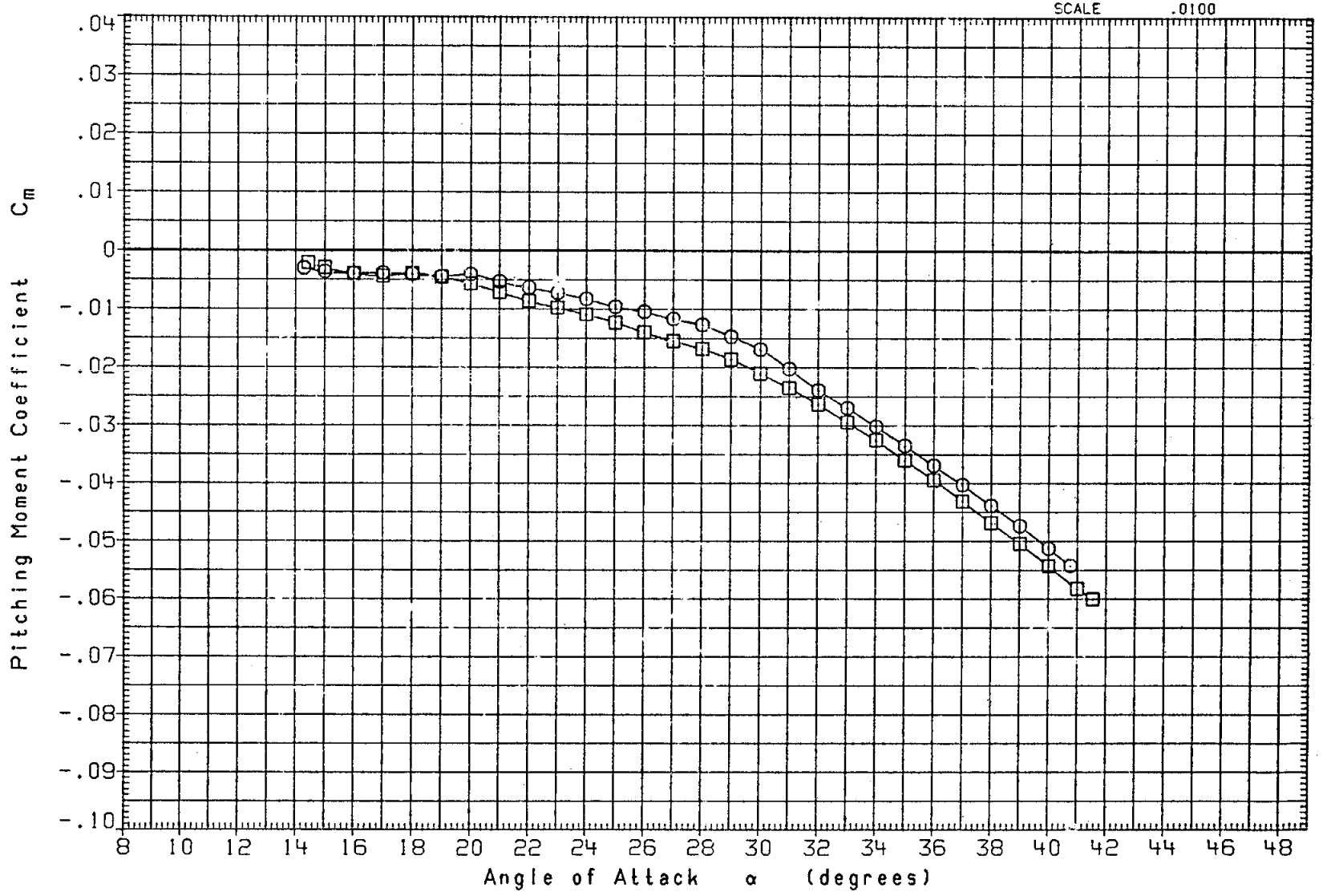


FIG. 1 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING A BASELINE CONFIGURATION

DATE 02 MAR 81

RT3002 CONFIGURATION 0A259 (AEDC V41B-141 OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.010
□	4.379

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
BETA	.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

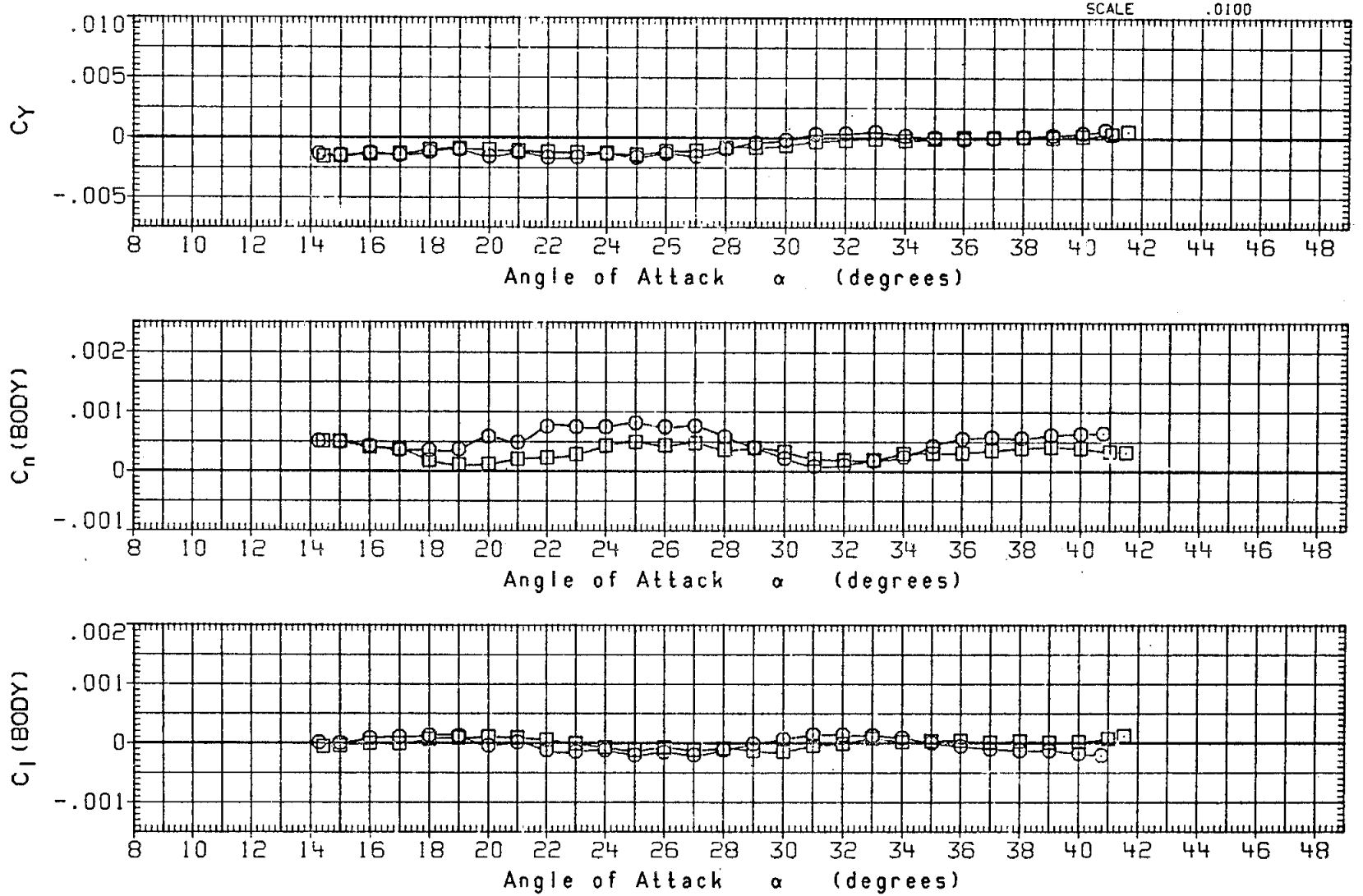


FIG. 1 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING A BASELINE CONFIGURATION

DA 02 MAR 81

RT3003 CONFIGURATION 0A259 (AEDC V41B-141 OV1J2, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.001
□	4.385

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
BETA	-.100	RUDDER	.000
ELEVON	.000	S-MODE	2.000
AILRON	.000	S-DIR	1.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

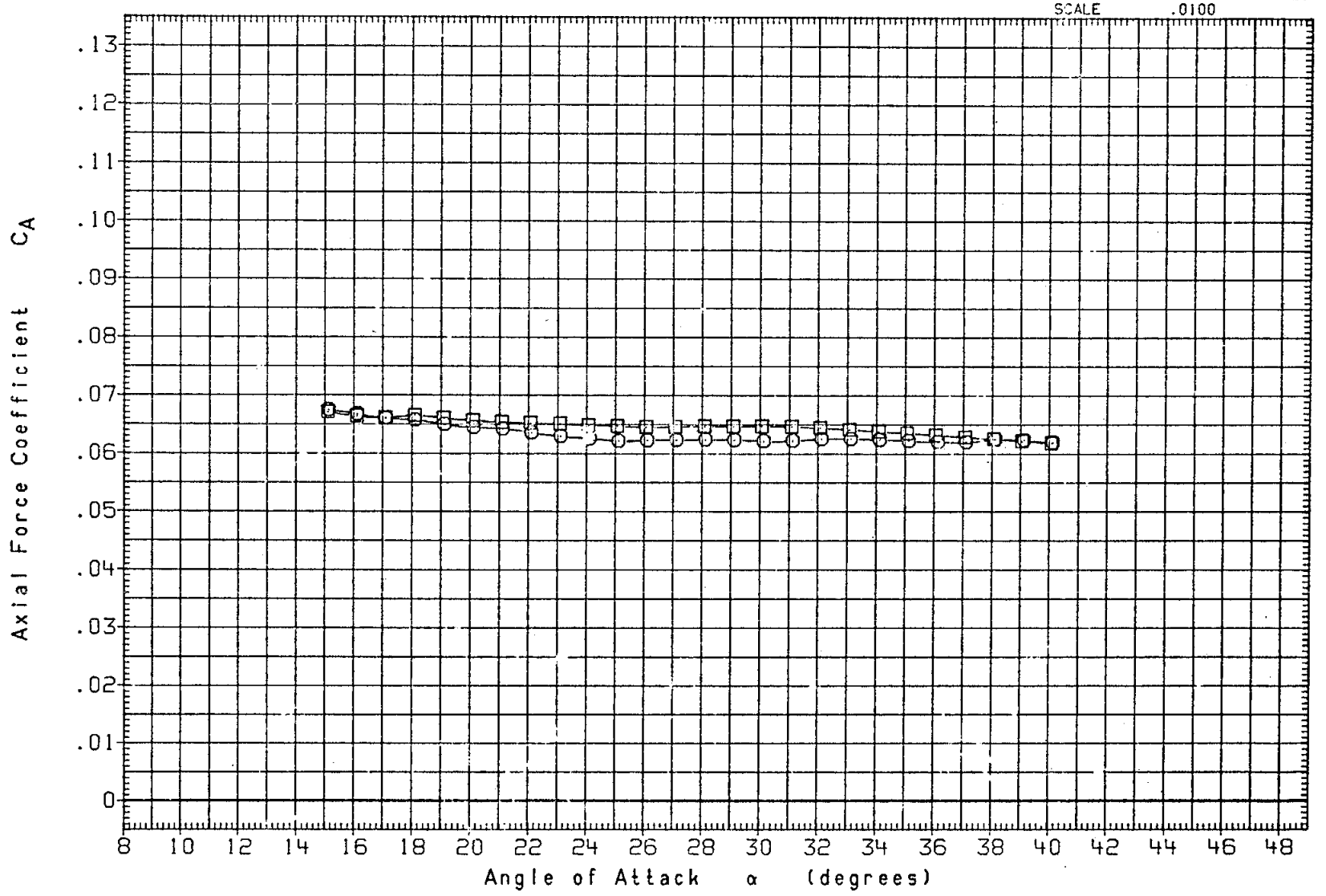


FIG. 1 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING A BASELINE CONFIGURATION

DATE 02 MAR 81

RT3003 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.001
□	4.385

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
BETA	-.400	RUDDER	.000
ELEVON	.000	S-MODE	2.000
AILRON	.000	S-DIR	1.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

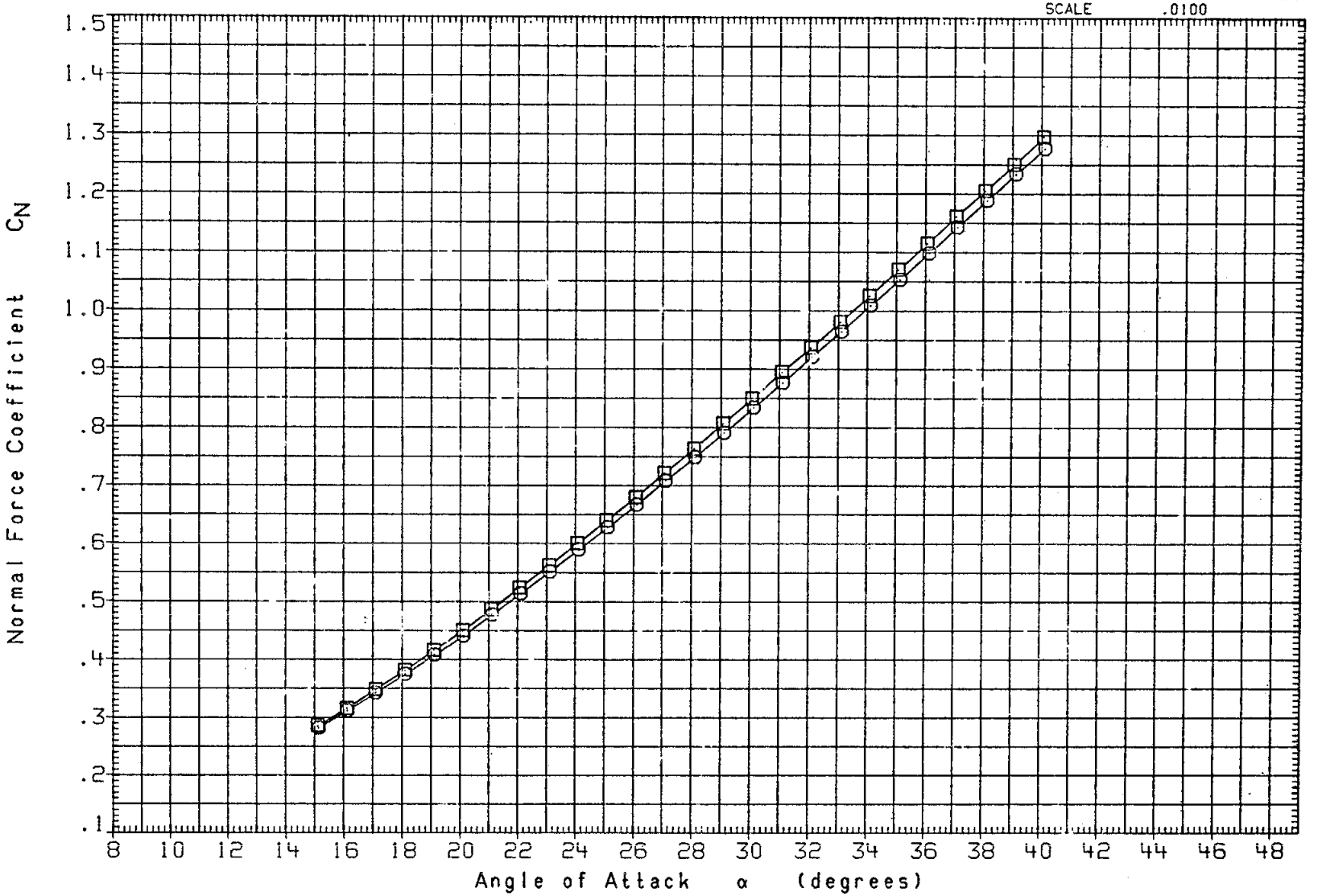


FIG. 1 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING A BASELINE CONFIGURATION

DA 02 MAR 81

PAGE

RT3003 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.001
□	4.385

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
BETA	-.400	RUDDER	.000
ELEVON	.000	S-MODE	2.000
AILRON	.000	S-DIR	1.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

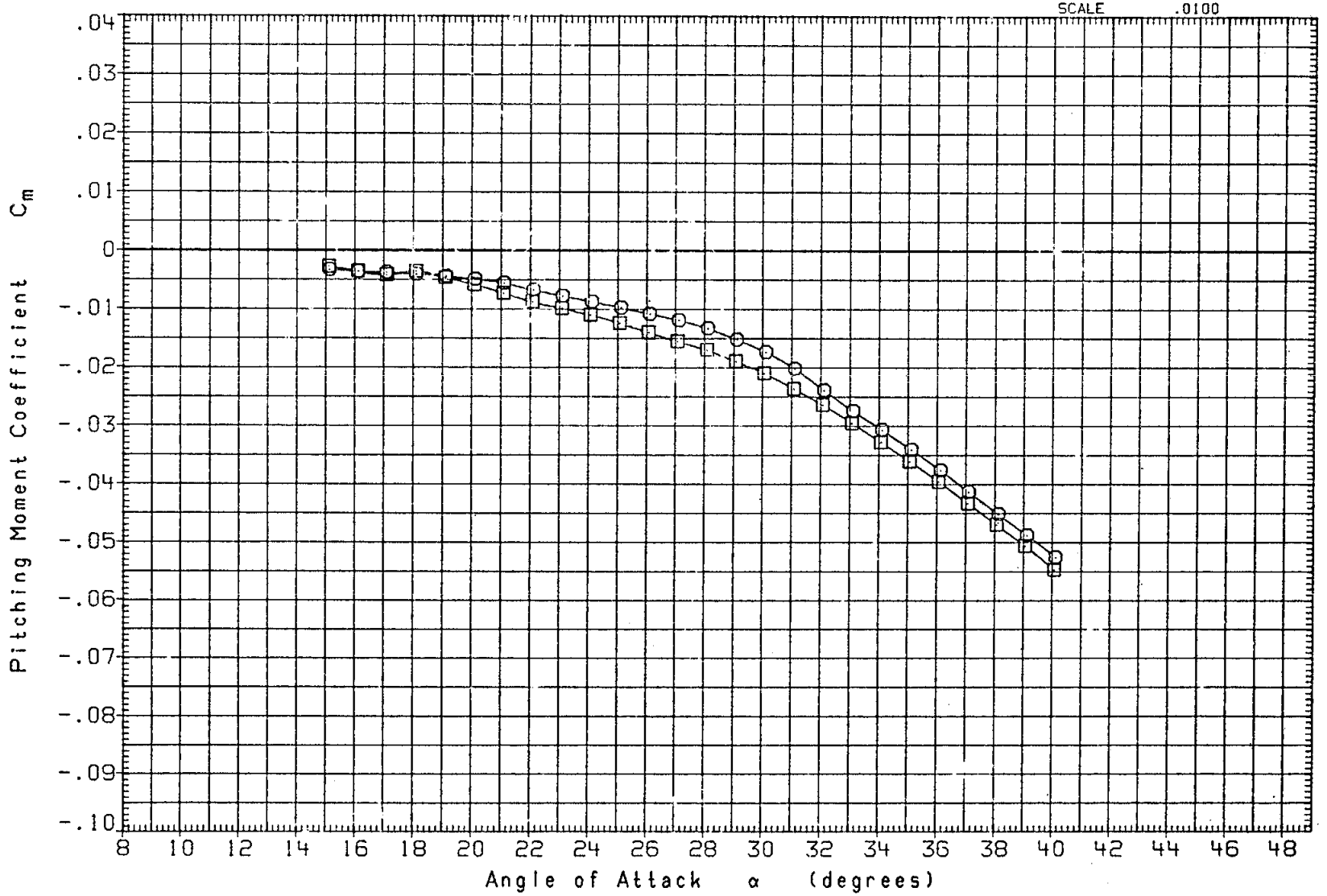


FIG. 1 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING A BASELINE CONFIGURATION

DATE 02 MAR 81

RT3003 CONFIGURATION 0A259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.001
□	4.385

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
BETA	-.400	RUDDER	.000
ELEVON	.000	S-MODE	2.000
AILRON	.000	S-DIR	1.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

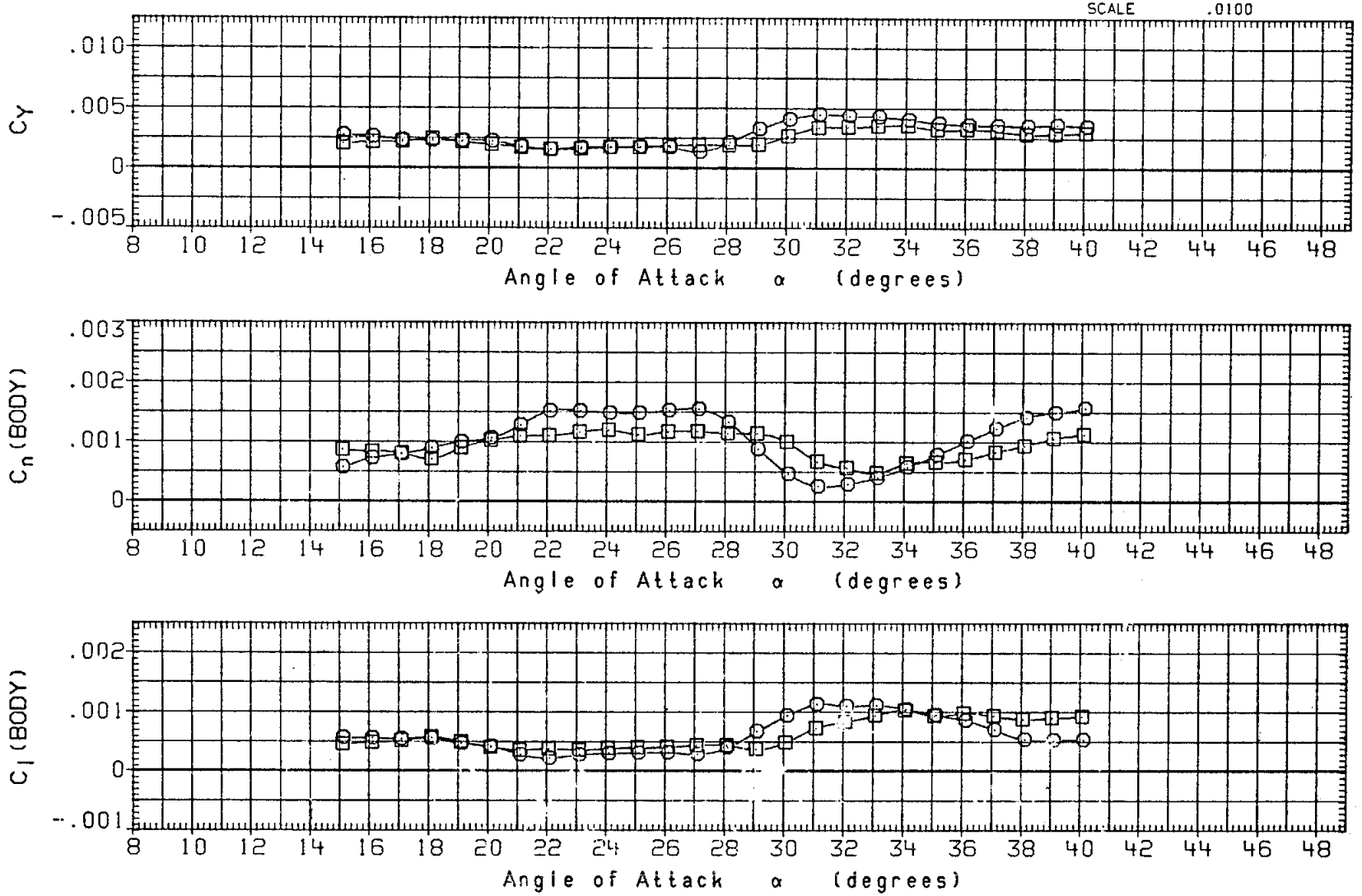


FIG. 1 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING A BASELINE CONFIGURATION

DATE 02 MAR 81

RT3004 CONFIGURATION 0A259 [AEDC V41B-141 0V102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.028	CONFIG	2.000	SPDBRK	87.200
□	4.360	BETA	.600	RUDDER	.000
		ELEVON	.000	S-MODE	2.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

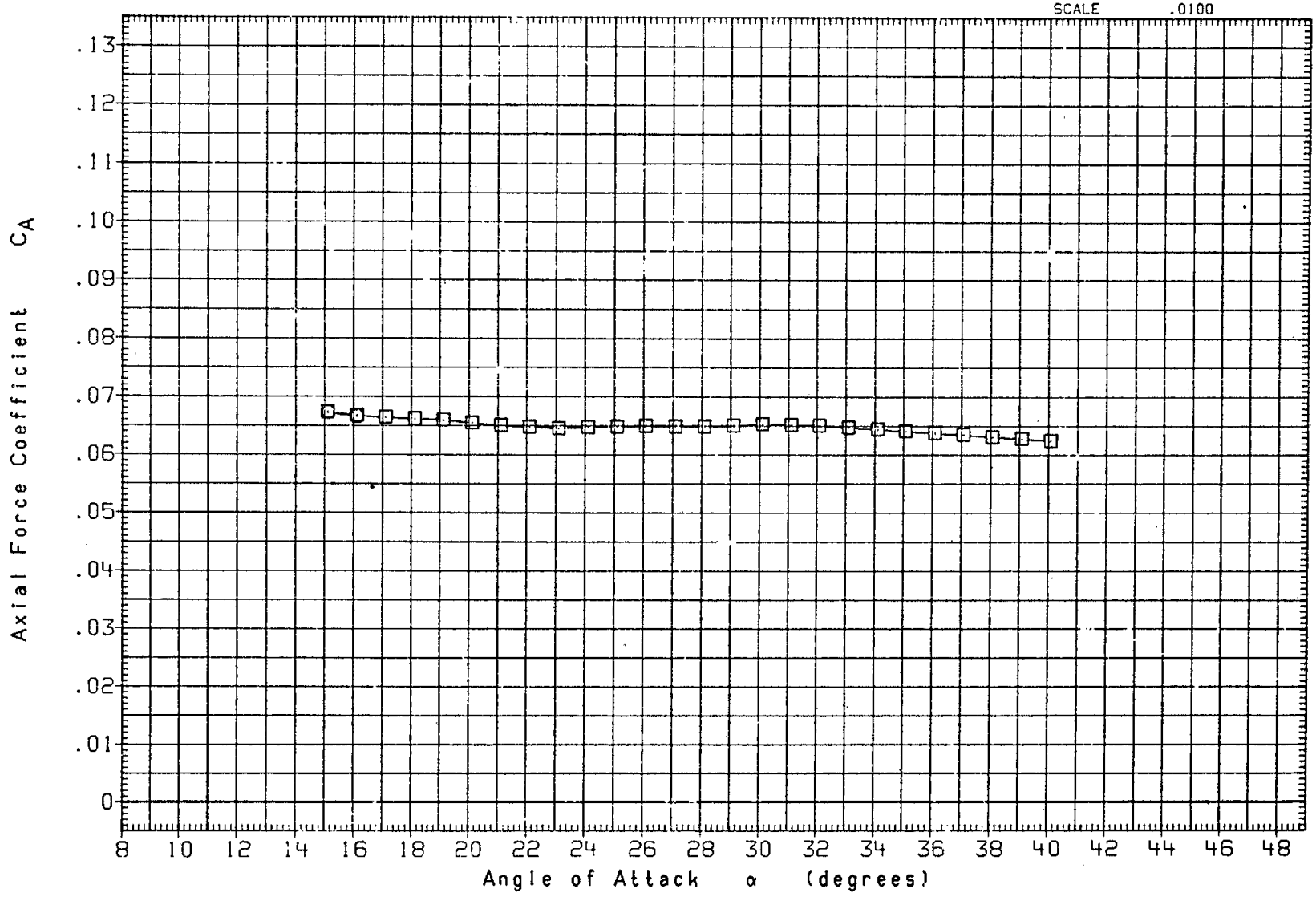


FIG. 1 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING A BASELINE CONFIGURATION

DATE 02 MAR 81

RT3004 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.028	CONFIG	2.000	SPDBRK	87.200
□	4.360	BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	2.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

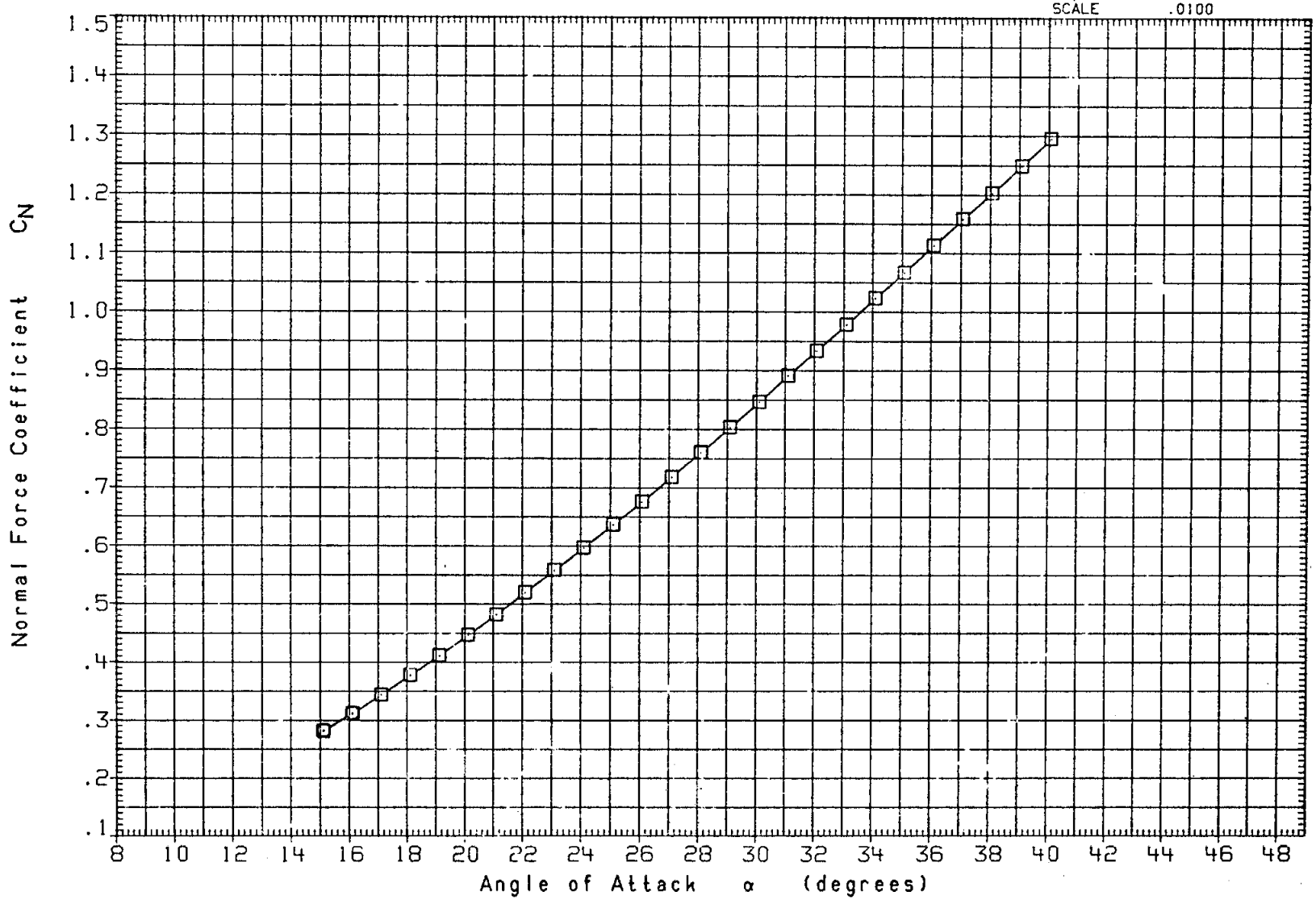


FIG. 1 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING A BASELINE CONFIGURATION

DAT 02 MAR 81

PAGE

RT3004 CONFIGURATION 0A25S (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.028	CONFIG	2.000	SPDBRK	87.200
□	4.360	BETA	.600	RUDDER	.000
		ELEVON	.000	S-MODE	2.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

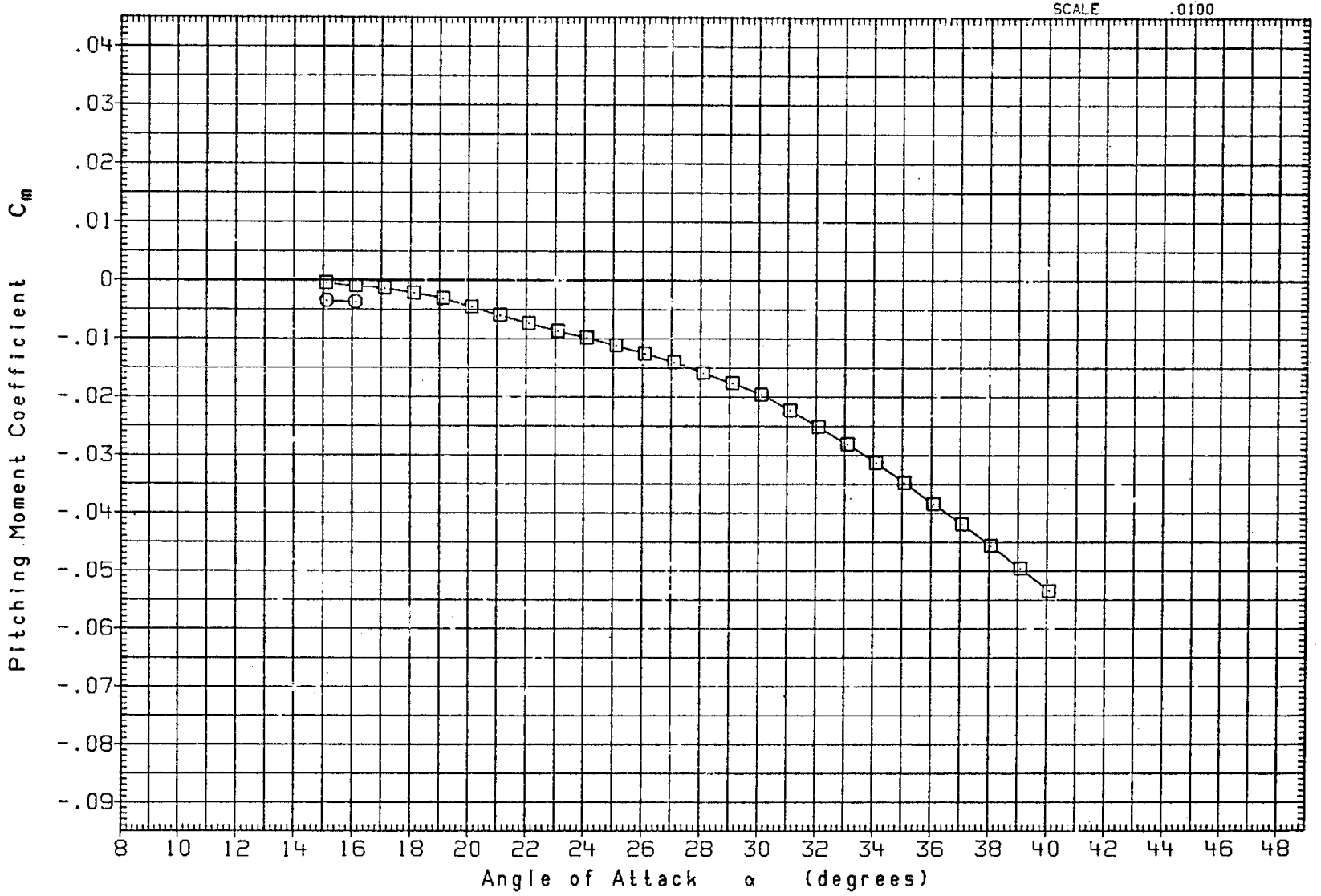


FIG. 1 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING A BASELINE CONFIGURATION

DATE 02 MAR 81

RT3004 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.028
□	4.360

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
BETA	.600	RUDDER	.000
ELEVON	.000	S-MODE	2.000
AILRON	.000	S-DIR	1.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

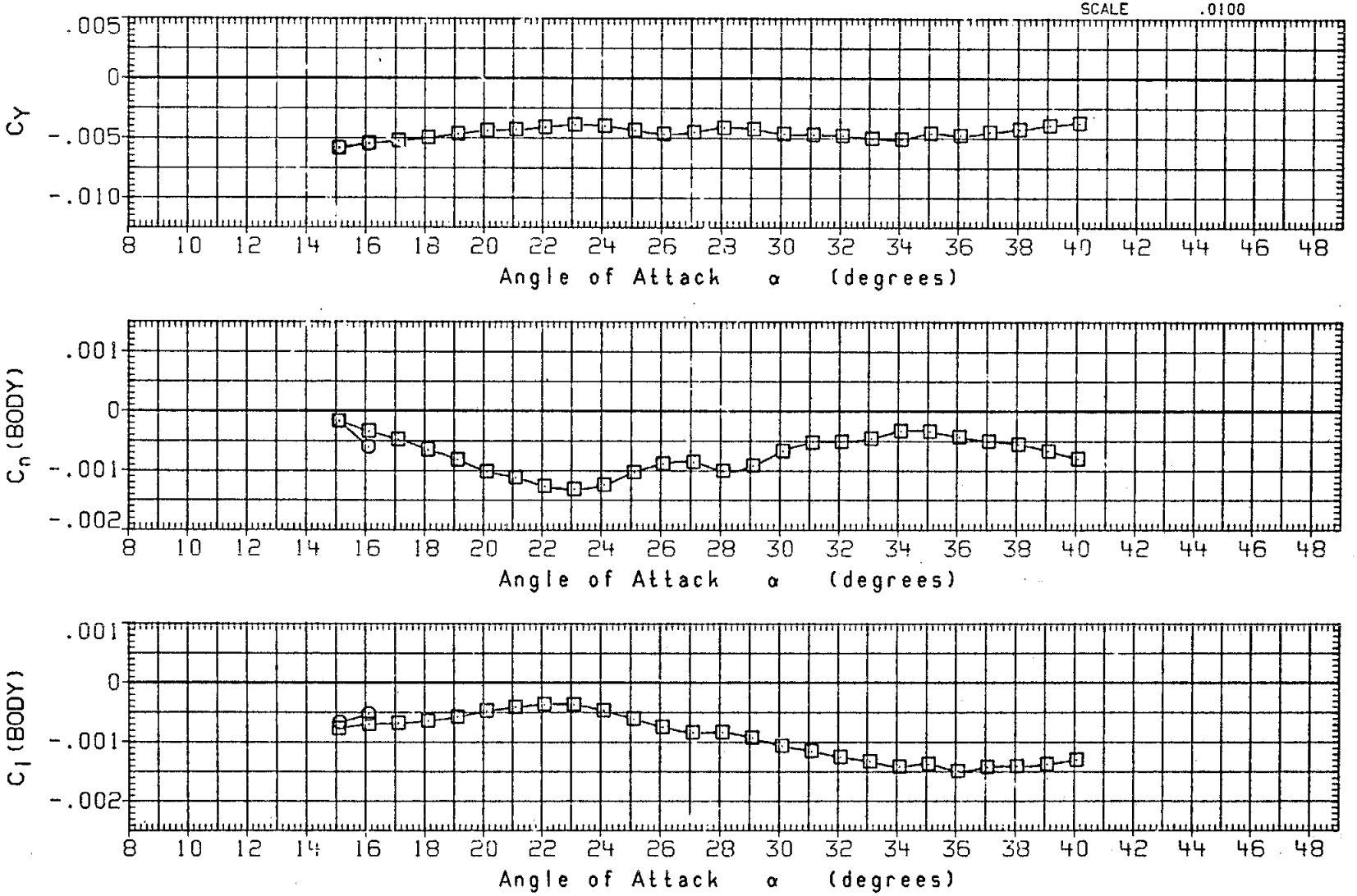


FIG. 1 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING A BASELINE CONFIGURATION

DAT 02 MAR 81

PAGE

RT3043 CONFIGURATION OA259 (AEDC V41B-14 OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.016	CONFIG	5.000	SFDBRK	87.200
□	4.347	BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	2.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

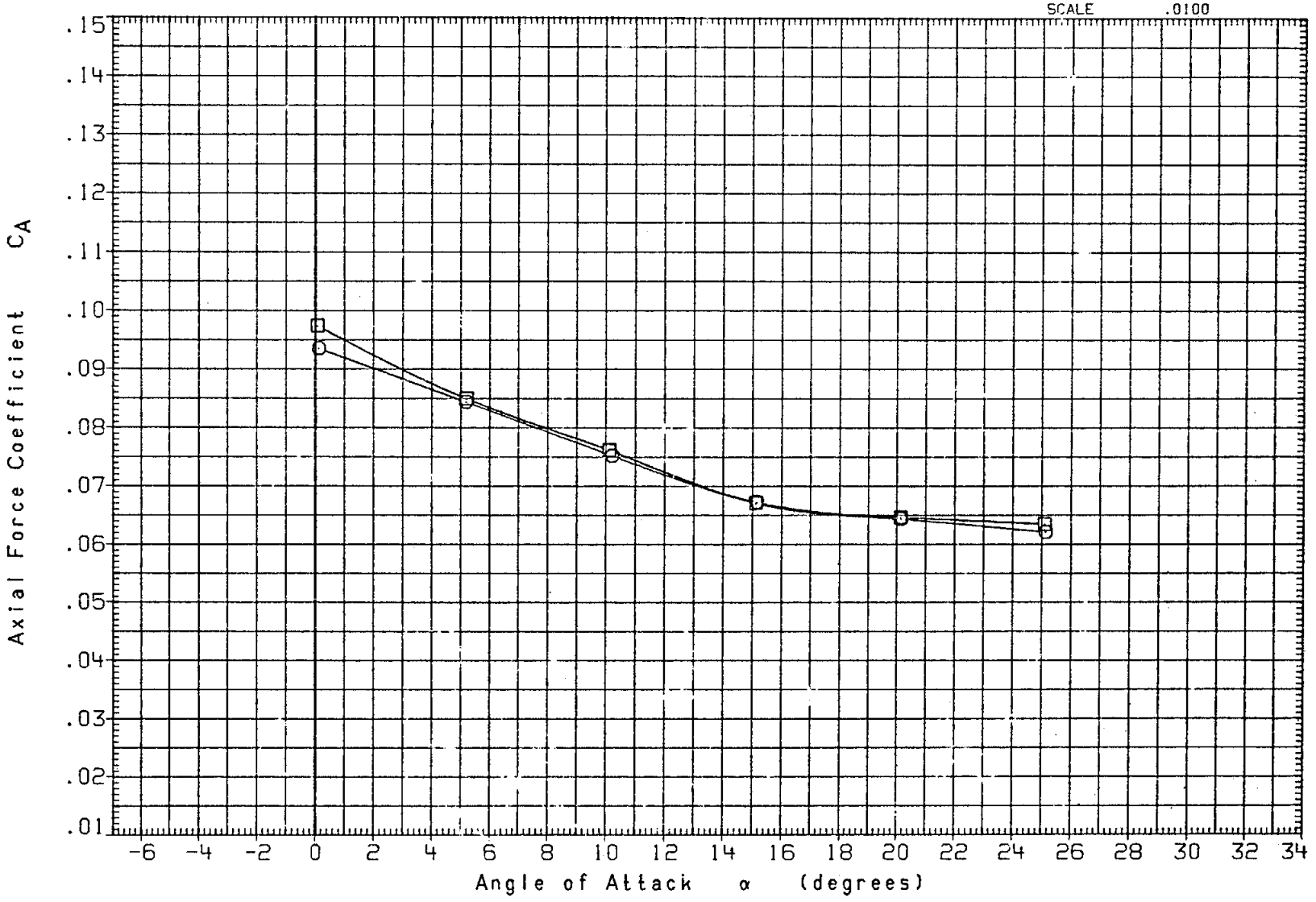


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3043 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.016	CONFIG	5.000	SPDBRK	87.200
□	4.347	BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	2.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

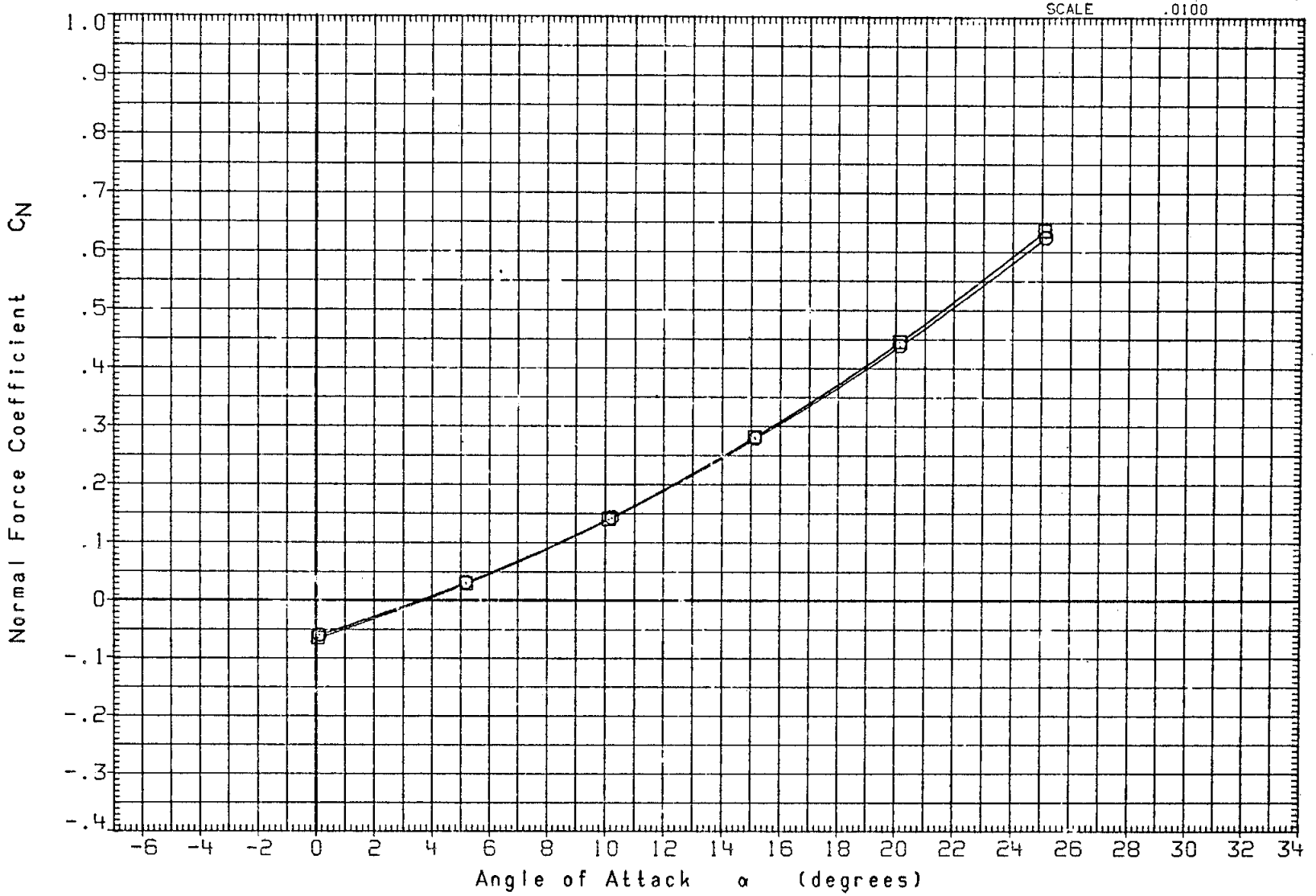


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

PAGE

RT3043 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.016
□	4.347

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
BETA	.000	RUDDER	.000
ELEVON	.000	S-MODE	2.000
AILRON	.000	S-DIR	1.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

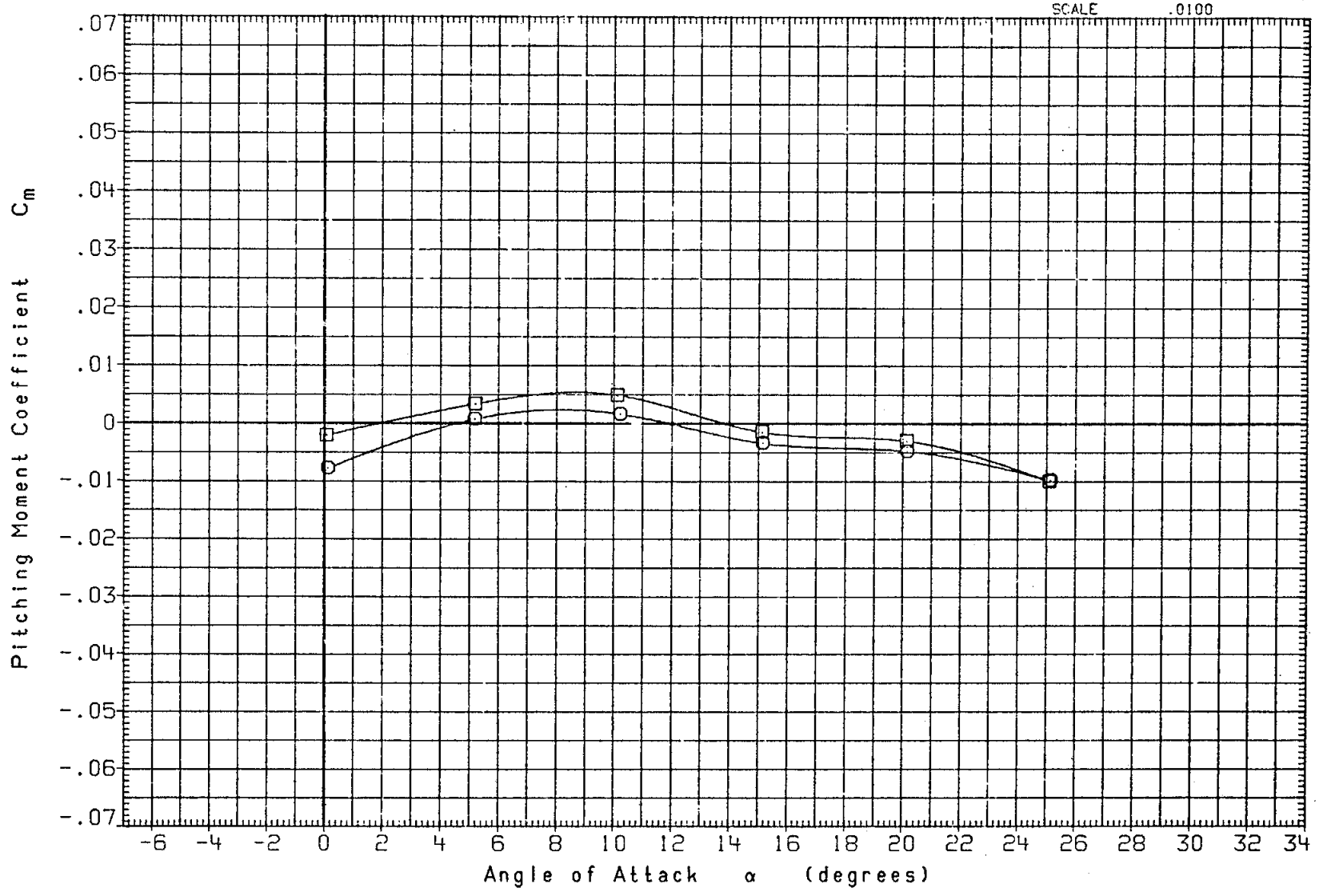


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3043 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.016
□	4.347

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
BETA	.000	RUDDER	.000
ELEVON	.000	S-MODE	2.000
AILRON	.000	S-DIR	1.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6500	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

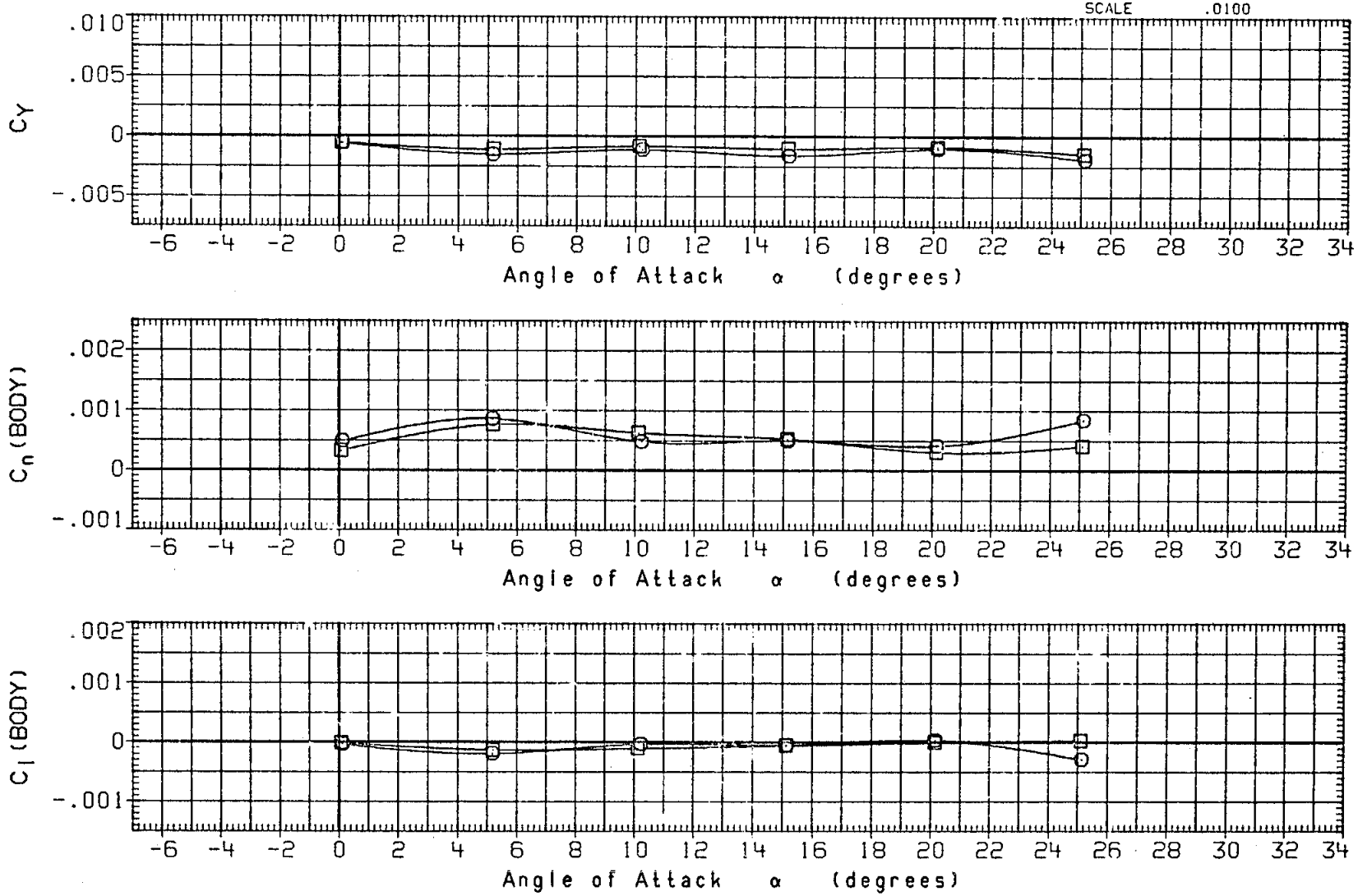


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3044 CONFIGURATION OA259 [AEDC V41B-14] GV103, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.032
□	4.342

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
BETA	-.440	RUDDER	.000
ELEVON	.000	S-MODE	2.000
AILRON	.000	S-DIR	1.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

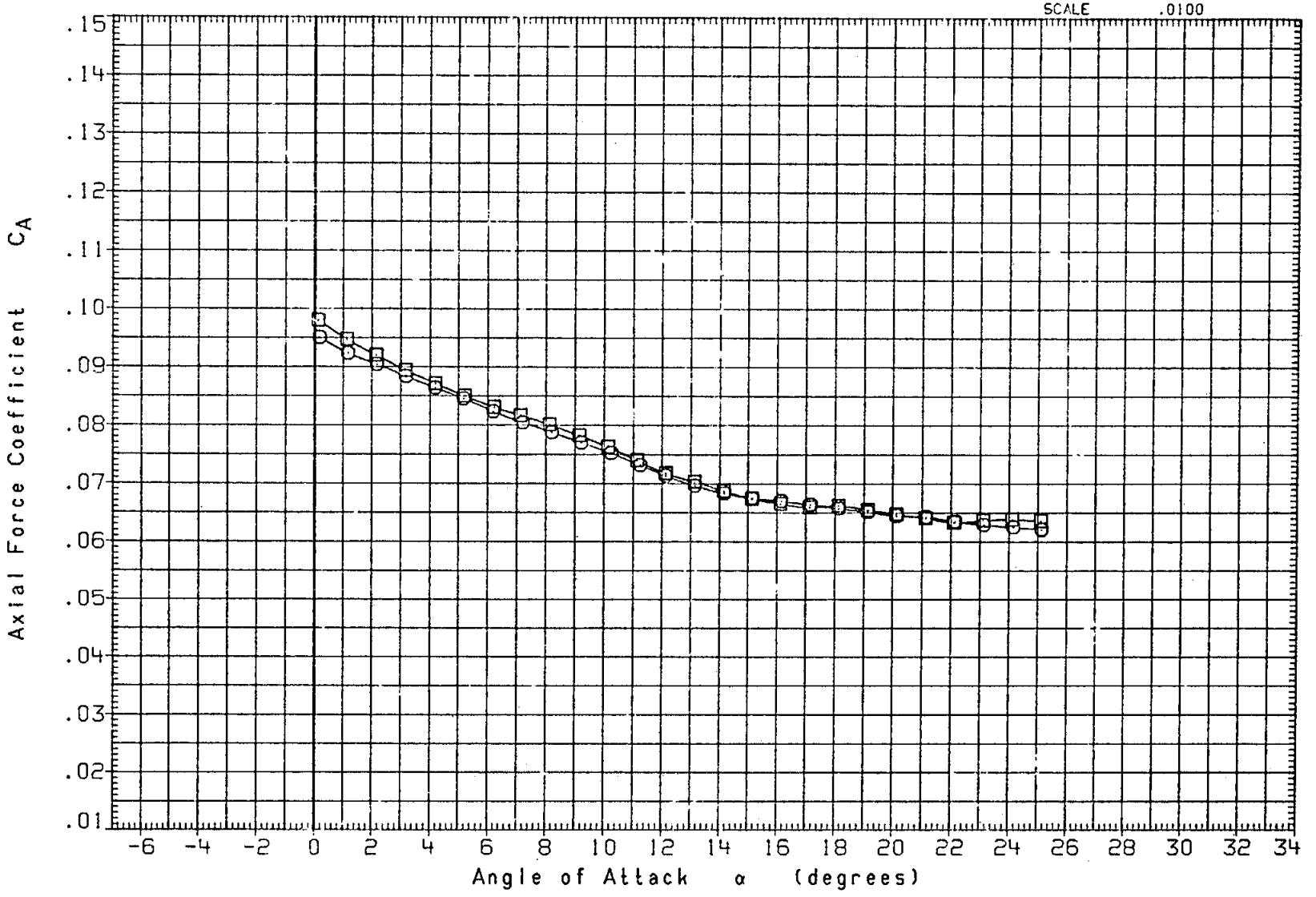


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3044 CONFIGURATION 0A259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.032	CONFIG	5.000	SPDBRK	87.200
□	4.342	BETA	-.440	RUDDER	.000
		ELEVON	.000	S-MODE	2.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

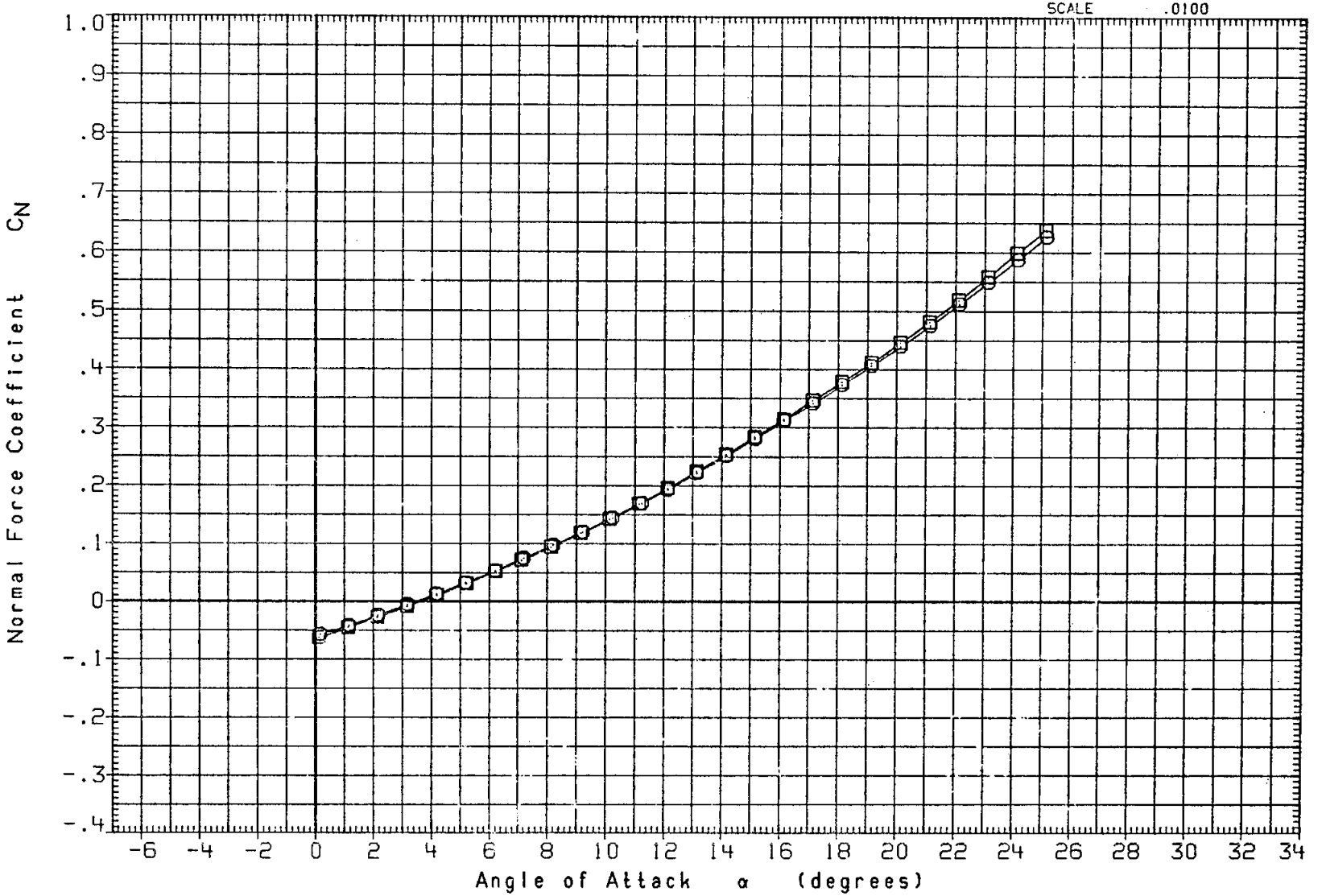


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3044 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.032	CONFIG	5.000	SPDBRK	87.200
□	4.342	BETA	-.440	RUDDER	.000
		ELEVON	.000	S-MODE	2.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

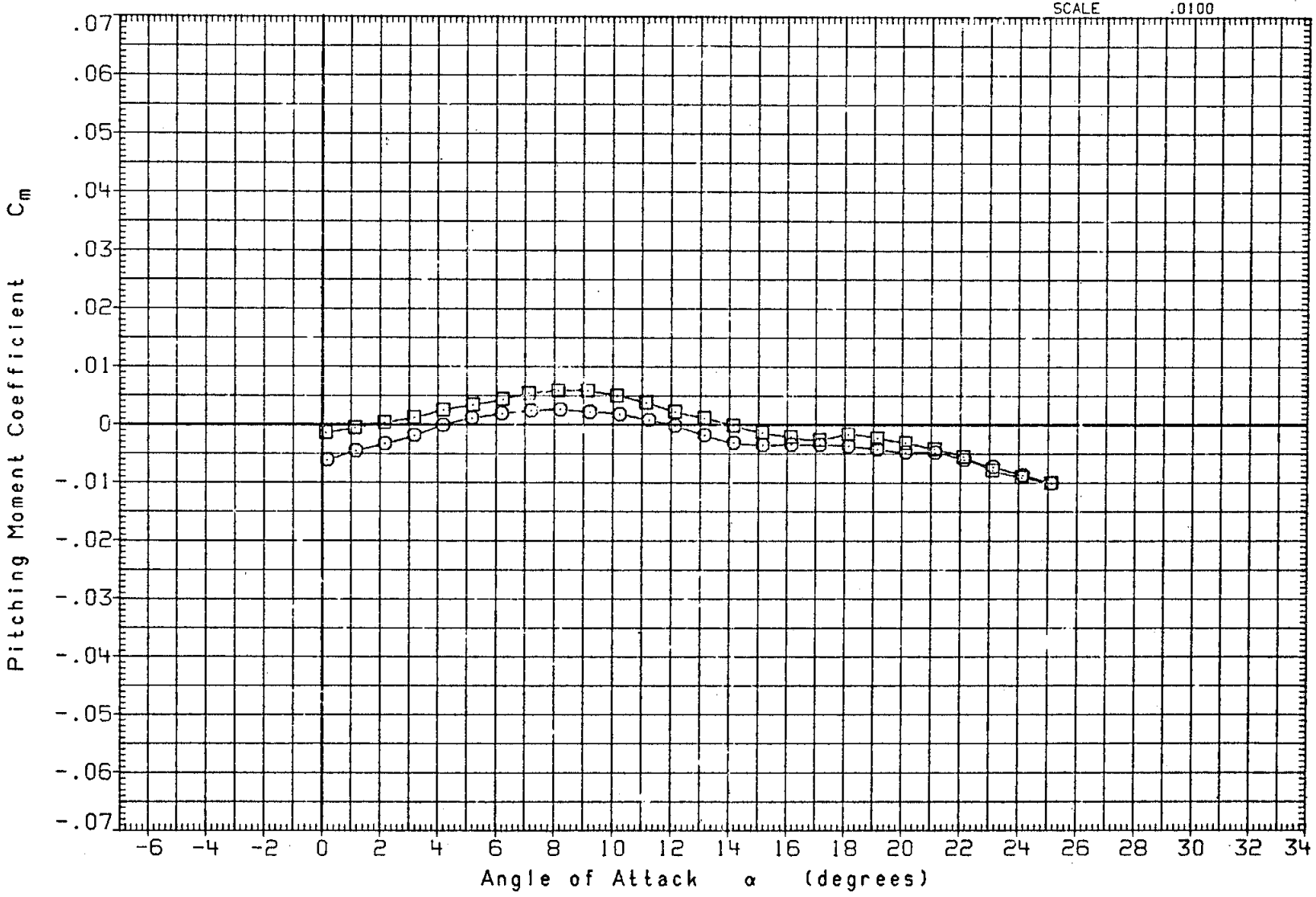


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3044 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.032
□	4.342

PARAMETRIC VALUES

CONFIG	5.000	SPDERK	87.200
BETA	-.440	RUDDER	.000
ELEVON	.000	S-MODE	2.000
AILRON	.000	S-DIR	1.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

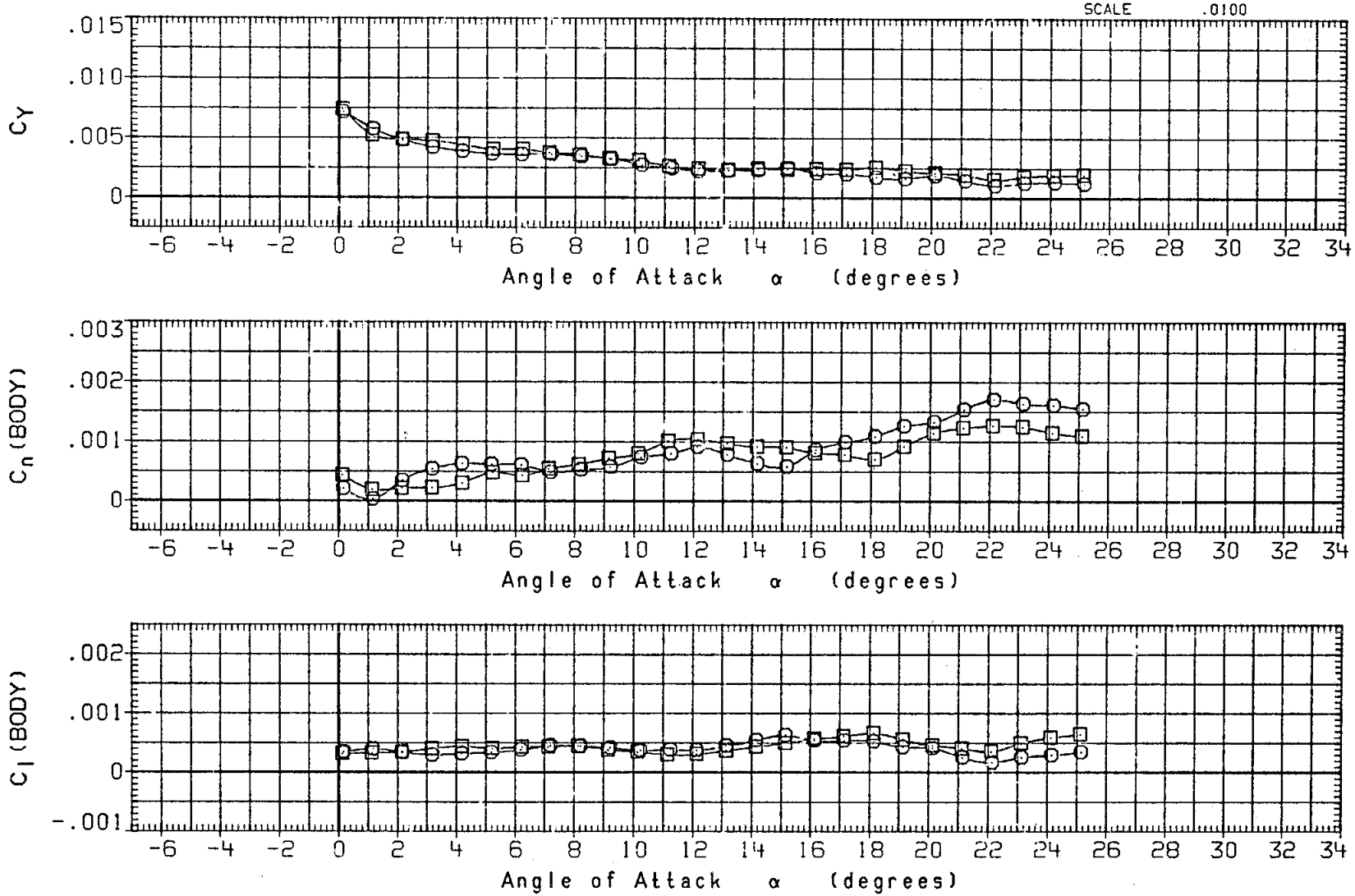


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3045 CONFIGURATION 0A259 (AEDC V41B-14) DV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.034	CONFIG	5.000	SPDBRK	87.200
□	4.364	BETA	.560	RUDDER	.000
		ELEVON	.000	S-MODE	2.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

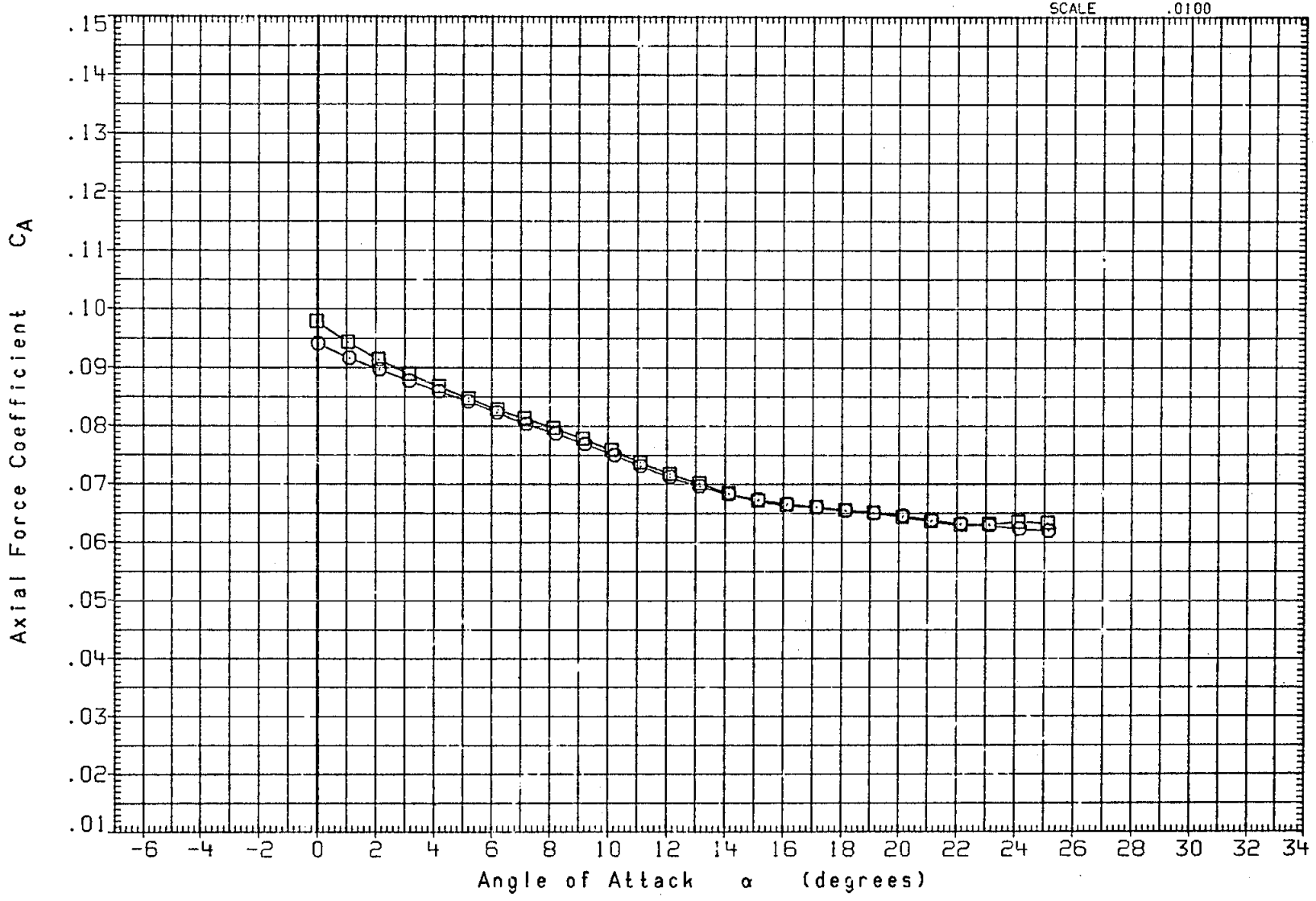


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3045 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.034
□	4.364

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
BETA	.560	RUDDER	.000
ELEVON	.000	S-MODE	2.000
AILRON	.000	S-DIR	1.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

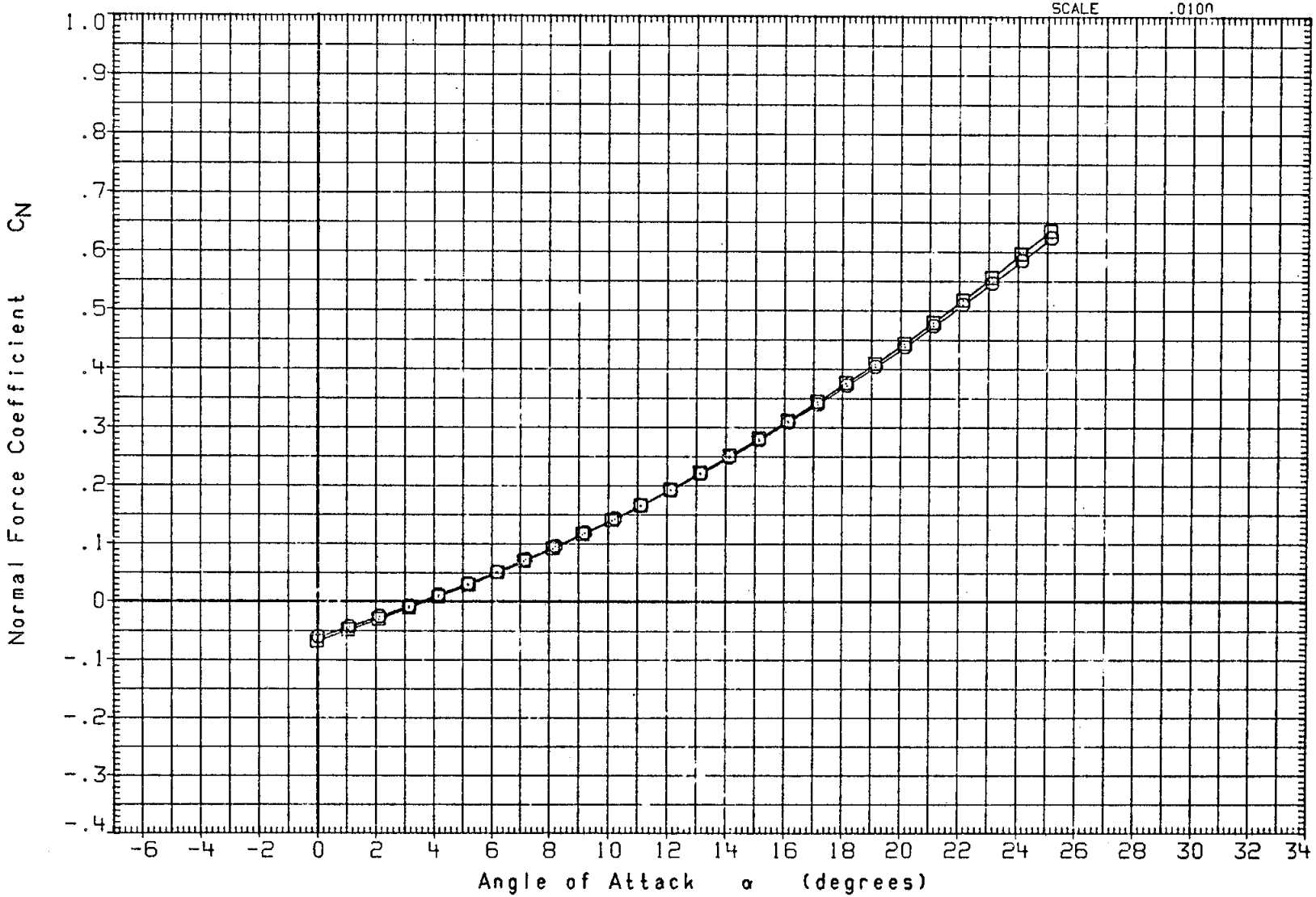


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3045 CONFIGURATION OA259 [AEDC V-1B-14] DV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.034	CONFIG	5.000	SPDBRK	87.200
□	4.364	BETA	.560	RUDDER	.000
		ELEVON	.000	S-MODE	2.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	.000

PEFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

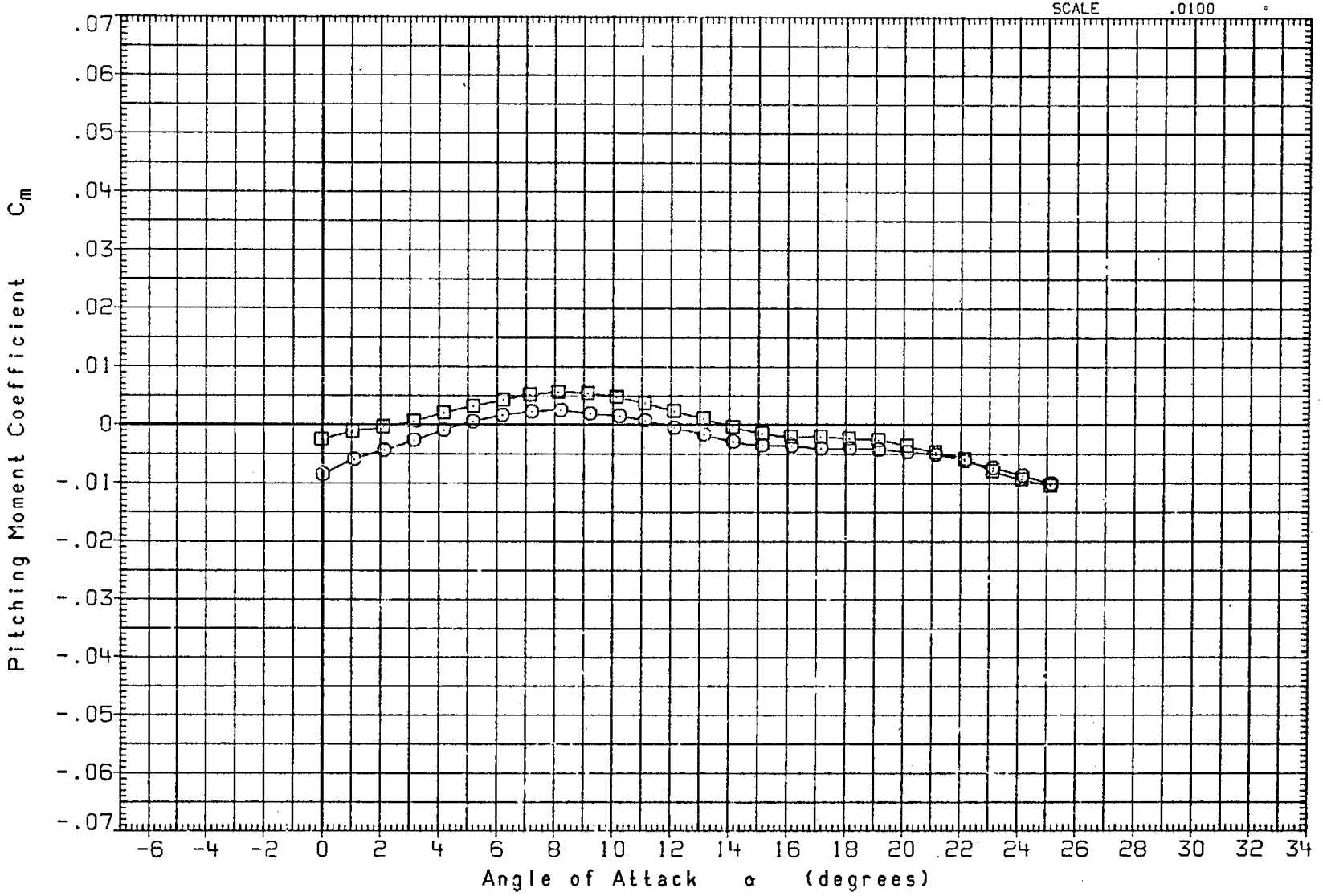


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3045 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.034
□	4.364

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
BETA	.560	RUDDER	.000
ELEVON	.000	S-MODE	2.000
AILRON	.000	S-DIR	1.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

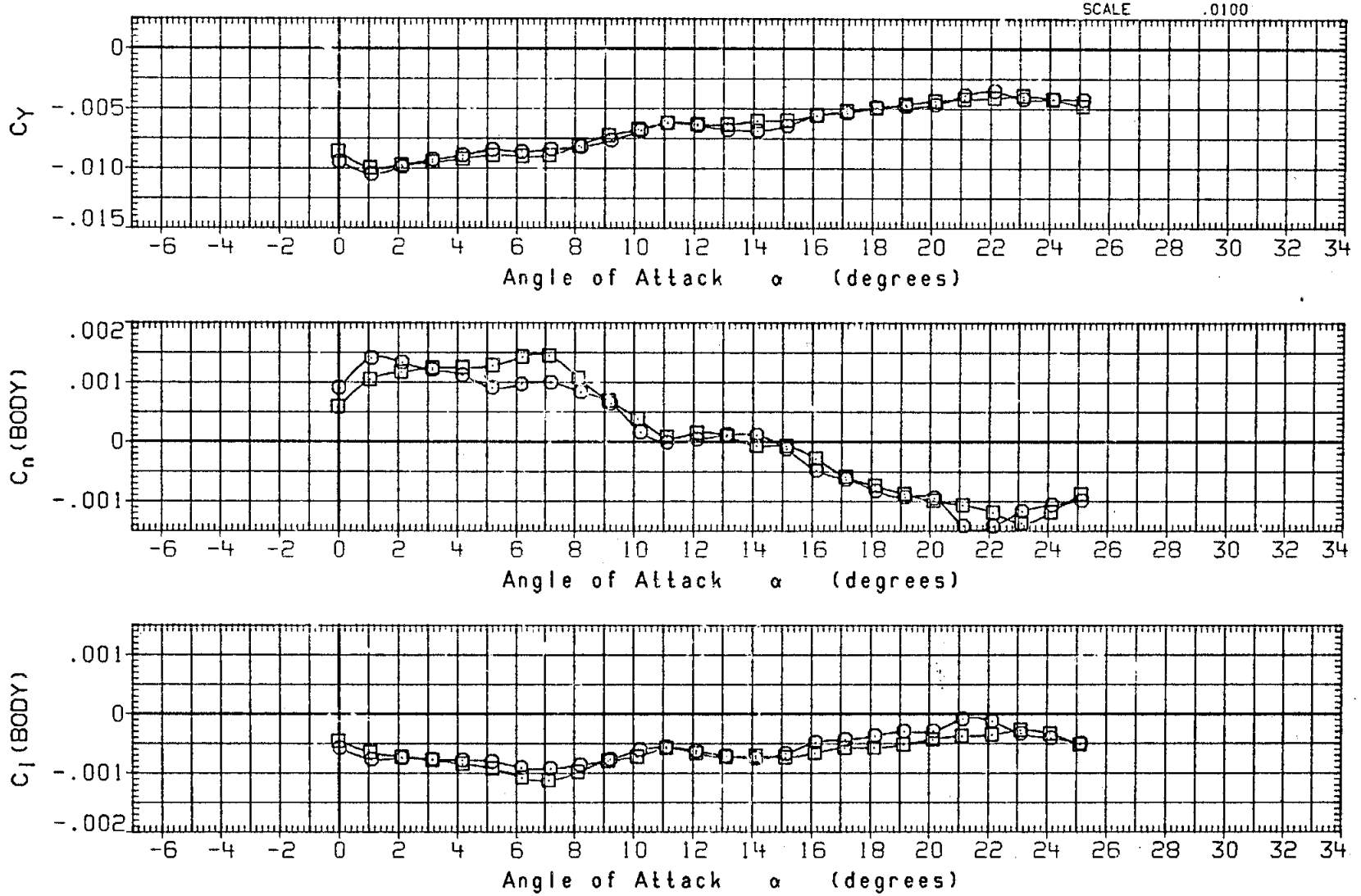


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3046 CONFIGURATION 0A259 (AEDC V41B-14) 0V102, STING B (UPRIGHT)

SYMBOL	RN/L
○	1.991
□	4.370

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
BETA	.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

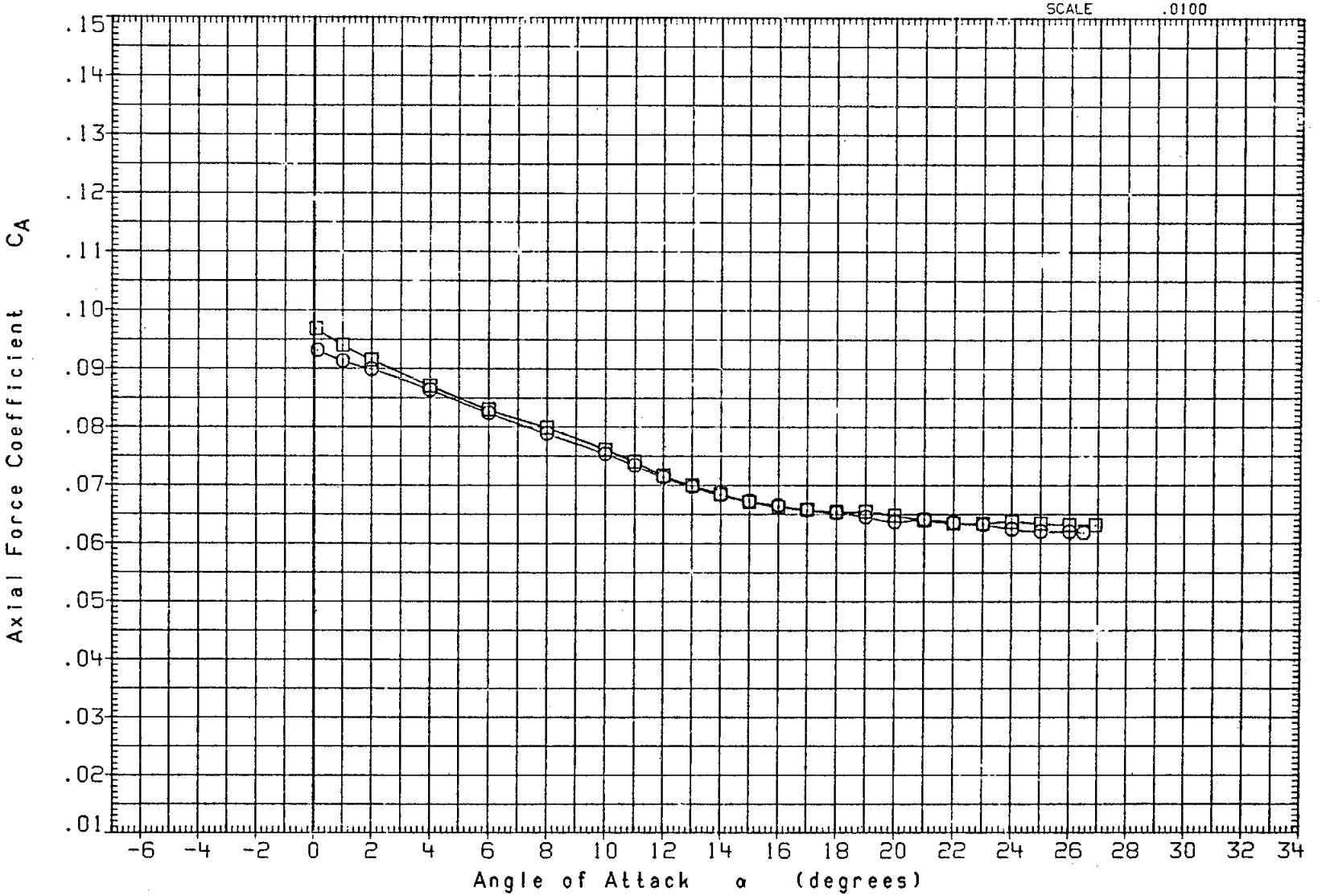


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3046 CONFIGURATION OA259 [AEDC V41B-14] OVIGE, STING B (UPRIGHT)

SYMBOL	RN/L
○	1.991
□	4.370

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
BETA	.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

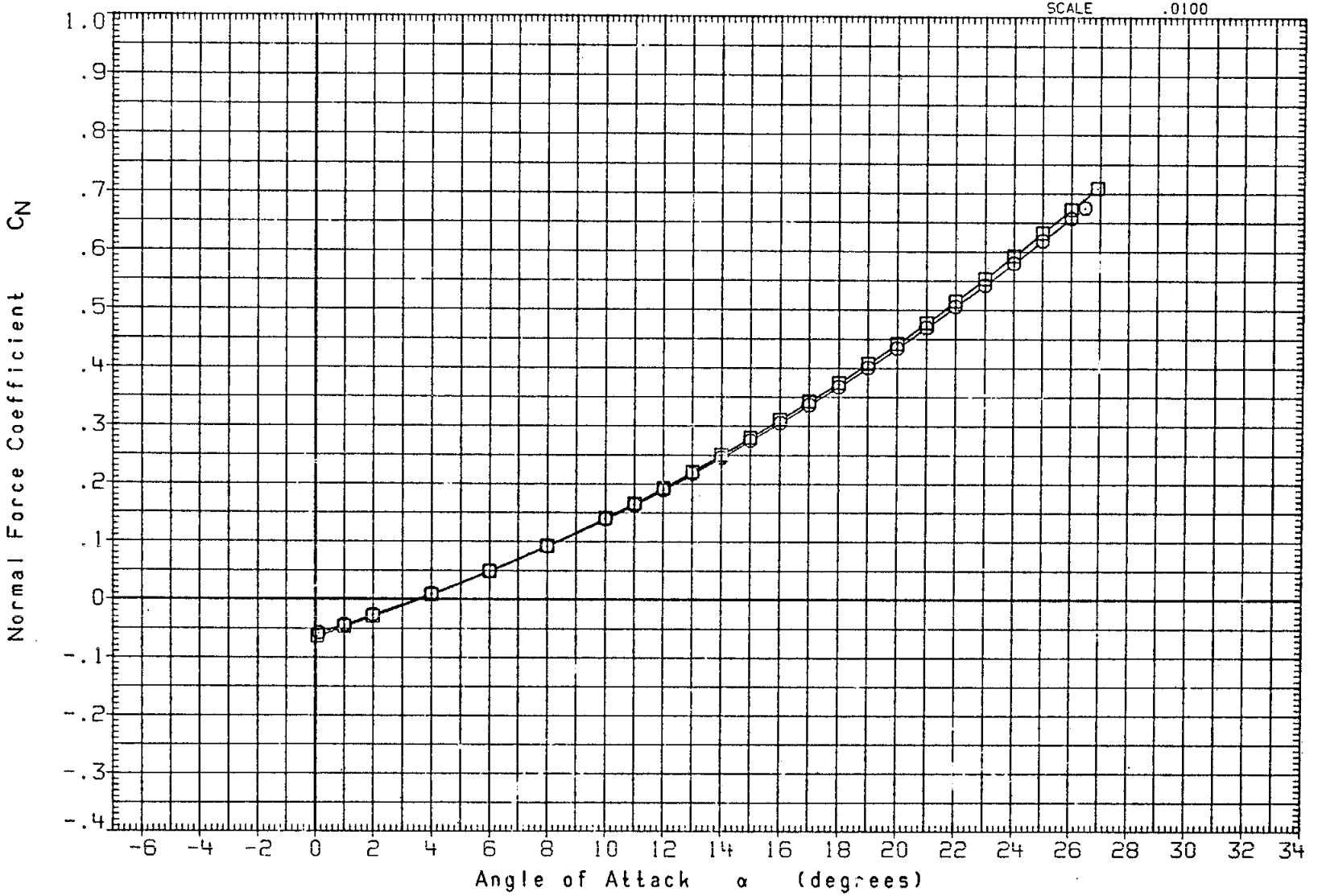


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3046 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	1.991	CONFIG	5.000	SPDBRK	87.200
□	4.370	BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

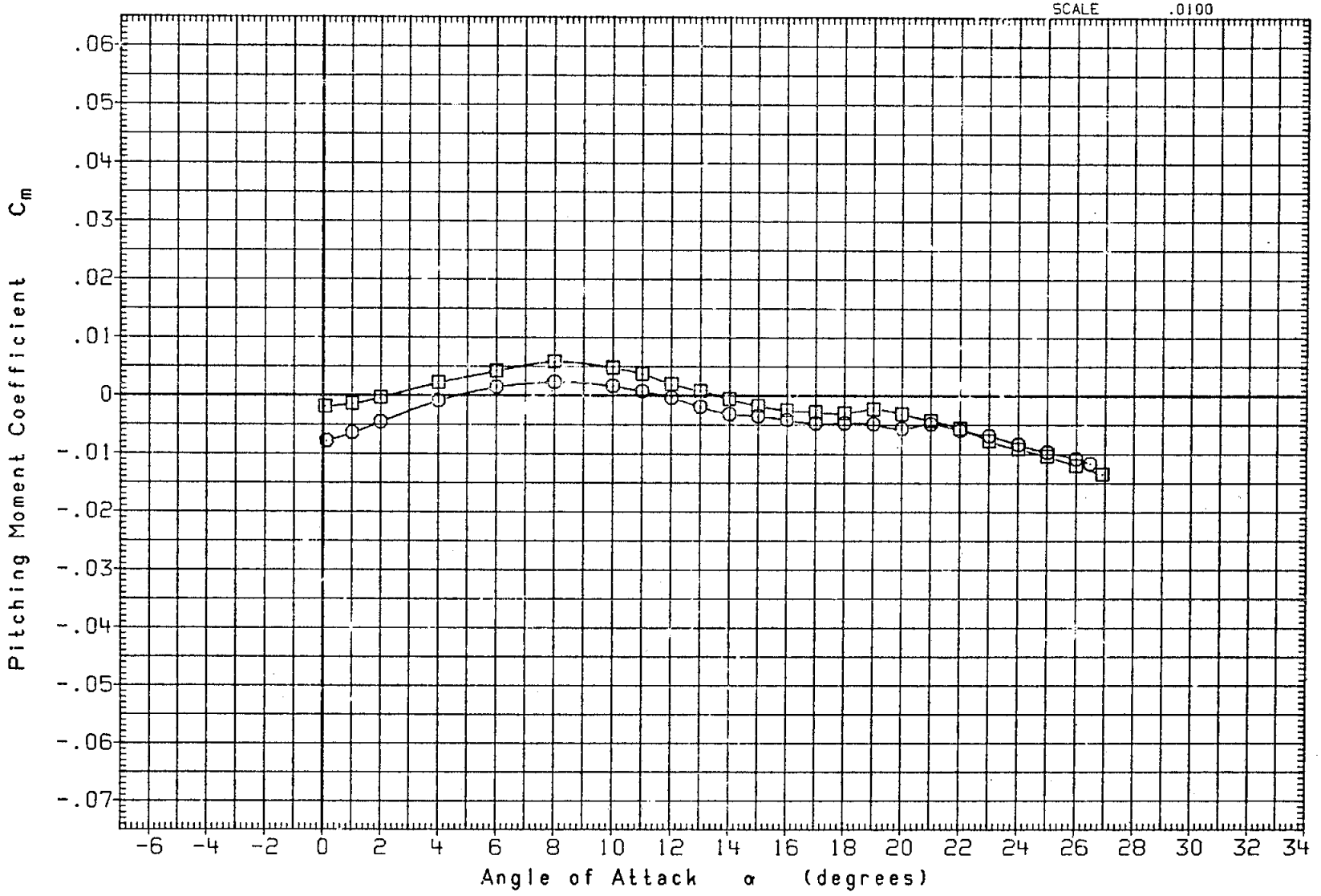


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3046 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	1.991
□	4.370

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
BETA	.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

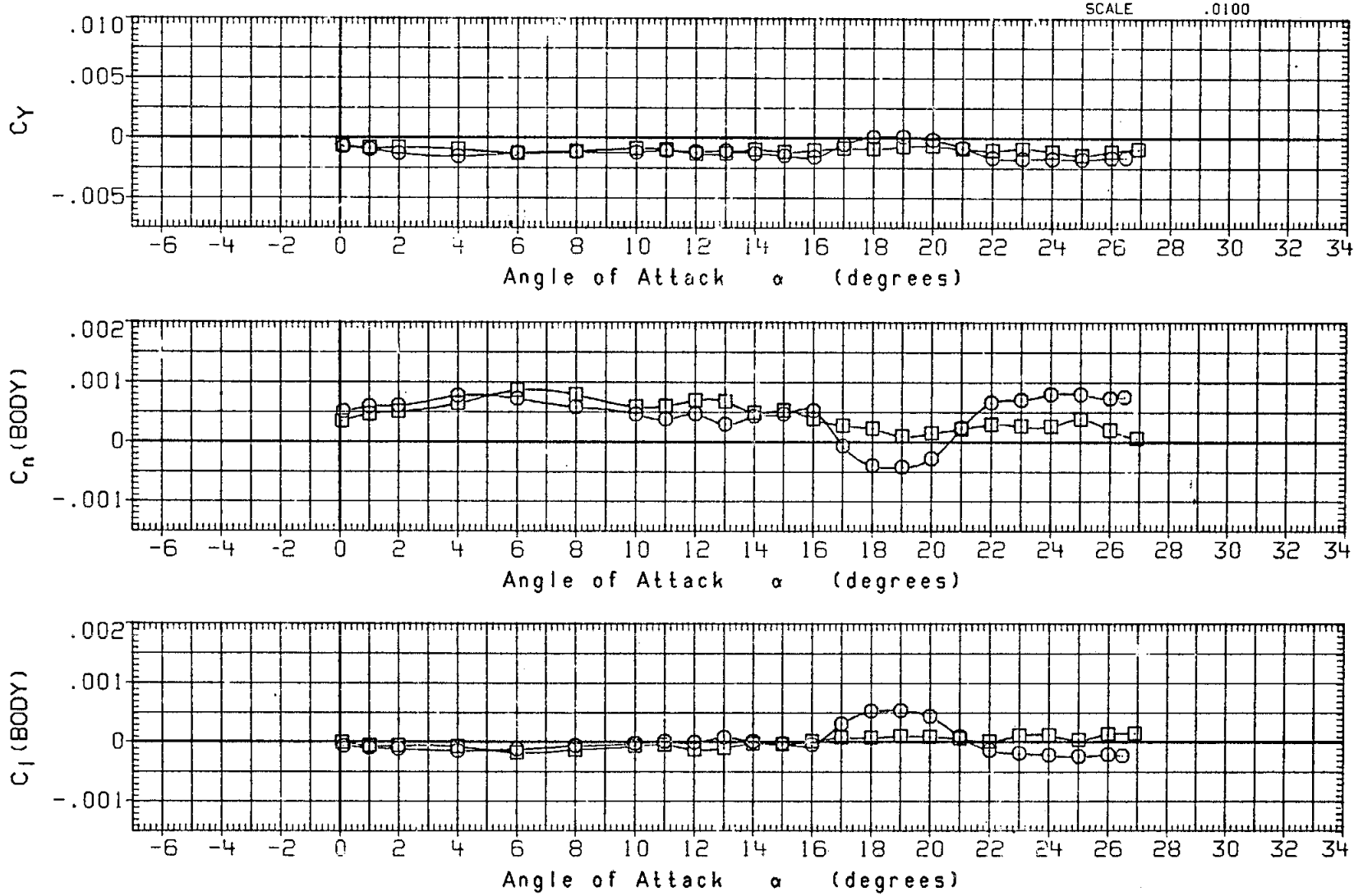


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3047 CONFIGURATION OA259 (AEDC V41B-14) CV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.016
□	4.355

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
BETA	.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

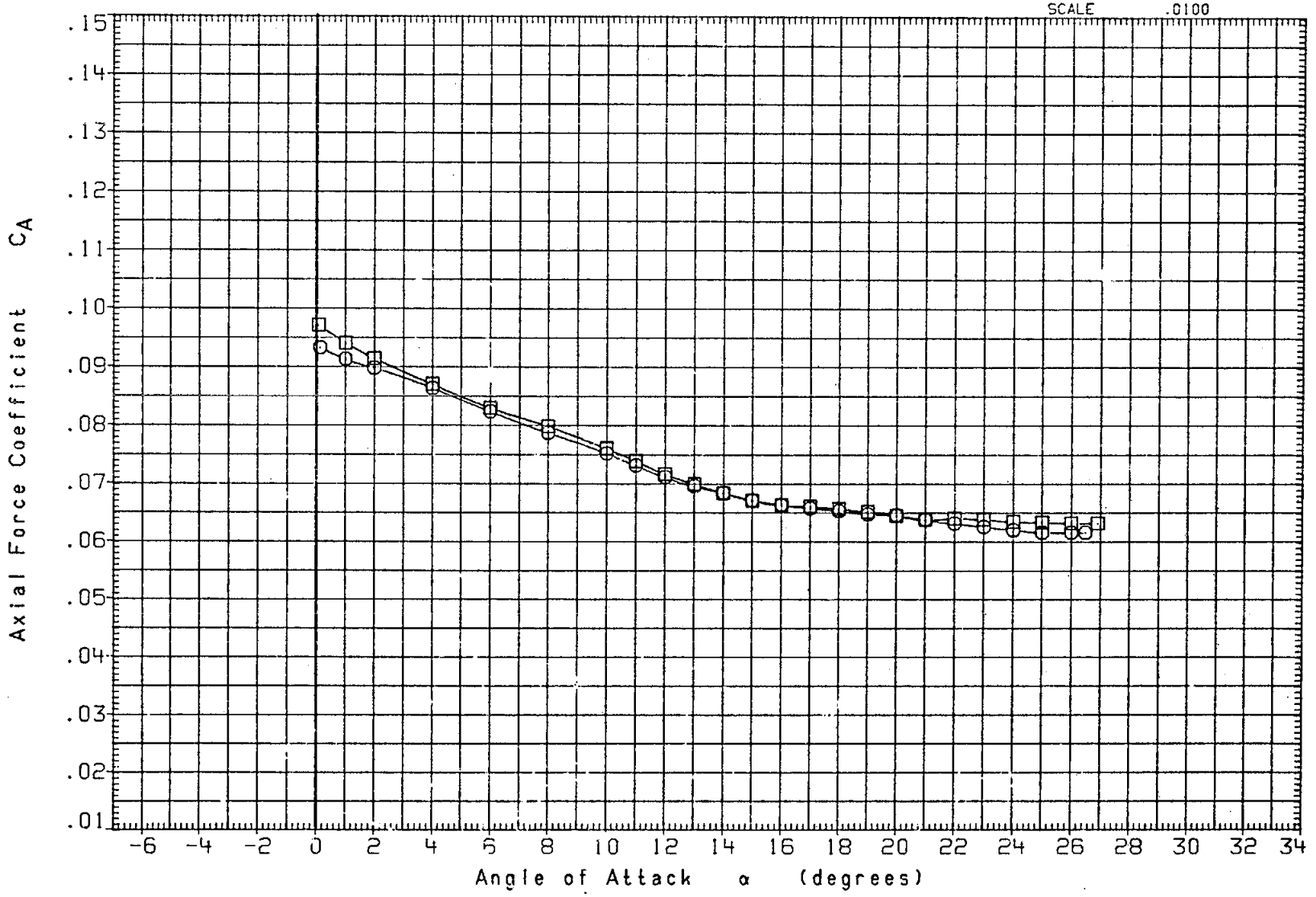


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3047 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.016
□	4.355

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
BETA	.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

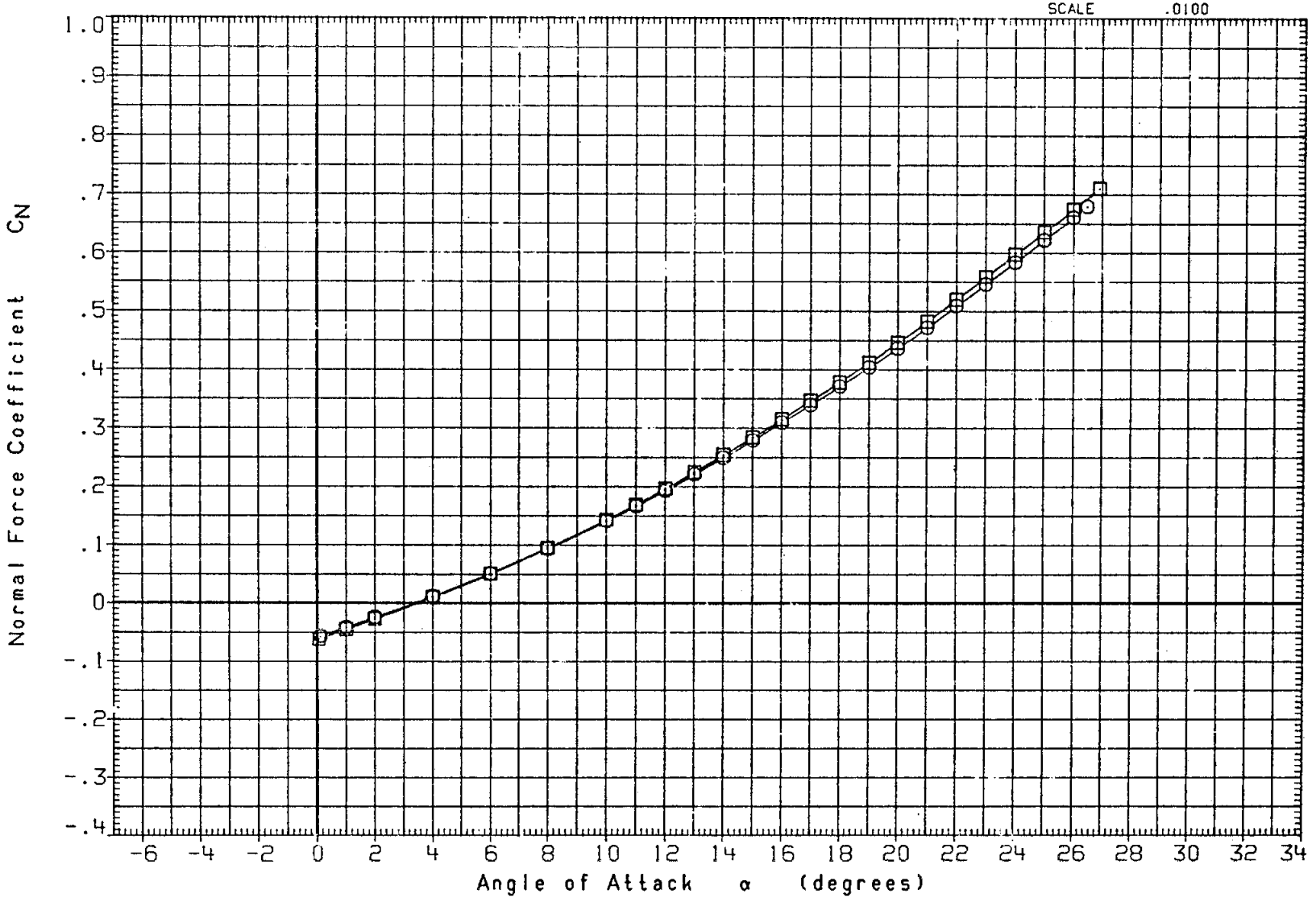


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3047 CONFIGURATION 0A259 (AEDC V41B-14) 0V102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.016
□	4.355

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
BETA	.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

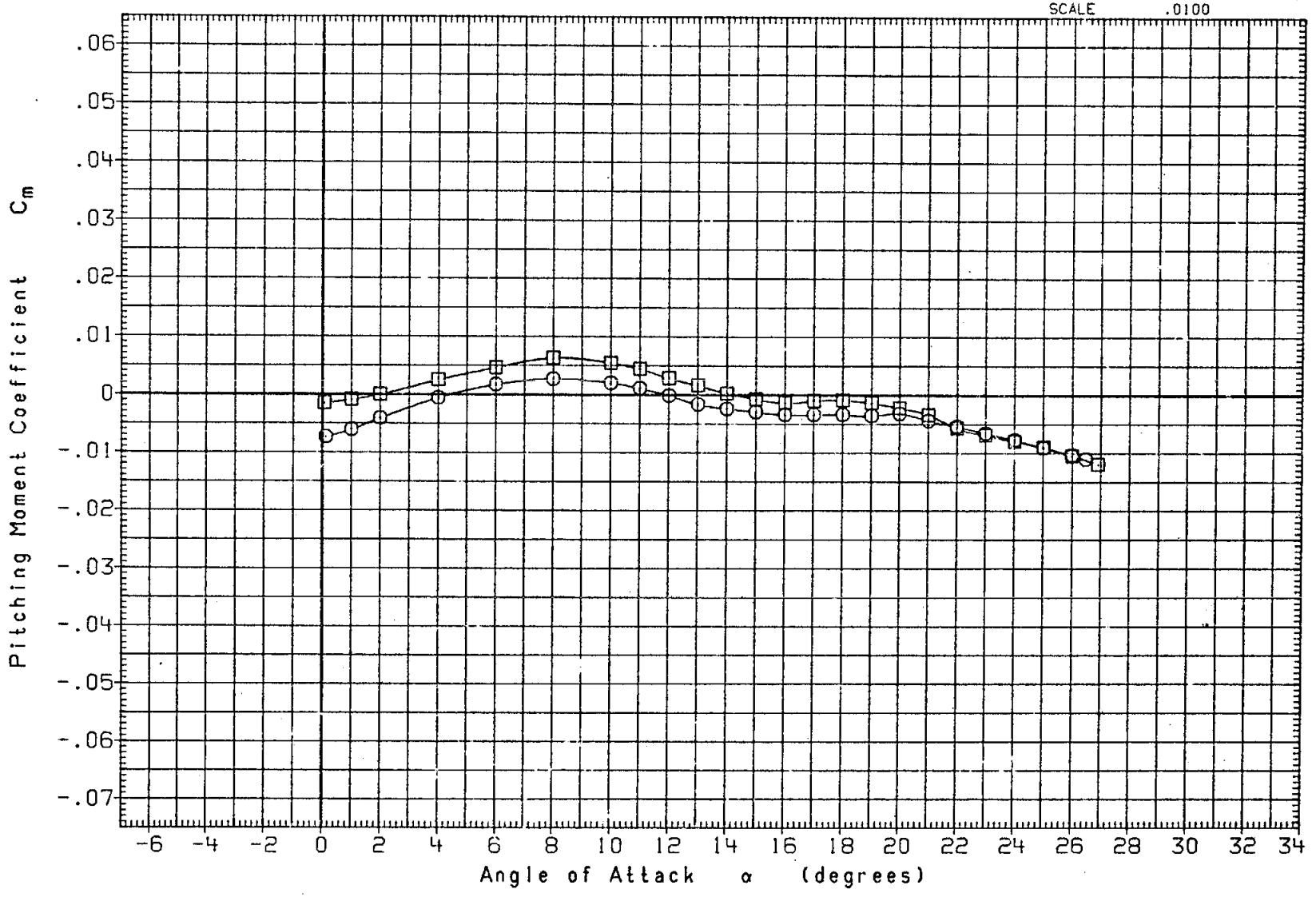


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3047 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.016	CONFIG	5.000	SPDBRK	87.200
□	4.355	BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

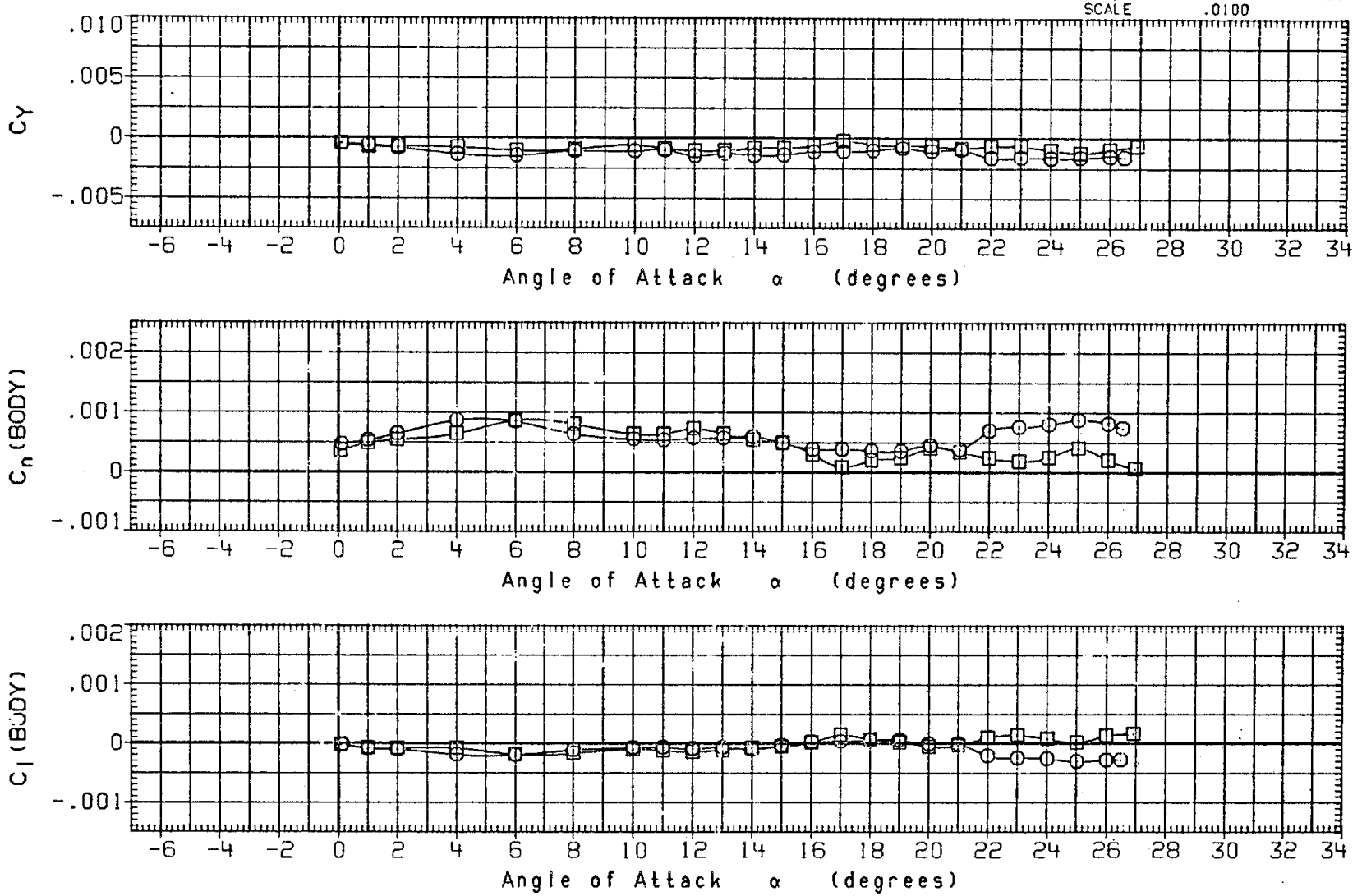


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(A) BASELINE CONFIGURATION

DATE 02 MAR 81

RT3065 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING B (COOLED-UPR)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.006	CONFIG	15.000	SPDBRK	87.200
□	4.360	BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

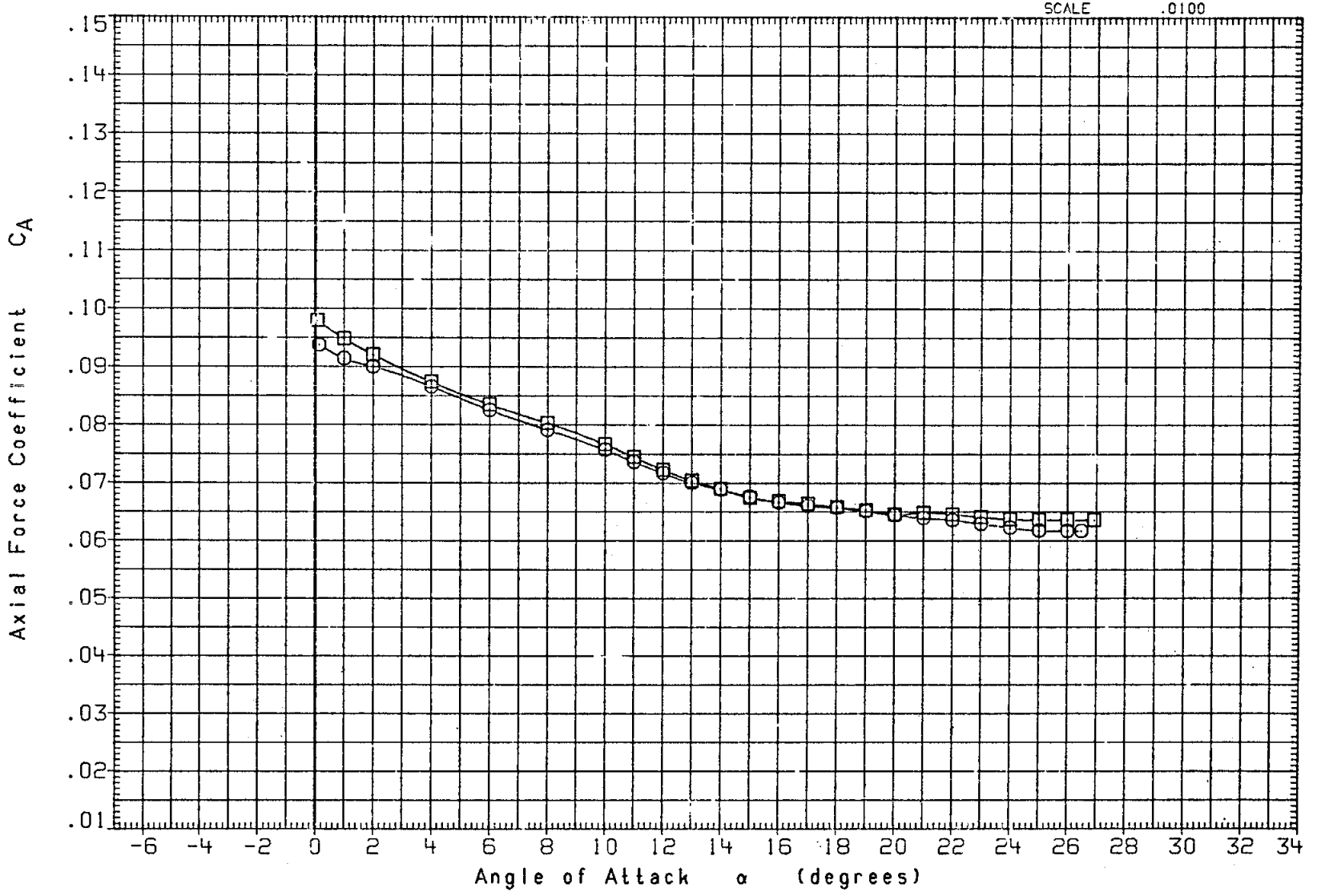


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(B) COOLED MODEL

DATE 02 MAR 81

RT3065 CONFIGURATION 0A259 (AEDC V4:B-14) 0V102, STING B (COOLED-UPR)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.006	CONFIG	15.000	SPDBRK	87.200
□	4.360	BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

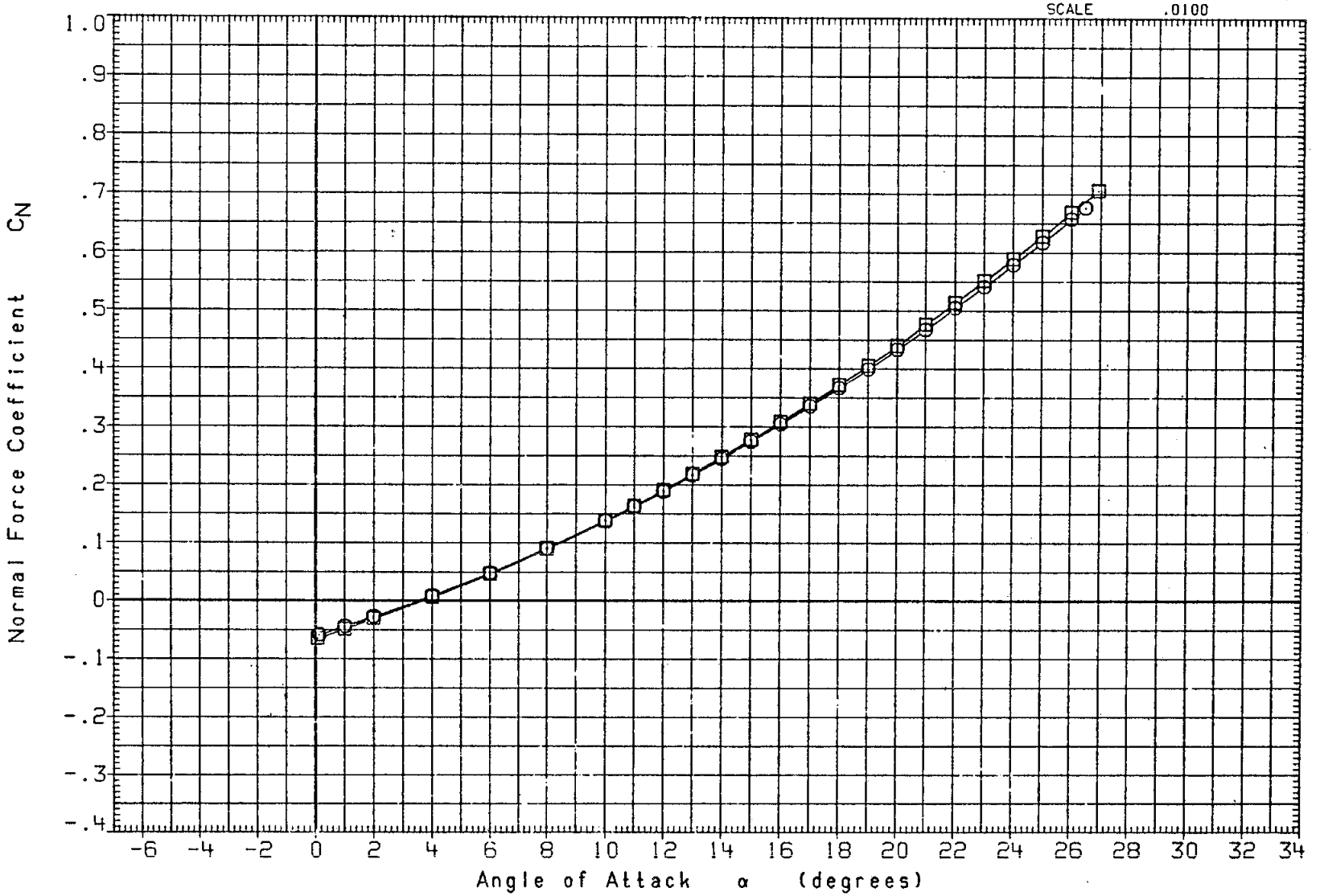


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B (B) COOLED MODEL

DATE 02 MAR 81

RT3065 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING B (COOLED-UPR)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.006	CONFIG	15.000	SPDBRK	87.200
□	4.360	BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	FHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

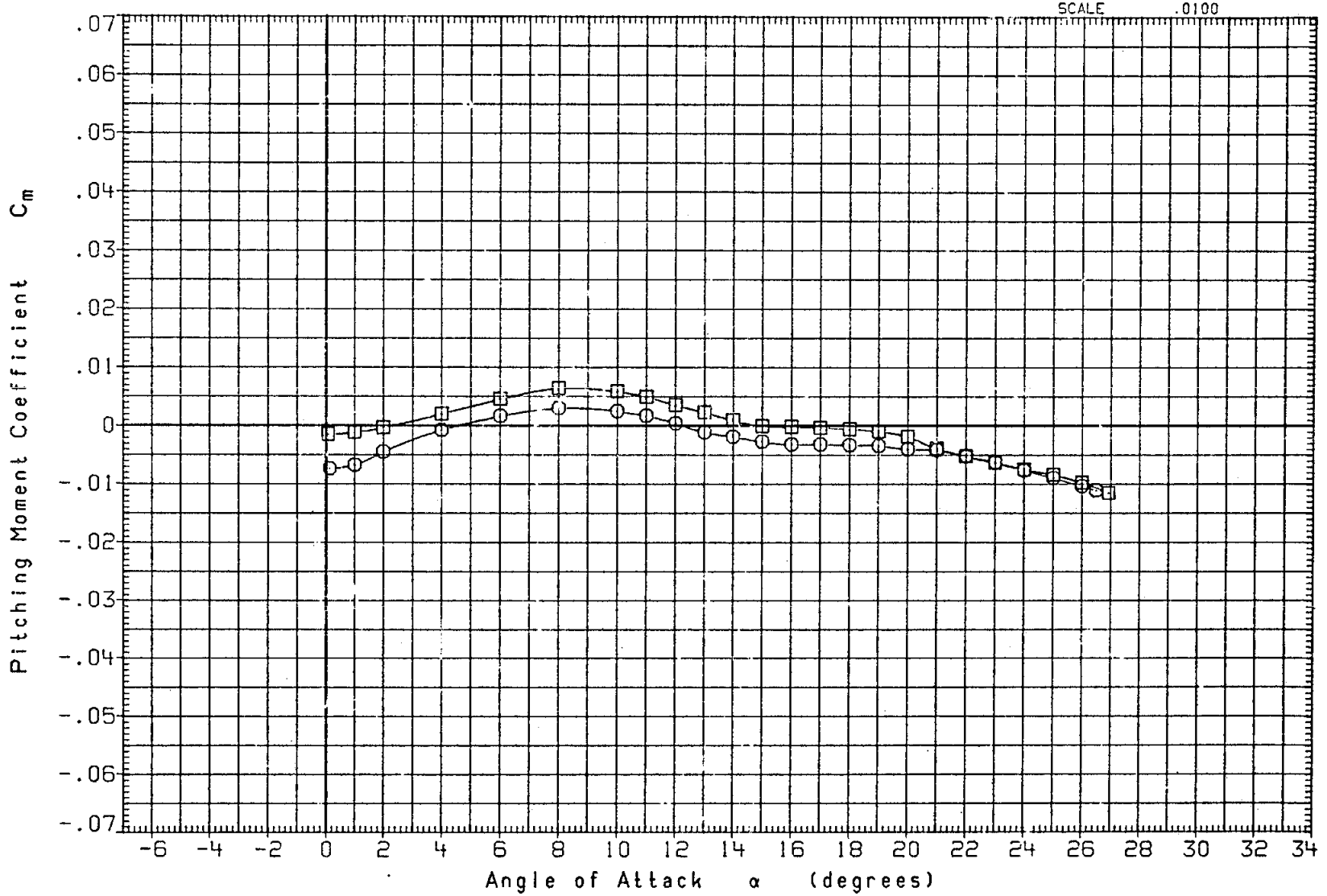


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B
(B) COOLED MODEL

DATE 02 MAR 81

RT3065 CONFIGURATION OA259 [AEDC V41B-14] OV102. STING B (COOLED-UPR)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.006	CONFIG	15.000	SPDBRK	87.200
□	4.360	BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

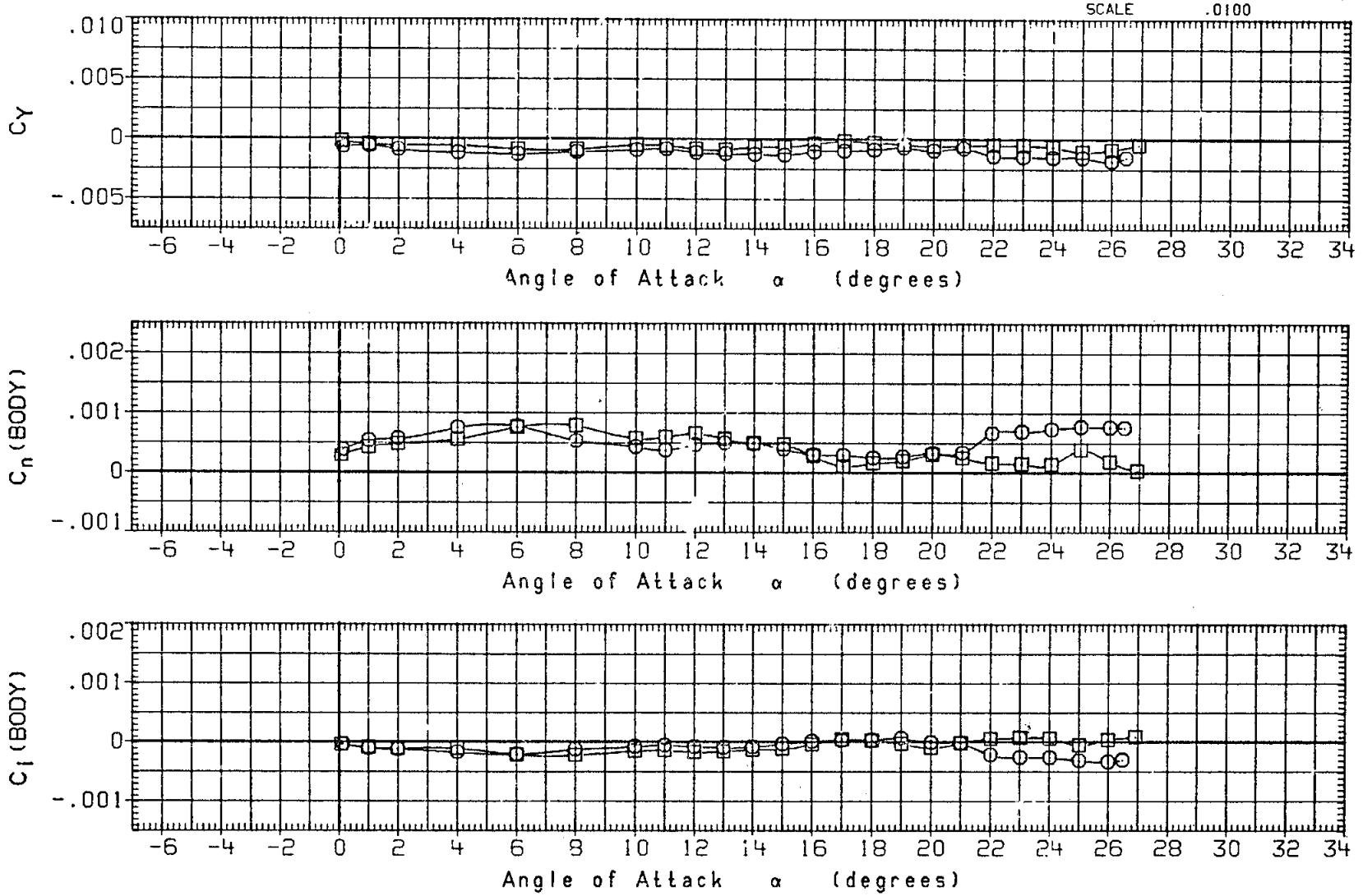


FIG. 2 REYNOLDS NUMBER EFFECT IN PITCH PLANE, STING B (B) COOLED MODEL

DATE 02 MAR 81

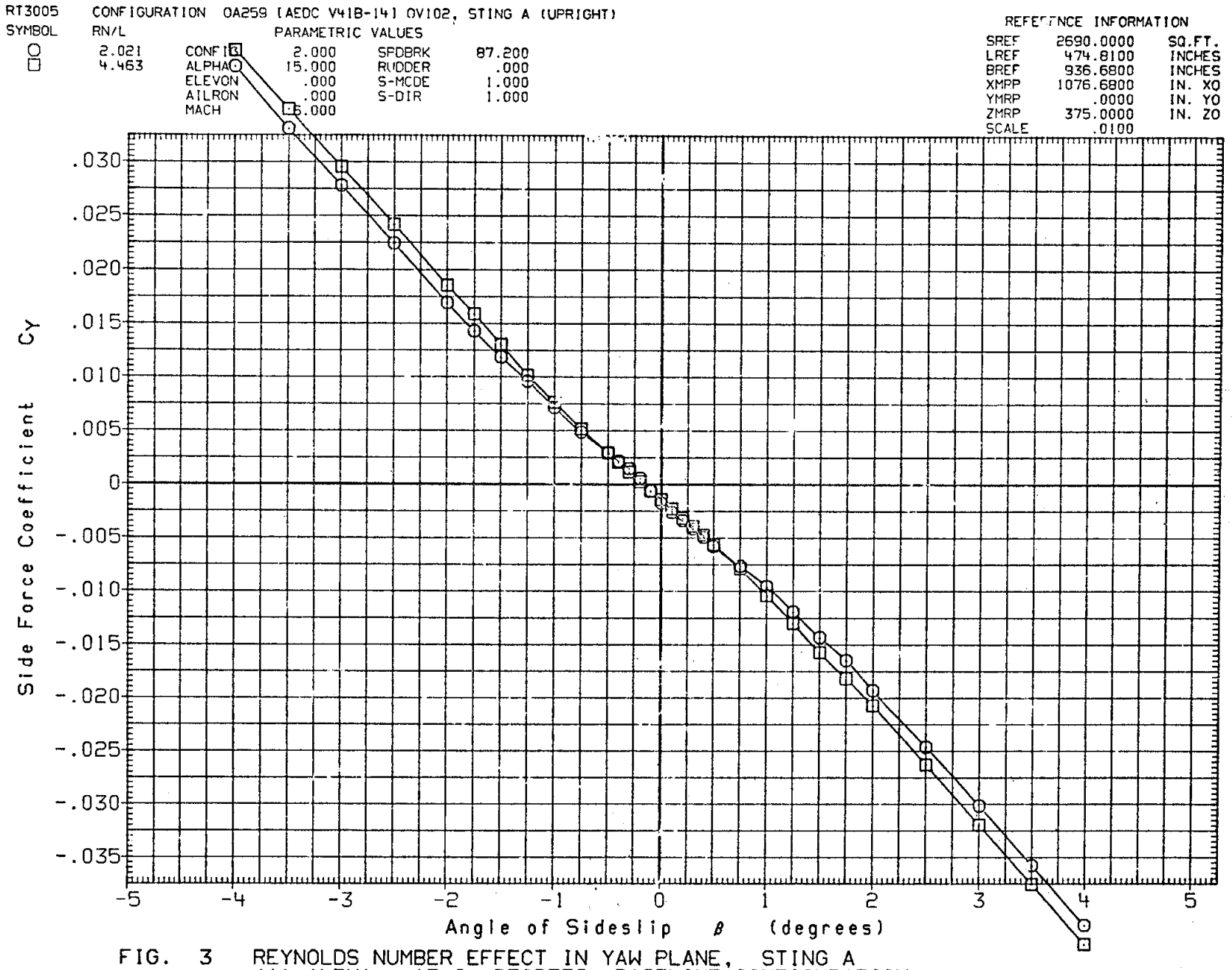


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(A) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3005 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.021	CONFIG	2.000	SPDBRK	87.200
□	4.463	ALPHA	15.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	5.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

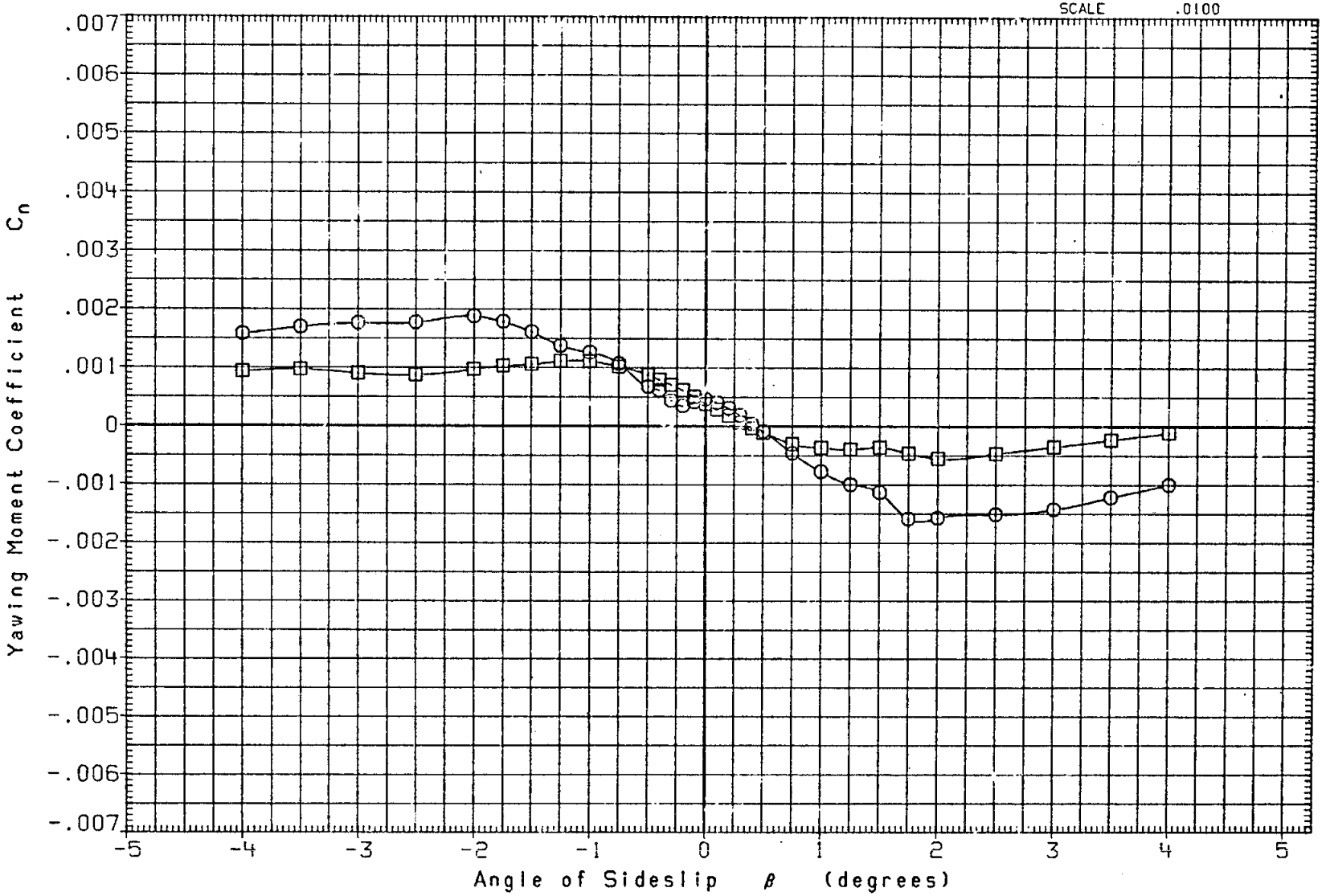


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(A) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3005 CONFIGURATION OA259 (AEDC V41B-14) OV102. STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.021	CONFIG	2.000	SPDBRK	87.200
□	4.463	ALPHA	15.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

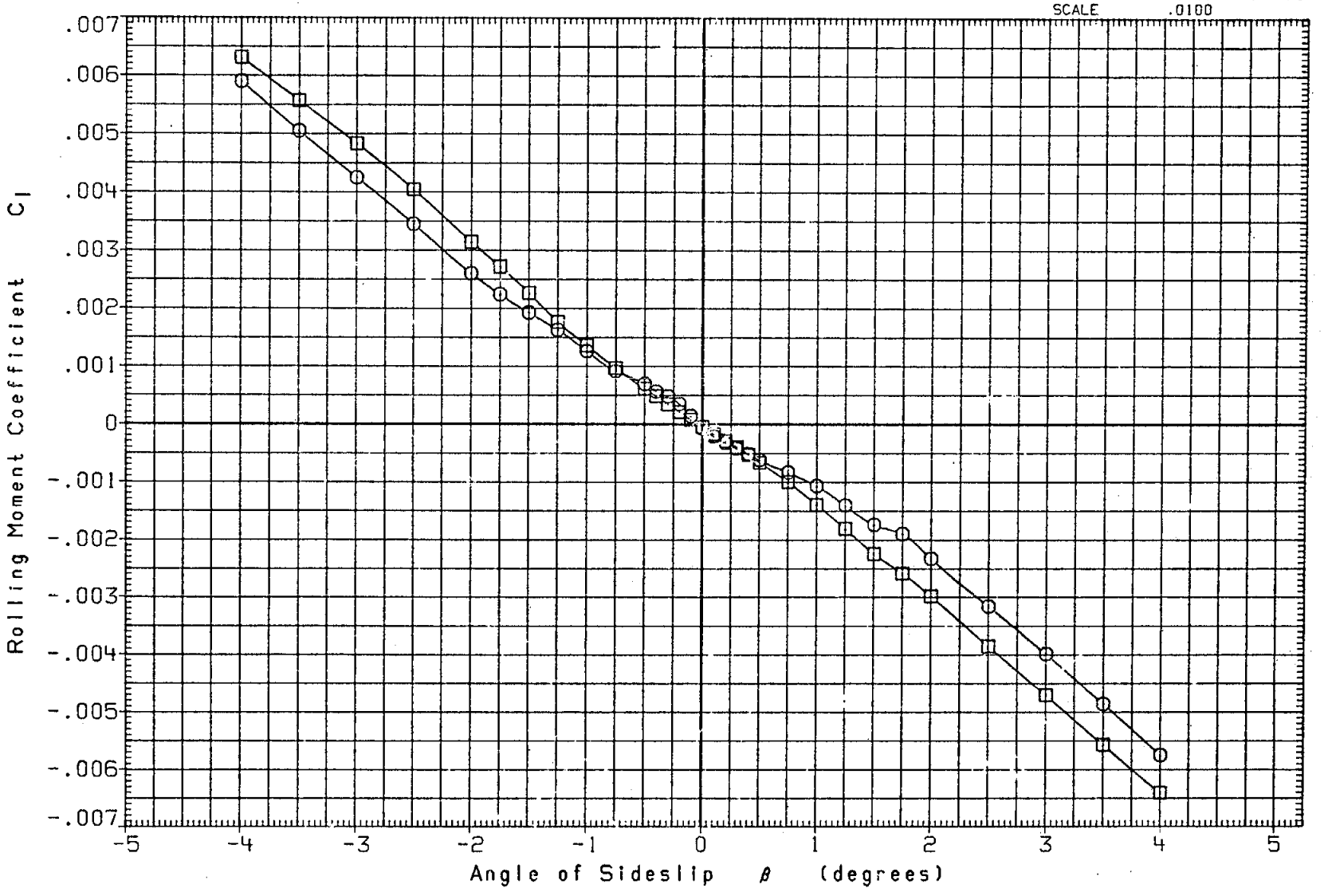


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(A) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3005 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.021
□	4.463

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	15.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

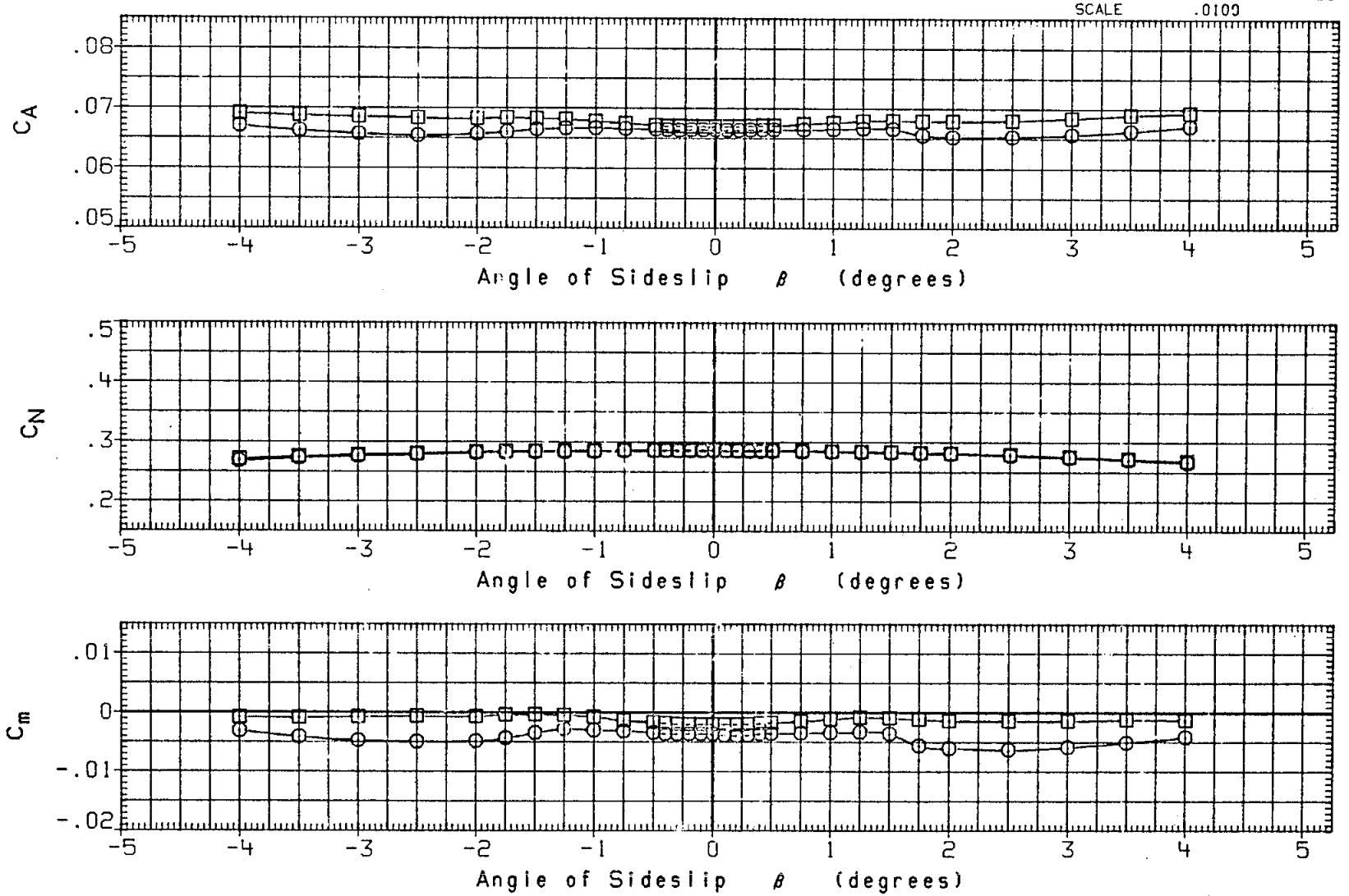


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(A) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

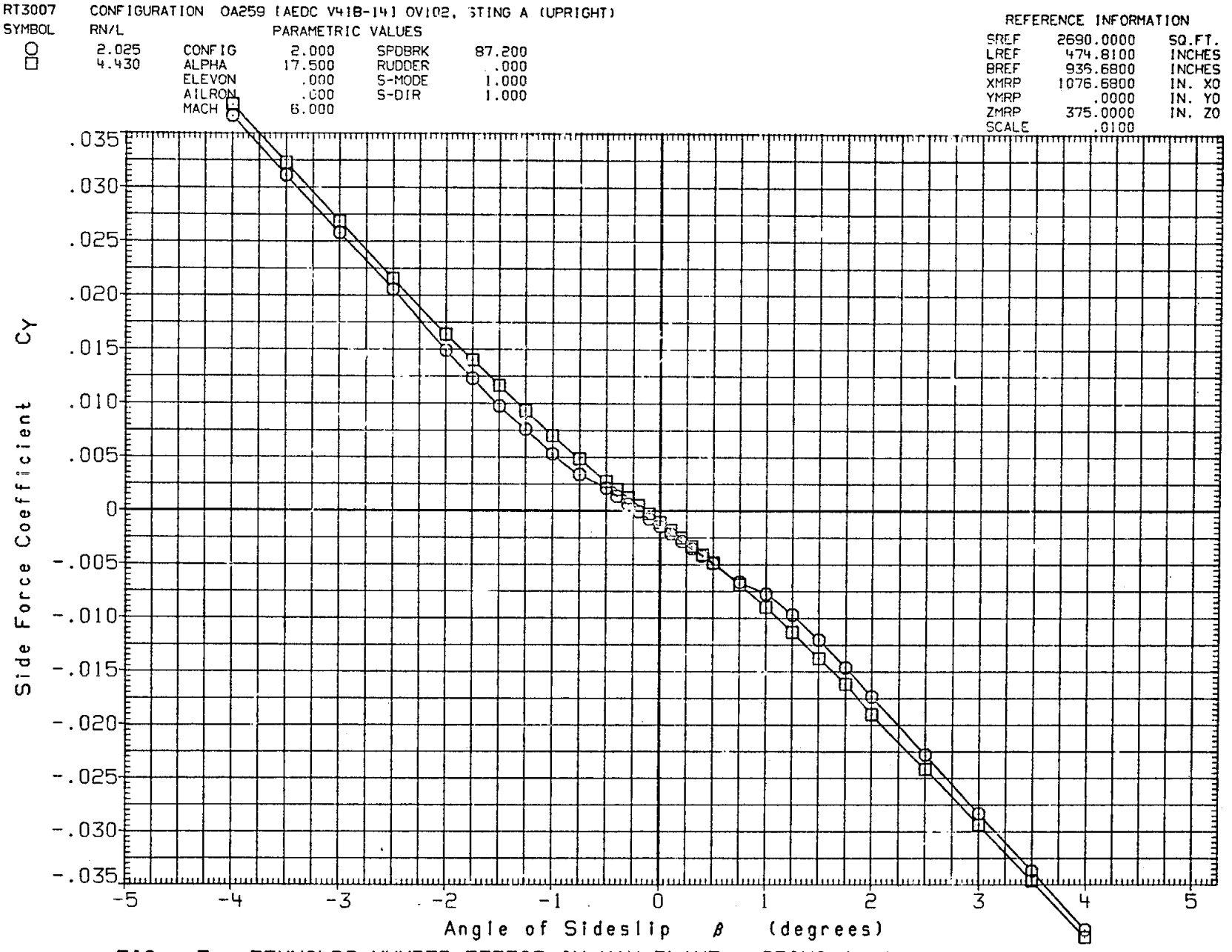


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(B) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3007 CONFIGURATION 0A259 [AEDC V413-141 OV102, STING'A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.025	CONFIG	2.000	SPDBRK	87.200
□	4.430	ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

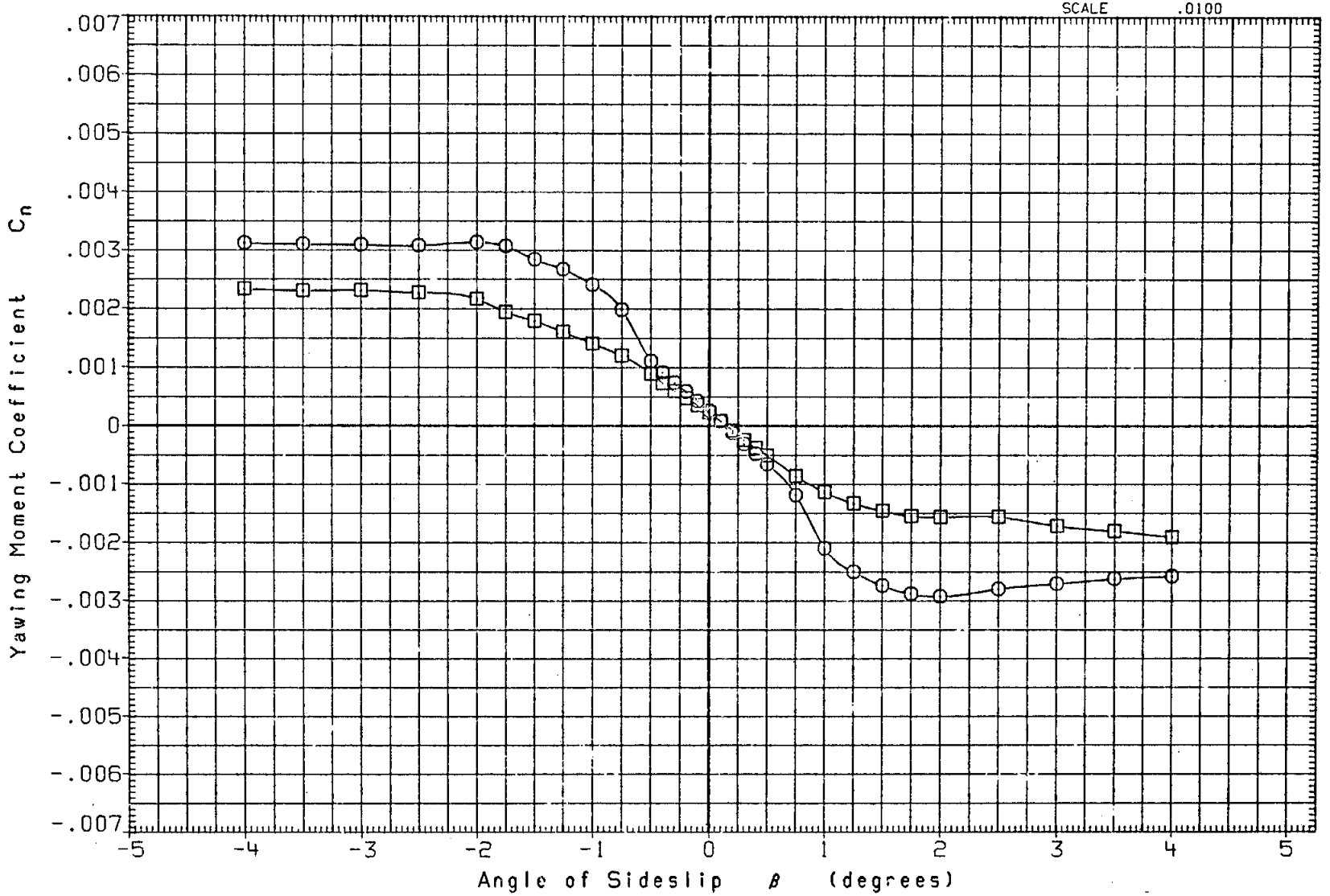


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(B) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3007 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.025
□	4.430

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	17.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

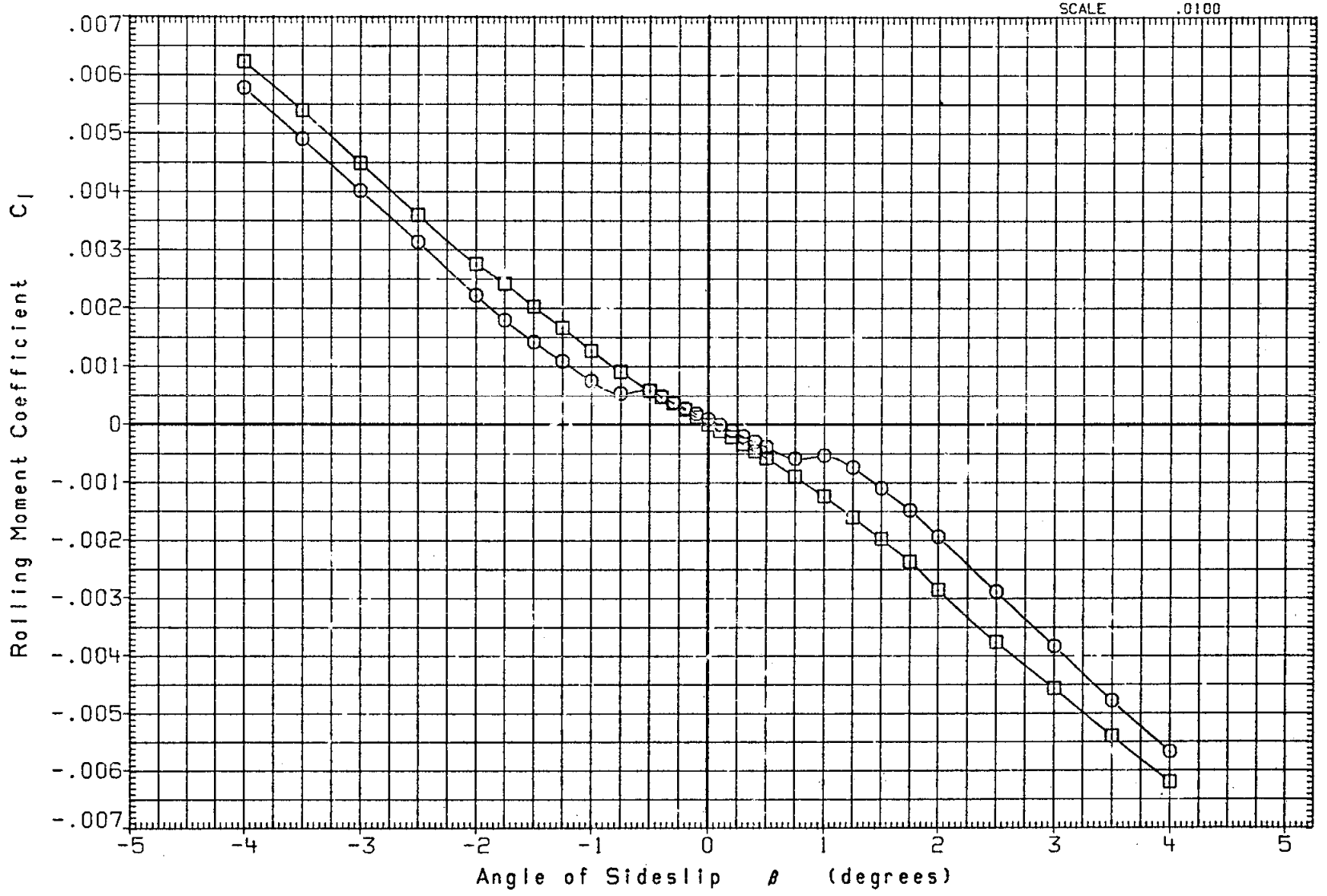


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(B) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3007 CONFIGURATION OA259 (AEDC V41E-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.025	CONFIG	2.000	SPDBRK	87.200
□	4.430	ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

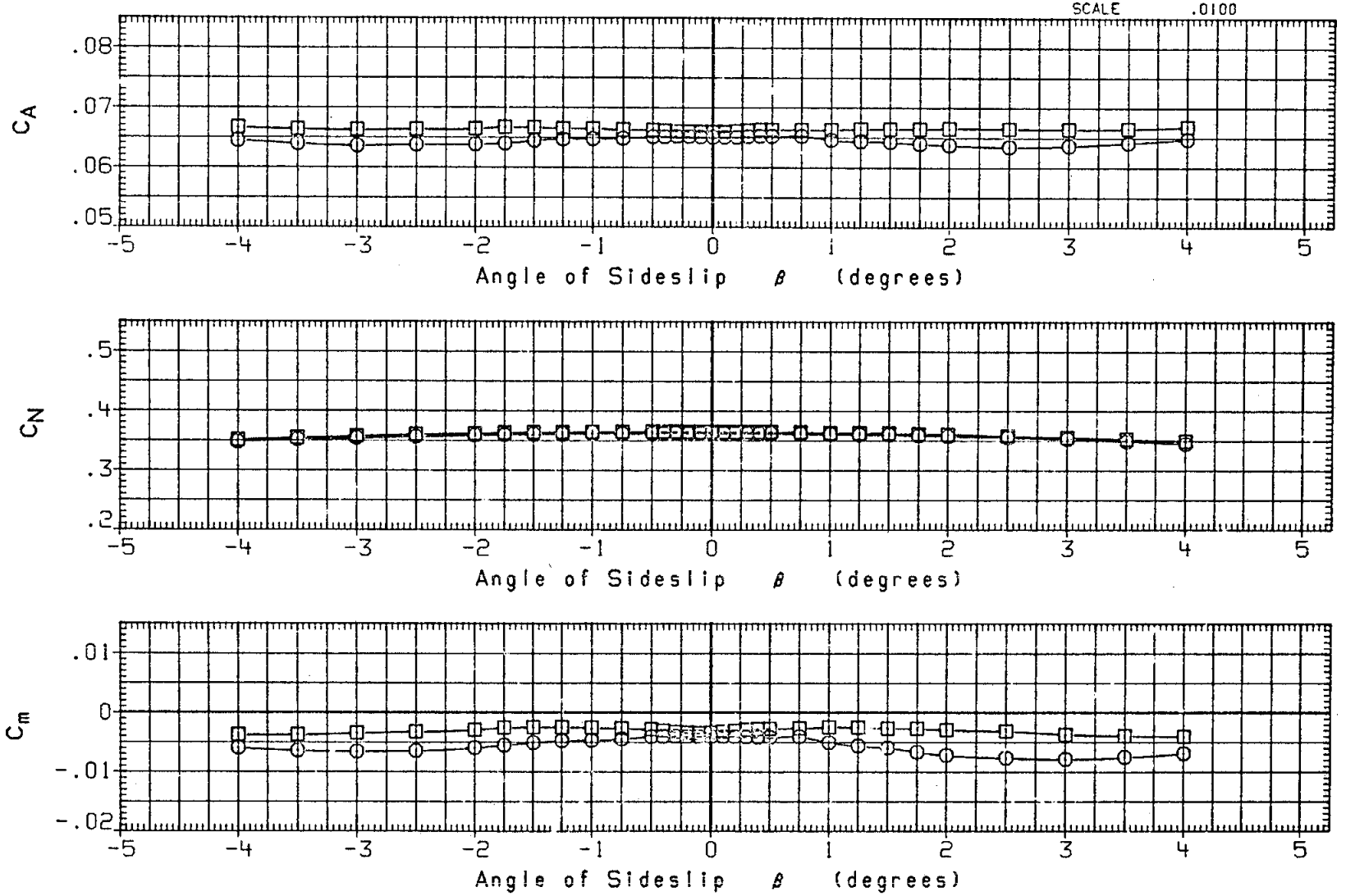


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(B) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

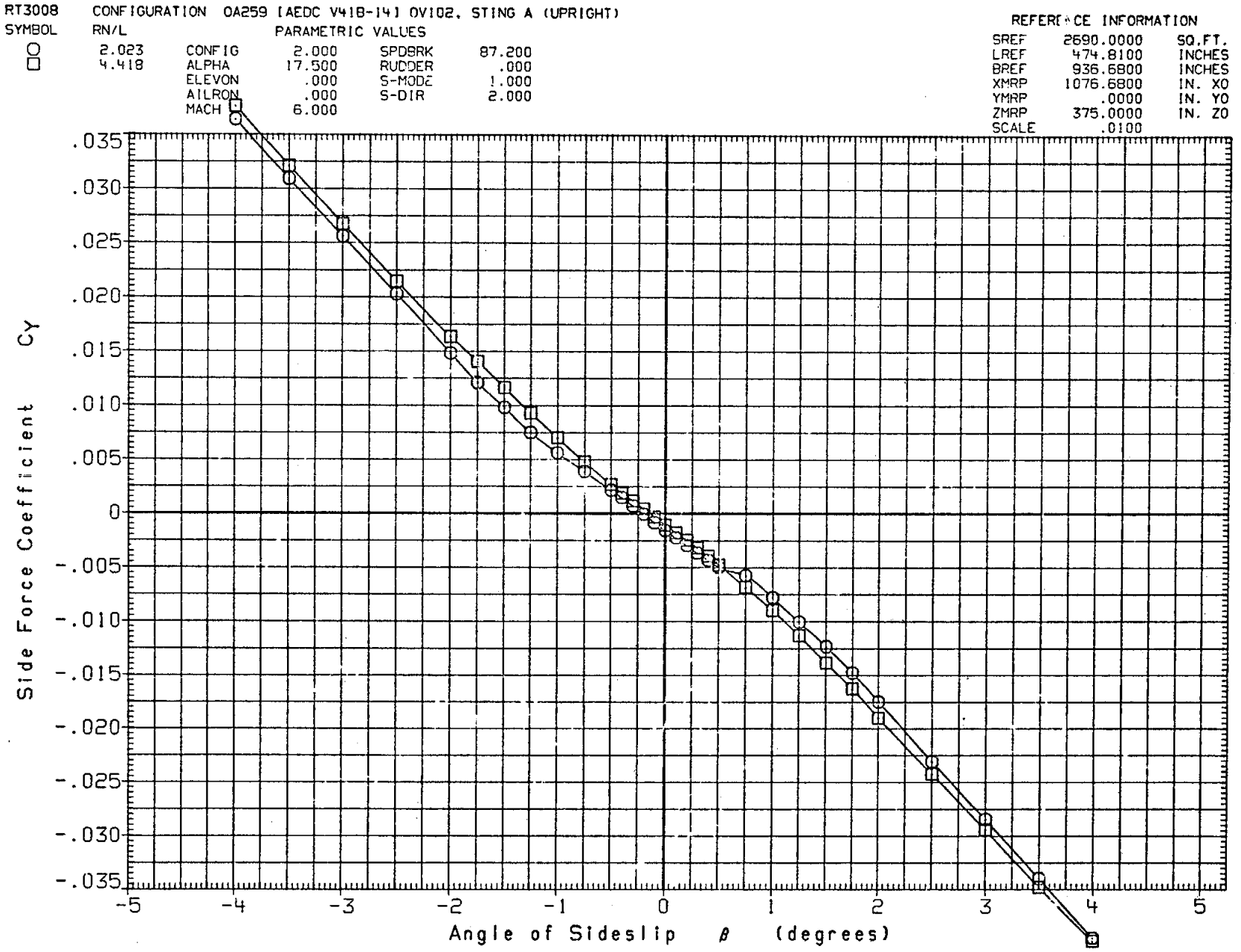


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(B) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3008 CONFIGURATION OA259 (AEDC V41B-141 OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.023	CONFIG	2.000	SPDBRK	87.200
□	4.418	ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

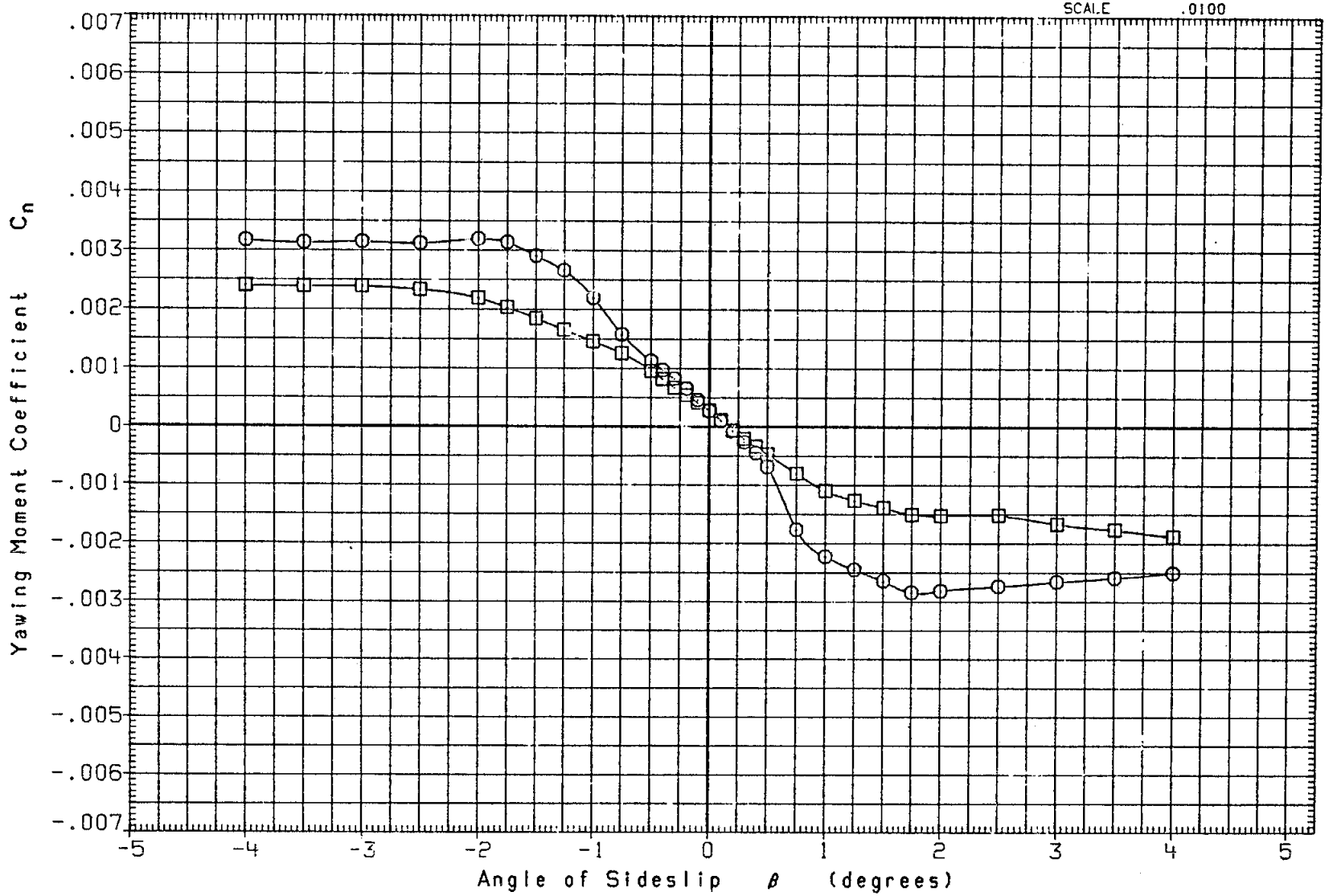


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(B) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION
DATE 12 MAR 81

RT3008 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.023
□	4.418

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	17.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

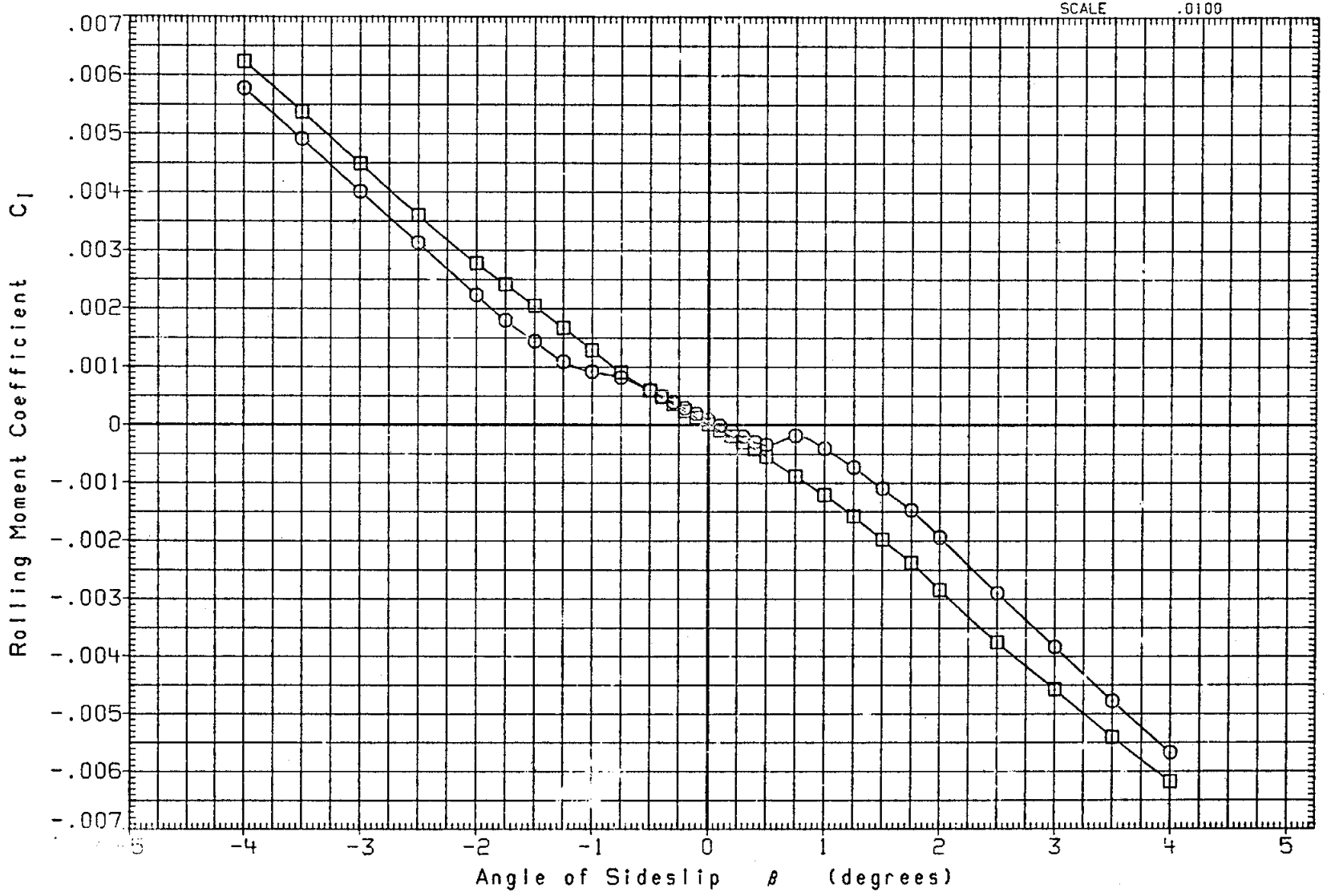


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(B) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3008 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.023
□	4.418

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	17.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

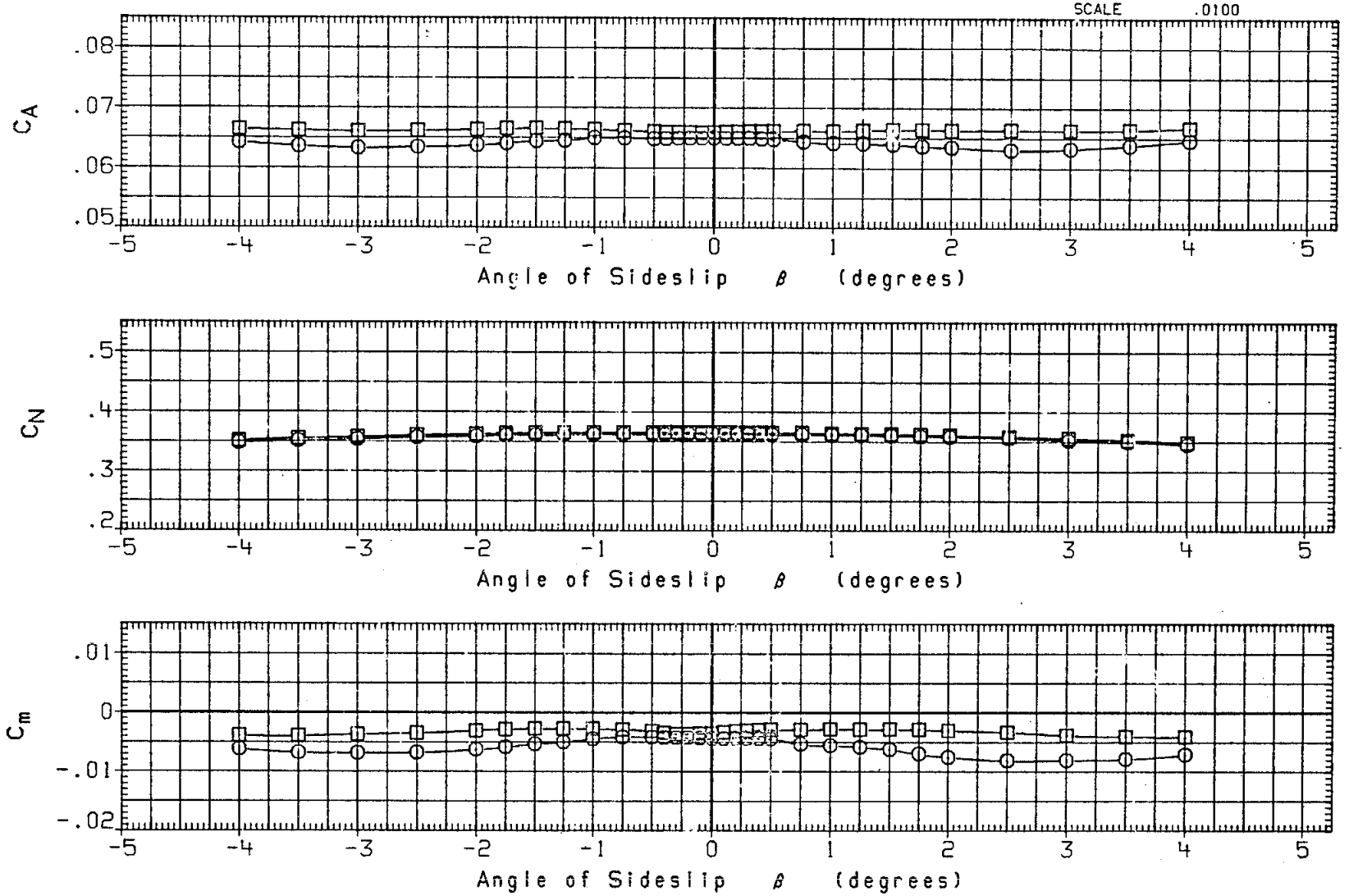


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(B) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

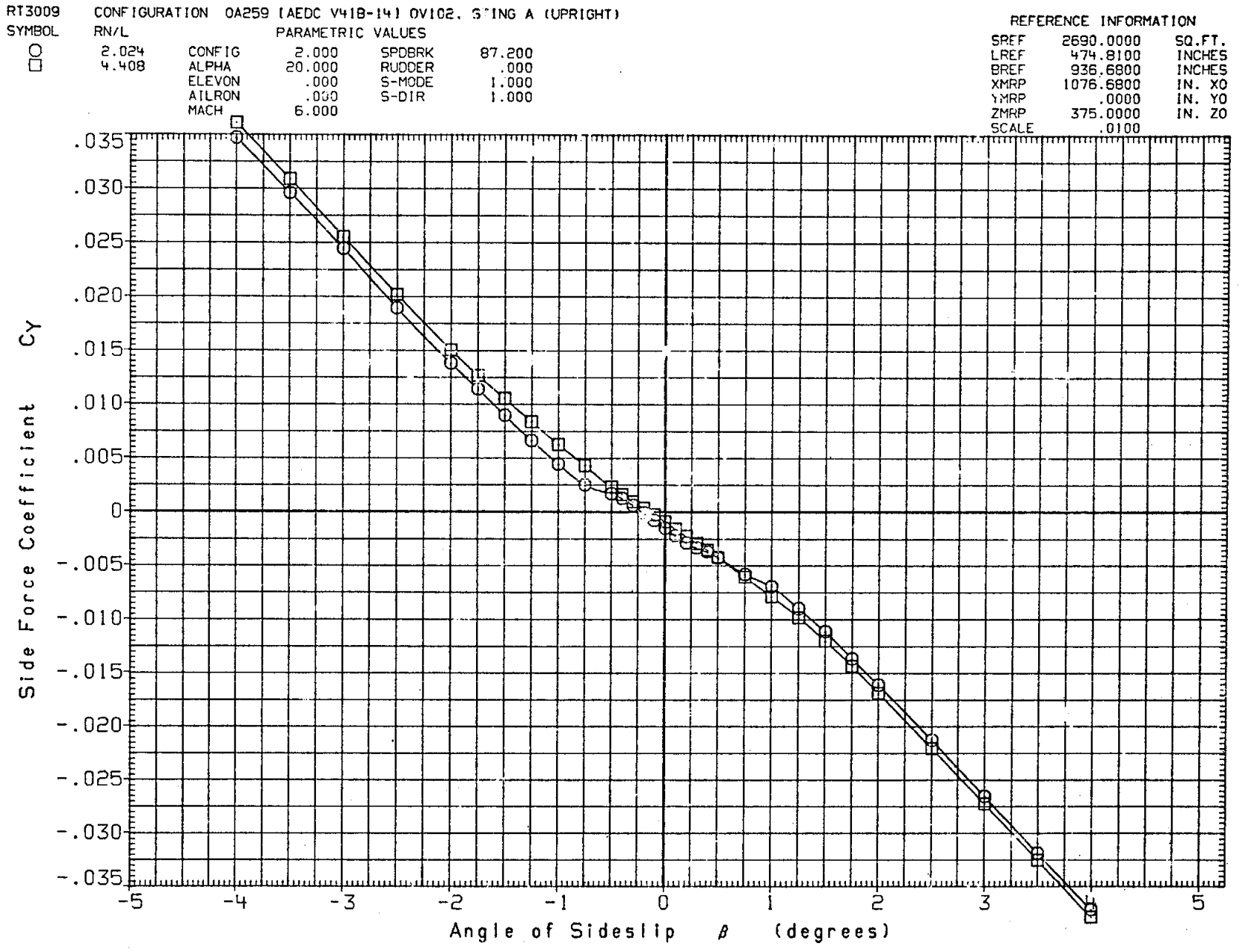


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(C) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3009 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.024	CONFIG	2.000	SPDBRK	87.200
□	4.408	ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

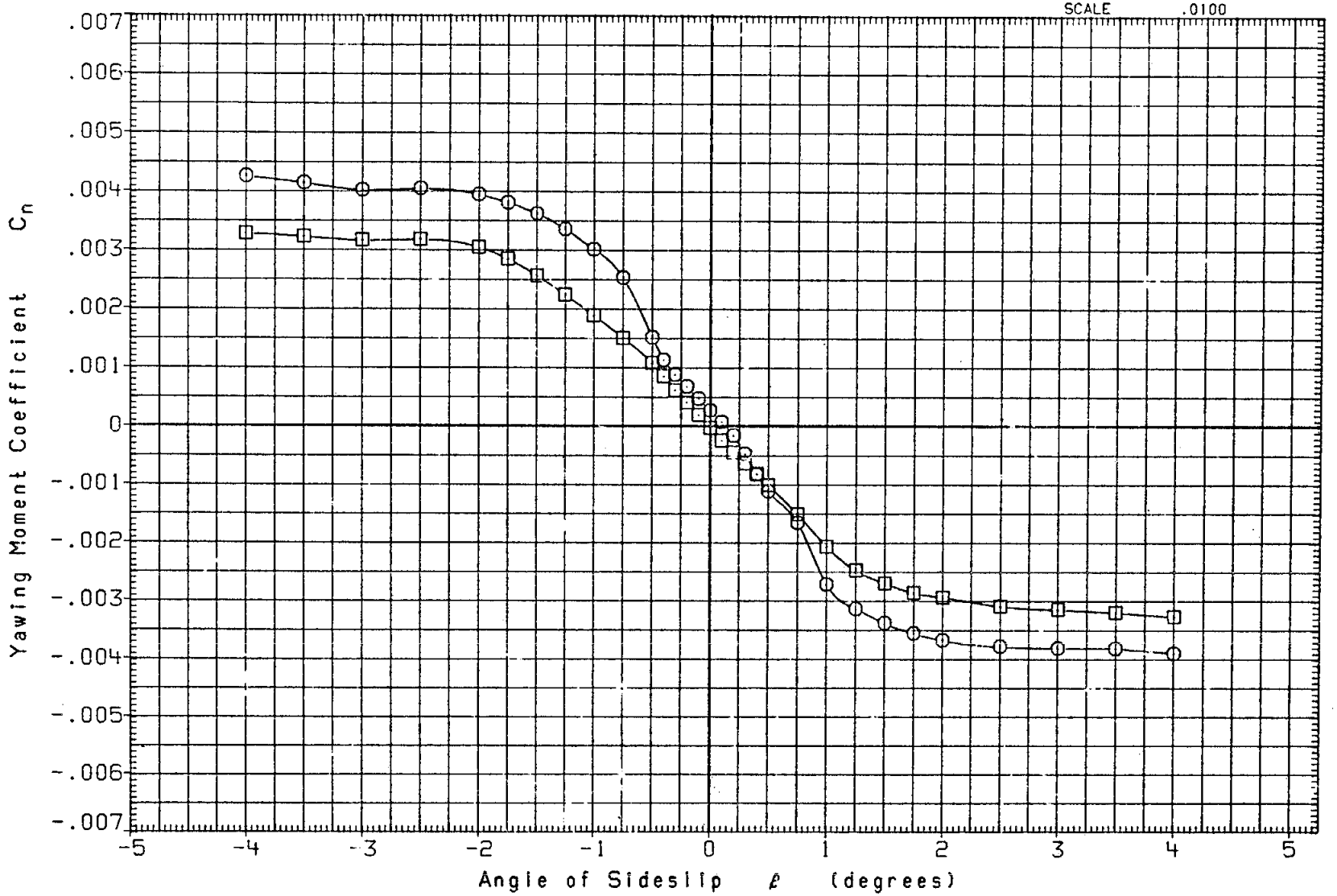


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(C) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3009 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.024	CONFIG	2.000	SPDBRK	87.200
□	4.408	ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

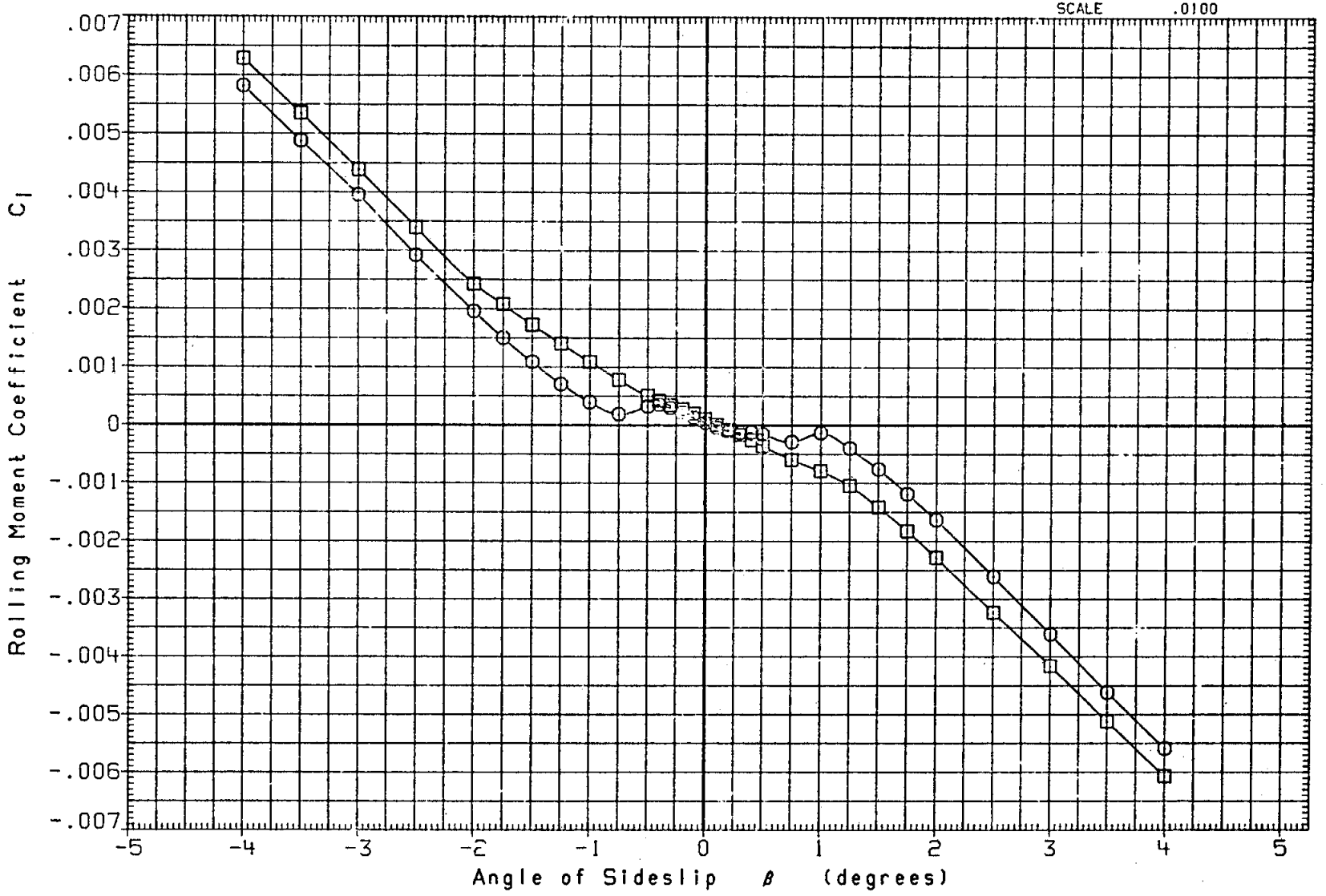


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(C) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3009 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.024
□	4.408

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	20.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

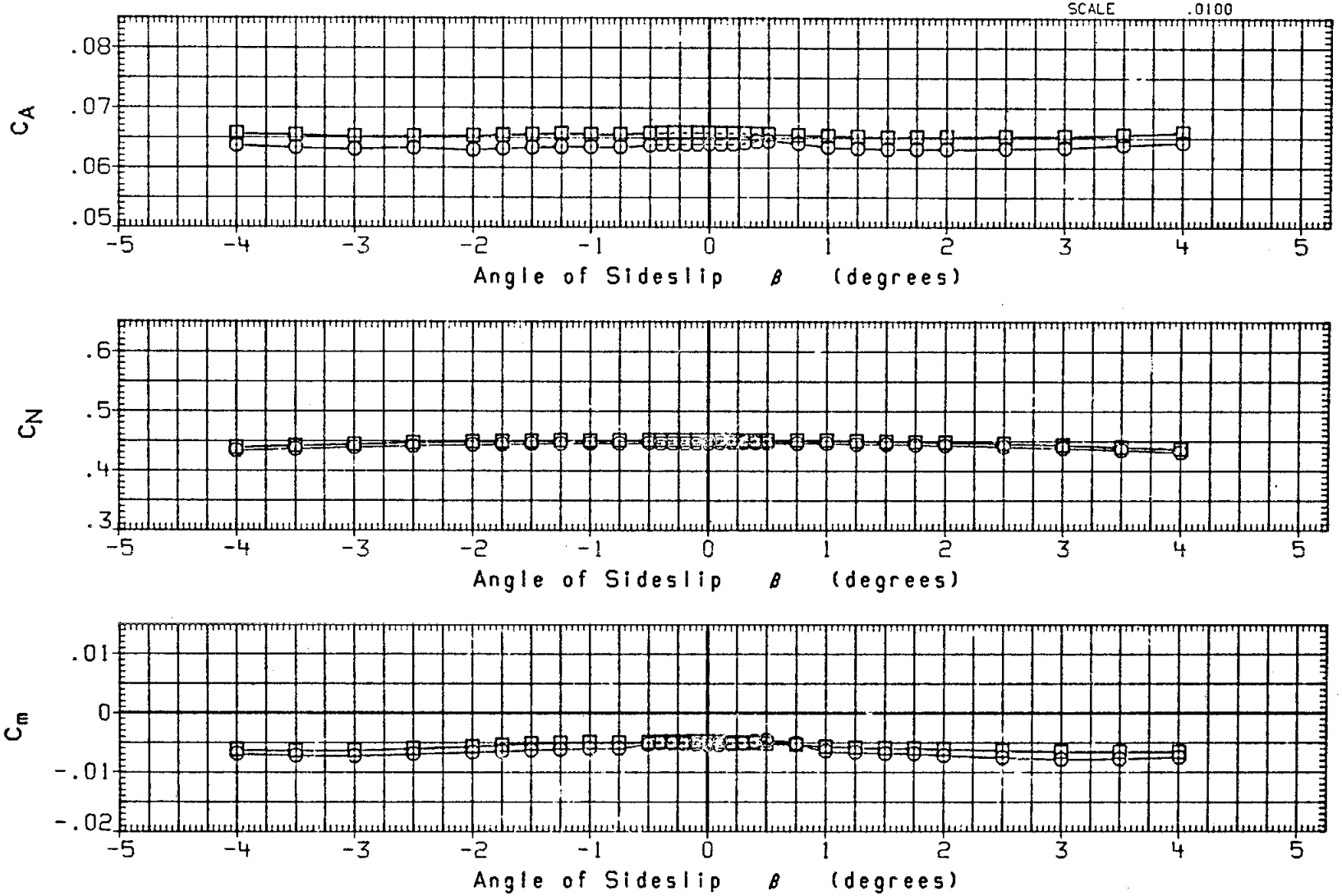


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(C) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION
DATE 2 MAR 81

RT3010 CONFIGURATION 0A259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.024
□	4.398

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	20.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

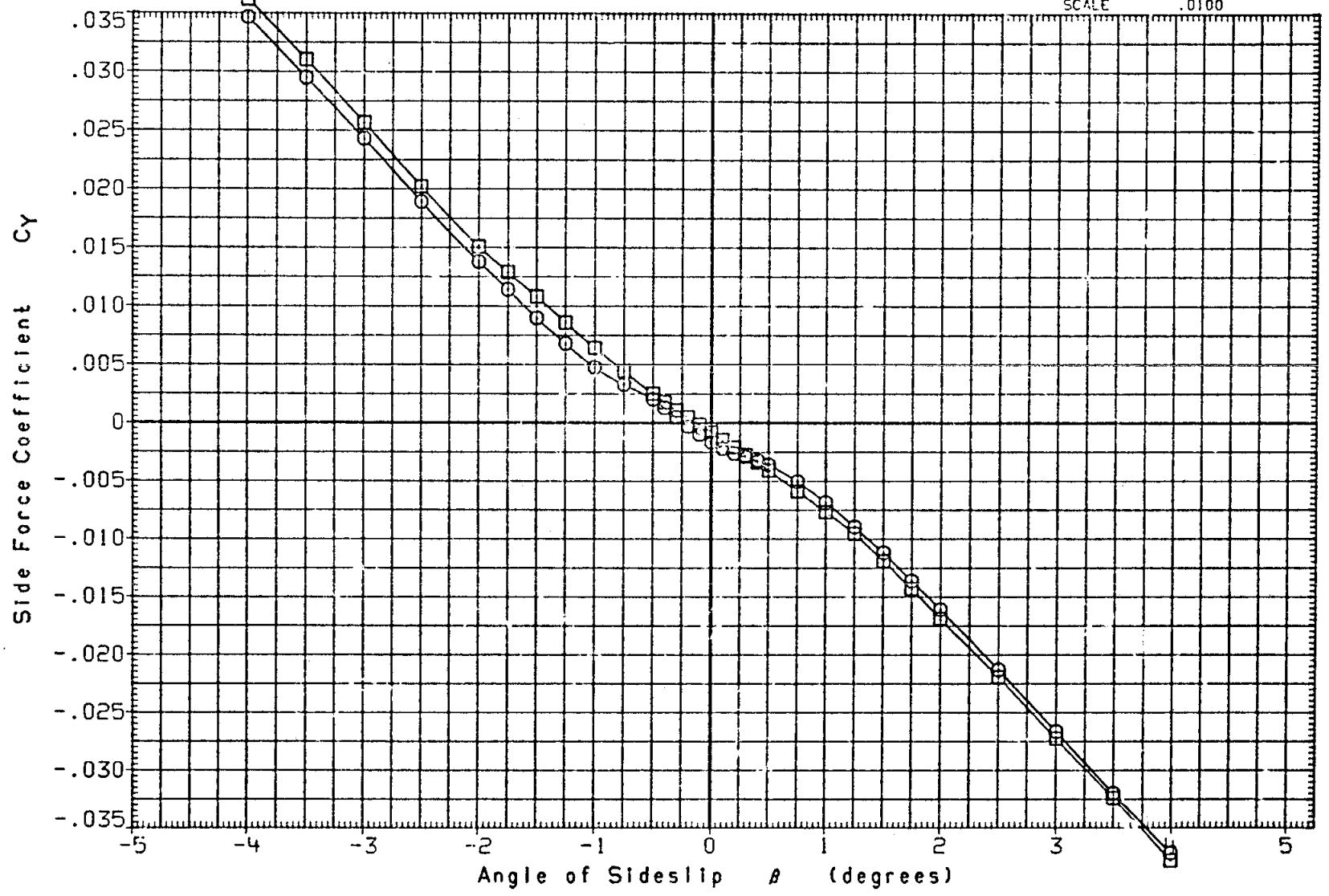


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(C) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3010 CONFIGURATION 0A259 (AEDC V41B-141 0V102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.024	CONFIG	2.000	SPDBRK	87.200
□	4.398	ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

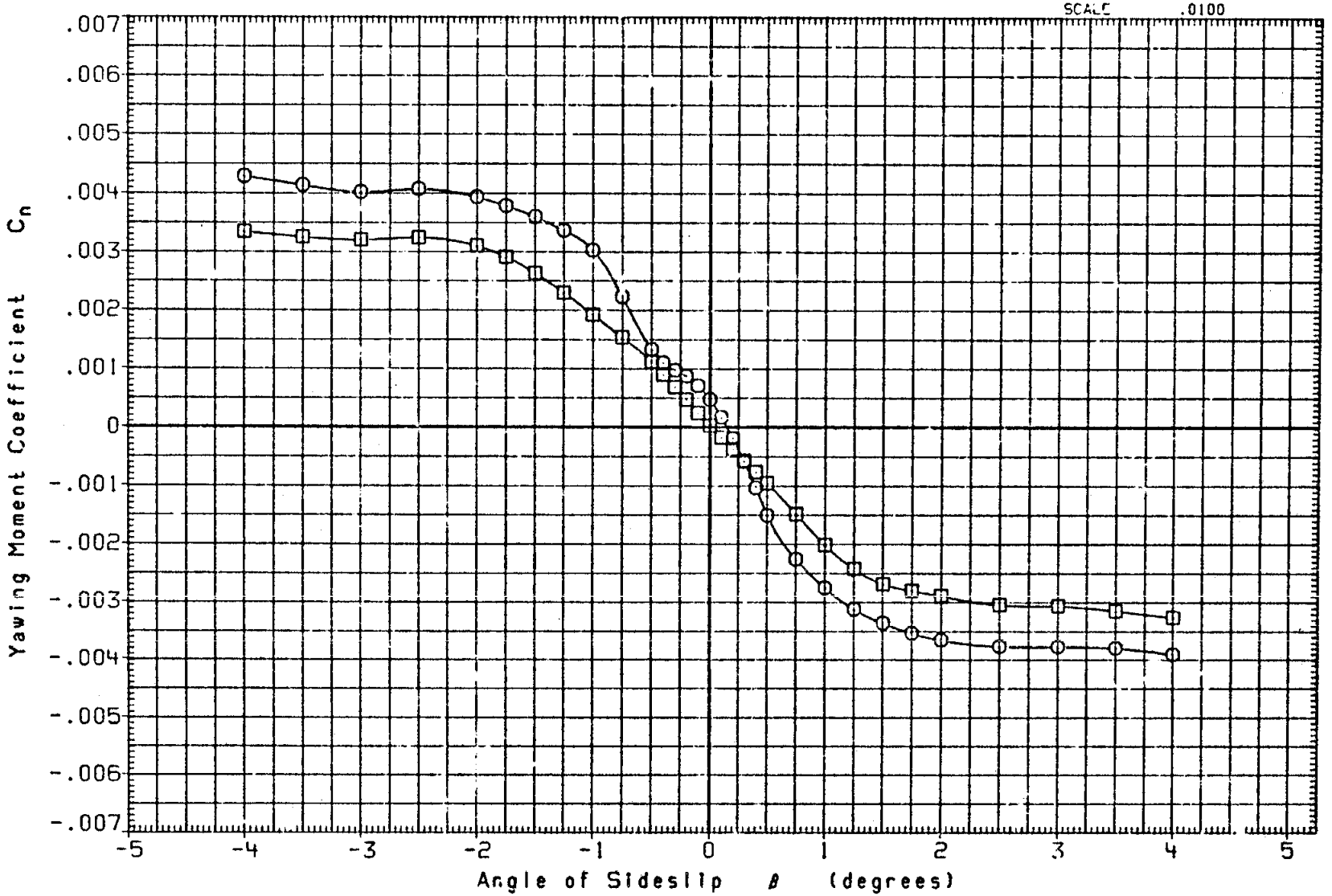


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(C) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3010 CONFIGURATION 0A259 (AEDC V41B-141 OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.024	CONFIG	2.000	SPDBRK	87.200
□	4.398	ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

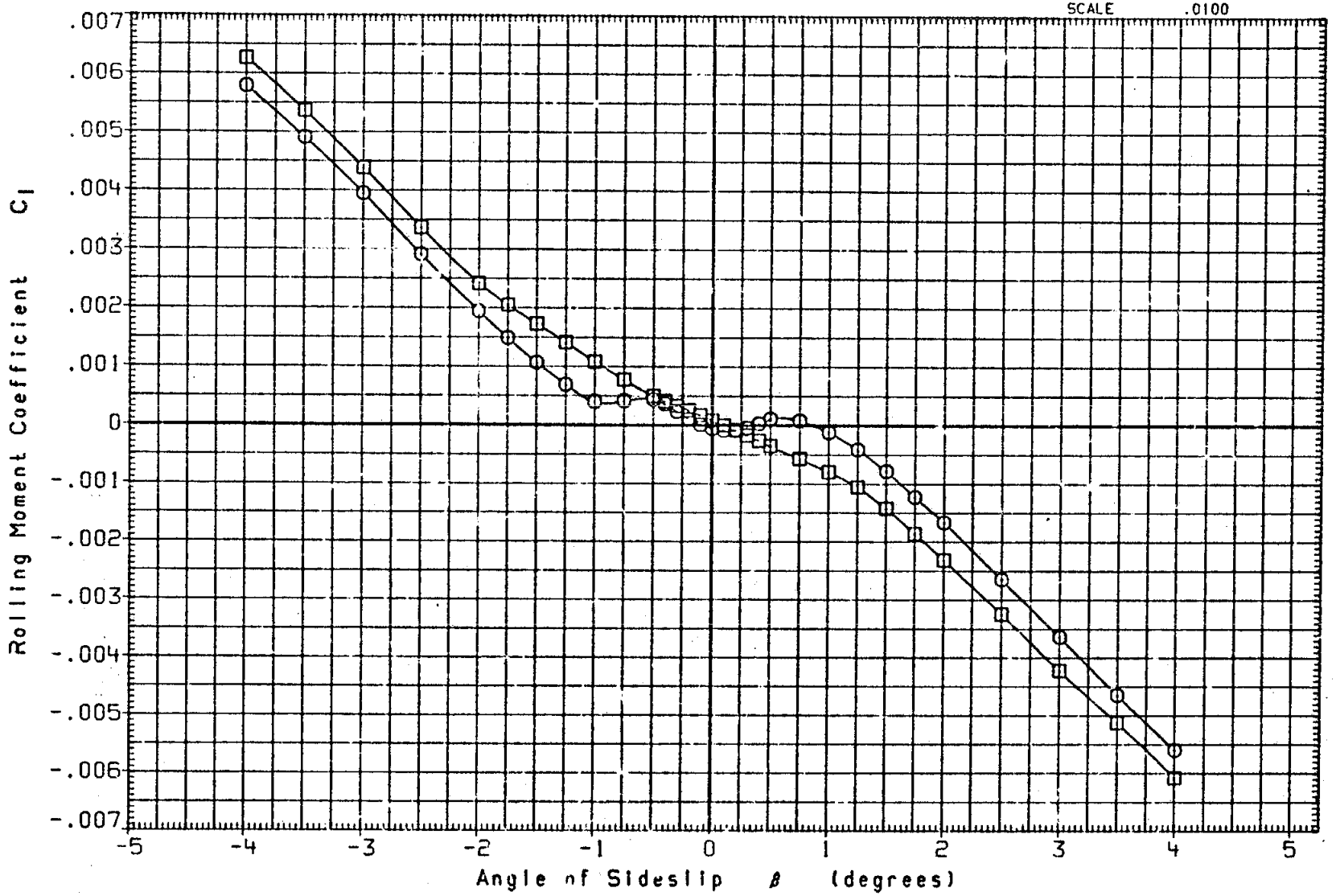


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(C) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3010 CONFIGURATION 0A259 (AEDC V41B-141 OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.024	CONFIG	2.000	SPDBRK	87.200
□	4.398	ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2500.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

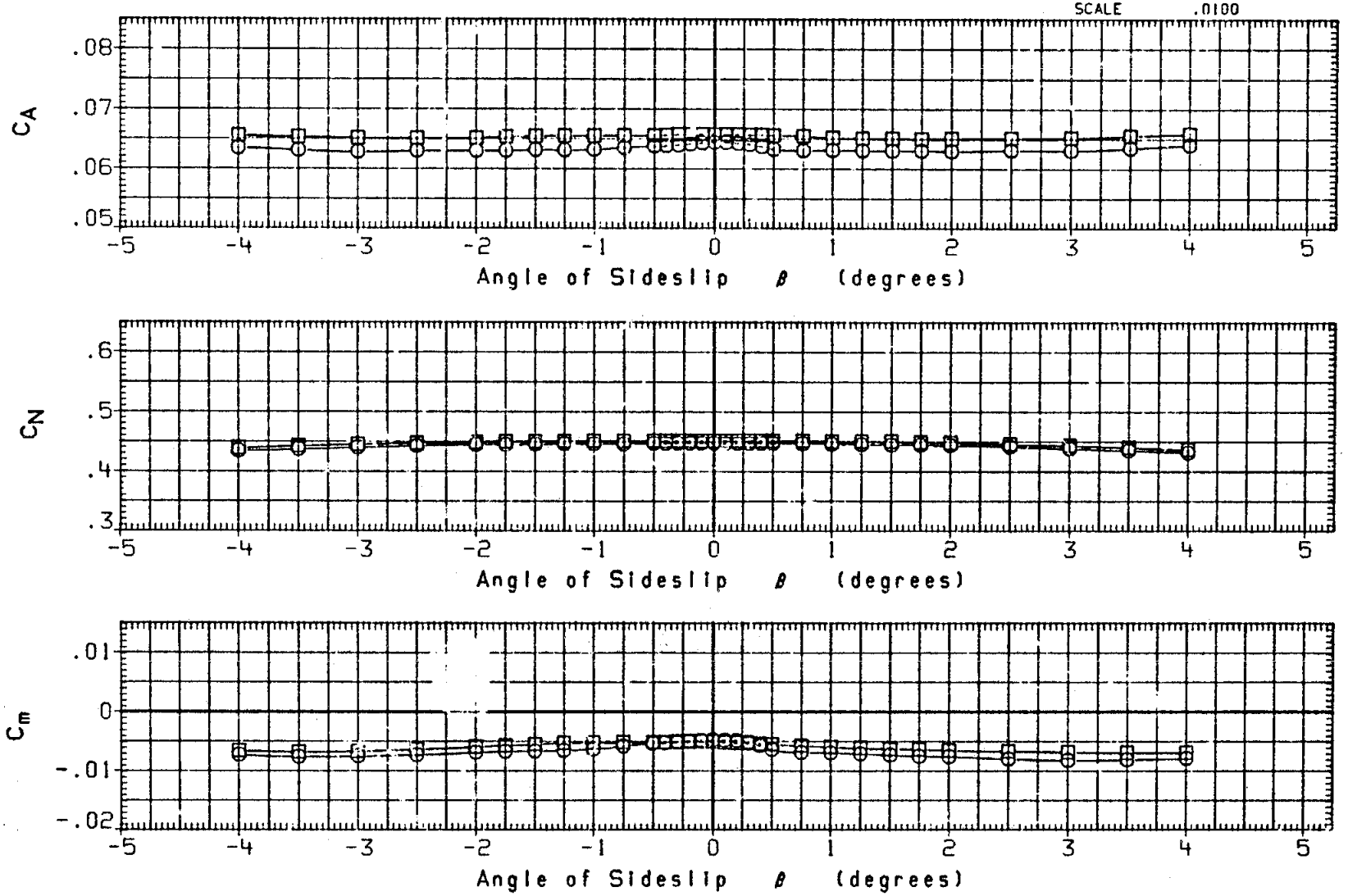


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(C) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3011 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.008
□	4.395

PARAMETRIC VALUES

CONFIG	2.000	SPOBPK	87.200
ALPHA	22.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2590.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

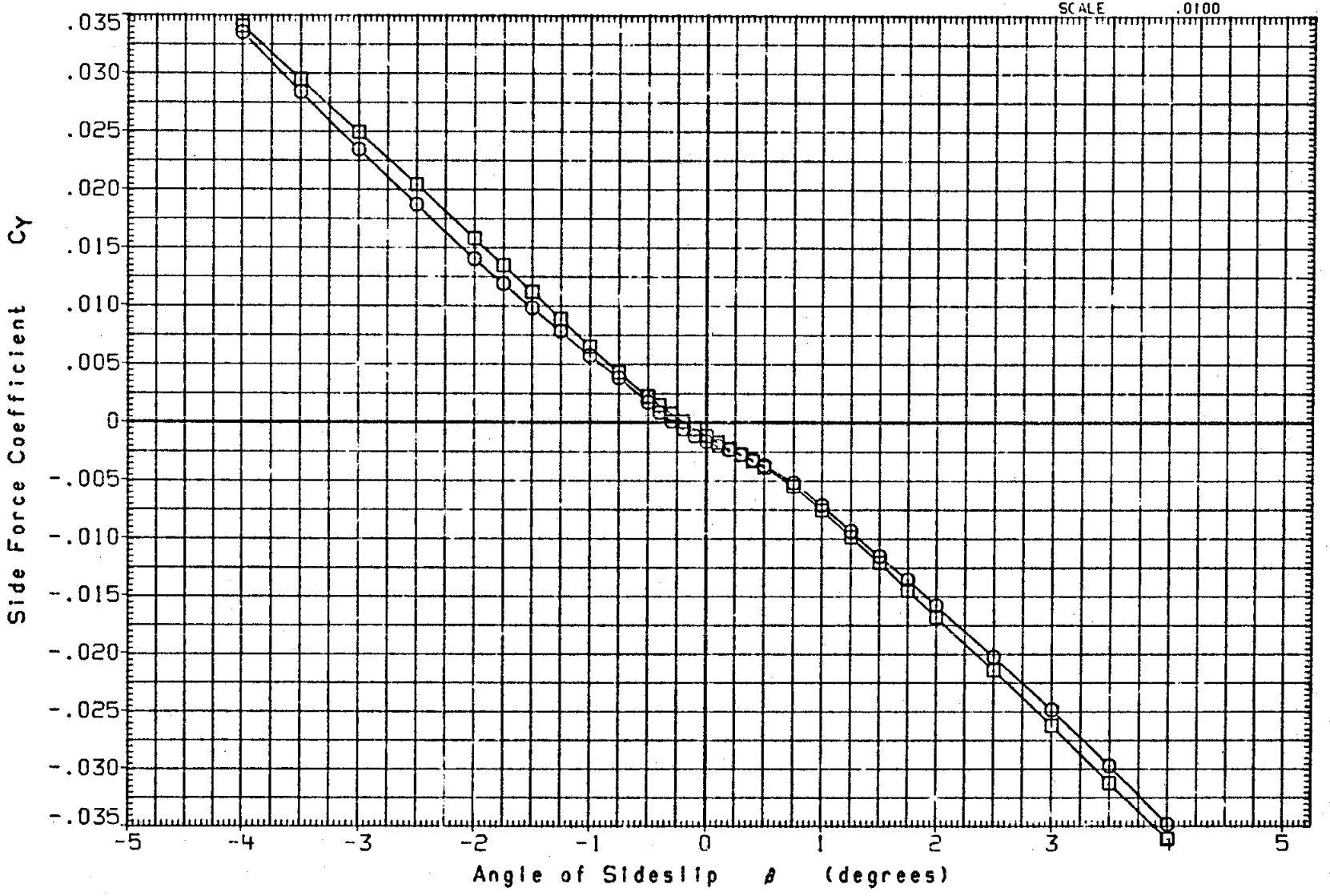


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(D) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3011 CONFIGURATION OA259 (AEDC V41B-141 OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.008
□	4.395

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	22.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

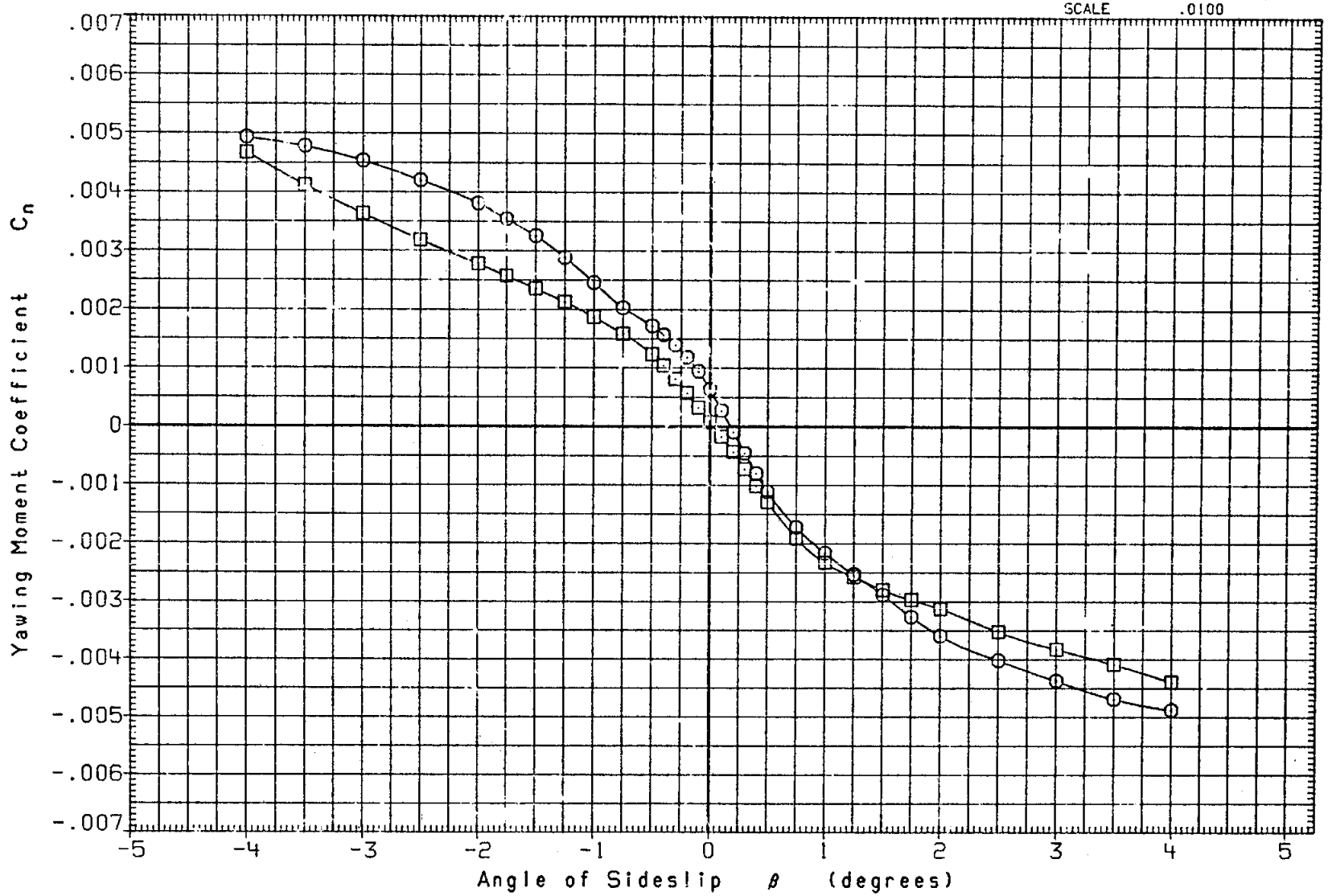


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(D) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION
D/ 02 MAR 81

RT3011 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.008
□	4.395

PARAMETRIC VALUES

CONFIG	2.000	SPOBRK	87.200
ALPHA	22.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

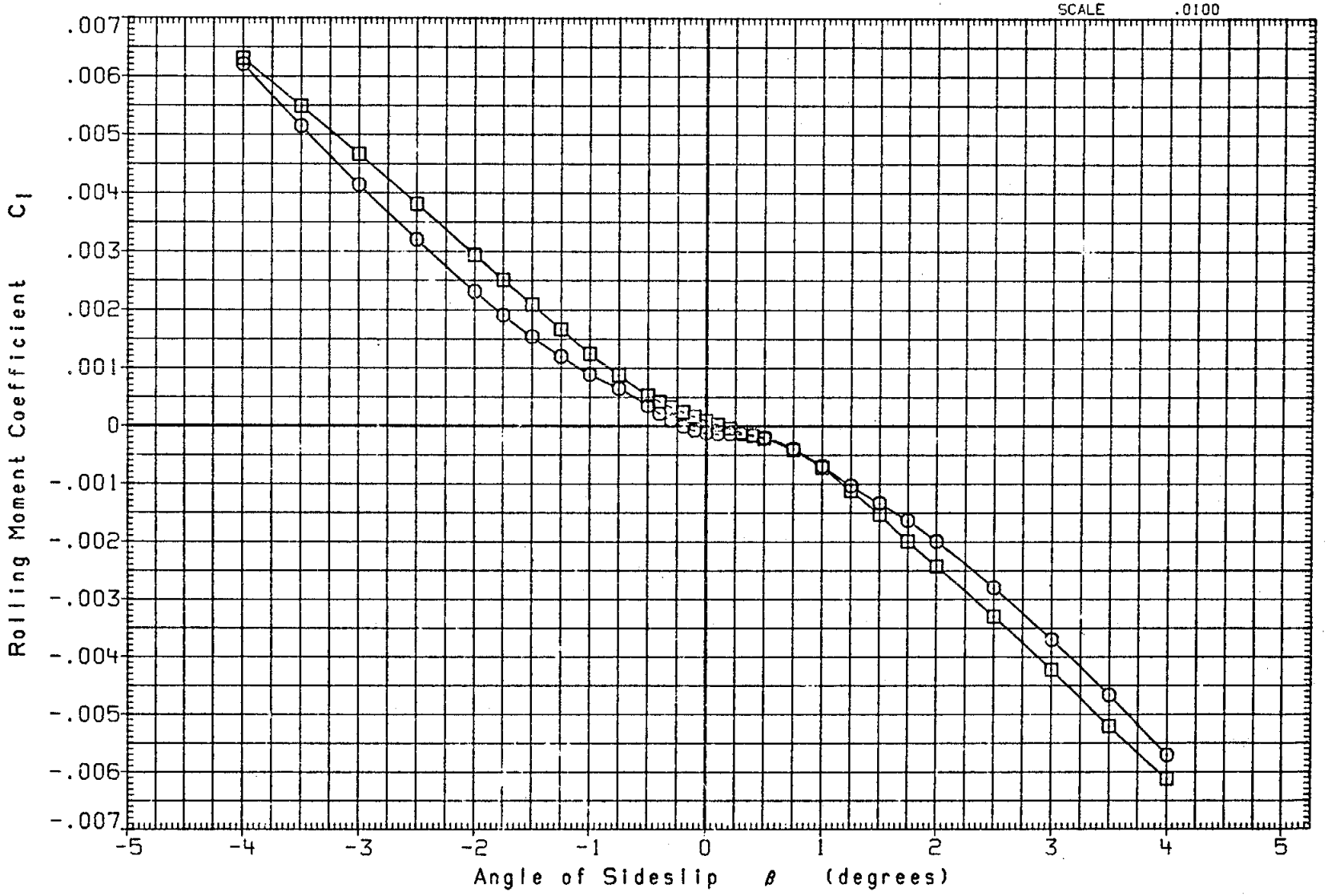


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(D) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3011 CONFIGURATION 0A259 [AEDC V41B-141 OVIC2, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.008
□	4.395

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	22.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

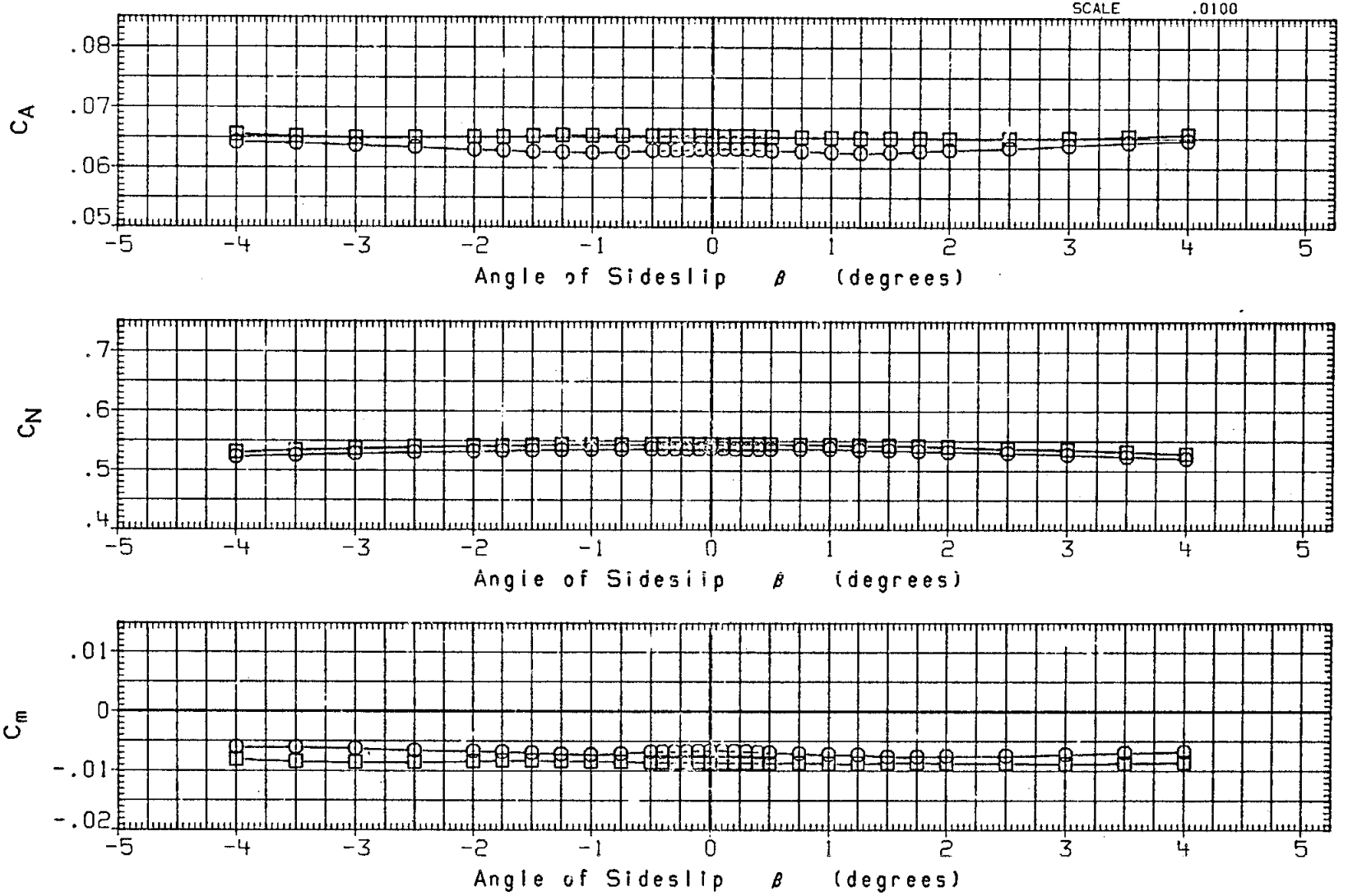


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(D) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION
DA 02 MAR 81

RT3012 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.007	CONFIG	2.000	SPDBRK	87.200
□	4.383	ALPHA	22.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

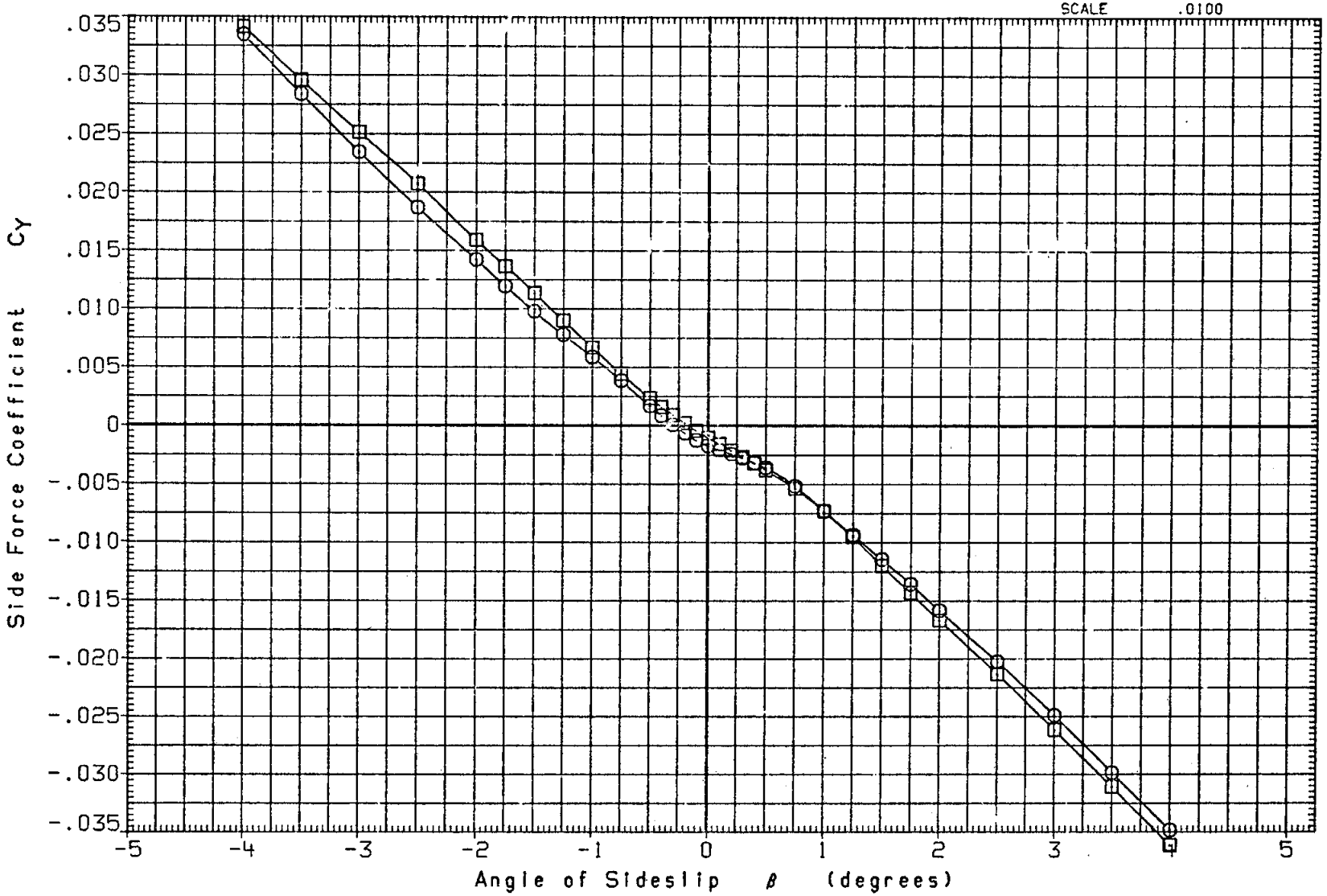


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(D) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3012 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.007
□	4.383

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	22.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

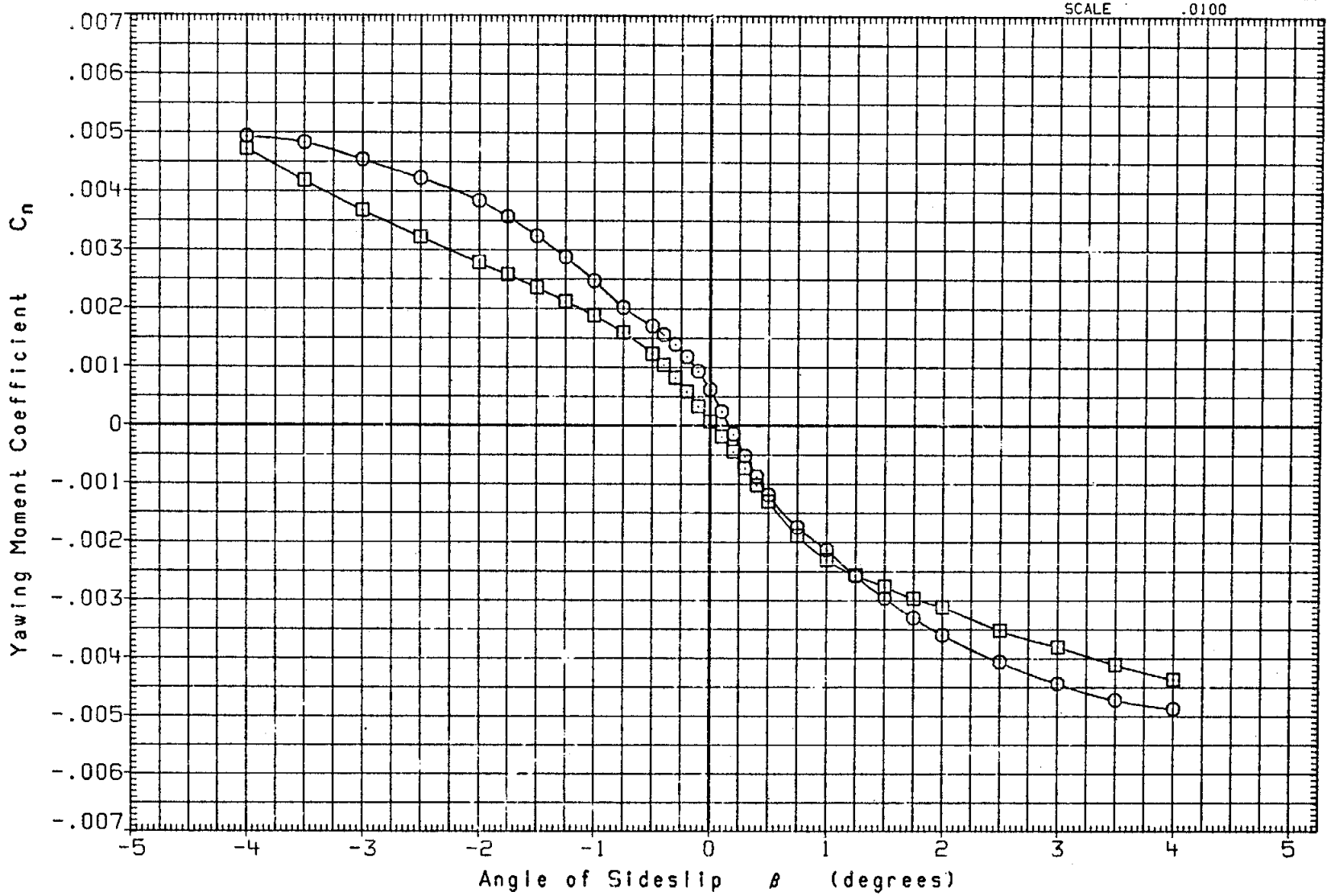


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(D) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION
DA 02 MAR 81

RT3012 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.007
□	4.383

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	22.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

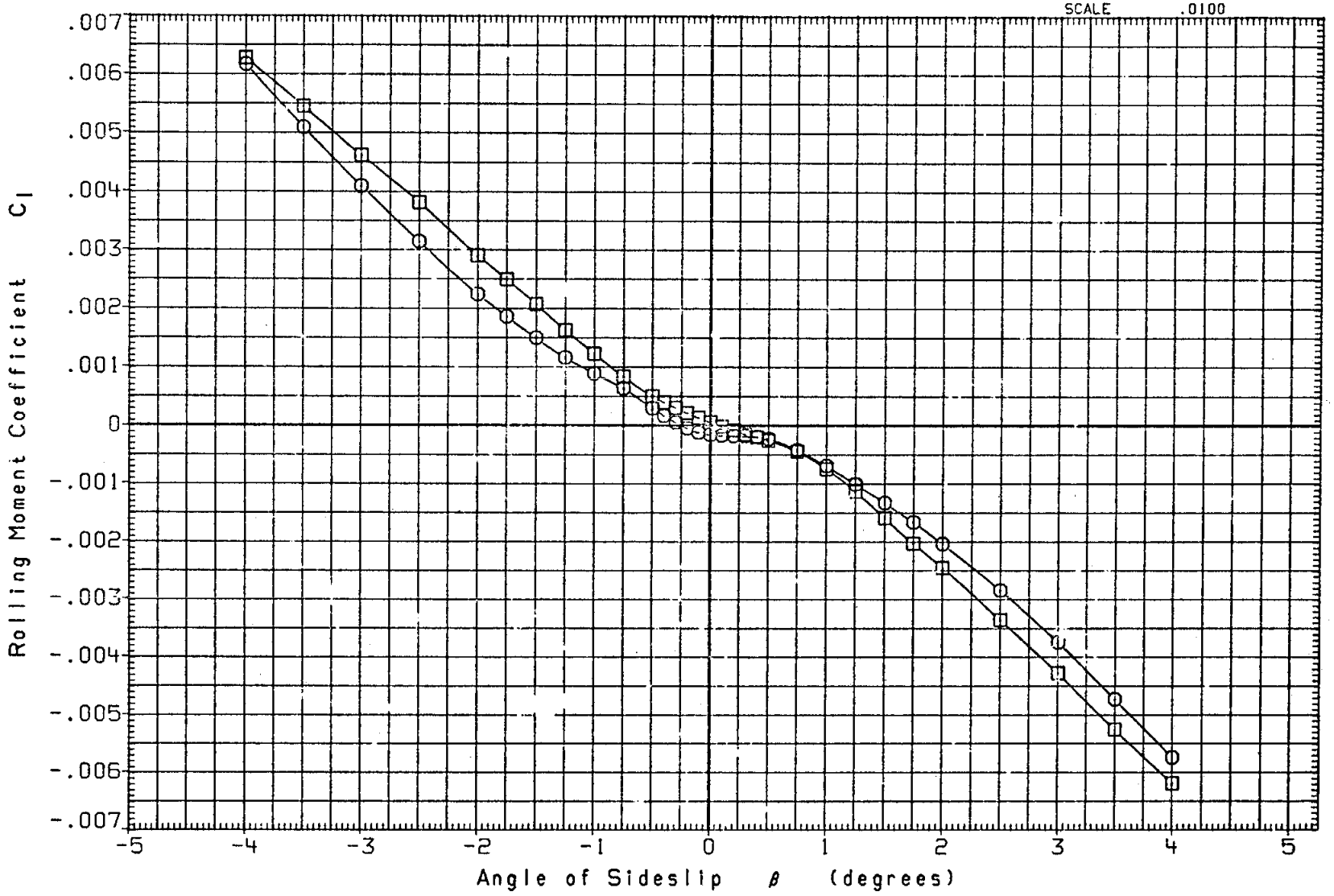


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(D) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3012 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.007
□	4.383

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	22.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

FEFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

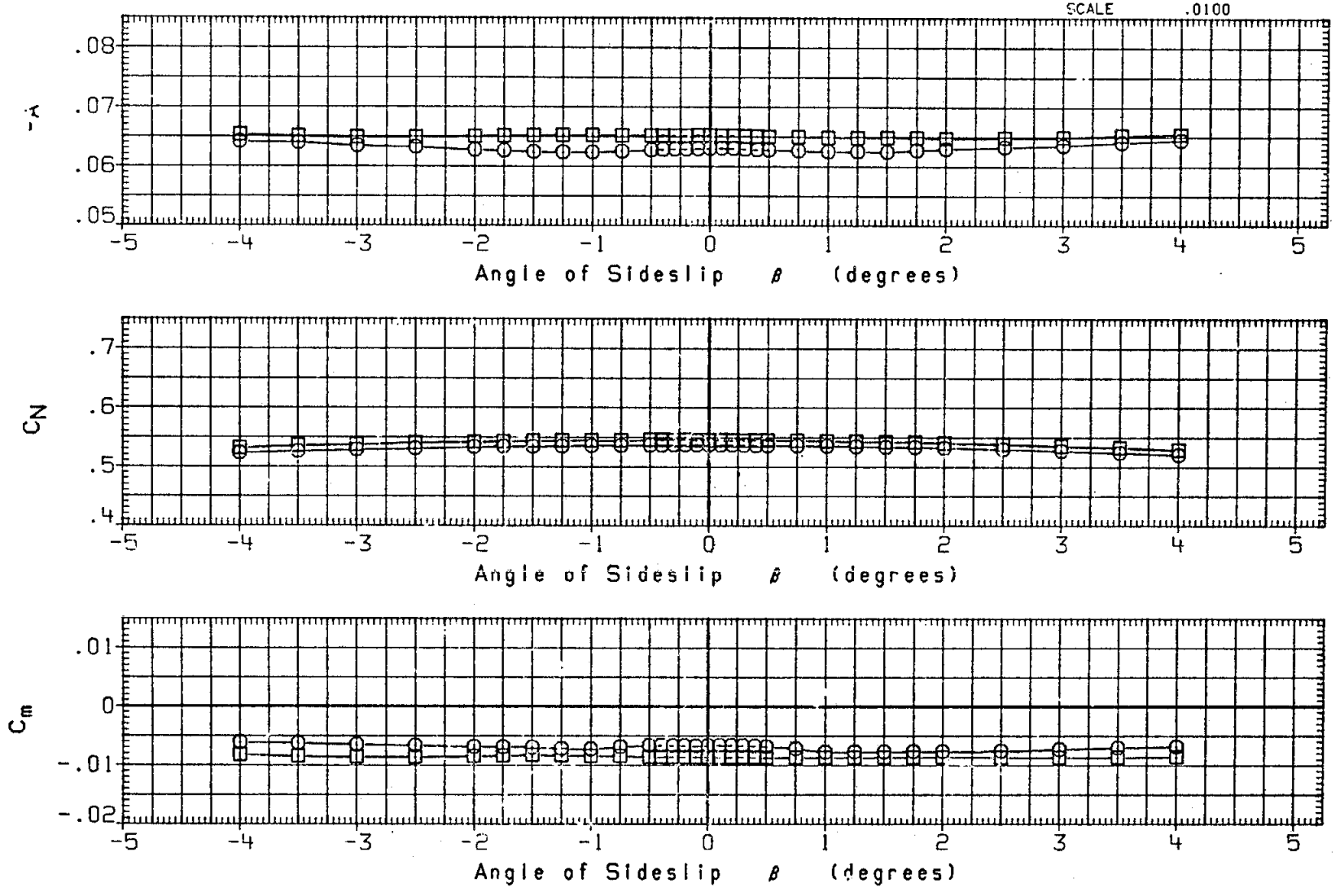


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(D) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION
DA 02 MAR 81

RT3013 CONFIGURATION OA259 (AEDC V41B-14) OVIC2, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.003	CONFIG	2.000	SPDBRK	87.200
□	4.377	ALPHA	25.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

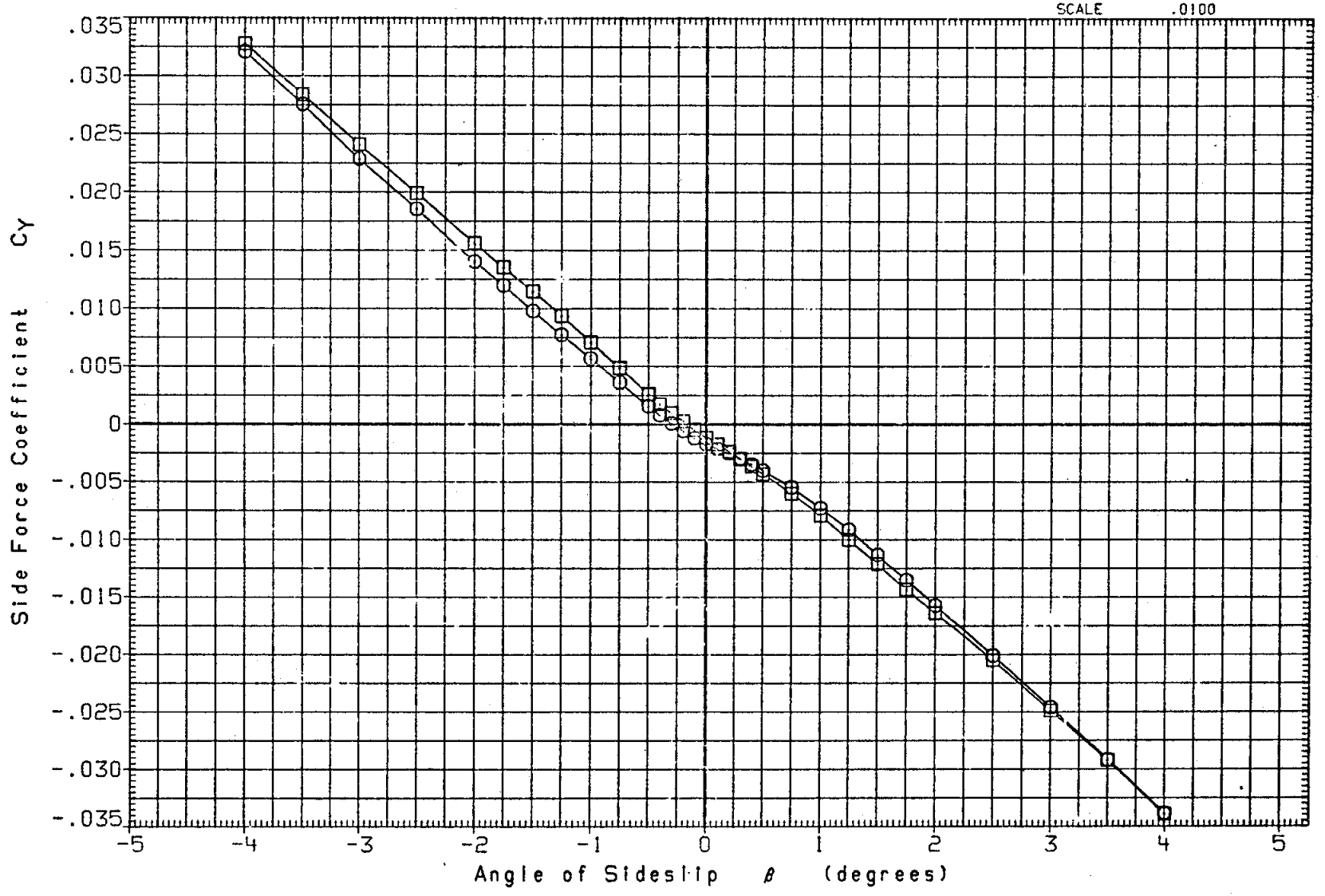


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(E) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3013 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.003	CONFIG	2.000	SPDBRK	87.200
□	4.377	ALPHA	25.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

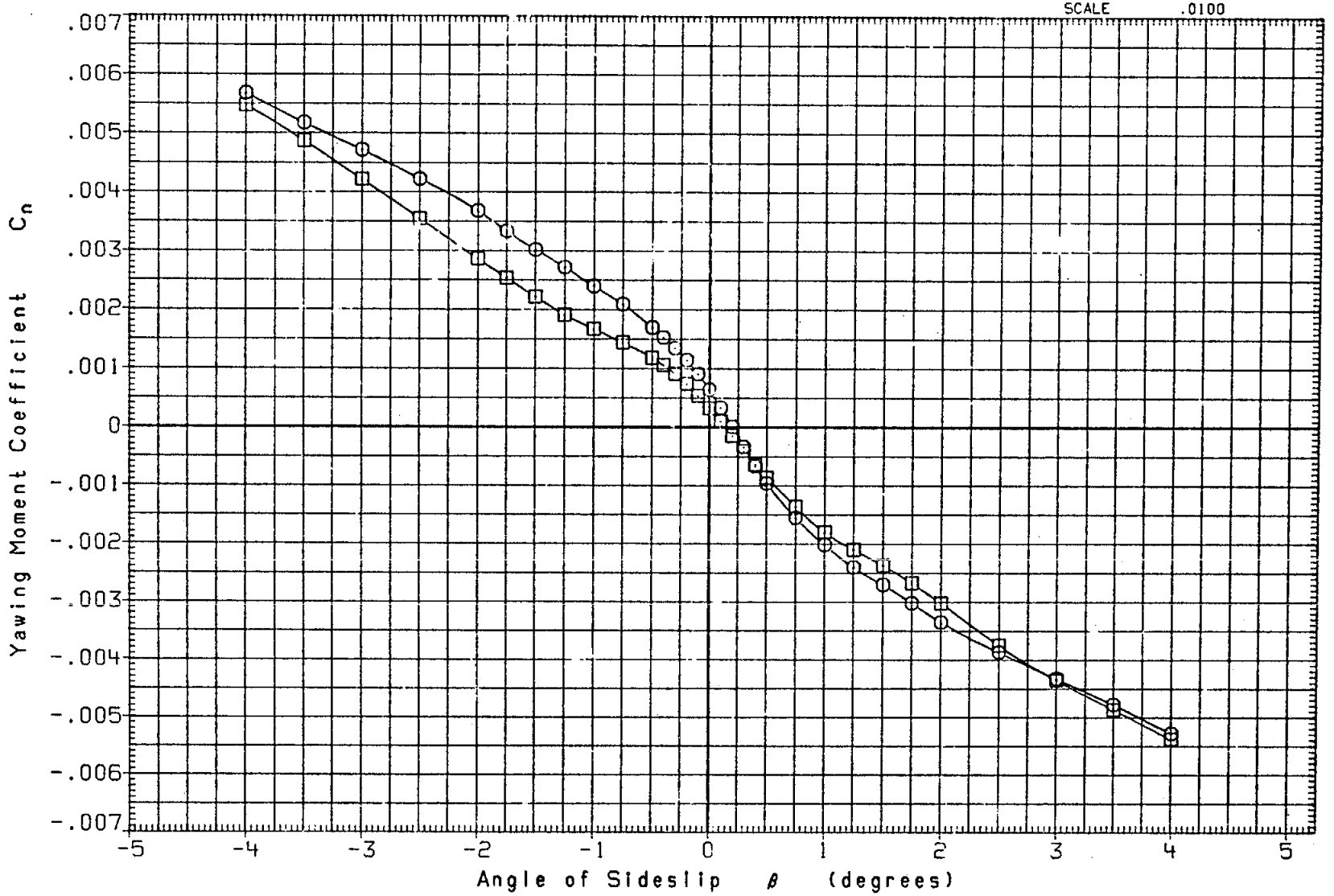


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(E) ALPHA = 25.0 DEGREES BASELINE CONFIGURATION
DA 02 MAR 81

RT3013 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.003
□	4.377

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	25.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6900	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

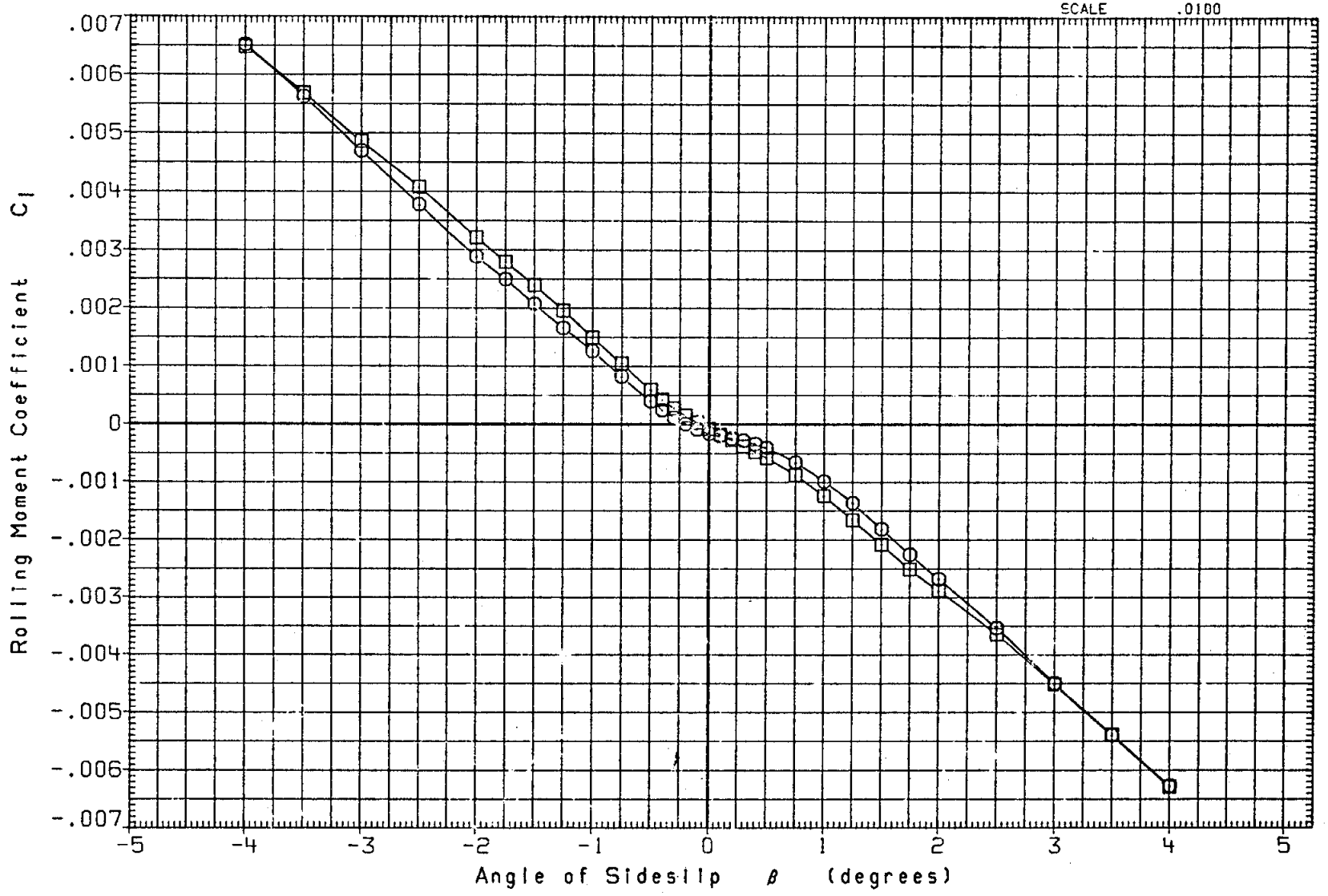


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(E) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3013 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.003
□	4.377

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	25.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

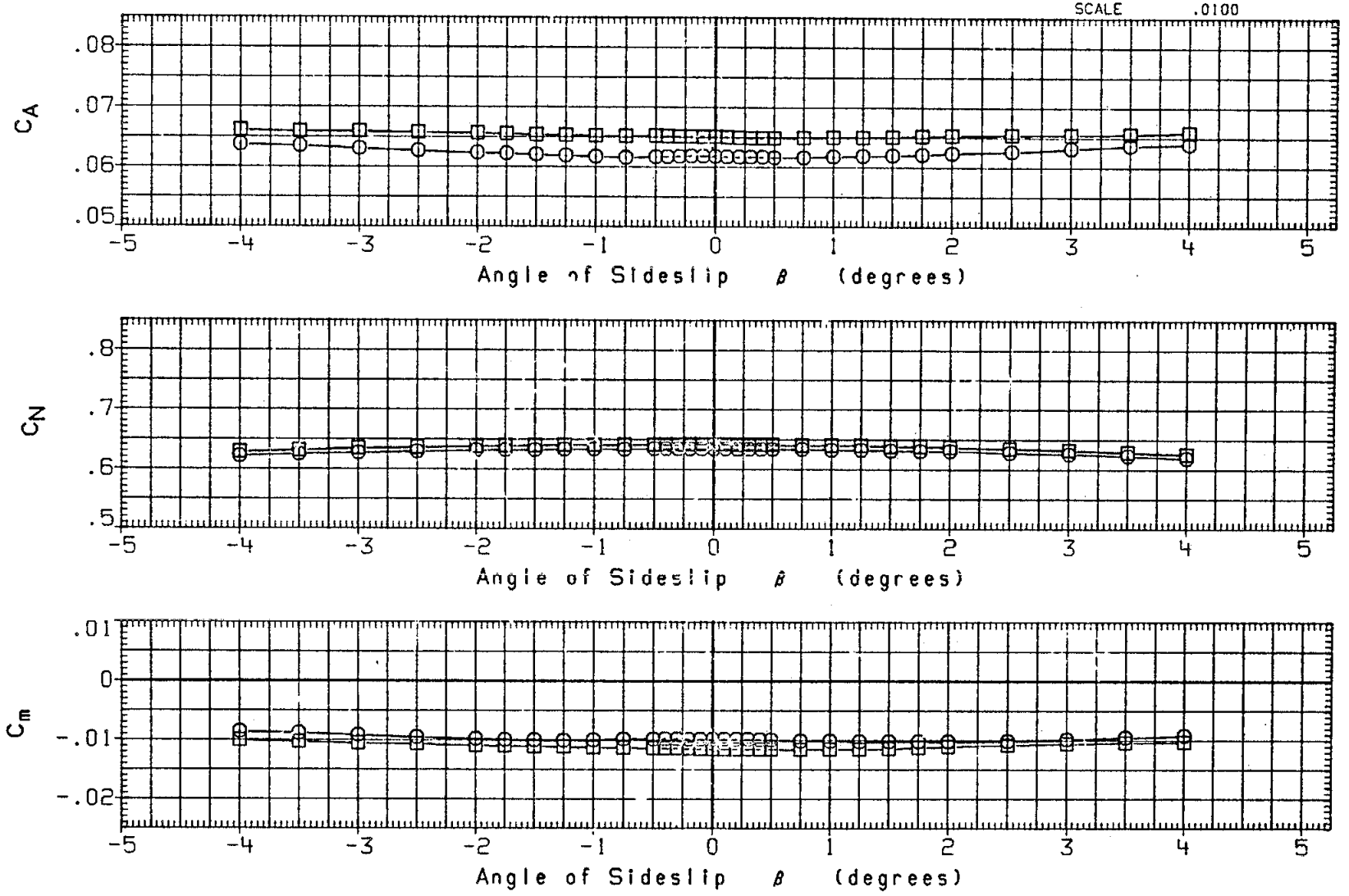


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(E) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION
DA 02 MAR 81

RT3014 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	1.991
□	4.363

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	25.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

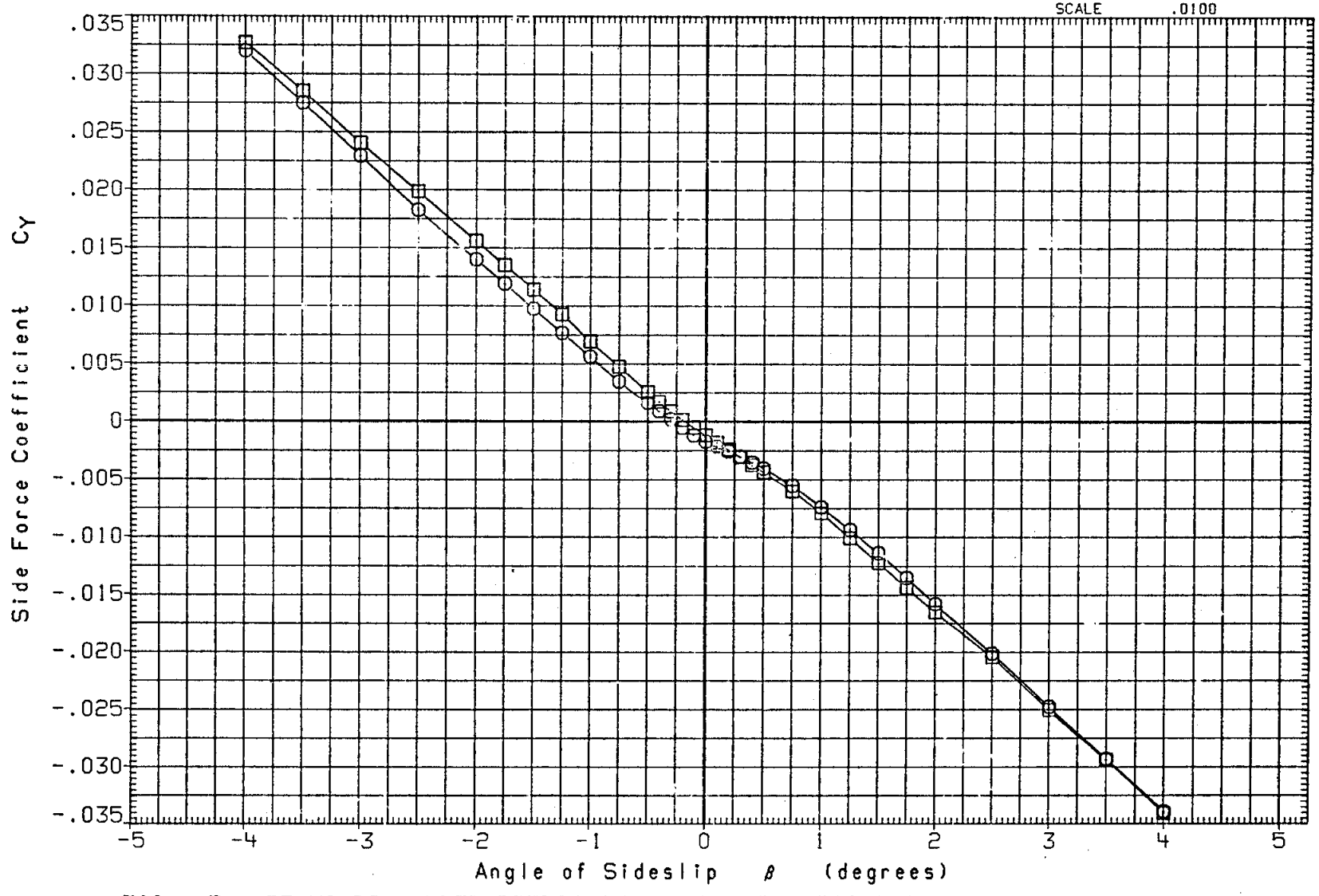


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(E) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3014 CONFIGURATION OA259 [AEDC V41B-14: OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	1.991	CONFIG	2.000	SPDBRK	87.200
□	4.363	ALPHA	25.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

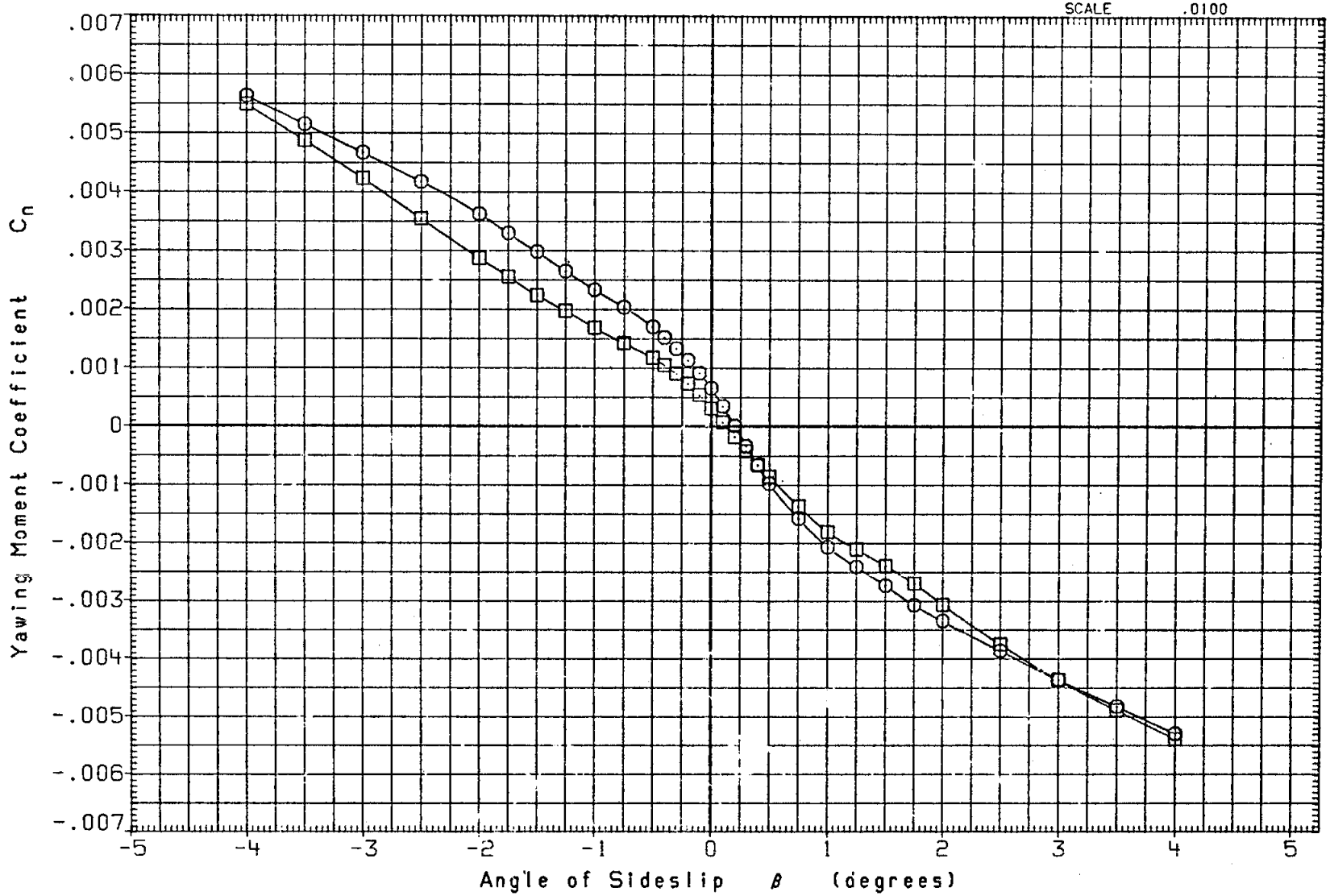


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(E) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3014 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	1.991
□	4.363

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	25.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

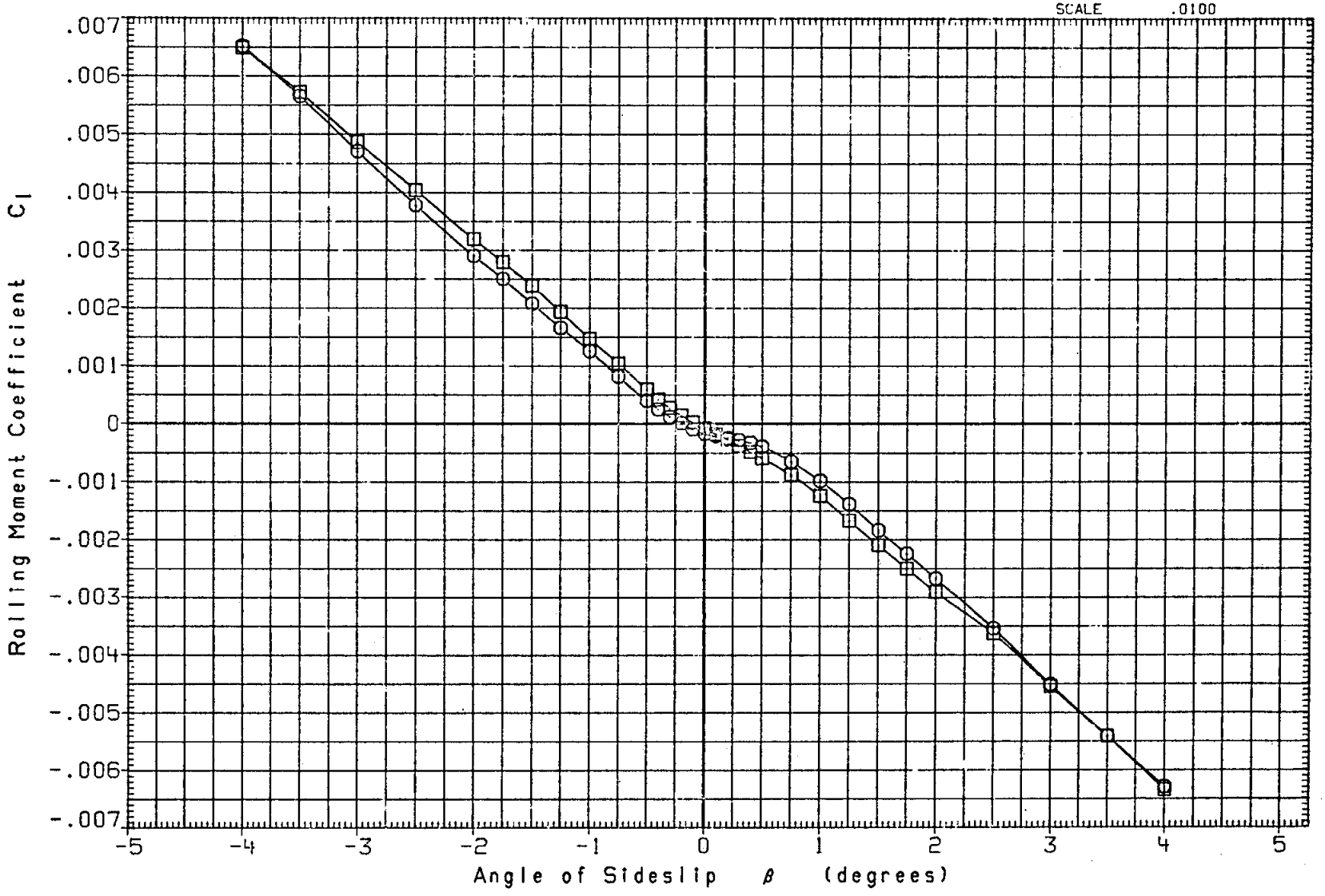


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(E) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3014 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	1.991
□	4.363

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	25.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

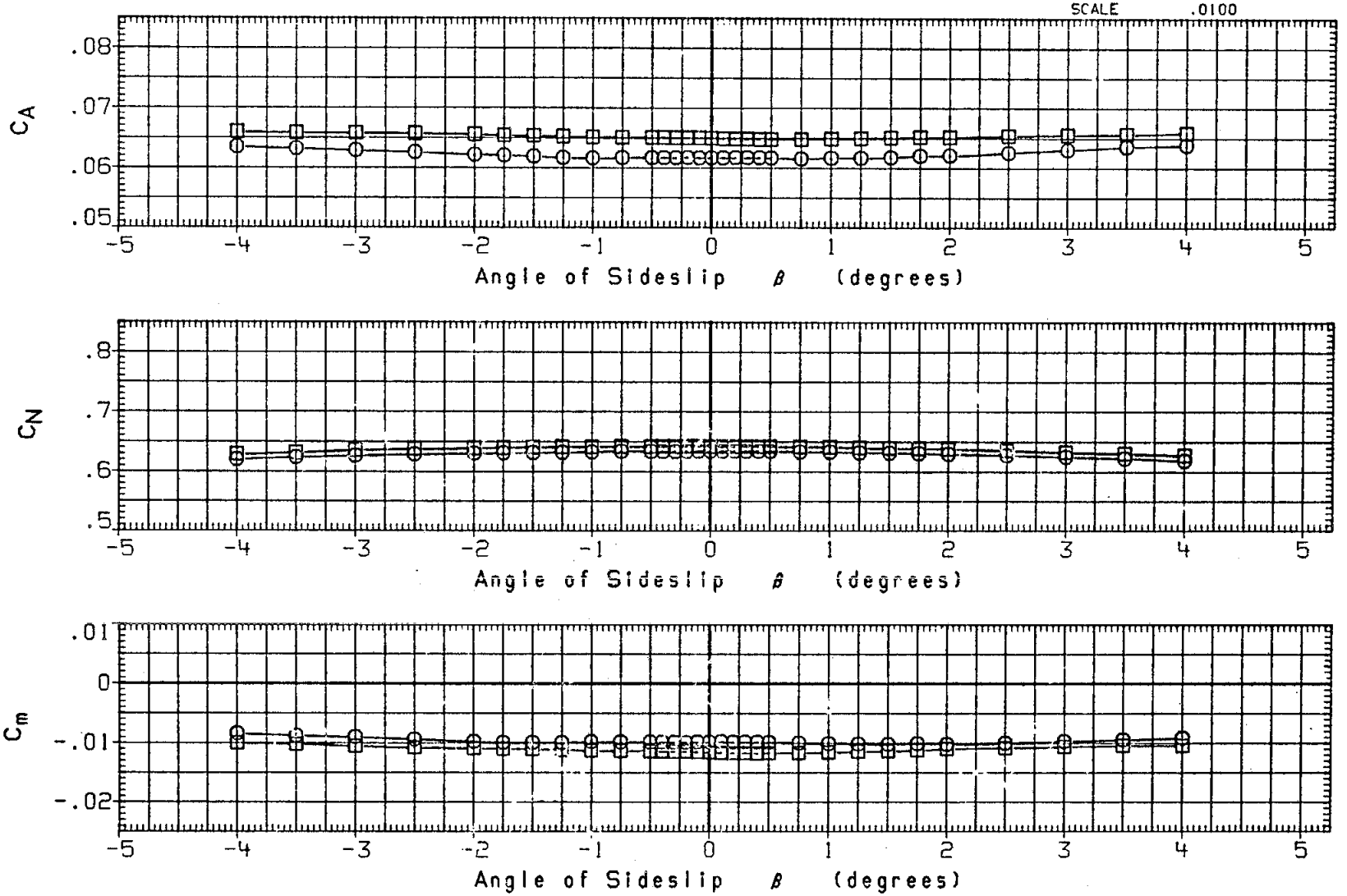


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(E) ALPHA = 25.0 DEGREES. BASELINE CONFIGURATION
DAT 02 MAR 81

RT3015 CONFIGURATION 0A259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.012	CONFIG	2.000	SPDBRK	87.200
□	4.342	ALPHA	27.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

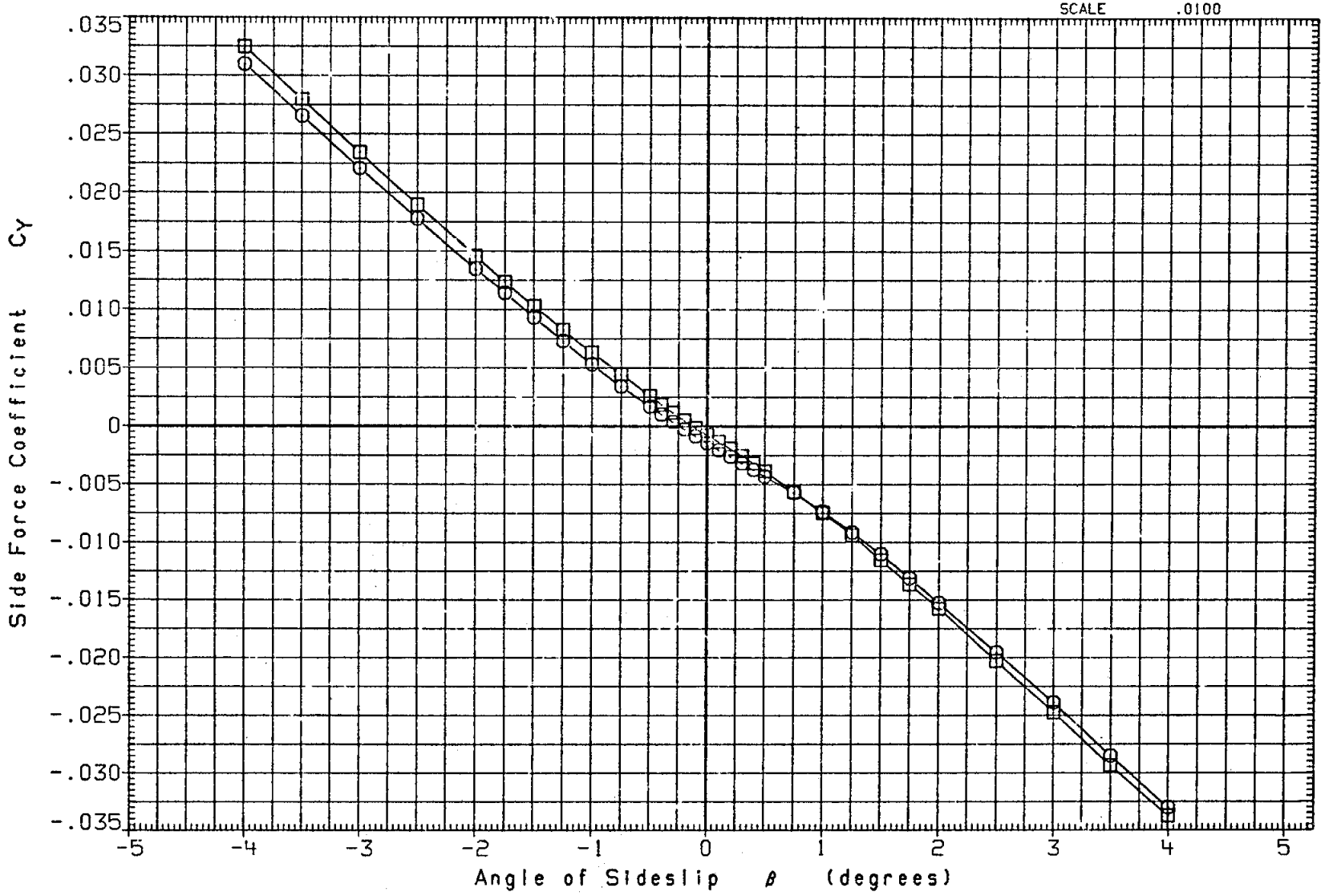


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(F) ALPHA = 27.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3015 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.012
□	4.342

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	27.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

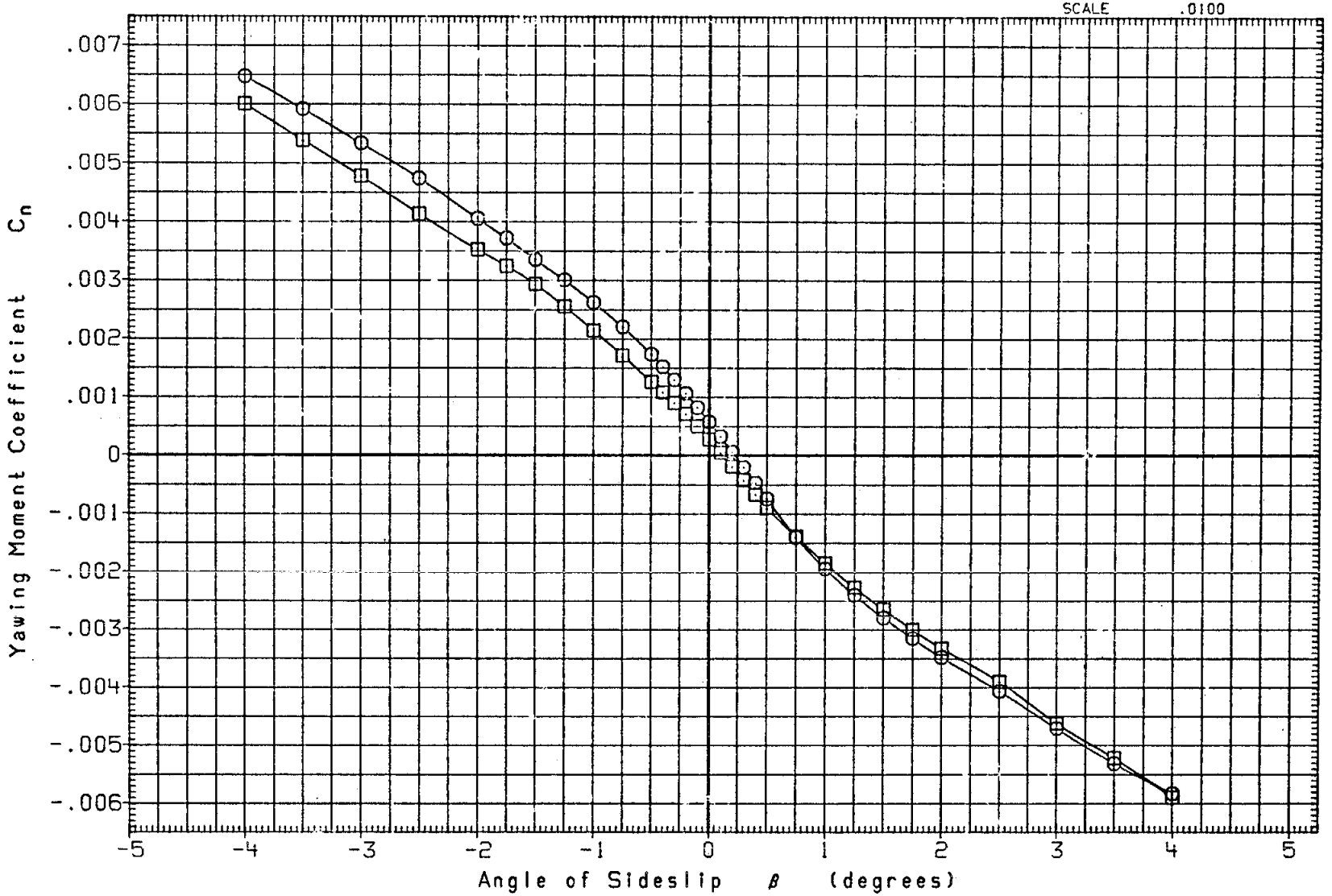


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(F) ALPHA = 27.5 DEGREES, BASELINE CONFIGURATION
DAT' 02 MAR 81

RT3015 CONFIGURATION 0A259 (AEDC V41B-14) OV1C2, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.012
□	4.342

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	27.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

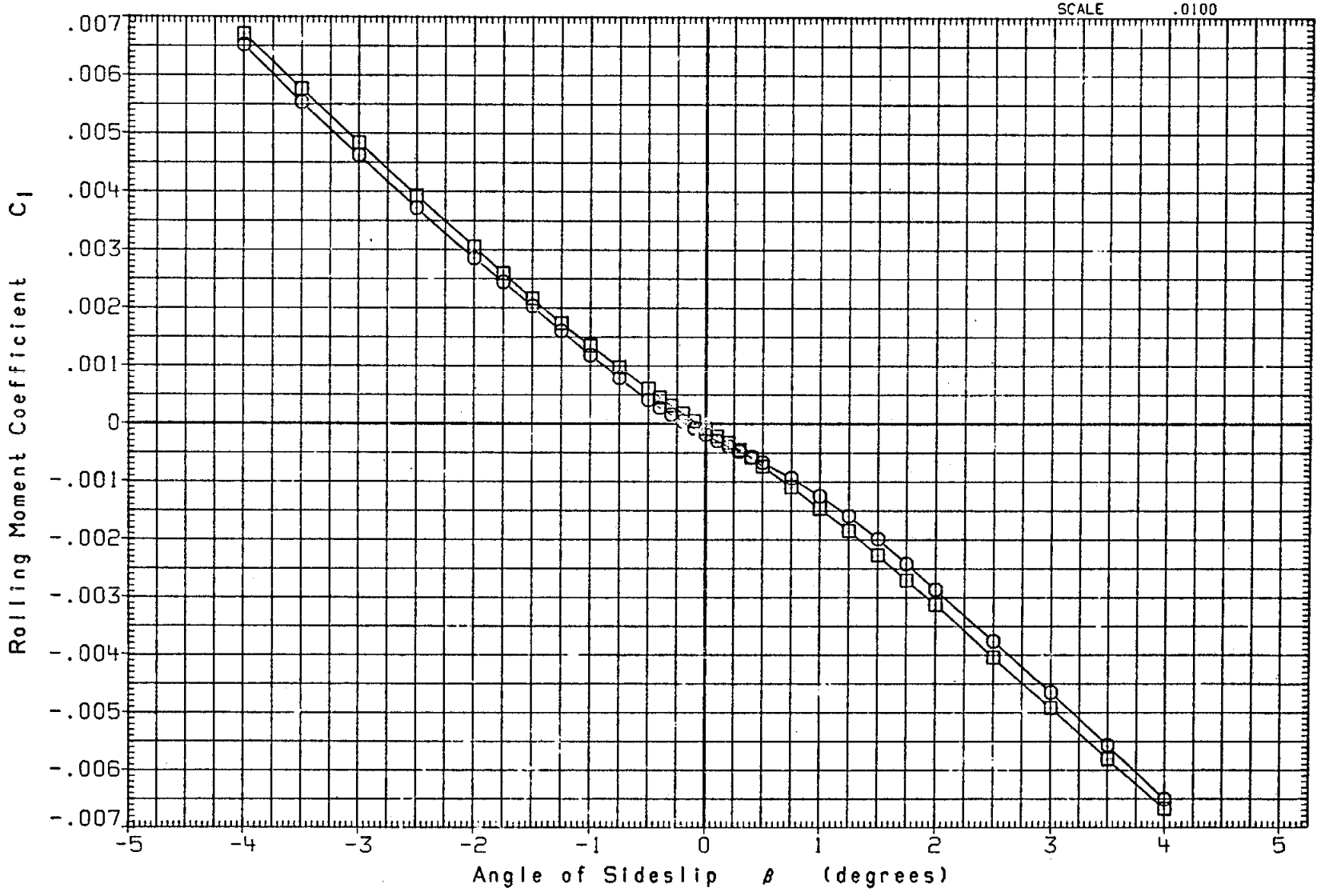


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(F) ALPHA = 27.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3015 CONFIGURATION 0A259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.012	CONFIG	2.000	SPDBRK	87.200
□	4.342	ALPHA	27.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

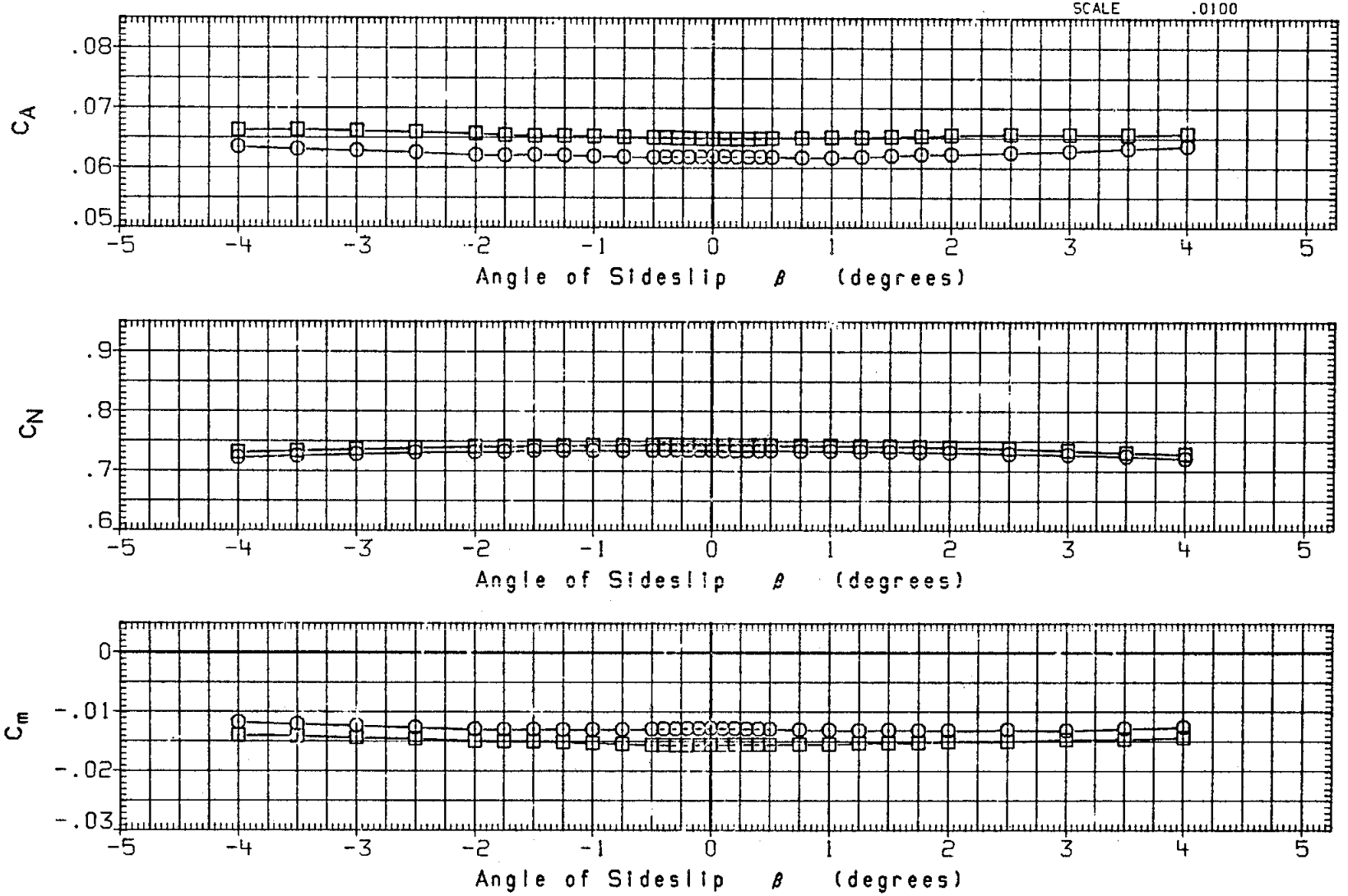


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(F) ALPHA = 27.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3017 CONFIGURATION 0A259 [AEDC V41B-14] OV10[illegible], STING A (UPRIGHT)

SYMBOL	RN/L
○	2.002
□	4.396

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	30.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

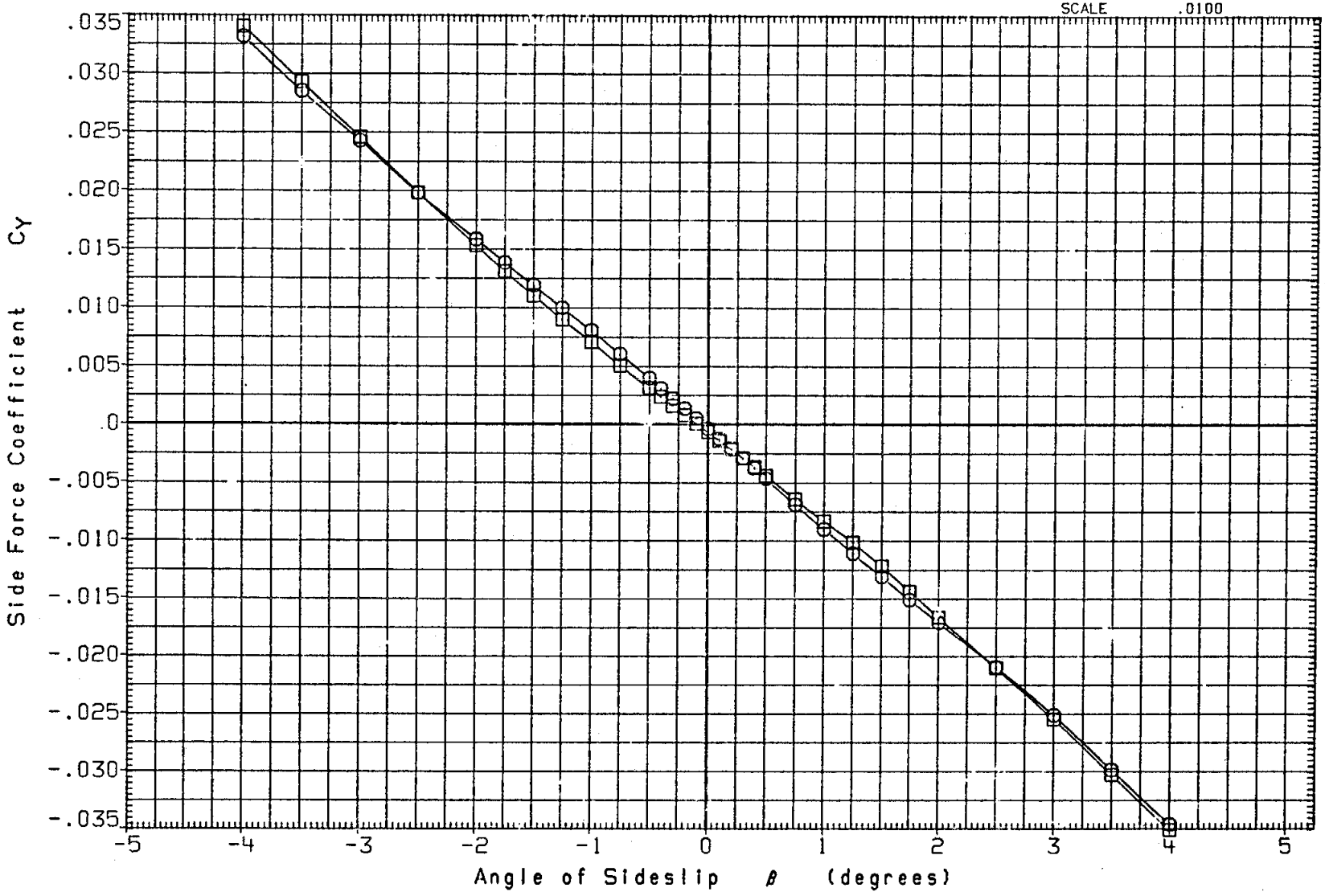


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(G) ALPHA = 30.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3017 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.002	CONFIG	2.000	SPDBRK	87.200
□	4.396	ALPHA	30.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

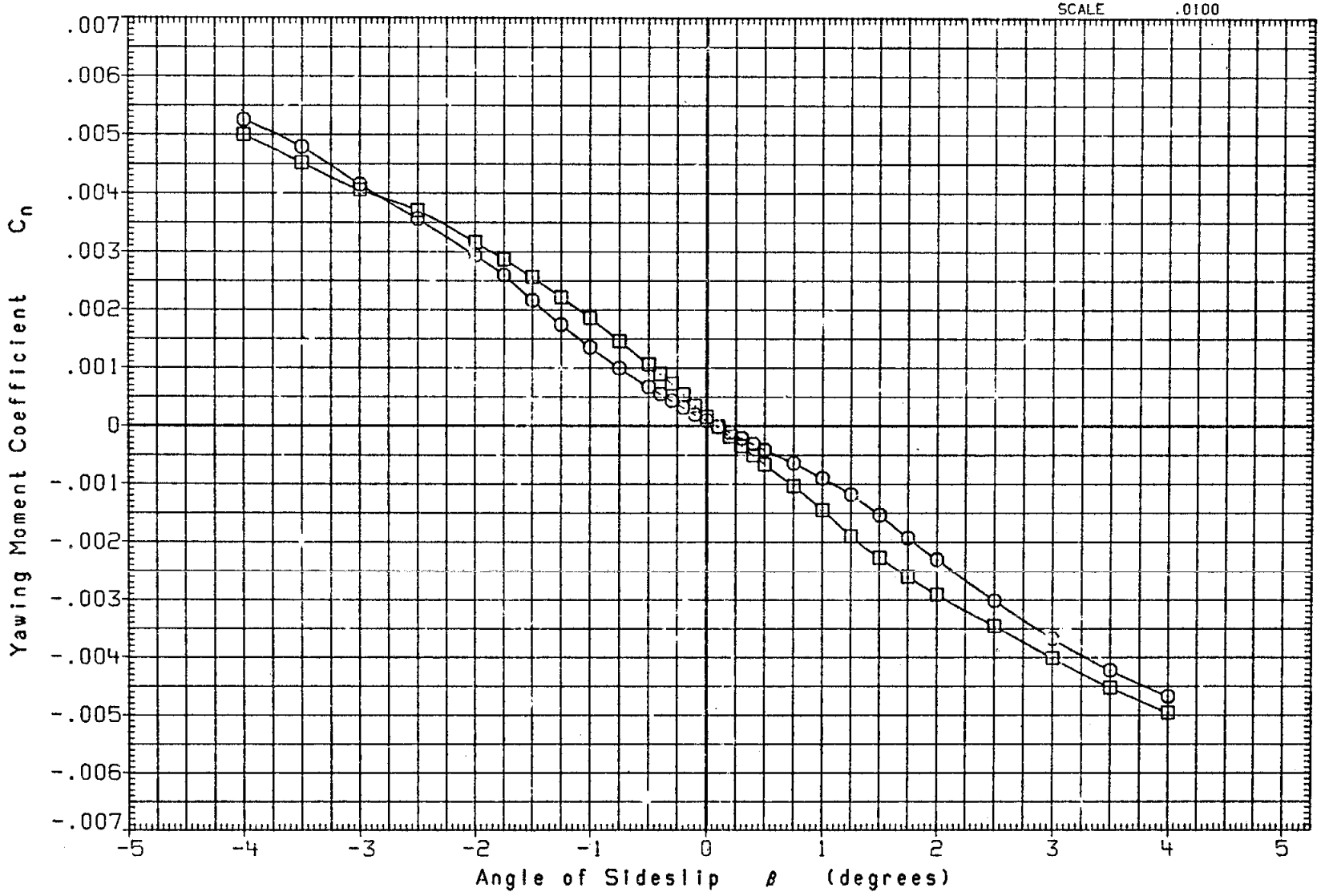


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(G) ALPHA = 30.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

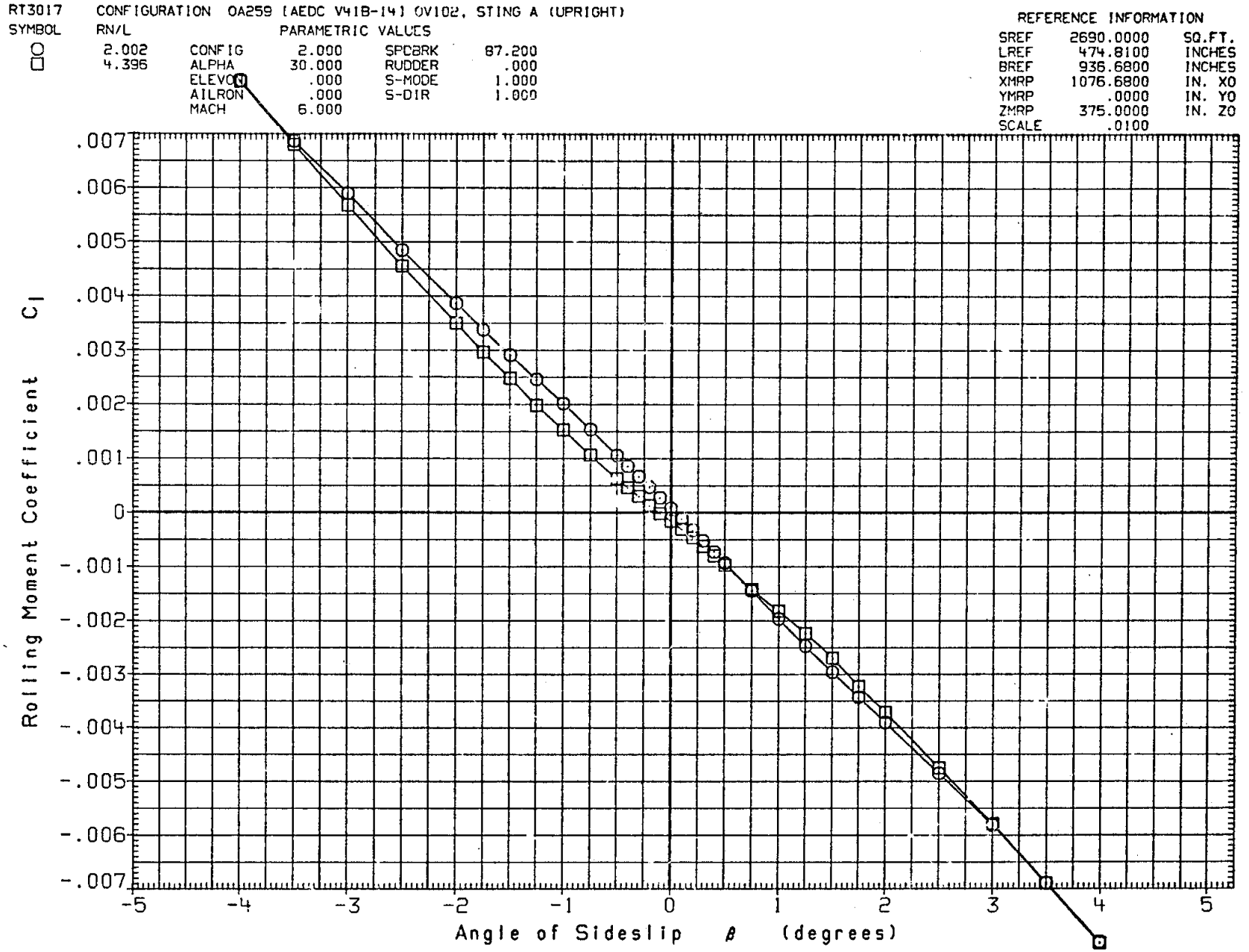


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(G) ALPHA = 30.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3017 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.002
□	4.396

PARAMETRIC VALUES

CONFIG	2.000	SPDBRK	87.200
ALPHA	30.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

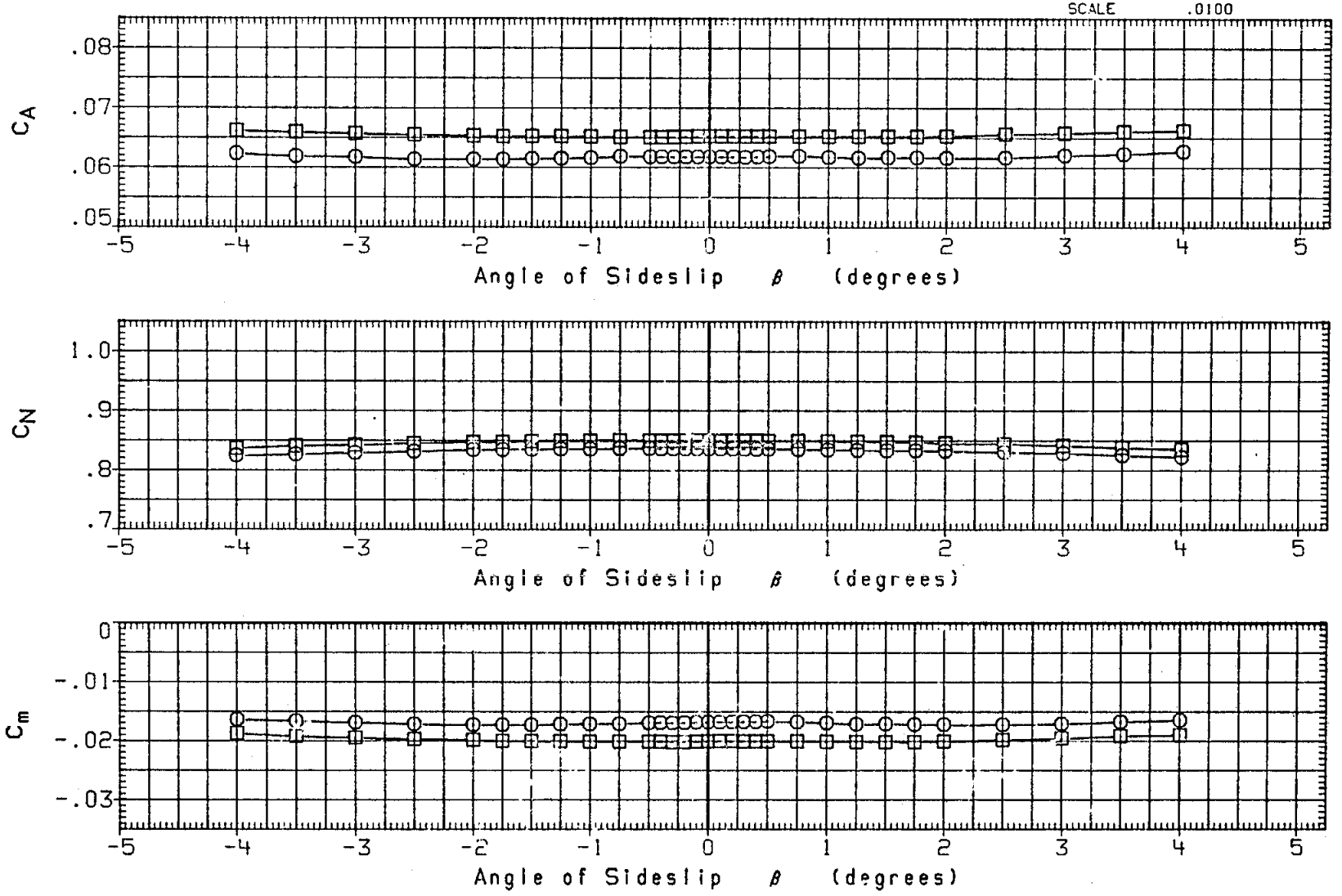


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(G) ALPHA = 30.0 DEGREES. BASELINE CONFIGURATION
DATE 02 MAR 81

RT3019 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.018	CONFIG	2.000	SPDBRK	87.200
□	4.412	ALPHA	32.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

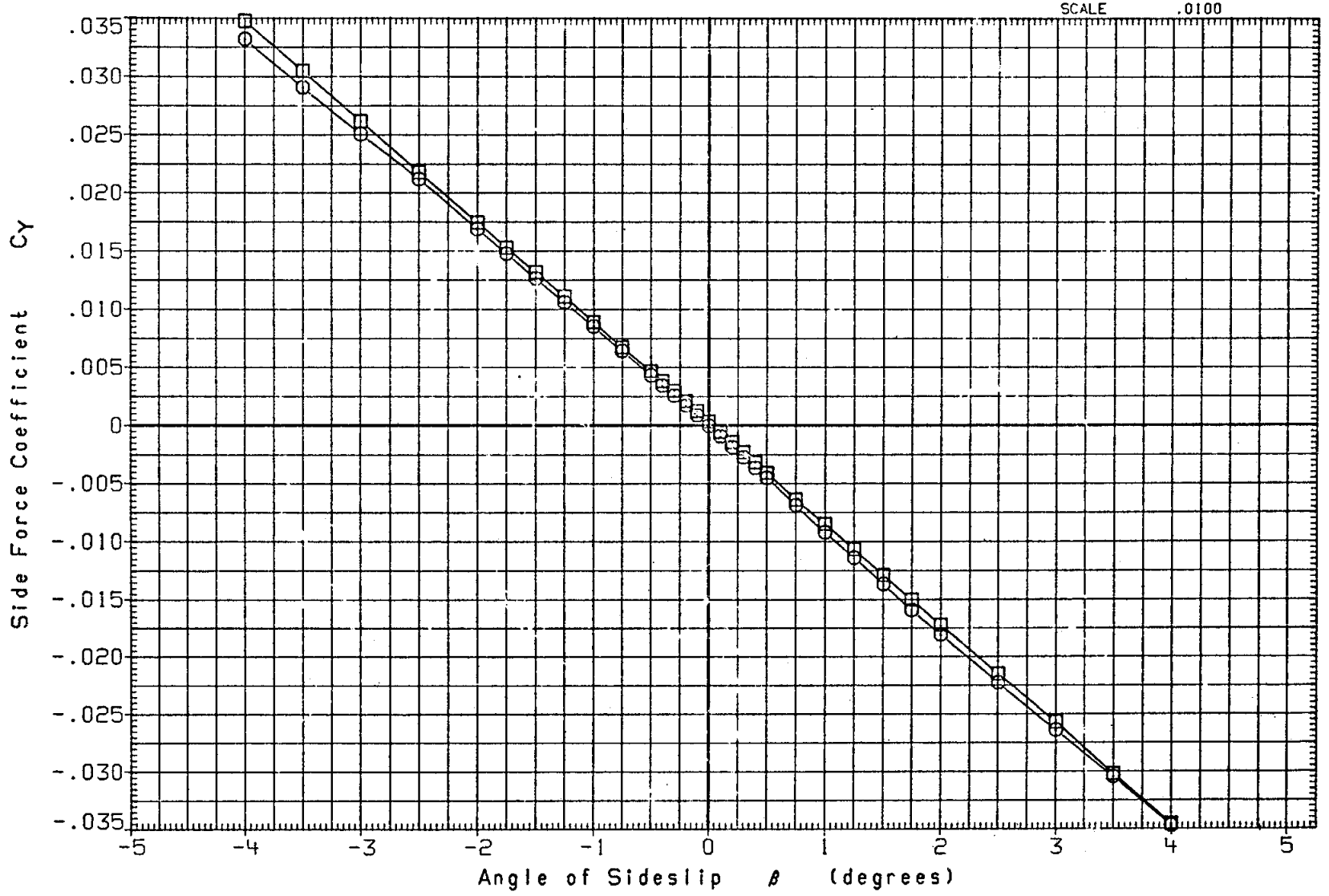


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(H) ALPHA = 32.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3019 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.018	CONFIG	2.000	SPDBRK	87.200
□	4.412	ALPHA	32.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

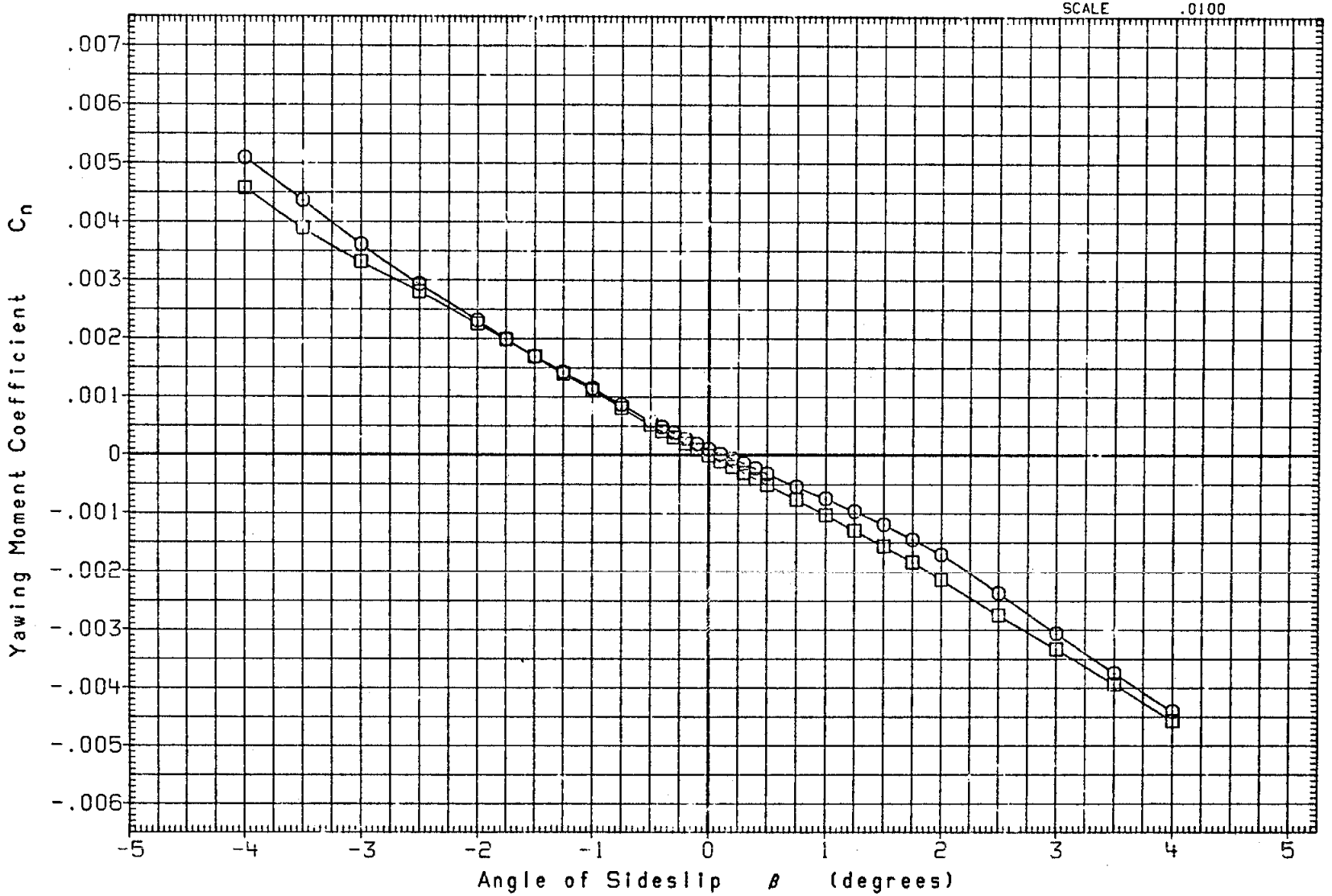


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(H) ALPHA = 32.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

PAGE

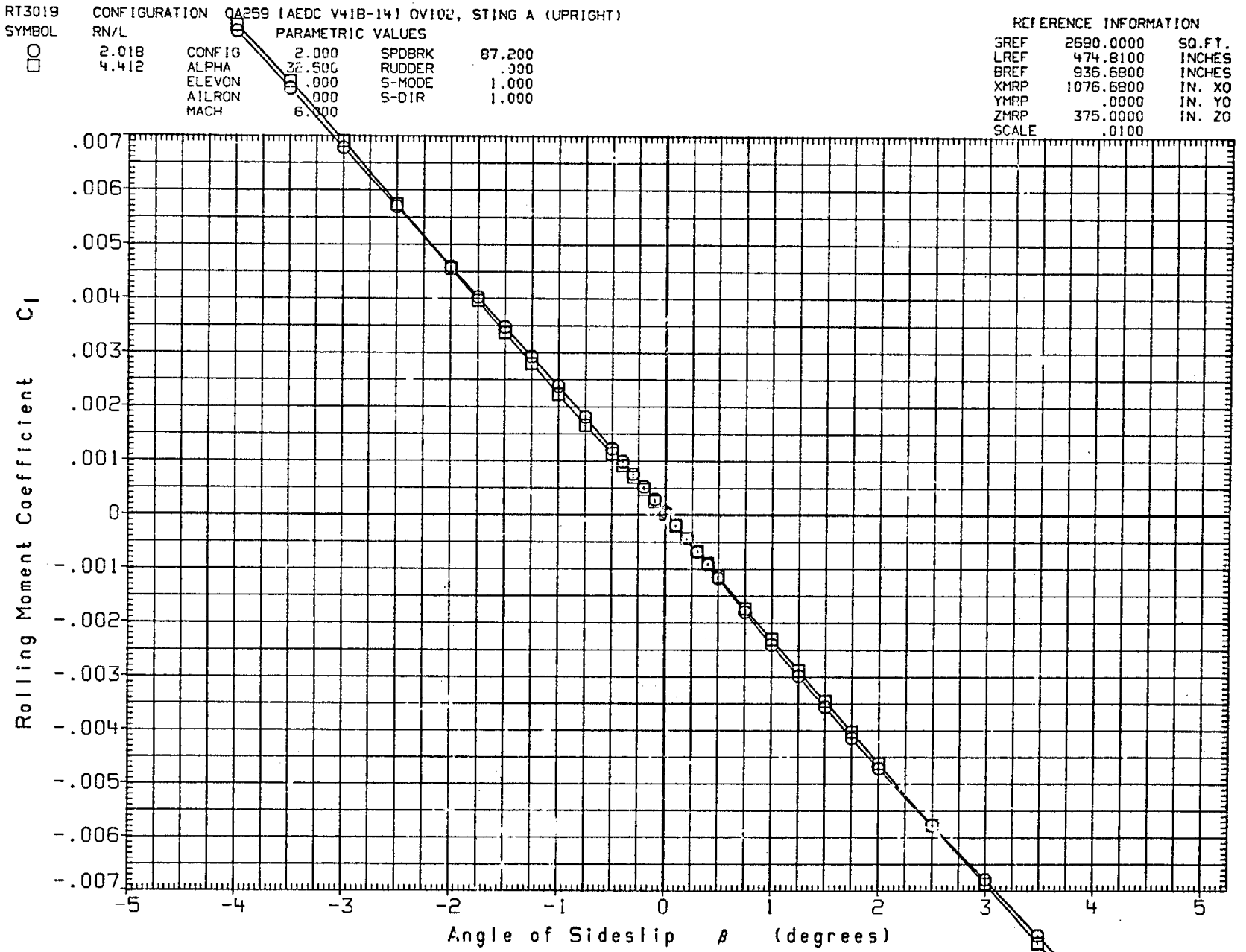


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(H) ALPHA = 32.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3019 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
□	2.018	CONFIG	2.000	SPDBRK	87.200
○	4.412	ALPHA	32.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

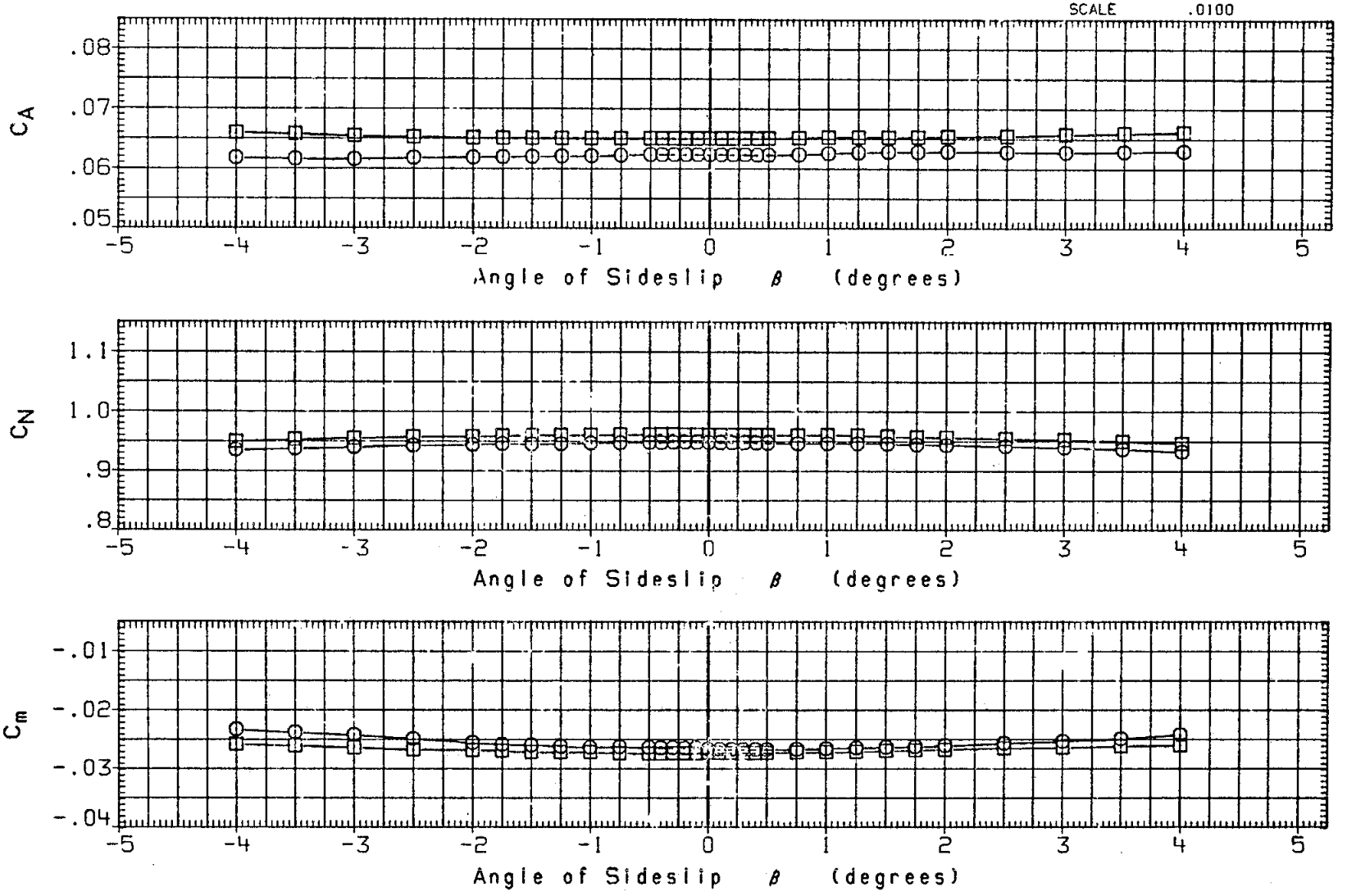


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(H) ALPHA = 32.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3021 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.021	CONFIG	2.000	SPDBRK	87.200
□	4.391	ALPHA	35.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

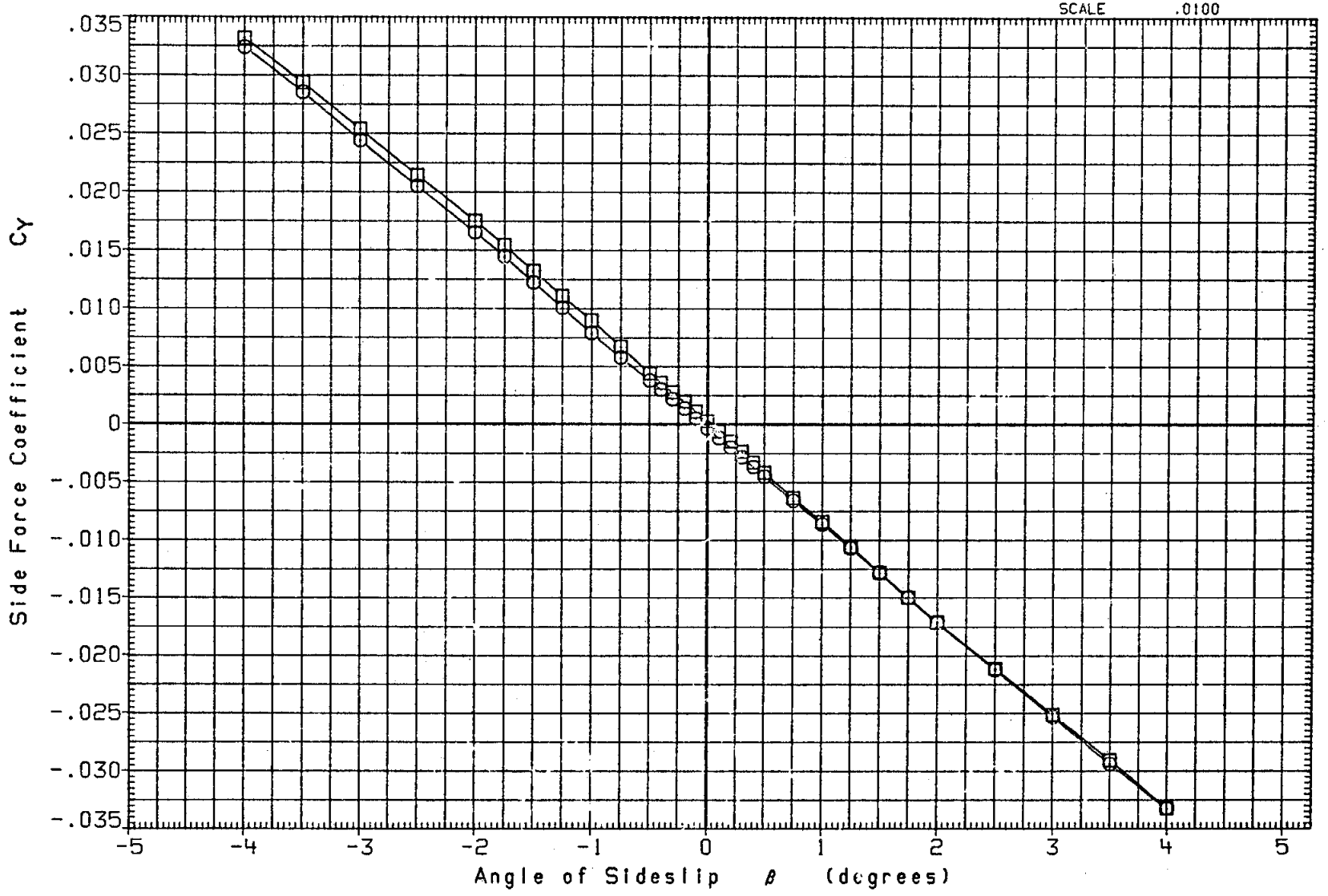


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(I) ALPHA = 35.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3021 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.021	CONFIG	2.000	SPDBRK	87.200
□	4.391	ALPHA	35.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

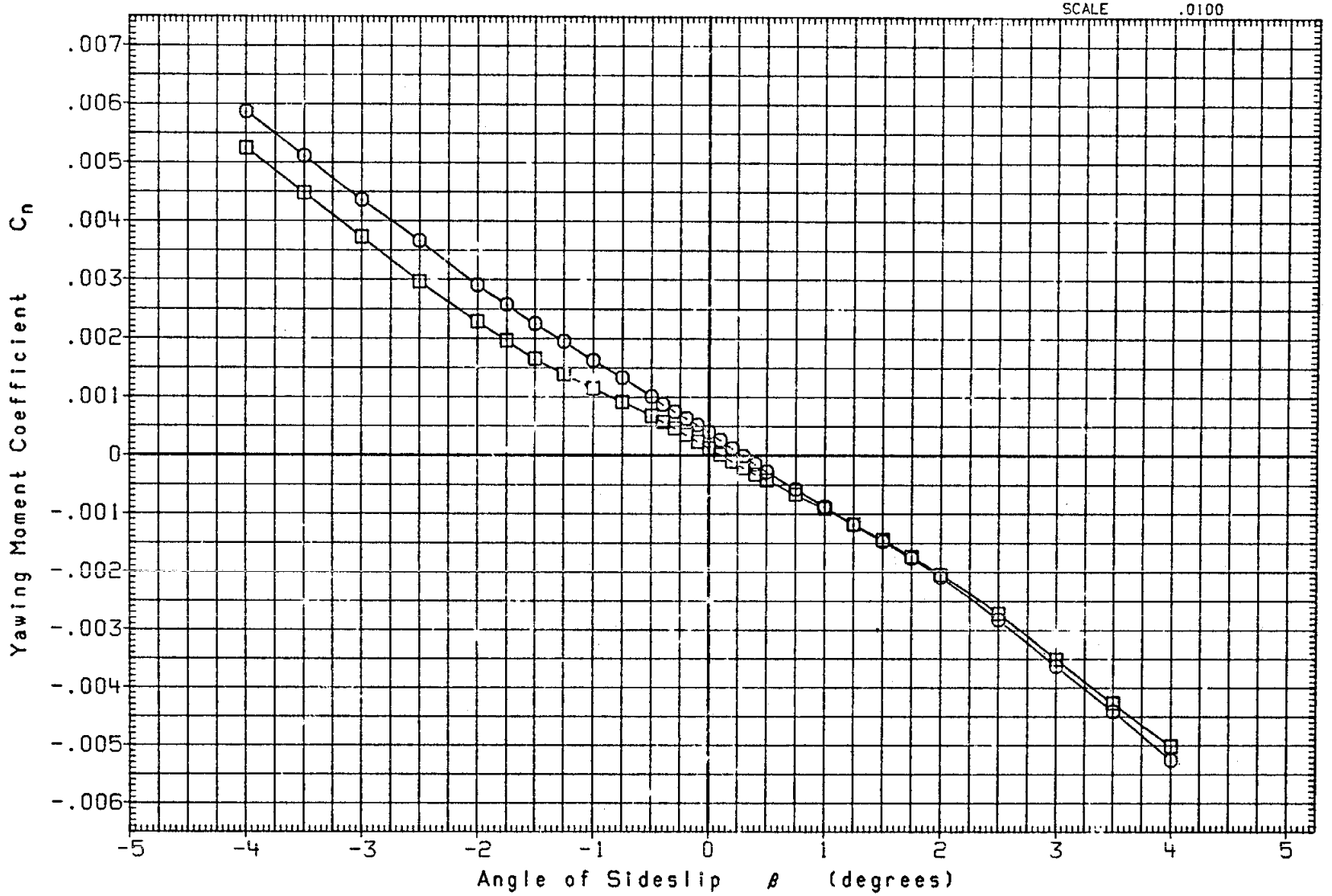


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(I) ALPHA = 35.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

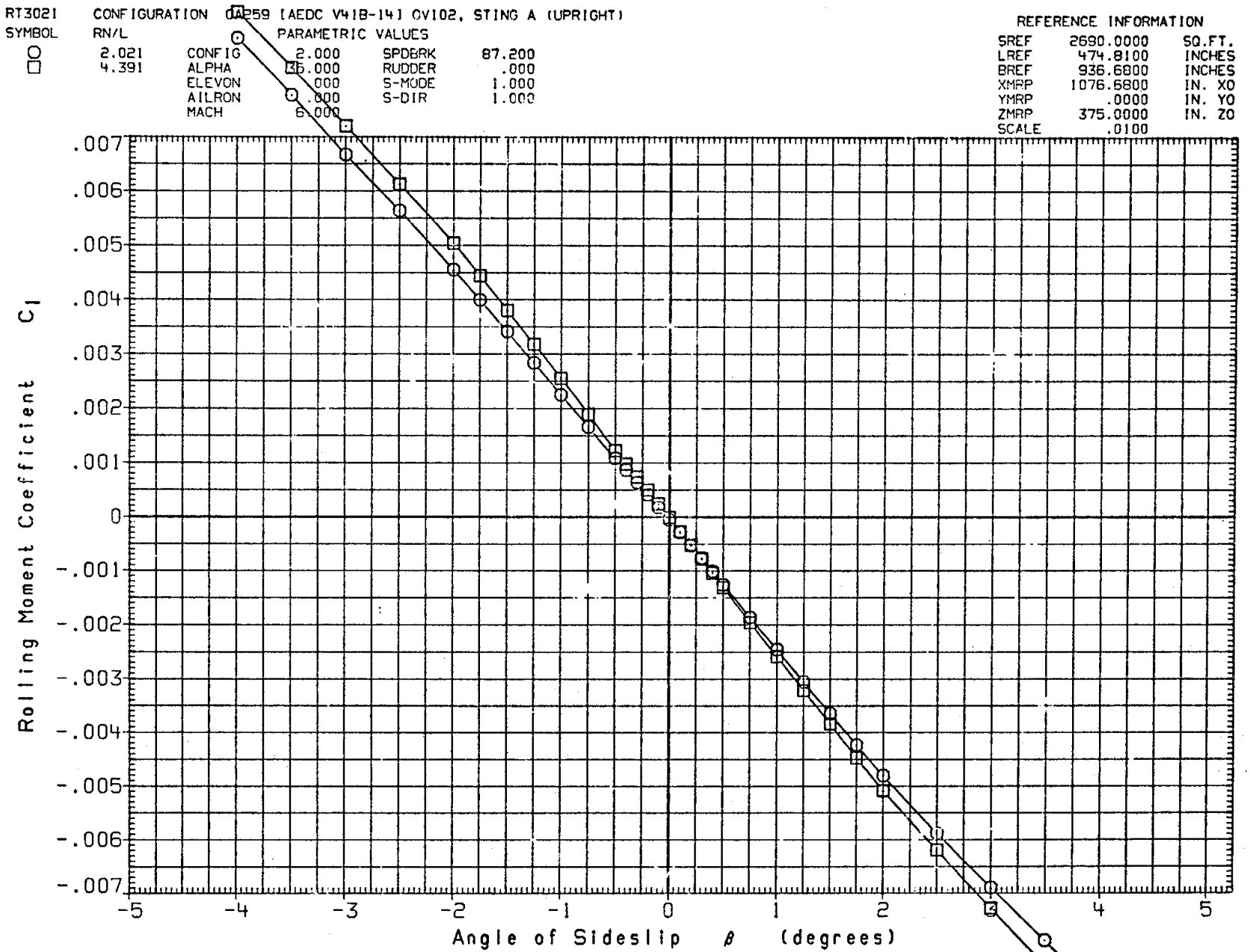


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(I) ALPHA = 35.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3021 CONFIGURATION 0A259 (AEDC V41B-141 DVICE, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.021	CONFIG	2.000	SPDBRK	87.200
□	4.391	ALPHA	35.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

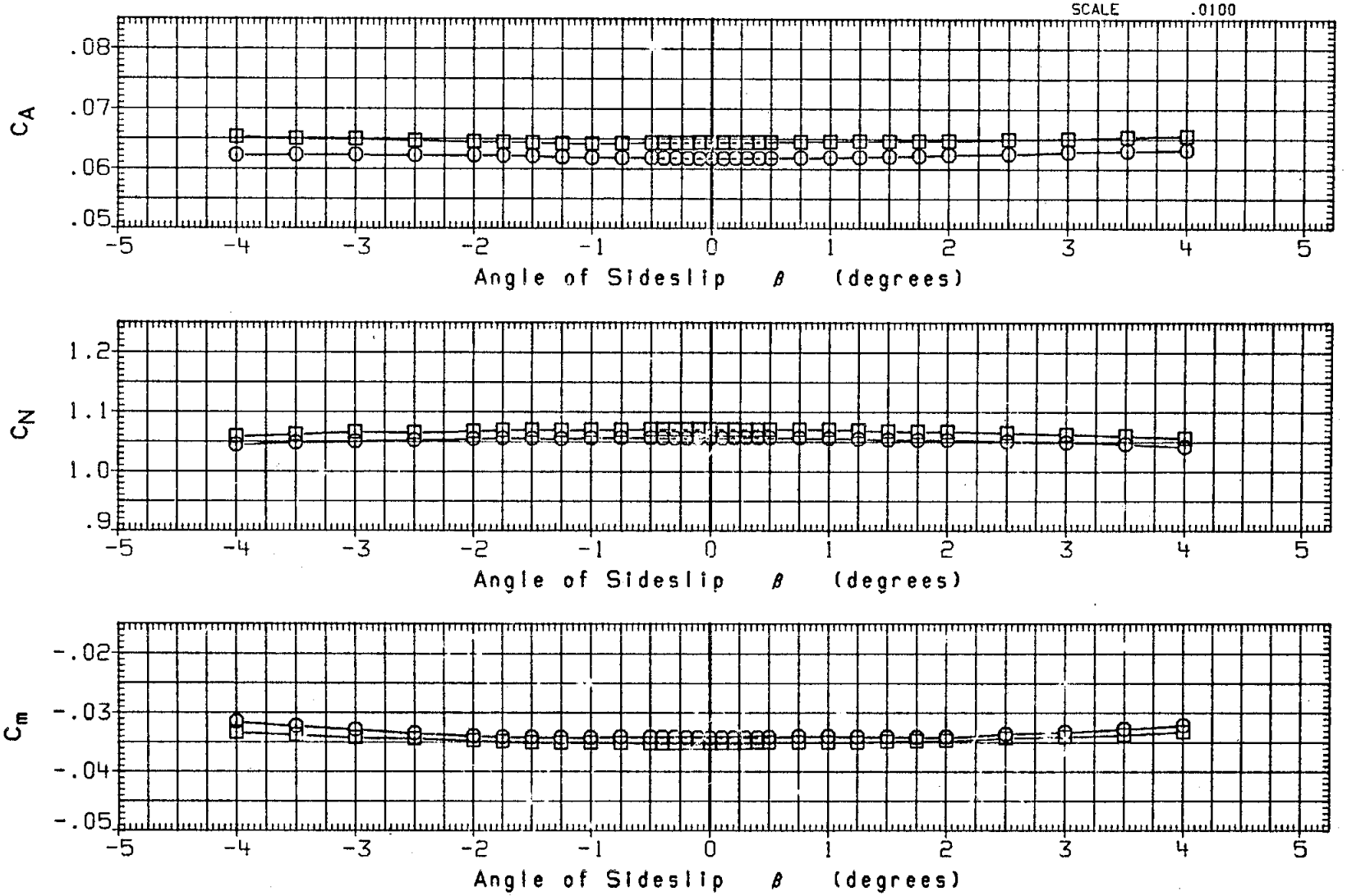


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(I) ALPHA = 35.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3023 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.025	CONFIG	2.000	SPDBRK	87.200
□	4.390	ALPHA	37.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

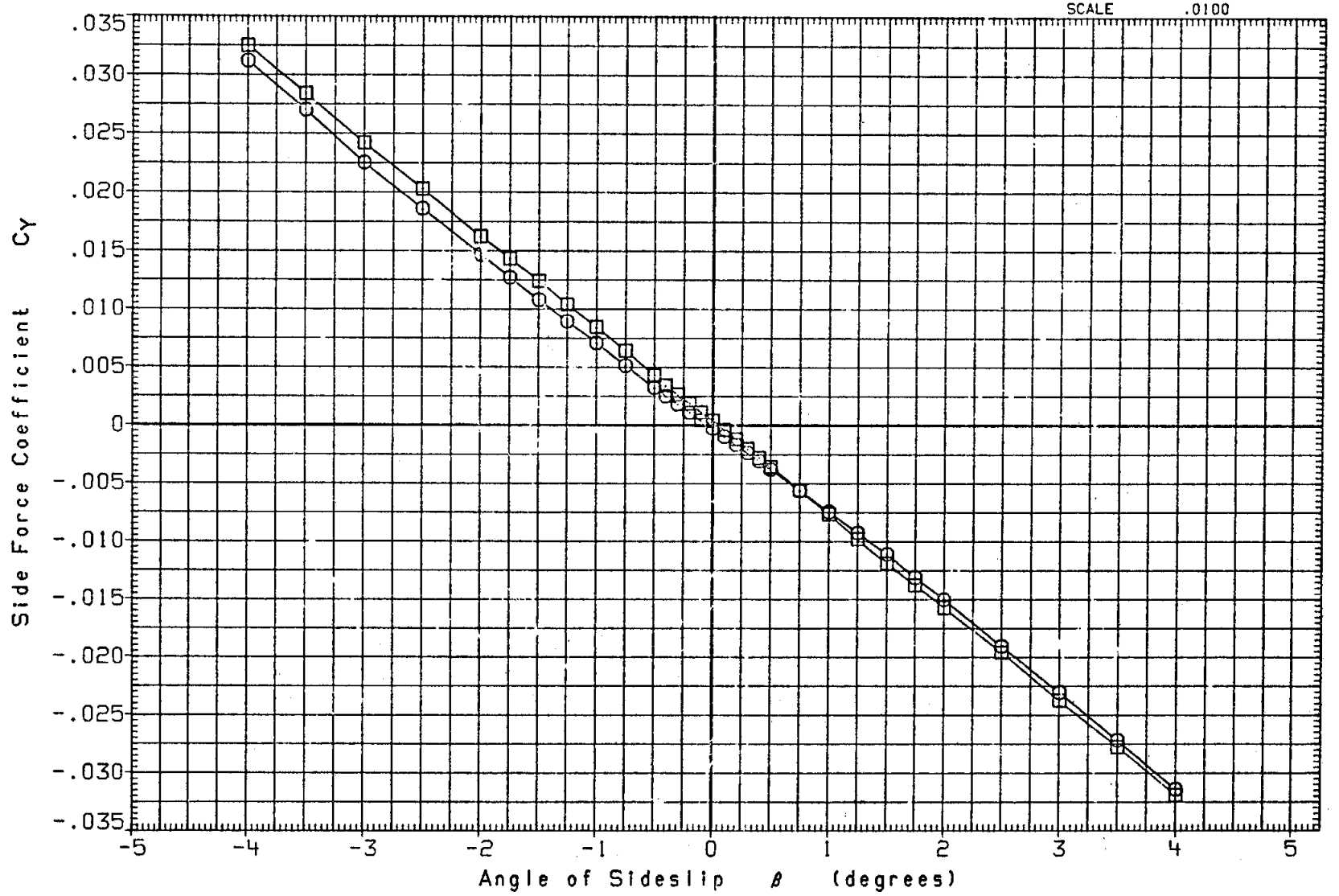


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(J) ALPHA = 37.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3023 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L
○	2.025
□	4.390

PARAMETRIC VALUES

CONFIG	2.000	SPDERK	87.200
ALPHA	37.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

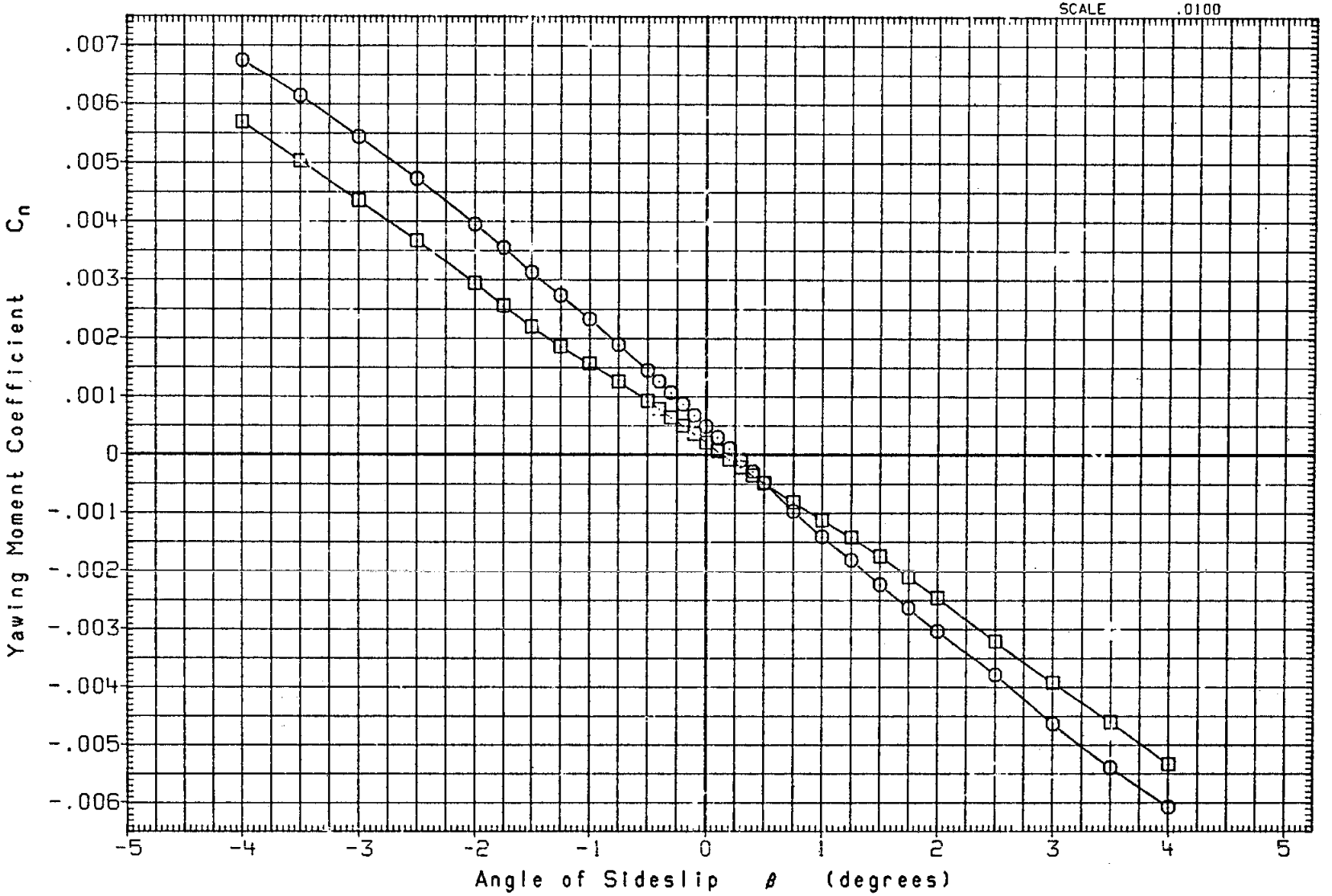


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(J) ALPHA = 37.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

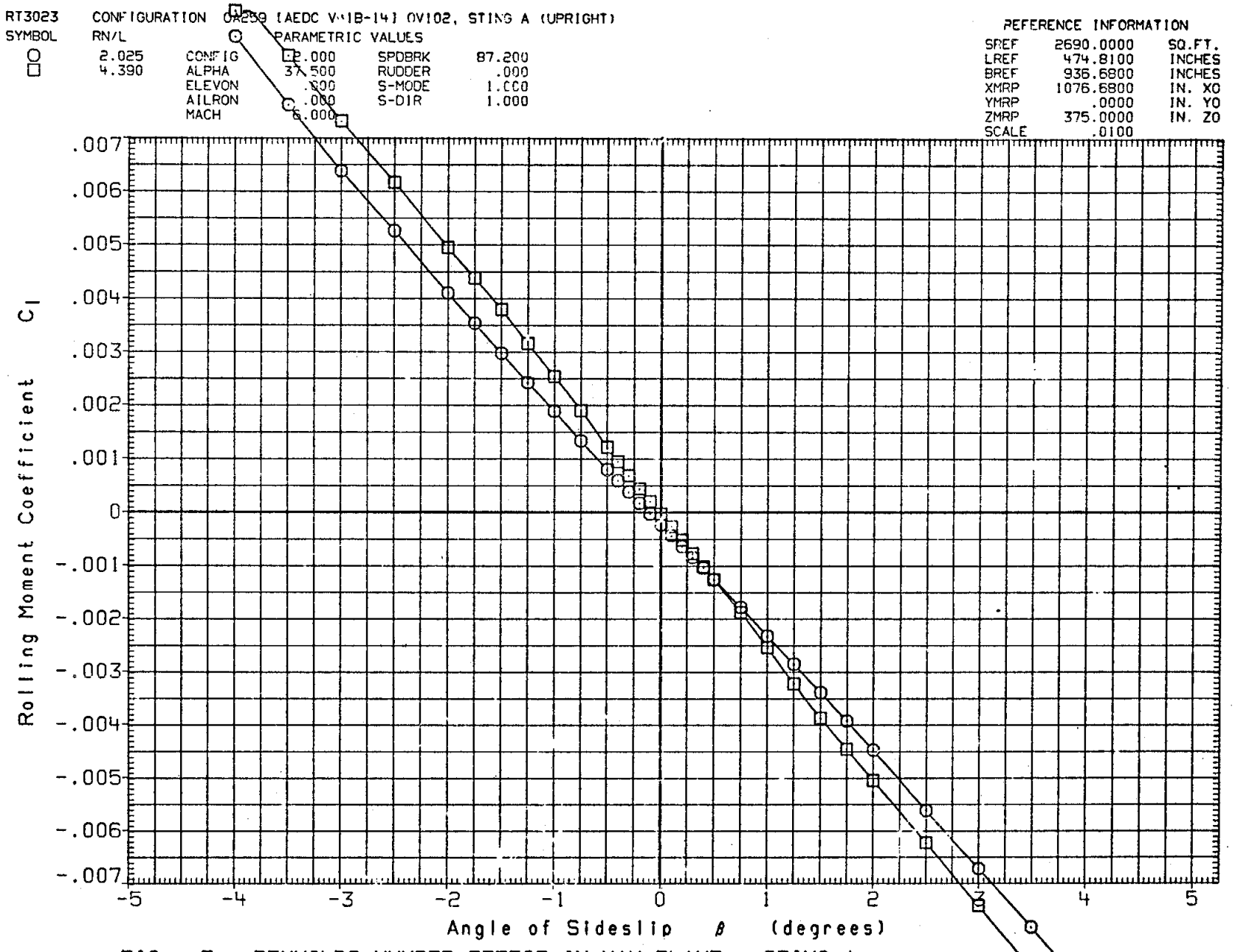


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(J) ALPHA = 37.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3023 CONFIGURATION 0A259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.025	CONFIG	2.000	SPDBRK	87.200
□	4.390	ALPHA	37.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

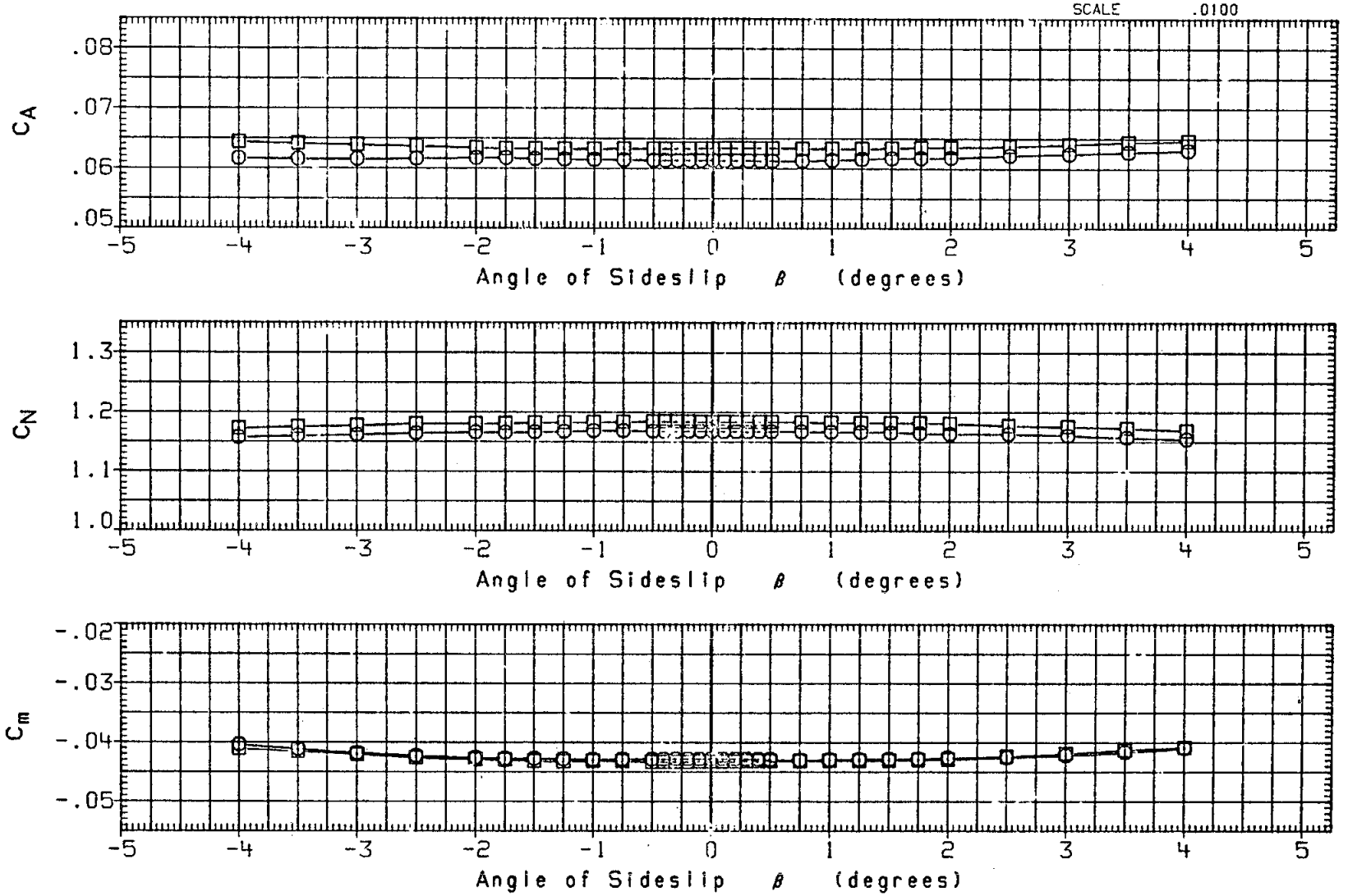


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(J) ALPHA = 37.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3025 CONFIGURATION OA259 [AEDC V4iB-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	1.989	CONFIG	2.000	SPDBRK	87.200
□	4.430	ALPHA	40.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

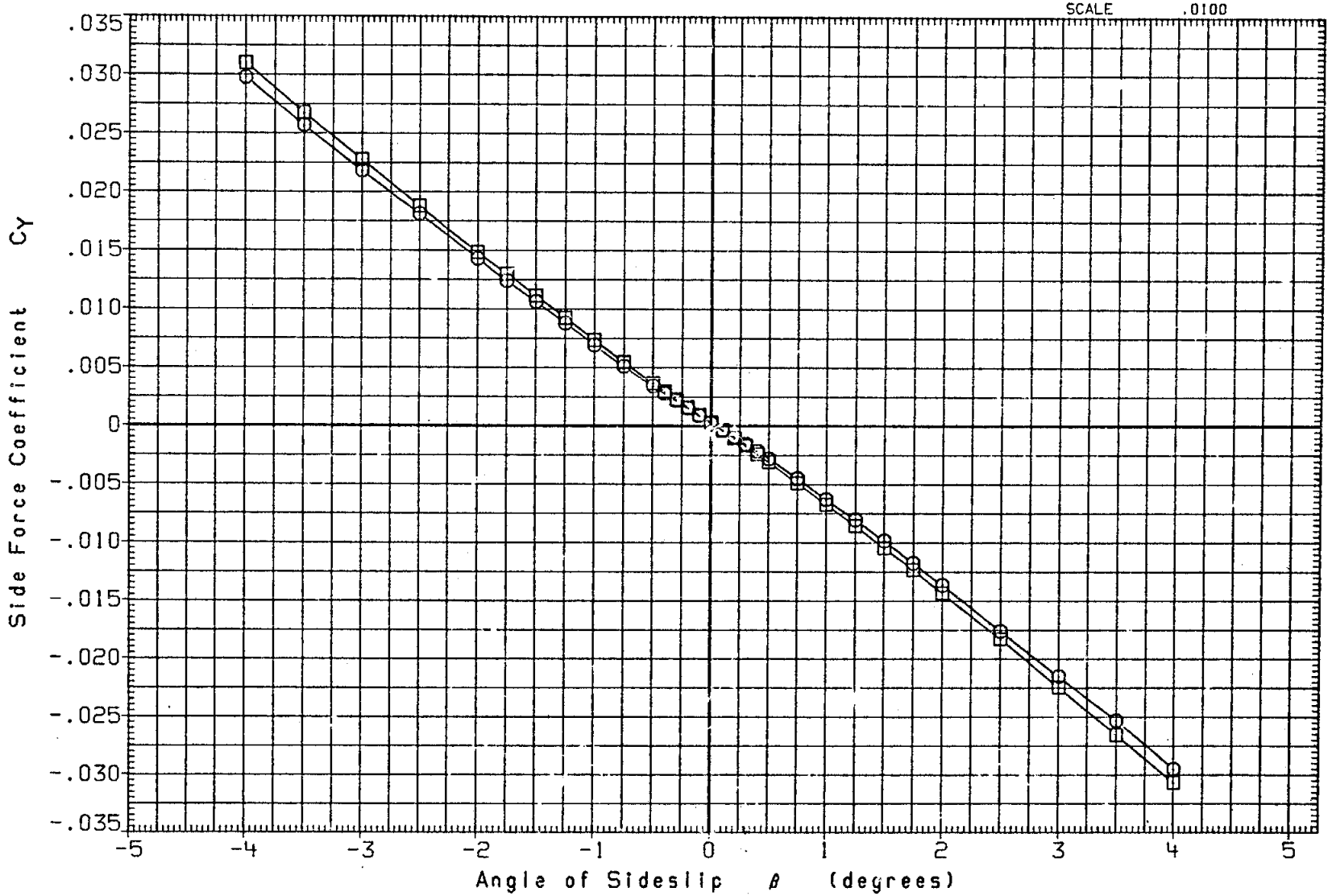


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(K) ALPHA = 40.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3025 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	1.989	CONFIG	2.000	SPDBRK	87.200
□	4.430	ALPHA	40.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

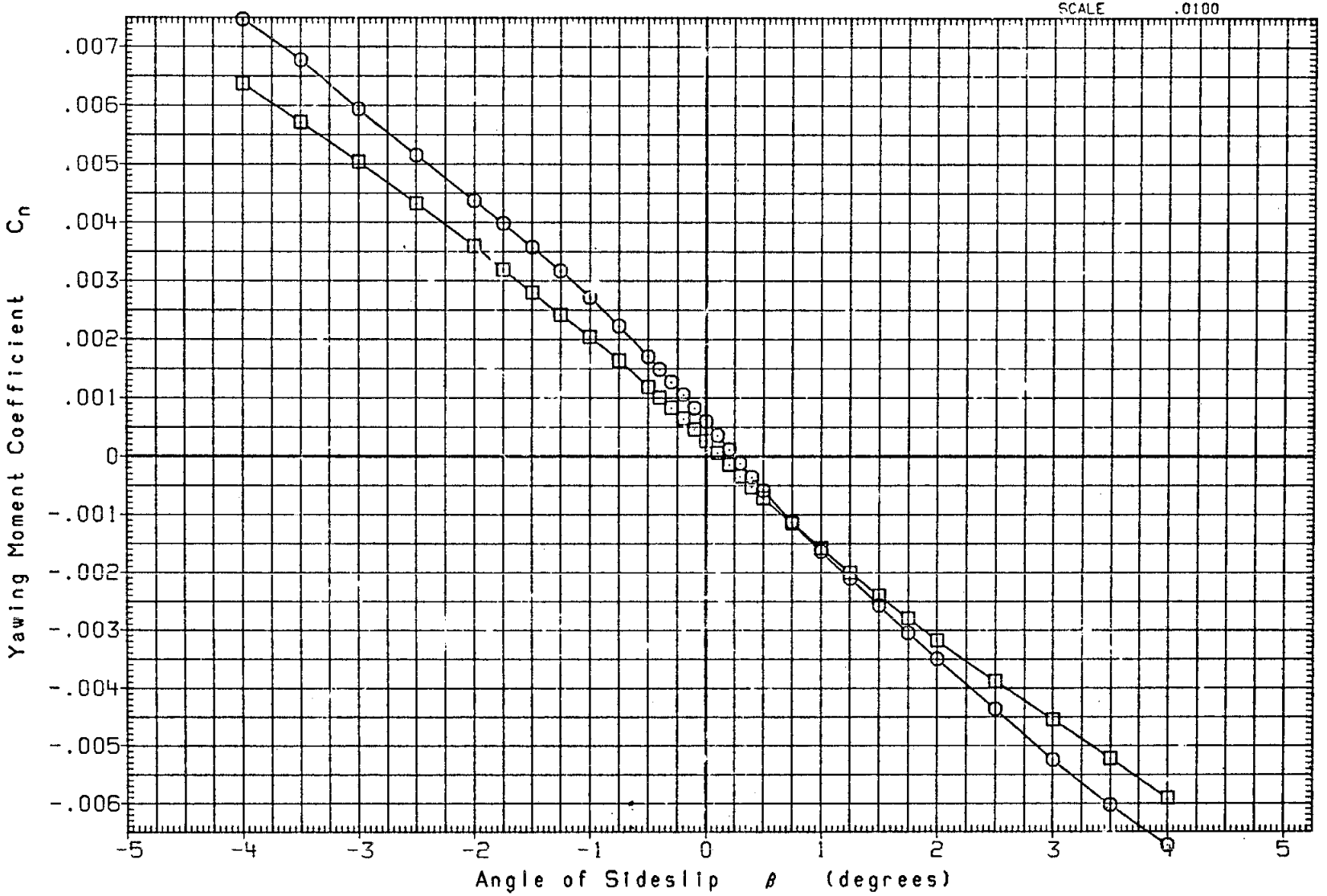


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(K) ALPHA = 40.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

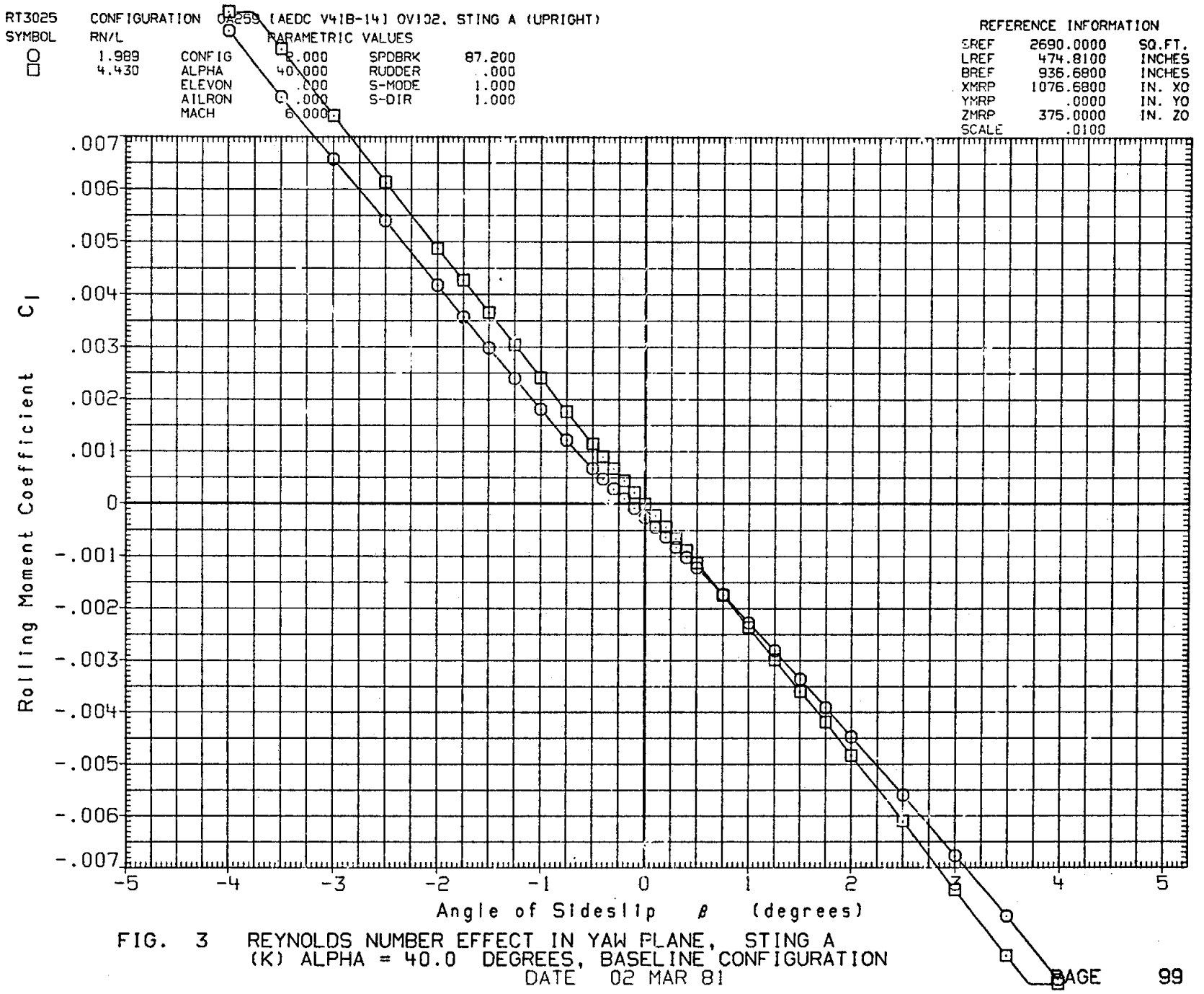


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(K) ALPHA = 40.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3025 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING A (UPRIGHT)

SYMBOL	RN/L		PARAMETRIC VALUES		
○	1.989	CONFIG	2.000	SPDBRK	87.200
□	4.430	ALPHA	40.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

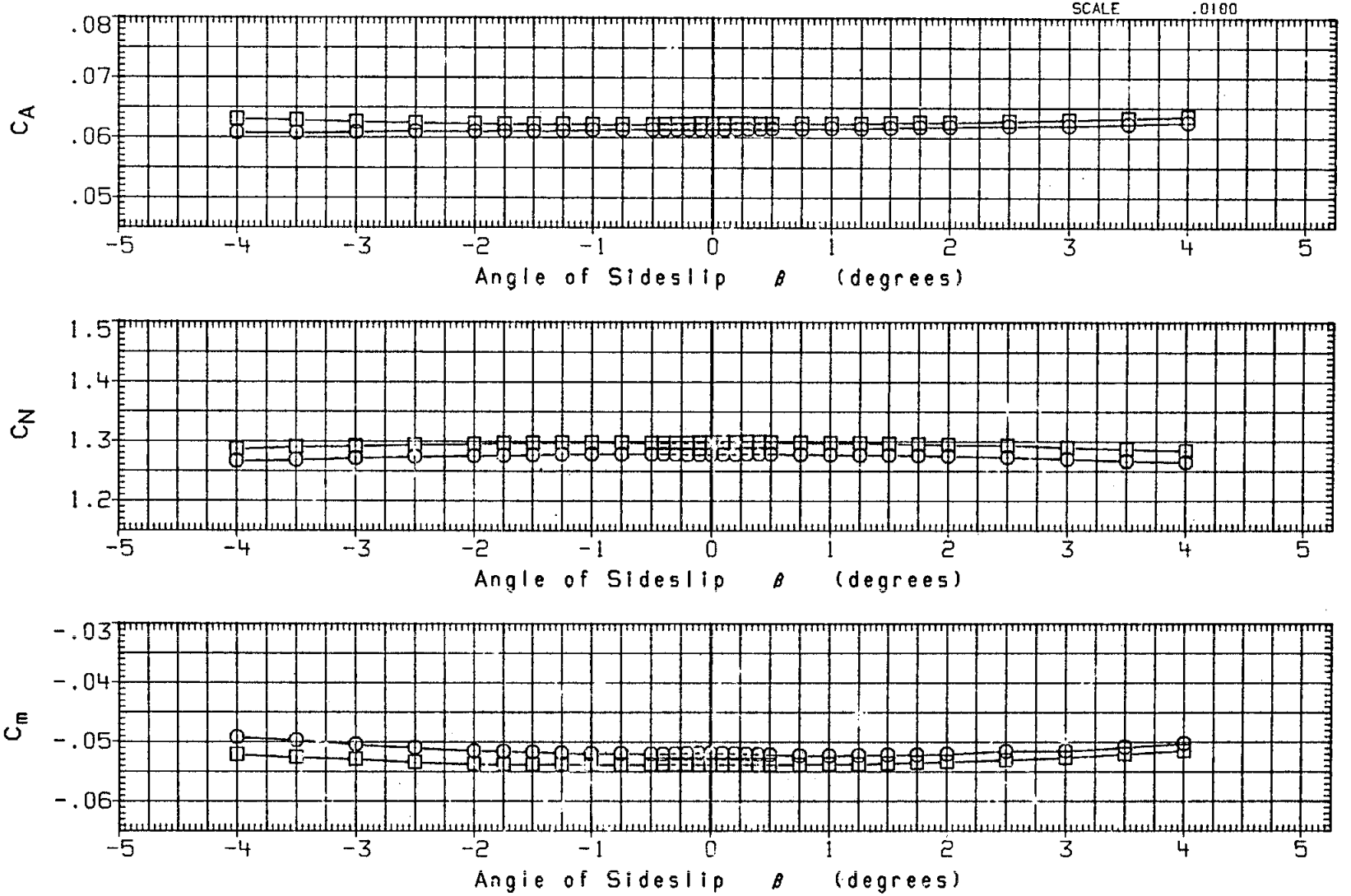


FIG. 3 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING A
(K) ALPHA = 40.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3048 CONFIGURATION 0A259 [AEDC V41B-14] 0V102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.029
□	4.379

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000	PHI	90.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

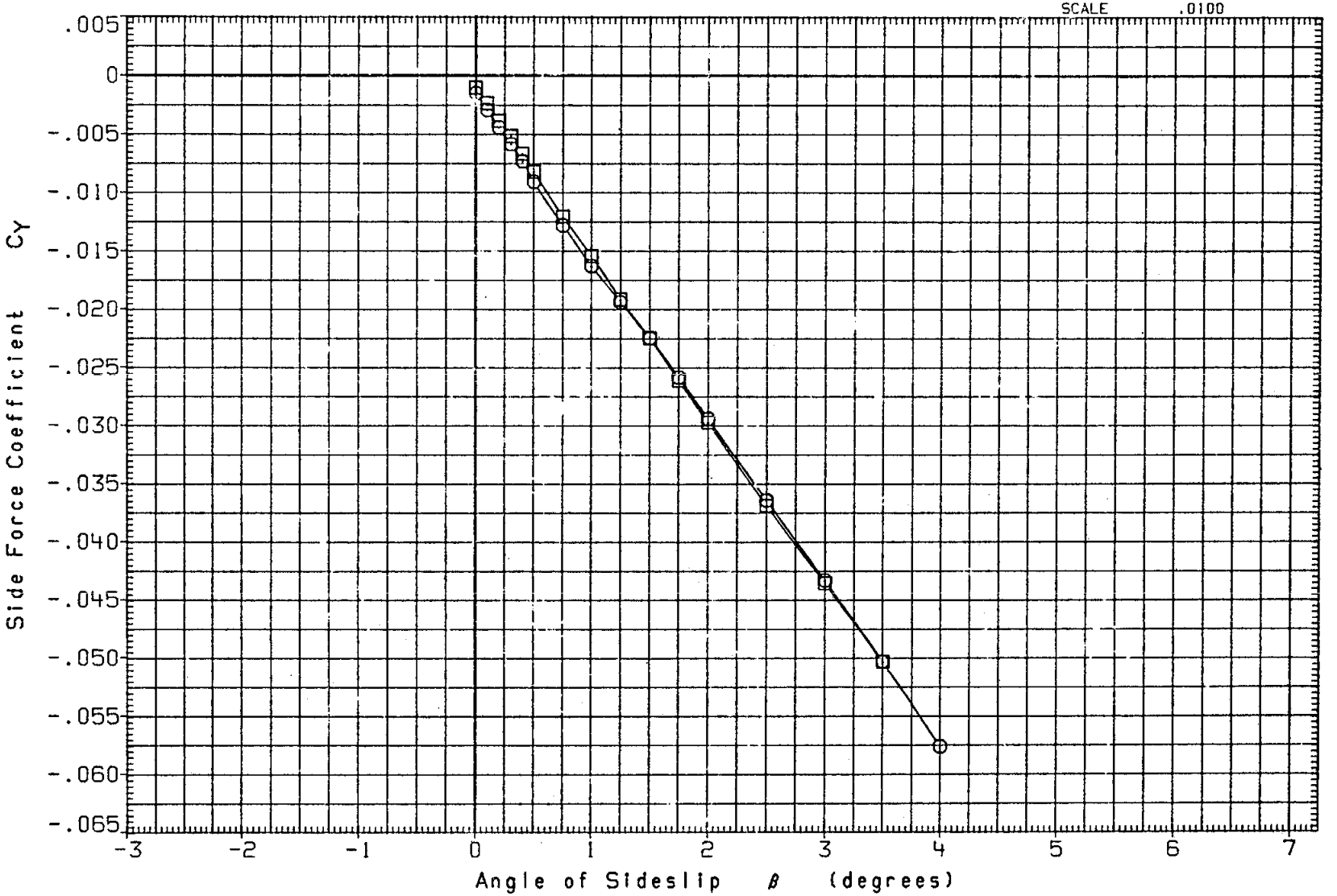


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(A) ALPHA = 0.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3048 CONFIGURATION 0A259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.029	CONFIG	5.000	SPDBRK	87.200
□	4.379	ALPHA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	90.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

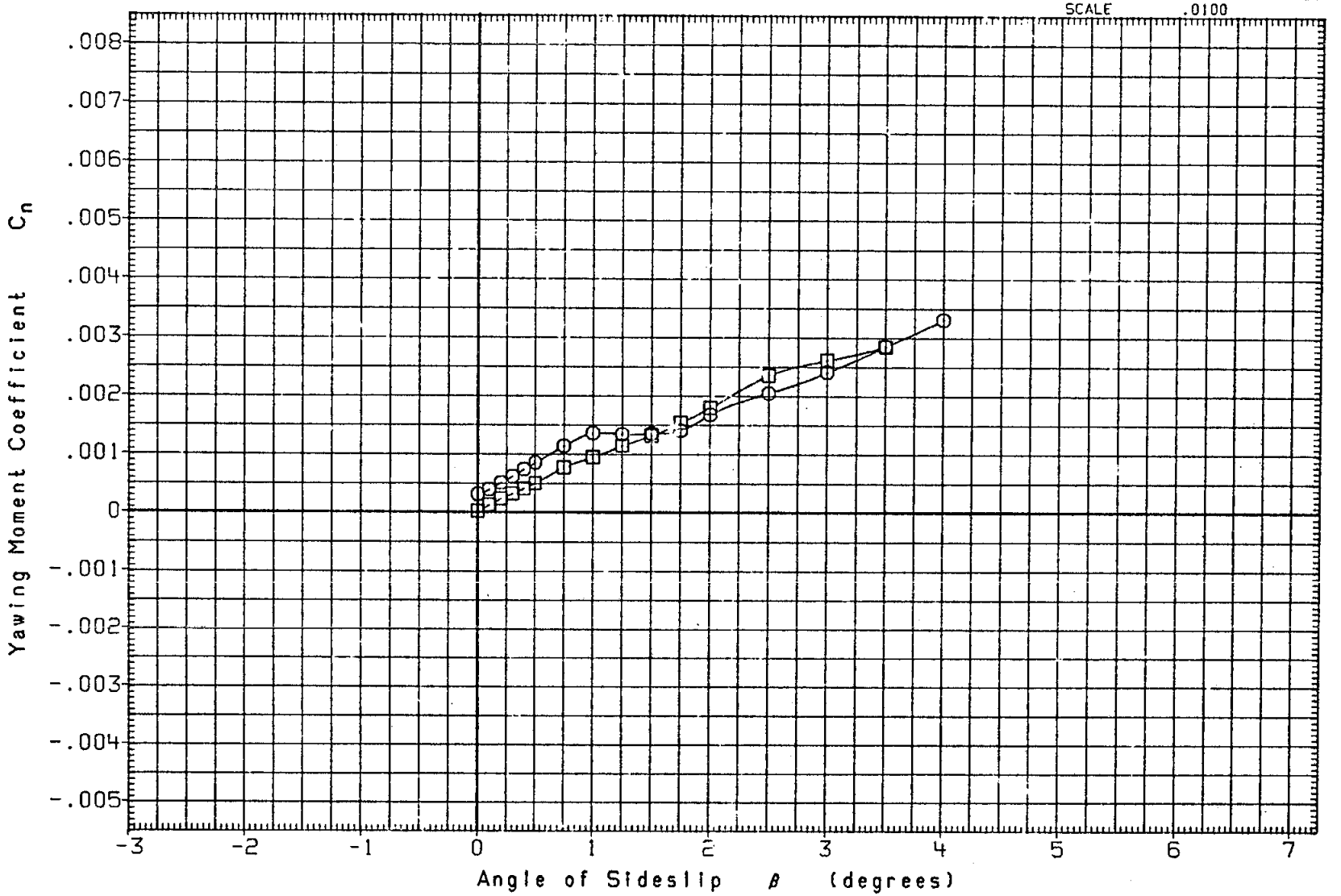


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(A) ALPHA = 0.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3048 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.029	CONFIG	5.000	SPDBRK	87.200
□	4.379	ALPHA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	90.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

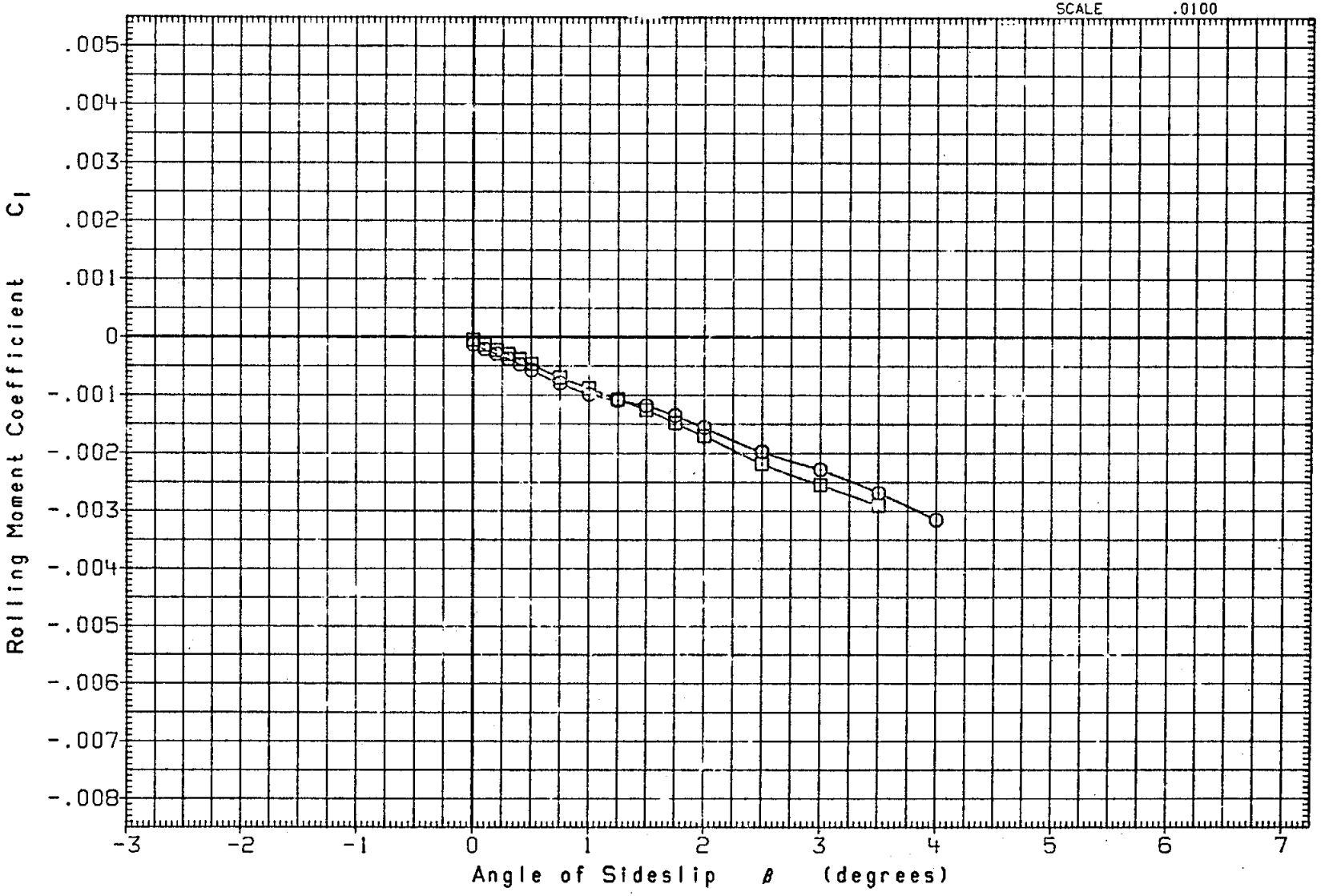


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(A) ALPHA = 0.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3048 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.029	CONFIG	5.000	SPDBRK	87.200
□	4.379	ALPHA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000	PHI	90.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

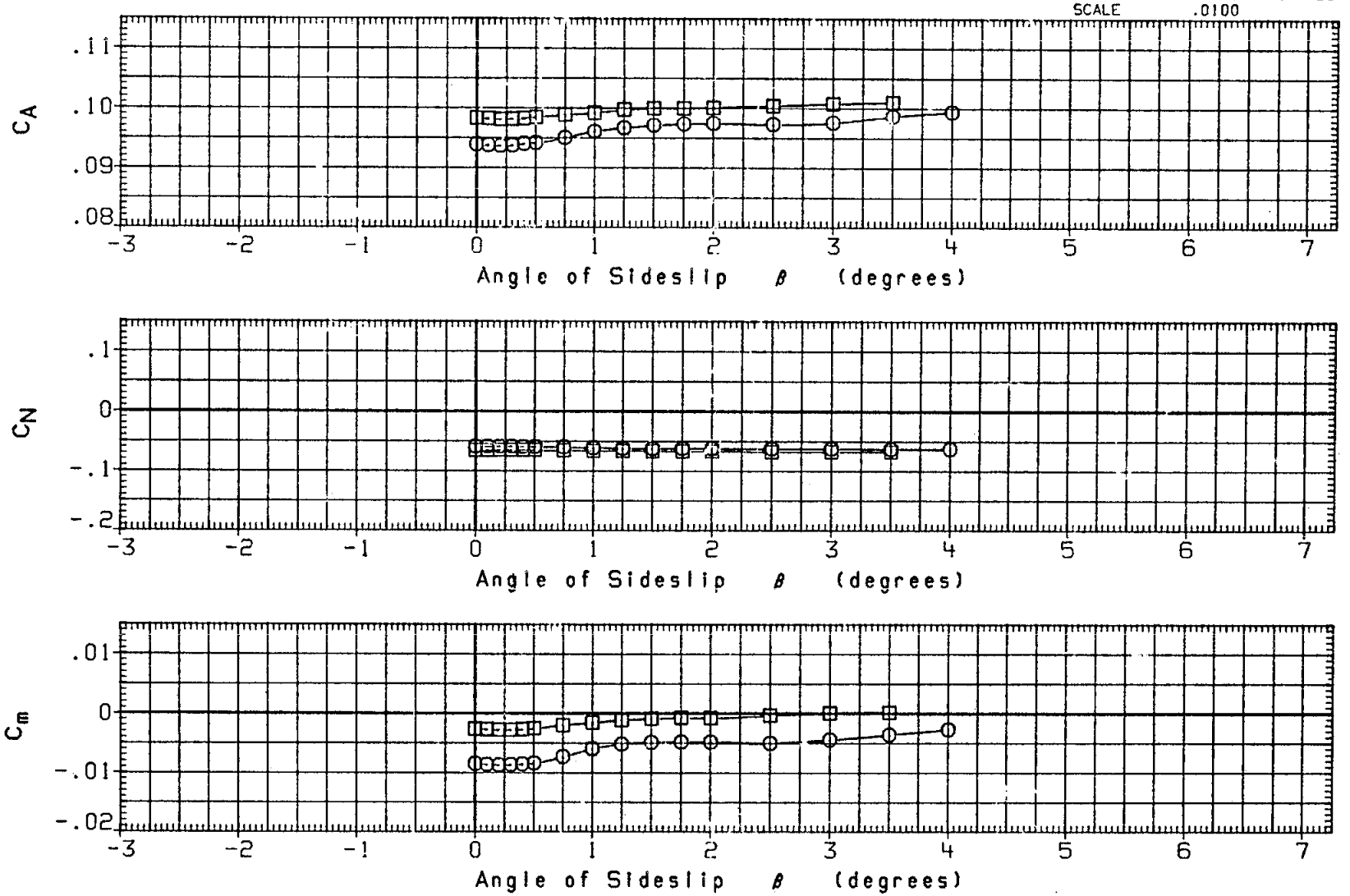


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(A) ALPHA = 0.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3049 CONFIGURATION 0A259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	1.995	CONFIG	5.000	SPDBRK	87.200
□	4.382	ALPHA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000	PHI	-90.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

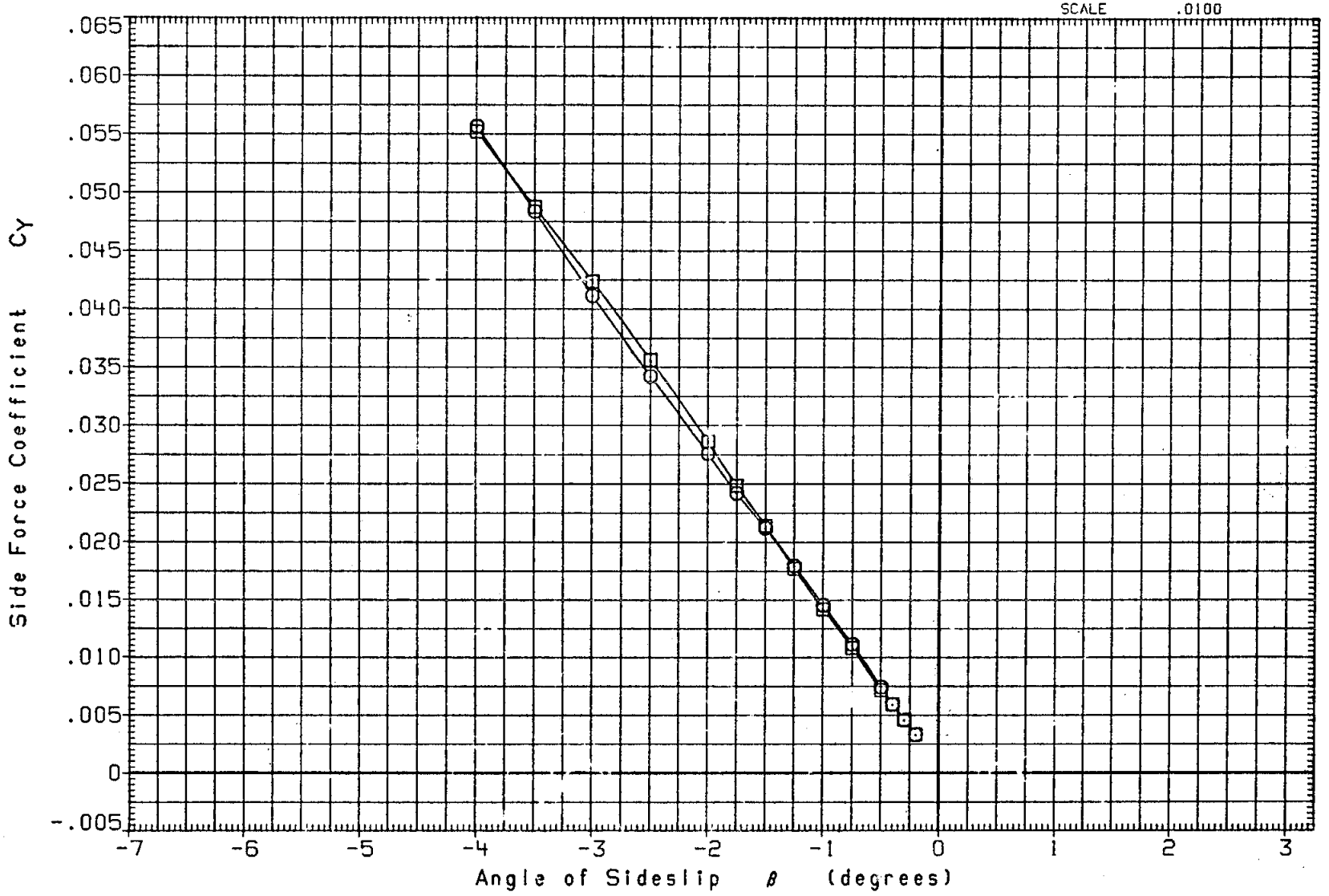


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(A) ALPHA = 0.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3049 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	1.995
□	4.382

PARAMETRIC VALUES

CONFIG	5.000	SFDBRK	87.200
ALPHA	.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000	PHI	-90.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

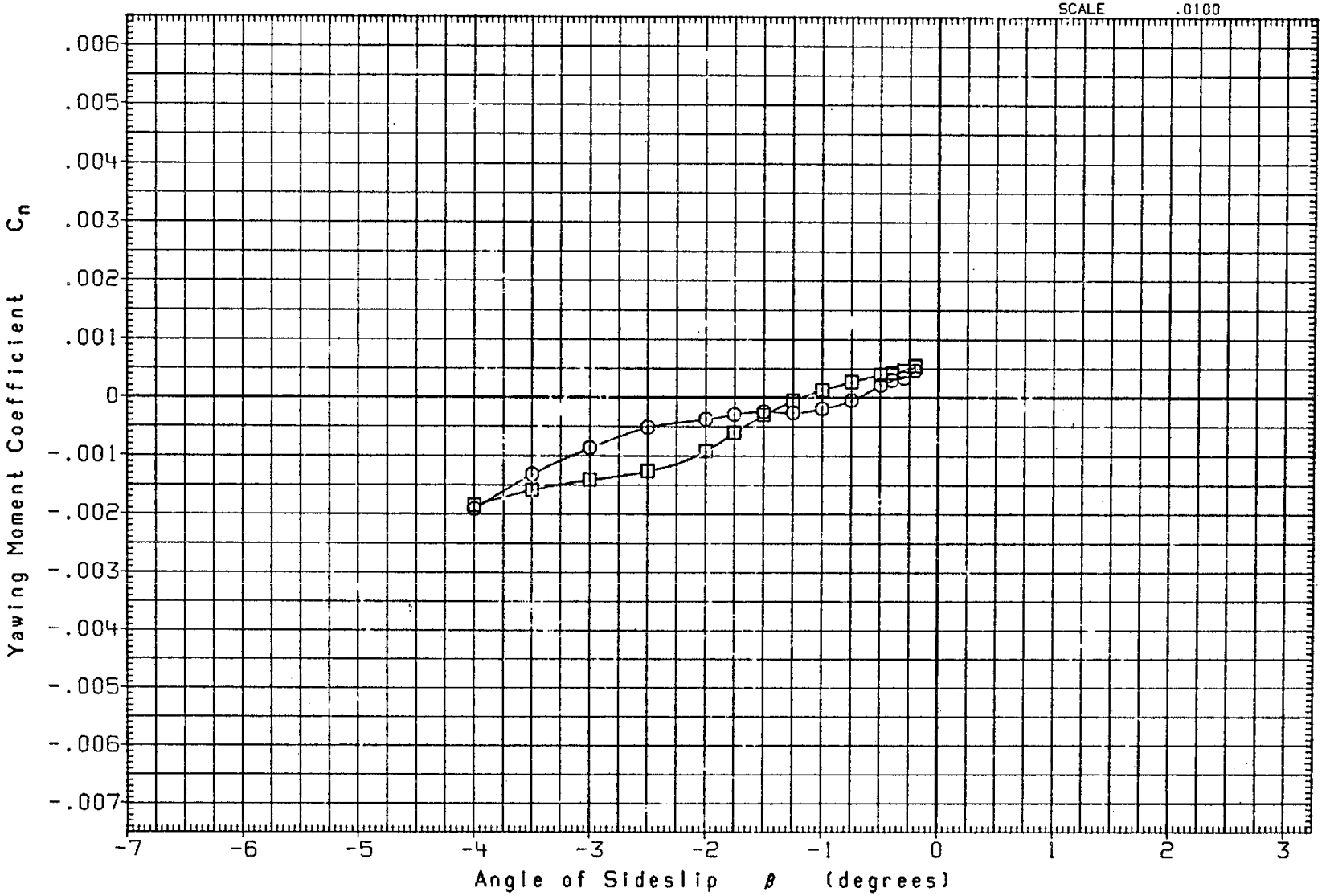


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(A) ALPHA = 0.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3049 CONFIGURATION OA259 [AEDC V41B-14] OVIC2, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	1.995	CONFIG	5.000	SPDBRK	87.200
□	4.382	ALPHA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000	PHI	-90.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	935.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

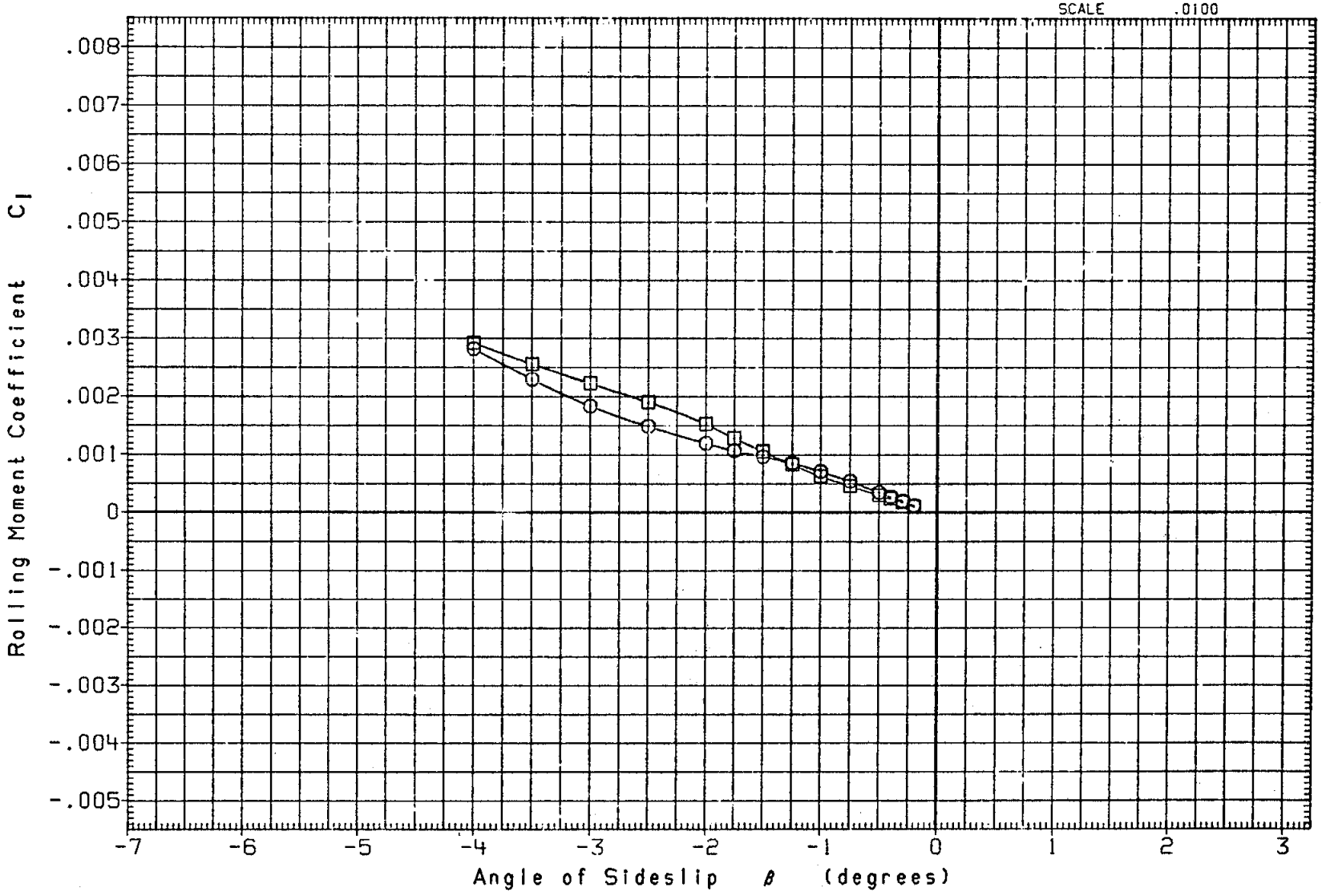


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(A) ALPHA = 0.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3049 CONFIGURATION 0A259 (AEDC V418-14) OV102, STING 5 (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	1.995	CONFIG	5.000	SPDBRK	87.200
□	4.382	ALPHA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000	PHI	-90.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

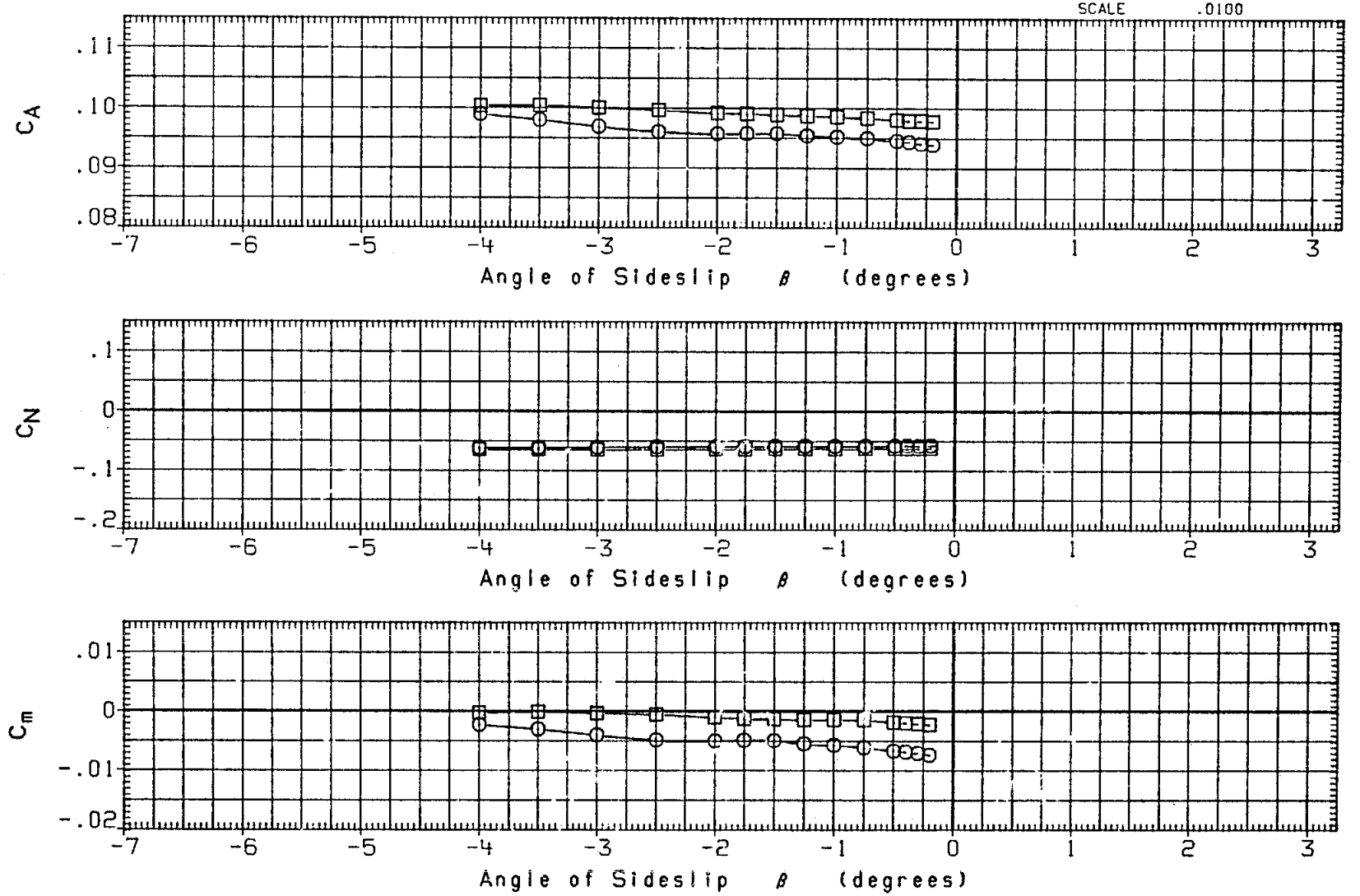


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(A) ALPHA = 0.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

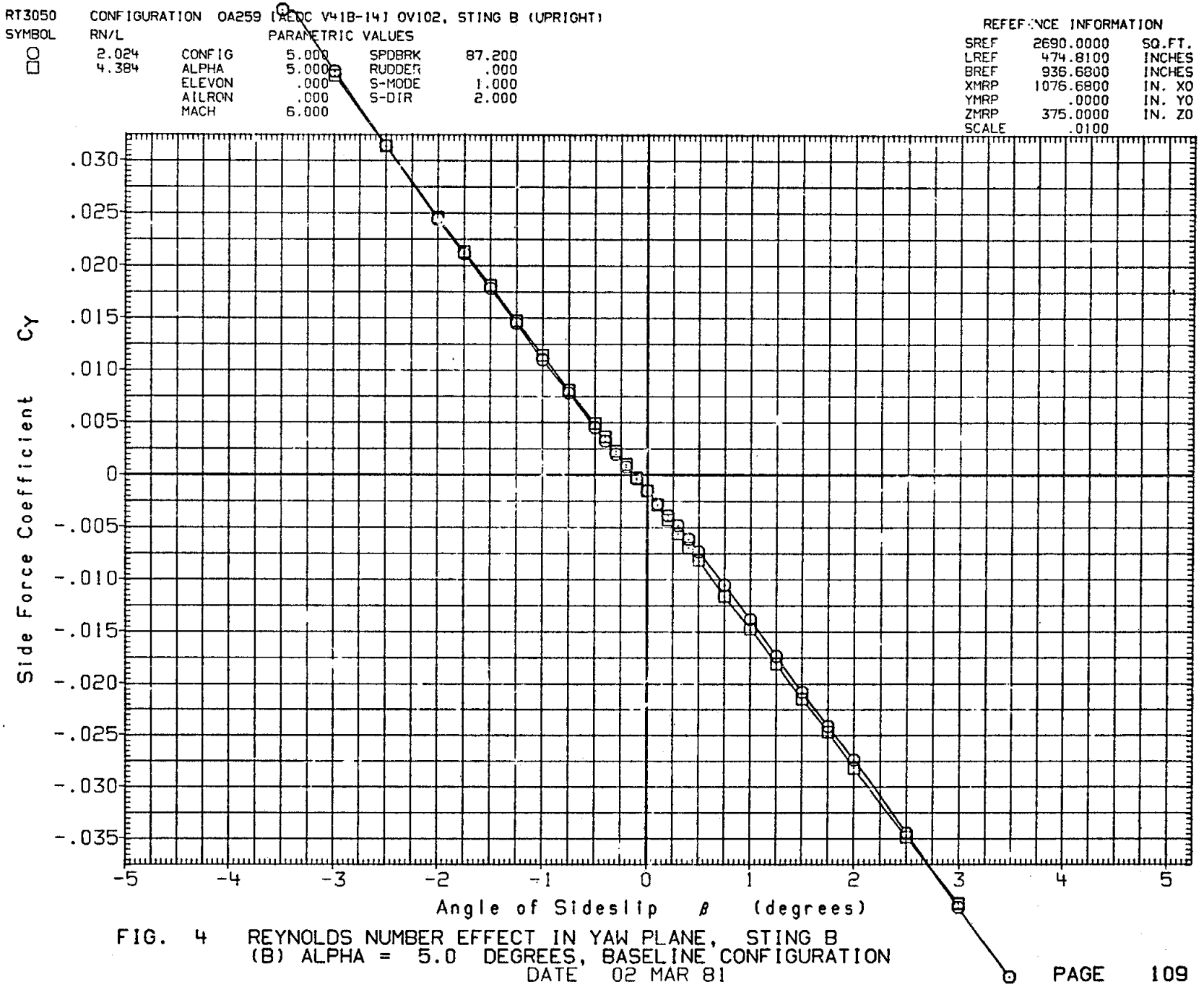


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(B) ALPHA = 5.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3050 CONFIGURATION 0A259 [AEDC V419-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.024	CONFIG	5.000	SPDBRK	87.200
□	4.384	ALPHA	5.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

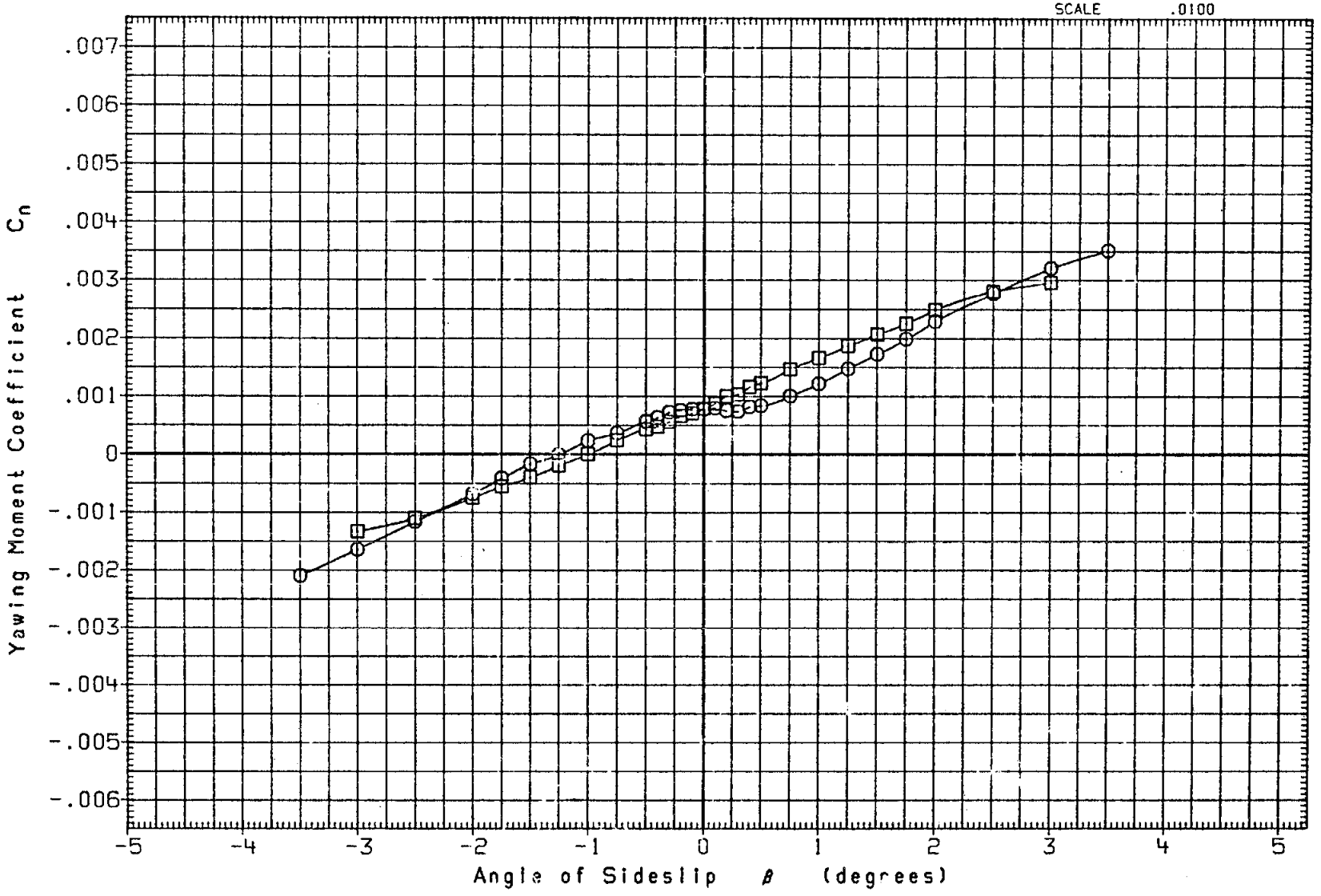


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(B) ALPHA = 5.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3050 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.024	CONFIG	5.000	SPDBRK	87.200
□	4.384	ALPHA	5.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

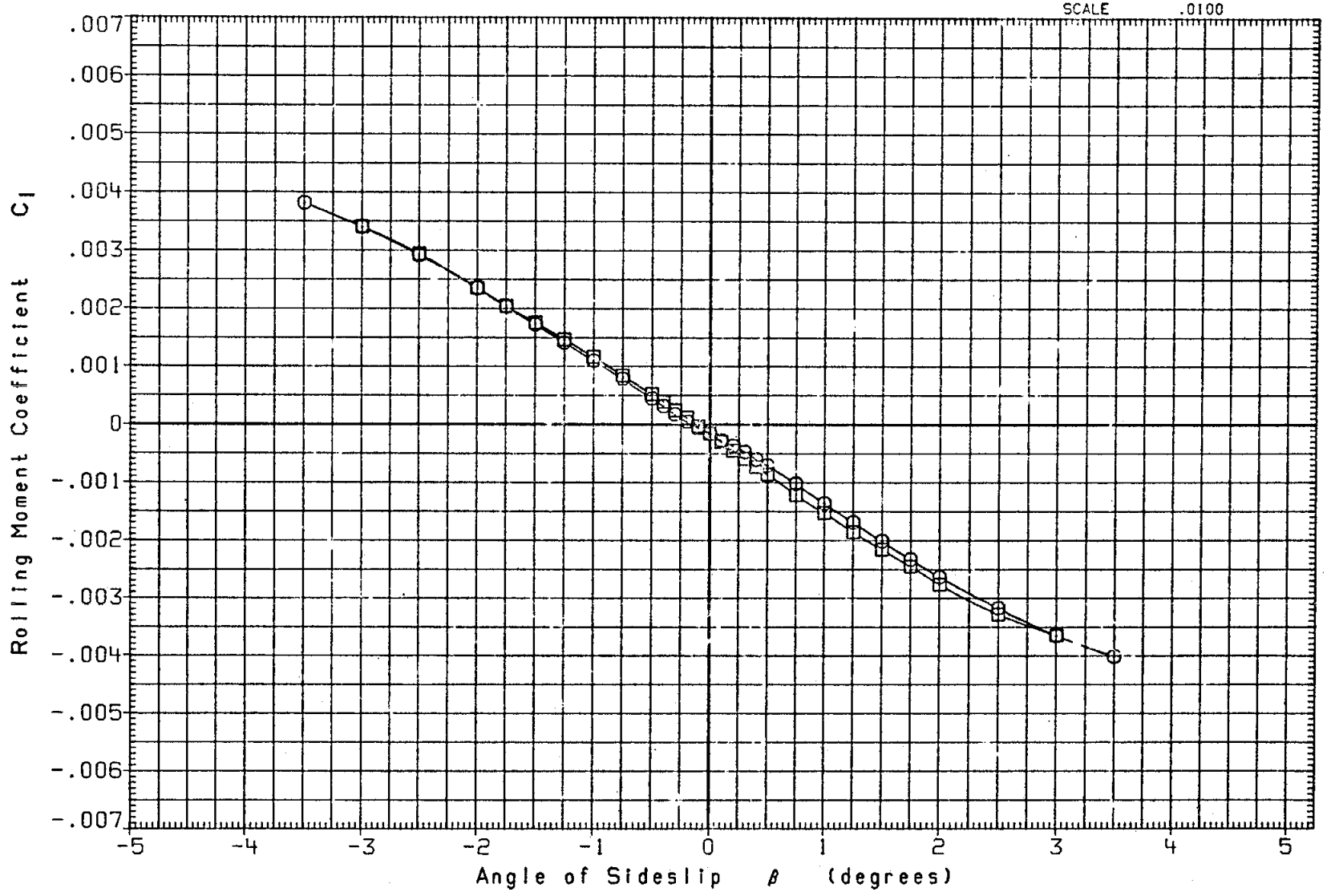


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(B) ALPHA = 5.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3050 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.024	CONFIG	5.000	SPDBRK	87.200
□	4.384	ALPHA	5.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

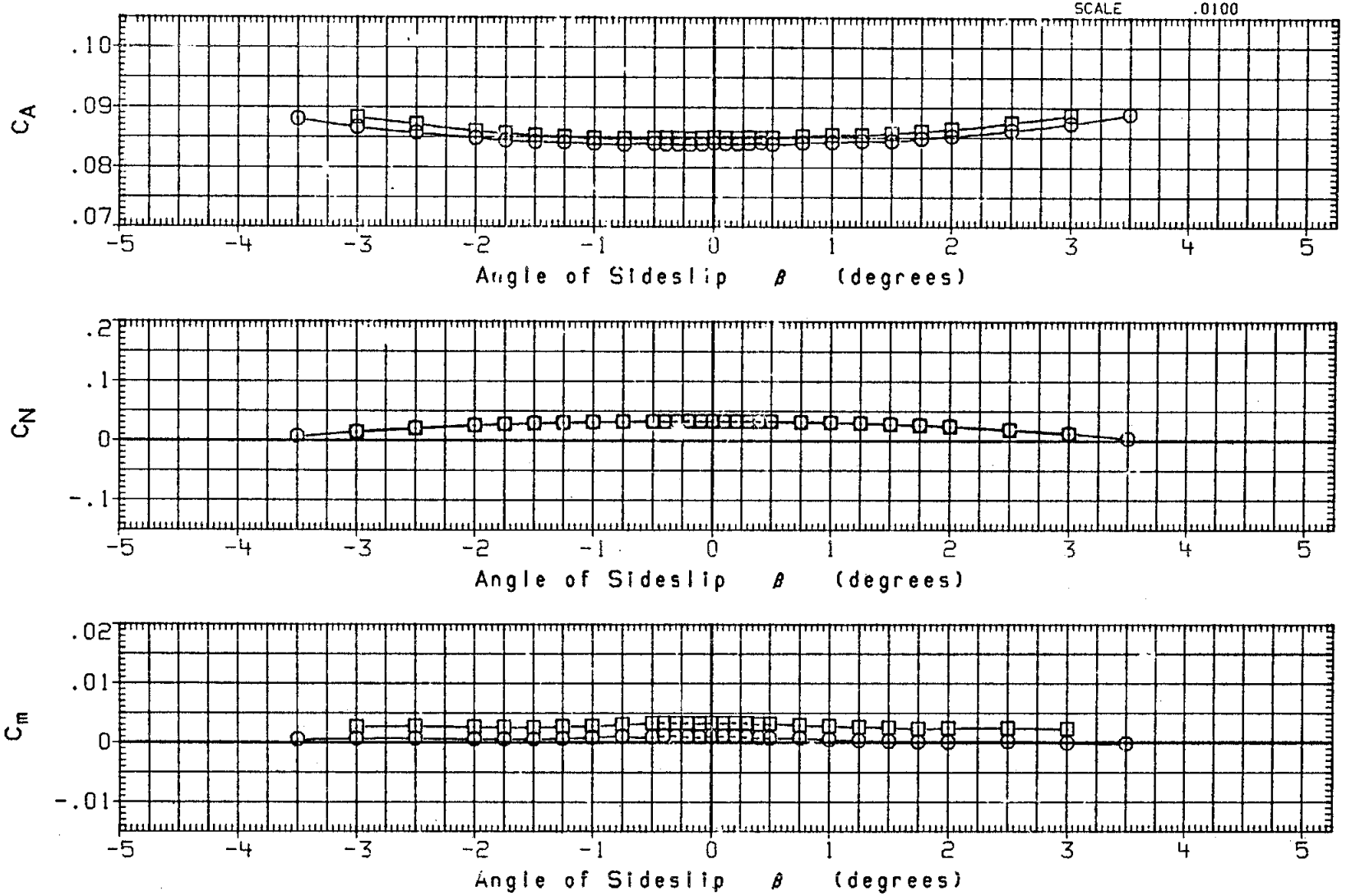


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(B) ALPHA = 5.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

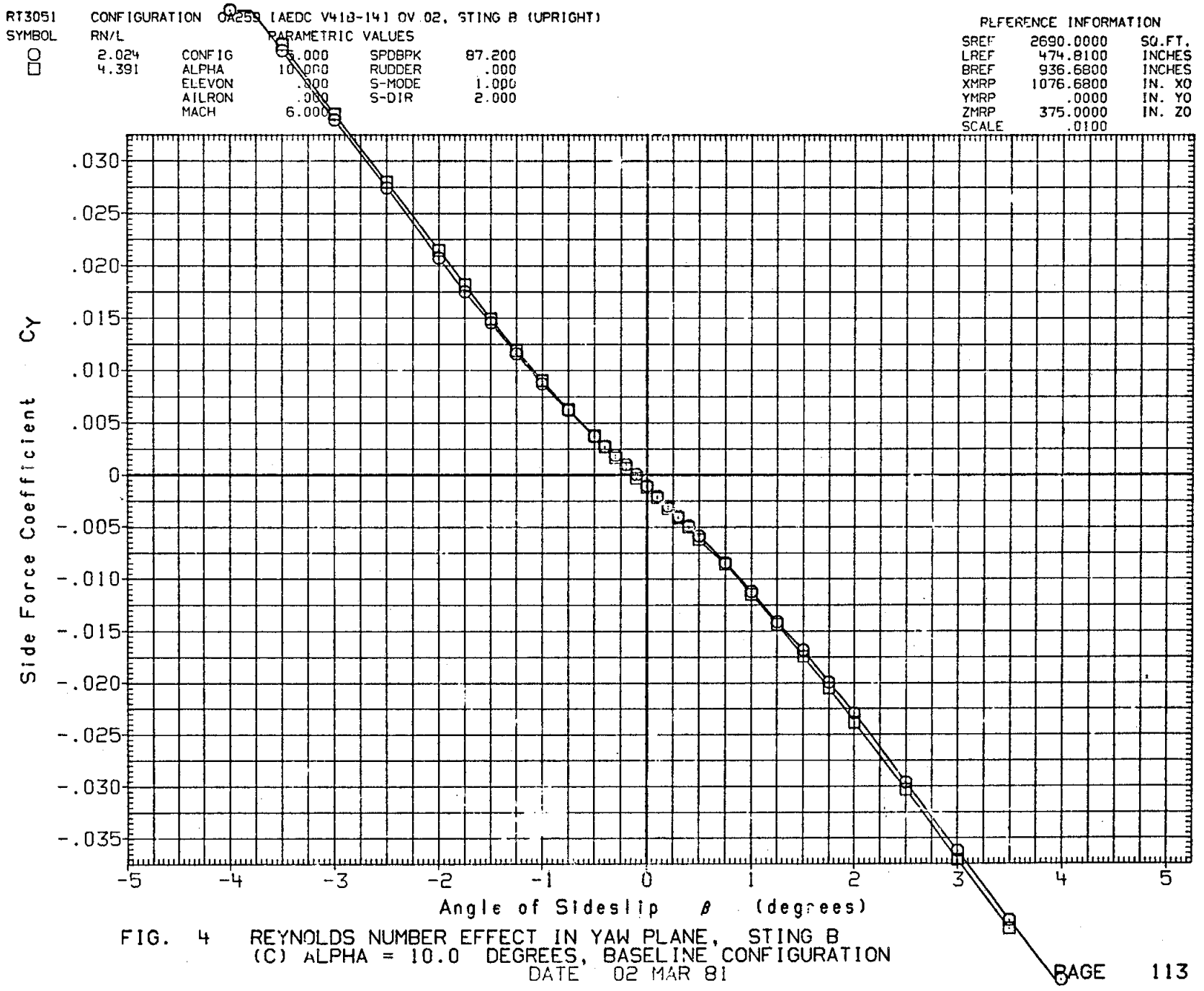


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(C) ALPHA = 10.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3051 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.024
□	4.391

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	10.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

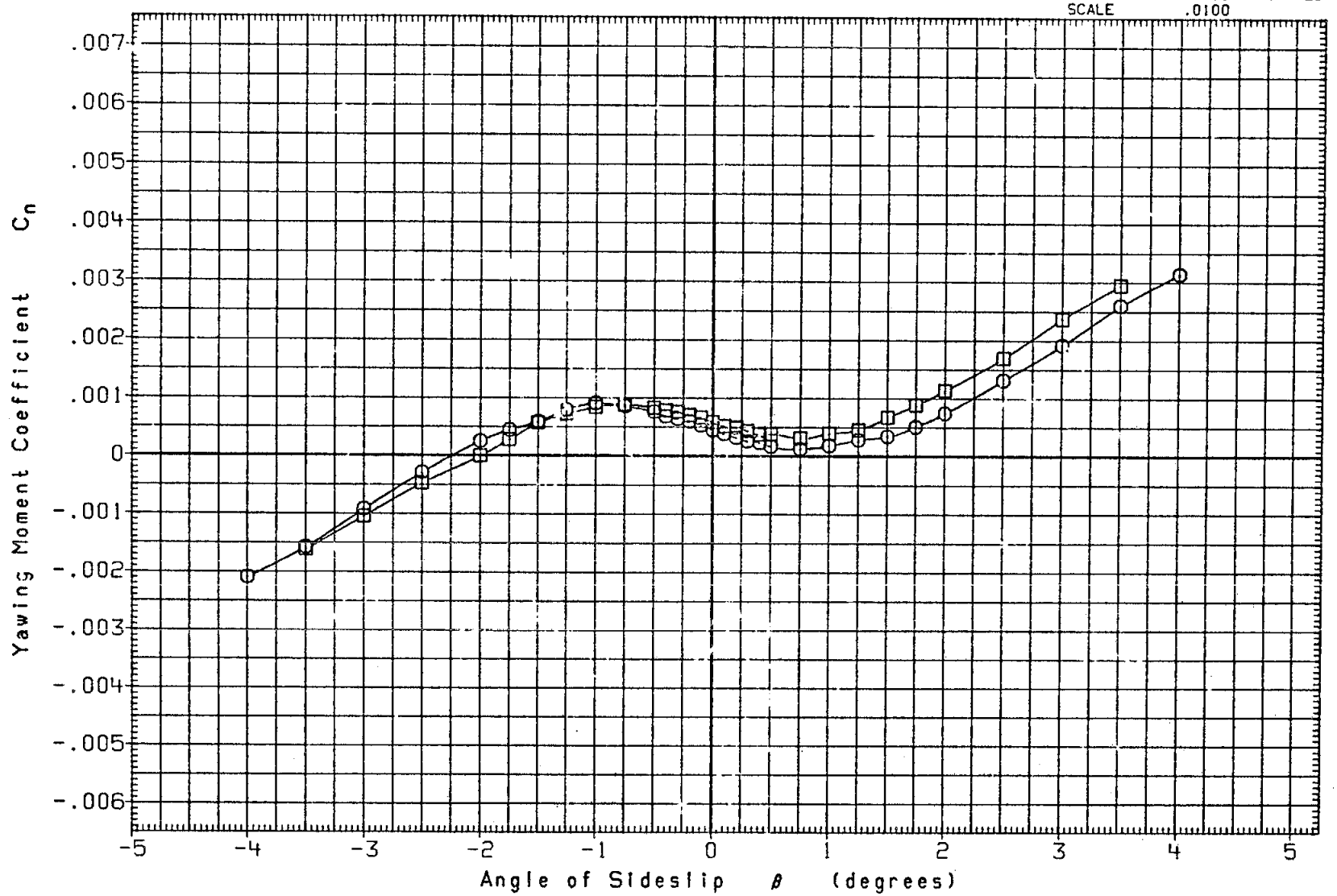


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(C) ALPHA = 10.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3051 CONFIGURATION OA259 [AEDC V41B-14] OV102, (TING B (UPRIGHT)

SYMBOL	RN/L
○	2.024
□	4.391

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	10.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

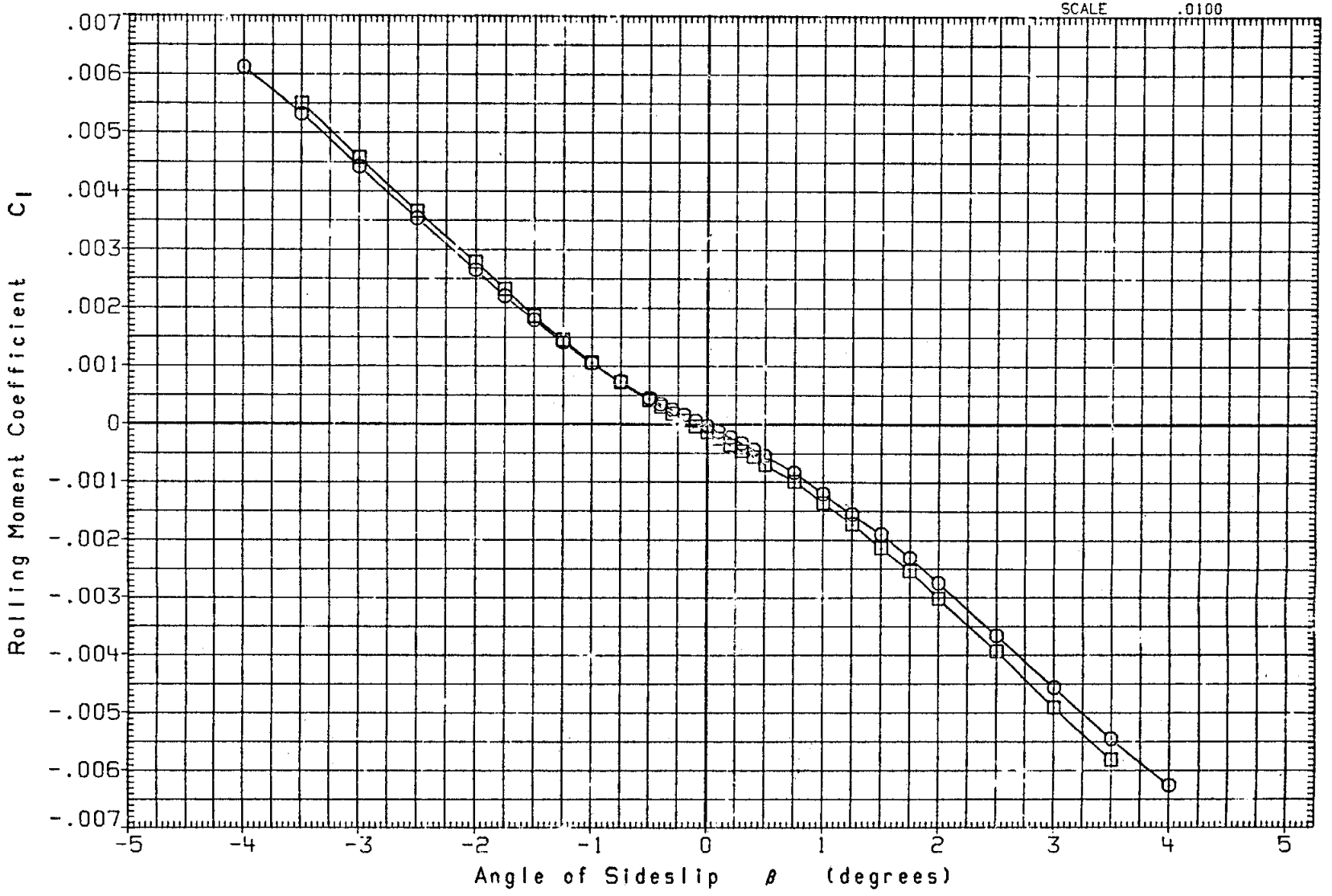


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(C) ALPHA = 10.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3051 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING 9 (UPRIGHT)

SYMBOL	RN/L
○	2.024
□	4.391

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	10.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

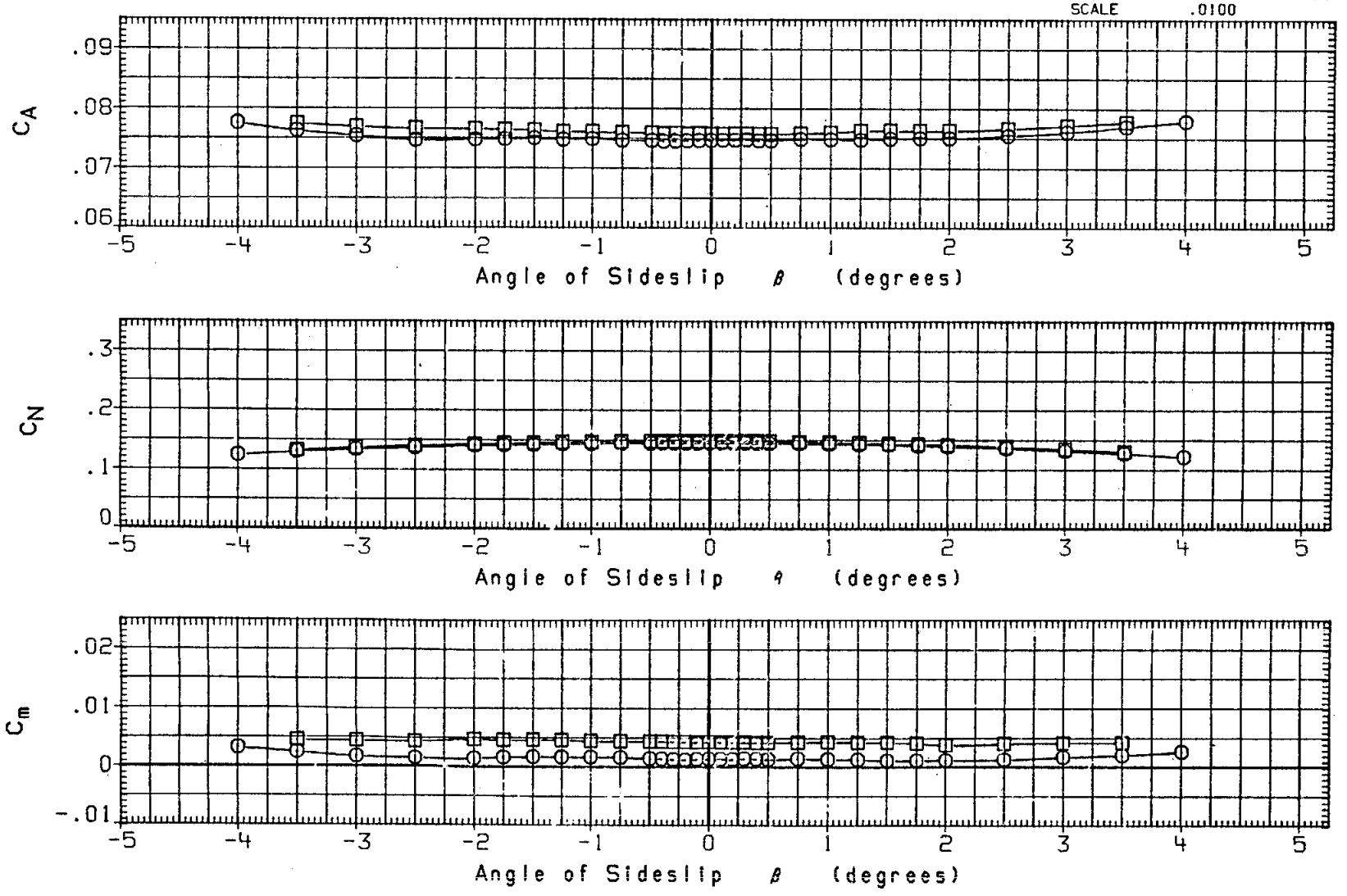


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(C) ALPHA = 10.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

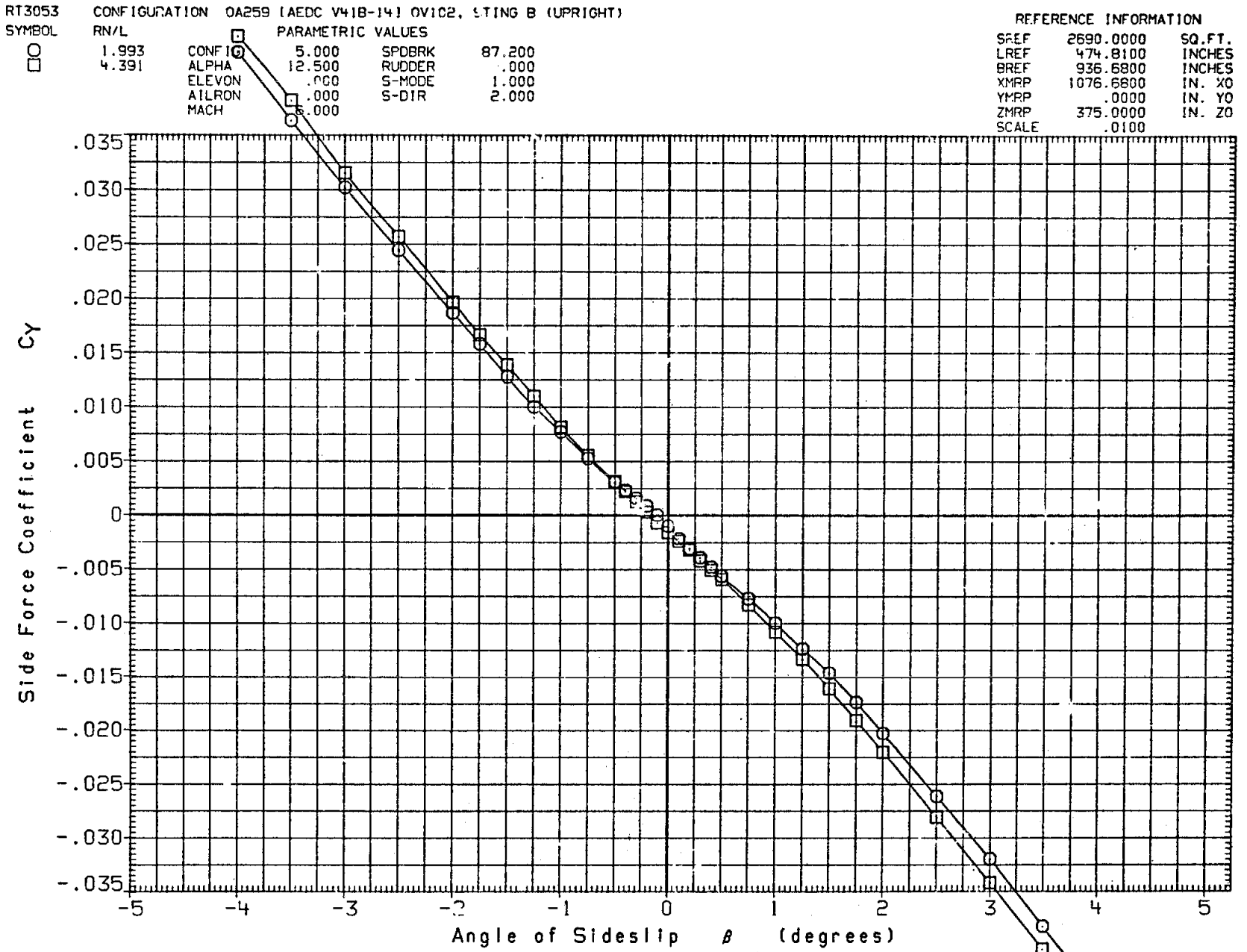


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(D) ALPHA = 12.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3053 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	1.993
□	4.391

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	12.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

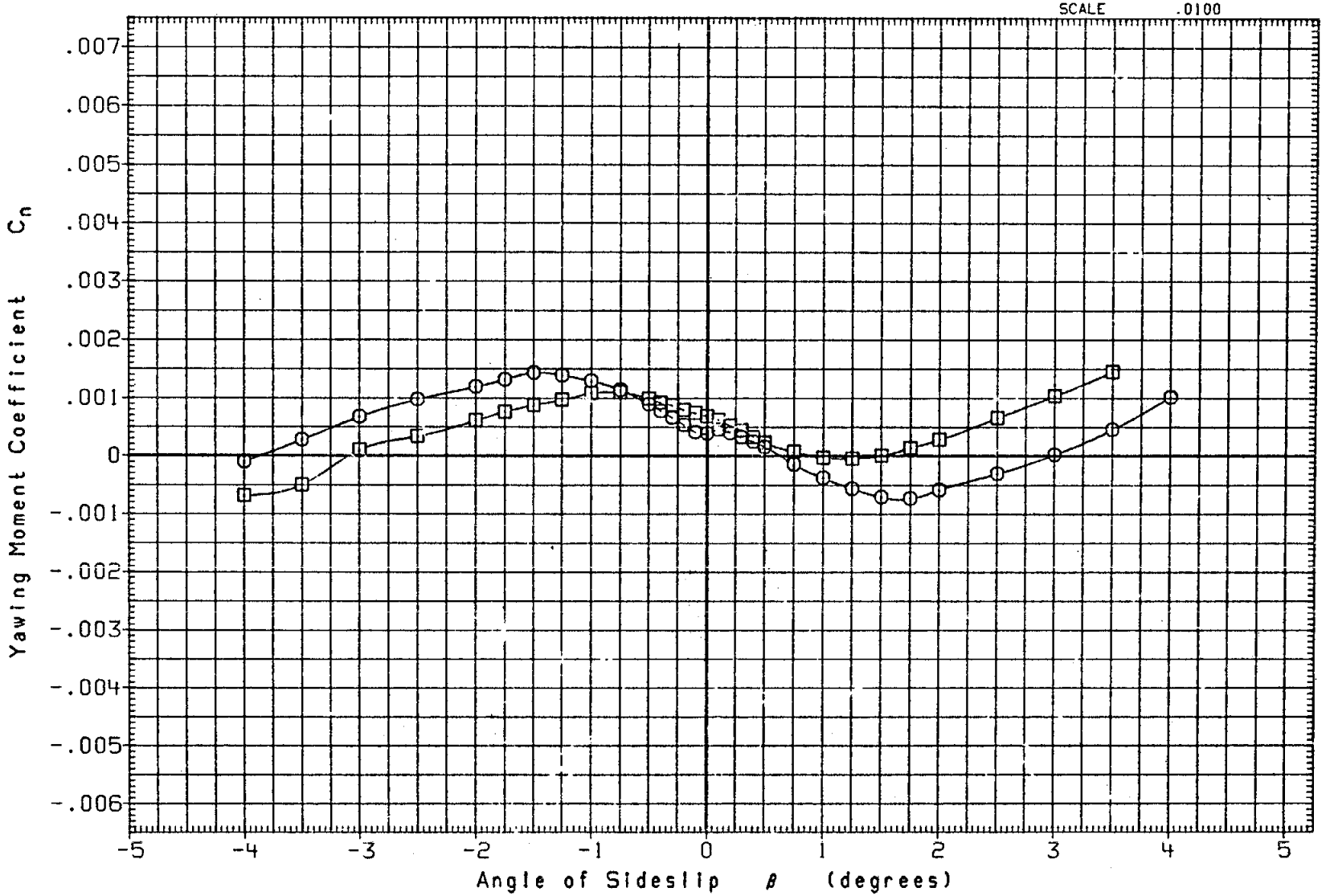


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(D) ALPHA = 12.5 DEGREES, BASELINE CONFIGURATION
DATE 2 MAR 81

RT3053 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	1.993
□	4.391

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	12.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

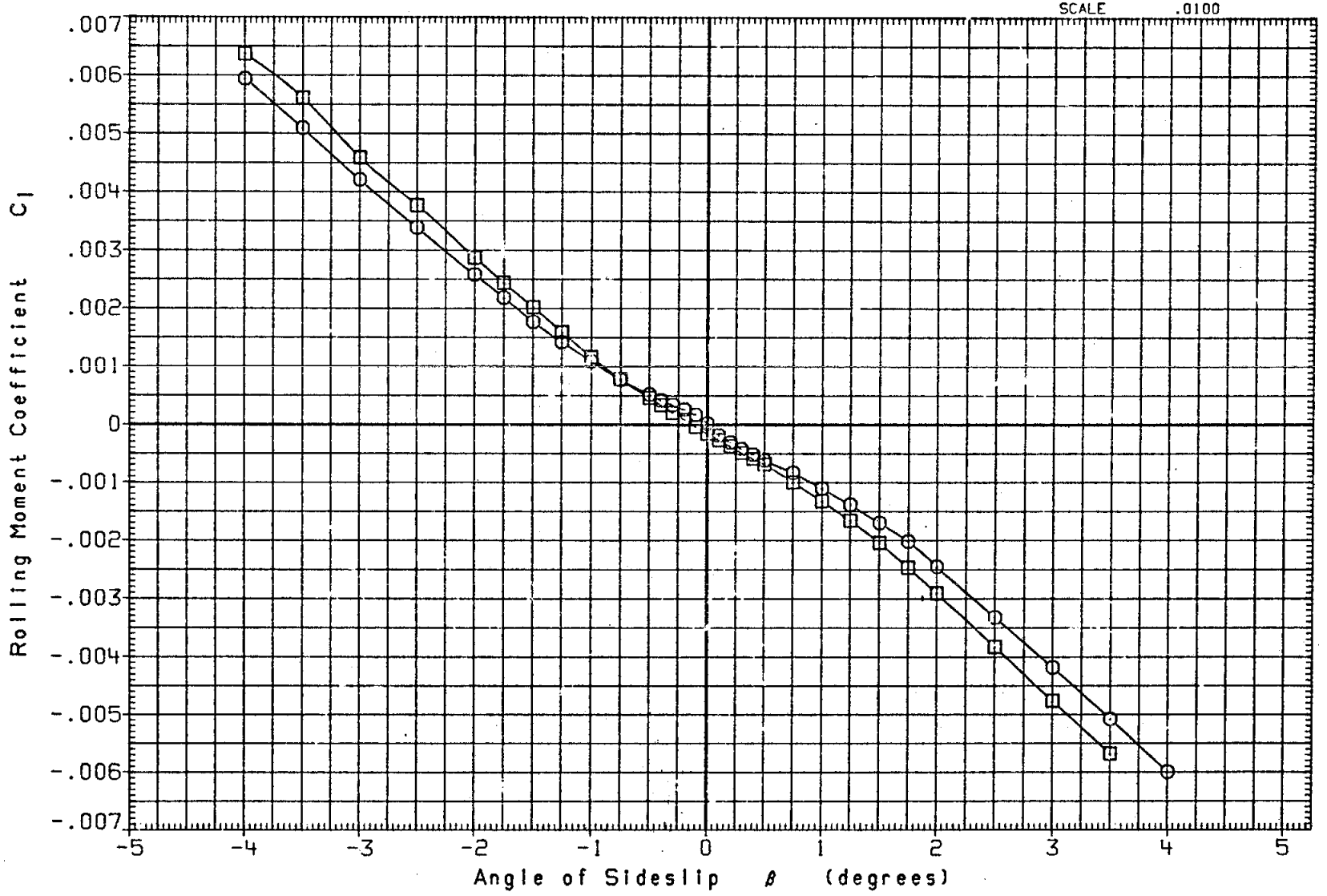


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(D) ALPHA = 12.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3053 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	1.993	CONFIG	5.000	SPDBRK	87.200
□	4.391	ALPHA	12.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

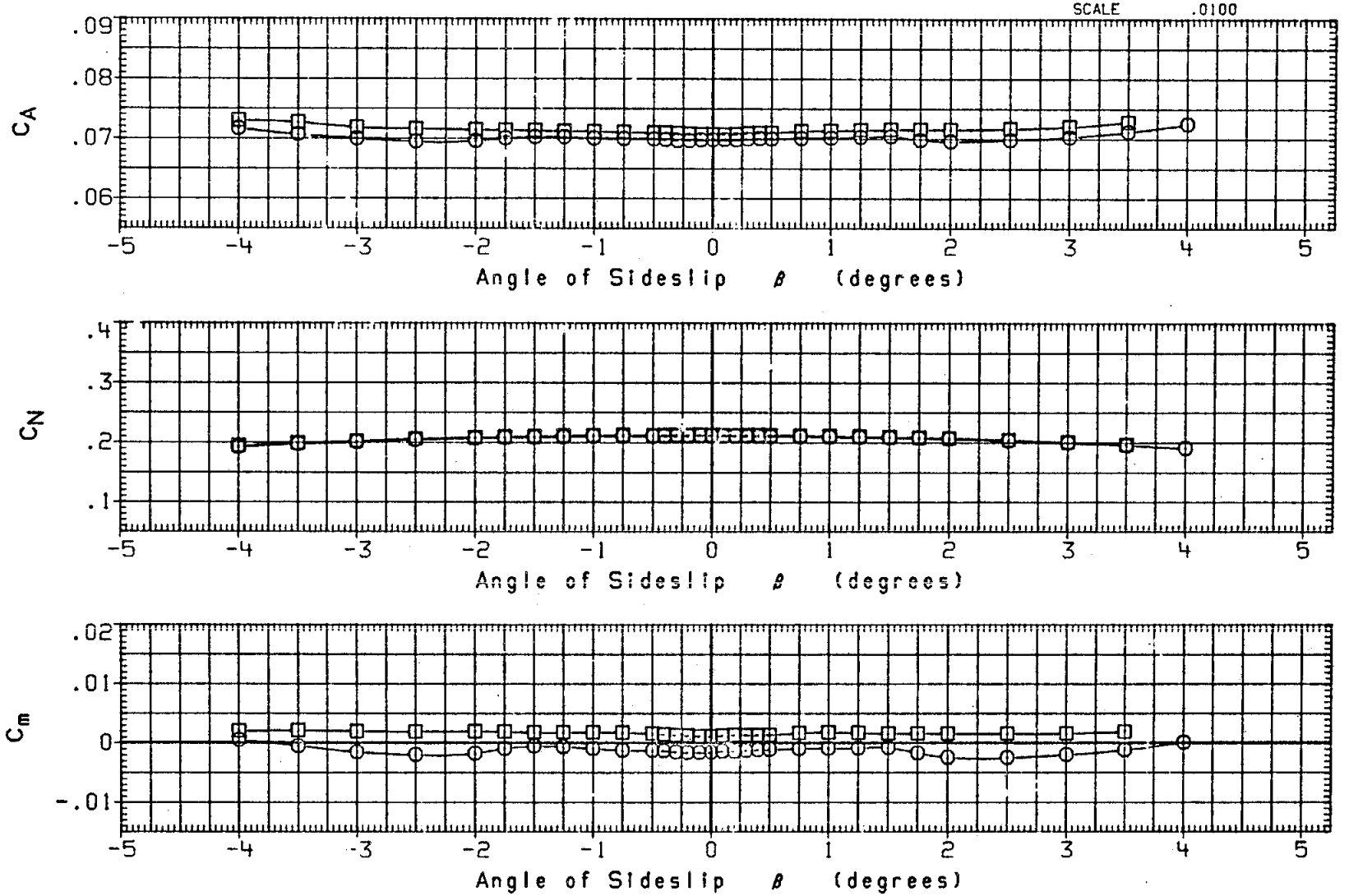


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(D) ALPHA = 12.5 DEGREES, BASELINE CONFIGURATION
DATE 2 MAR 81

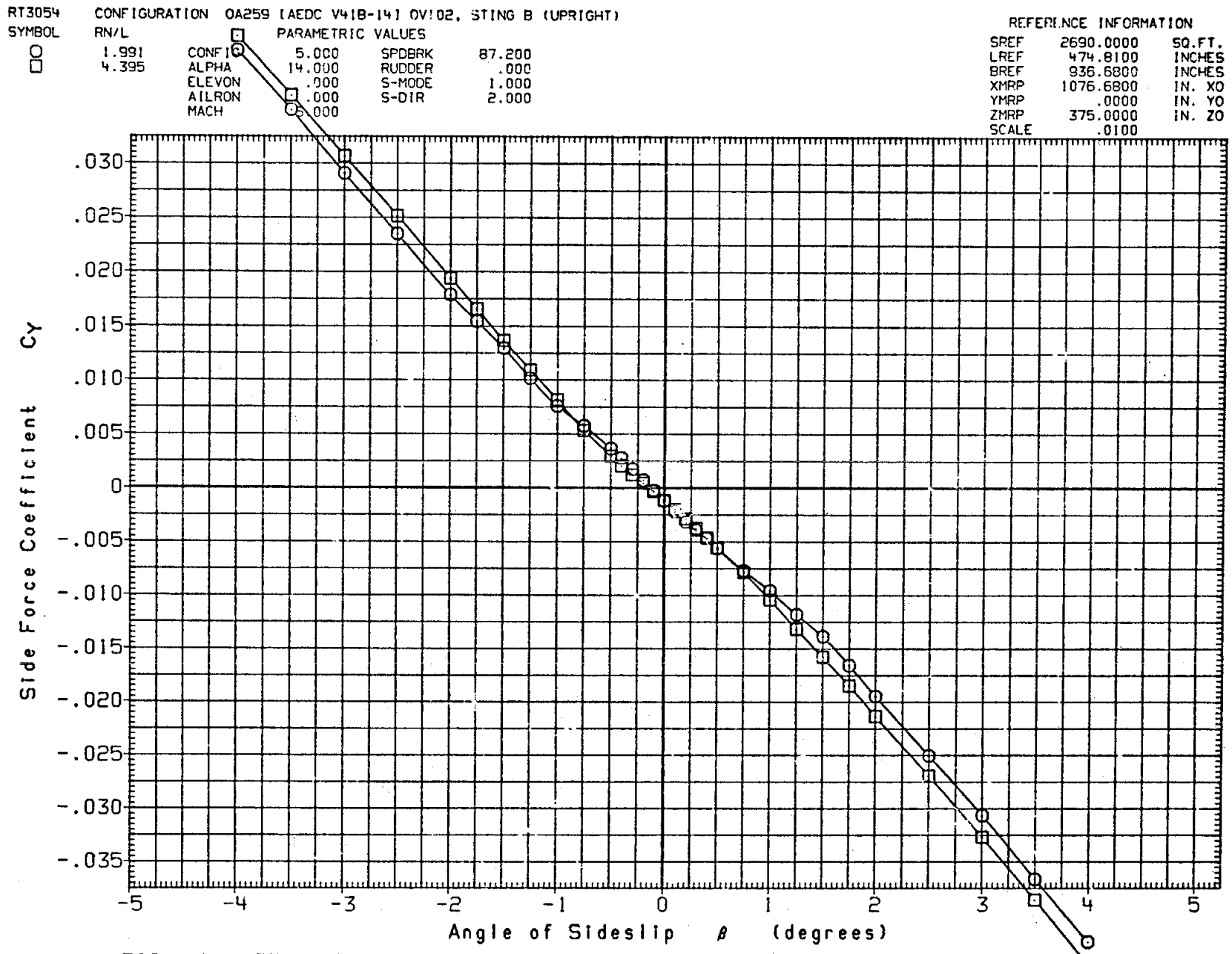


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(E) ALPHA = 14.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3054 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	1.991	CONFIG	5.000	SPOBPK	87.200
□	4.395	ALPHA	14.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

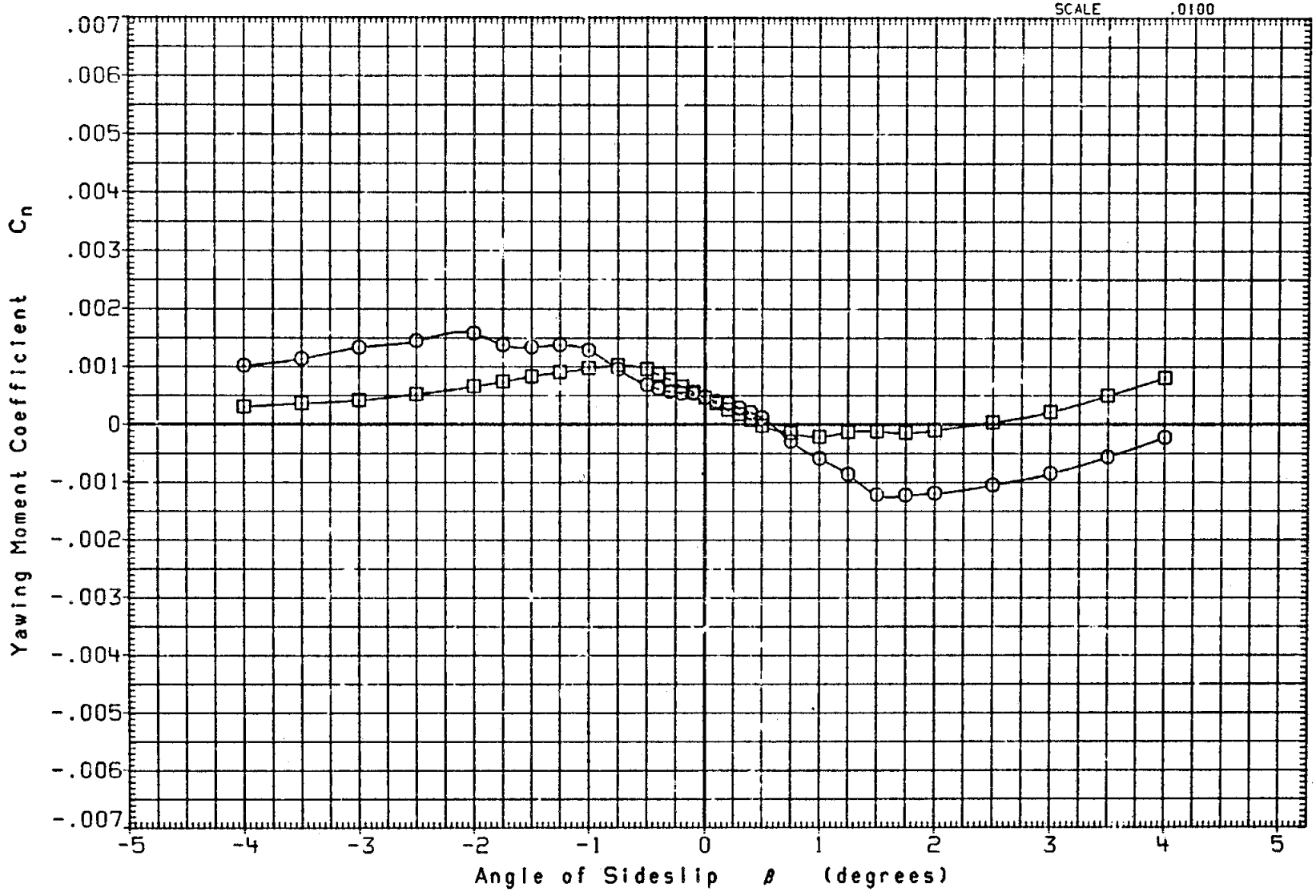


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(E) ALPHA = 14.0 DEGREES, BASELINE CONFIGURATION
DATE 2 MAR 81

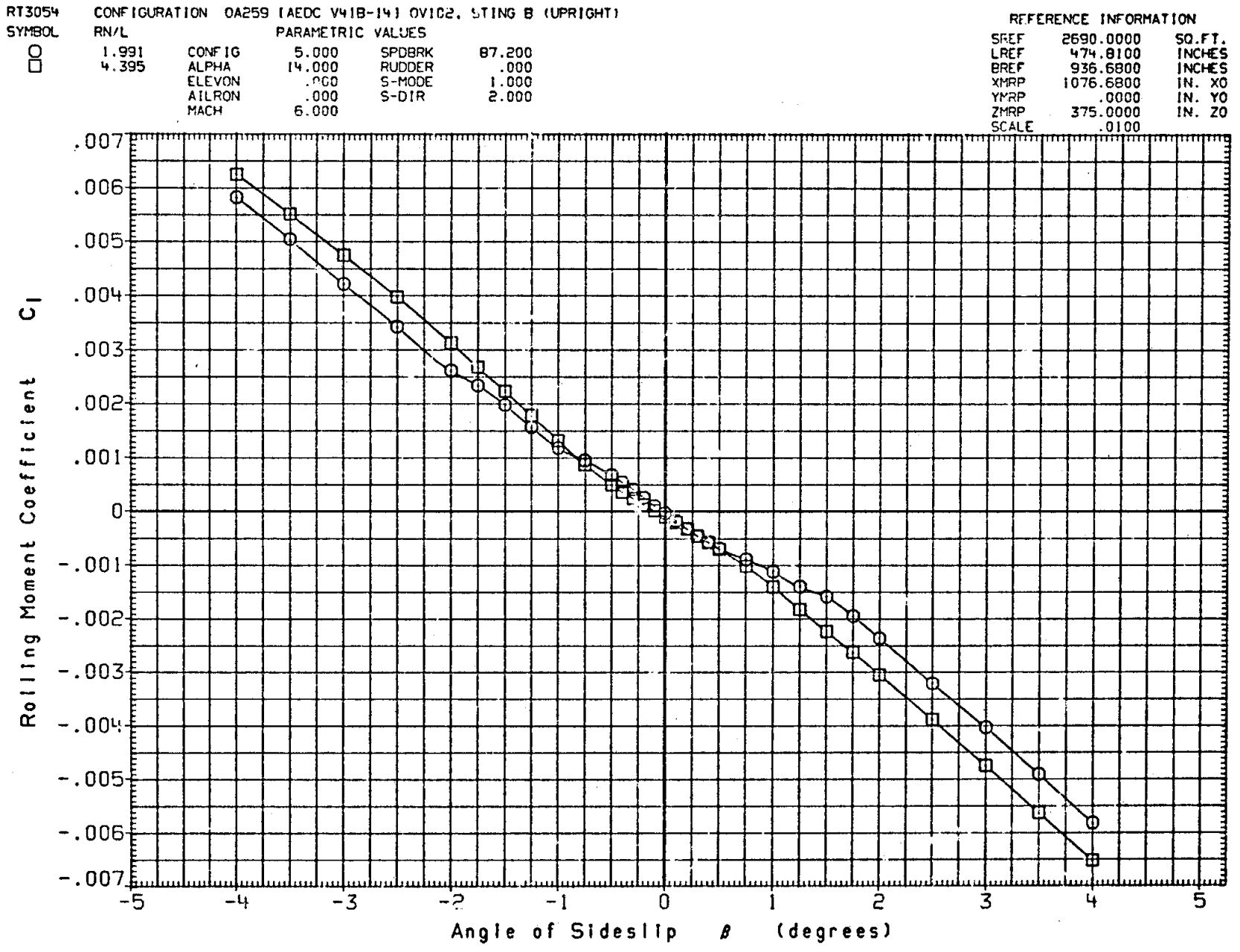


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(E) ALPHA = 14.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3054 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	1.991
□	4.395

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	14.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	336.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

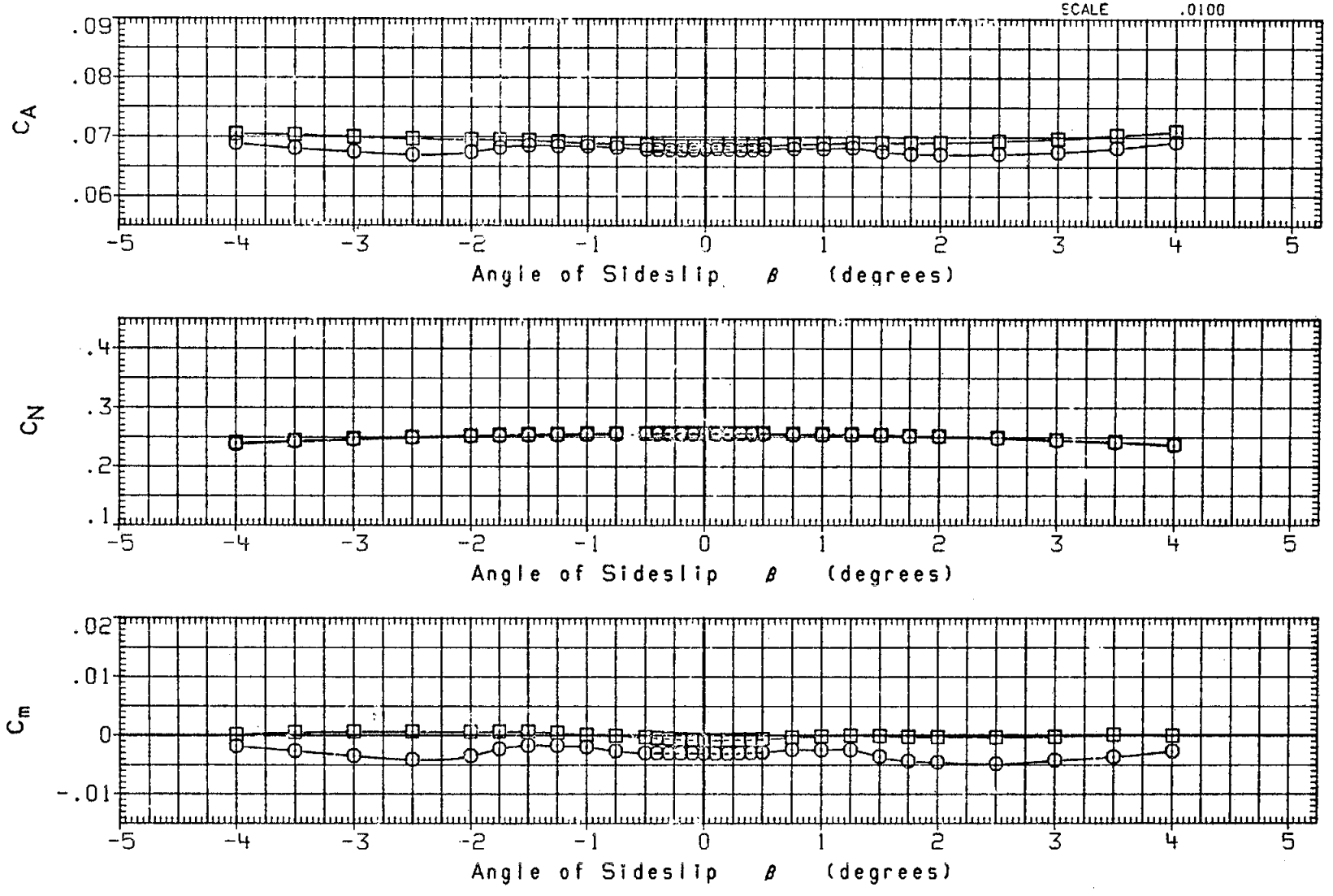


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(E) ALPHA = 14.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

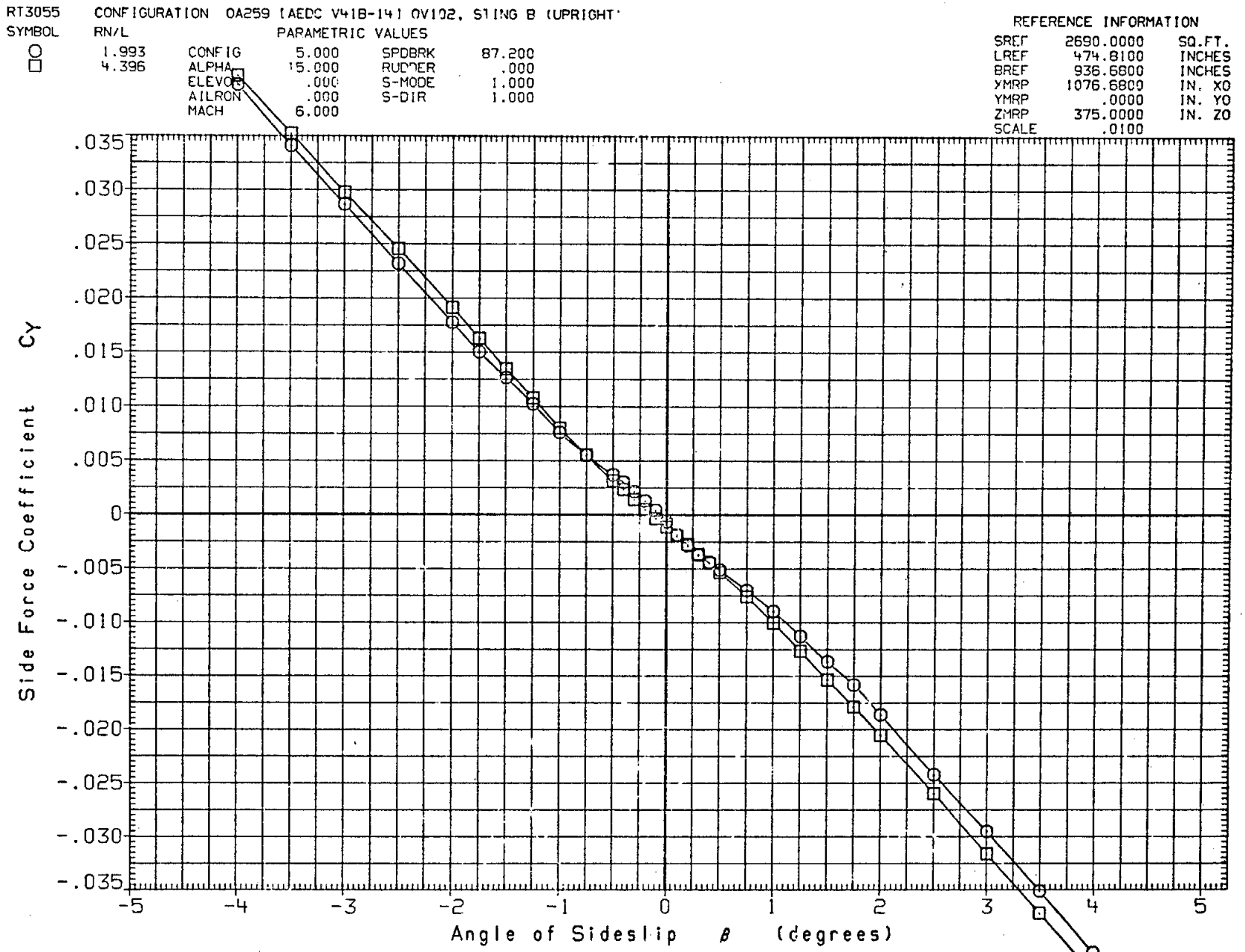


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(F) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3055 CONFIGURATION 0A259 (AEDC V413-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	1.993
□	4.396

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	15.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

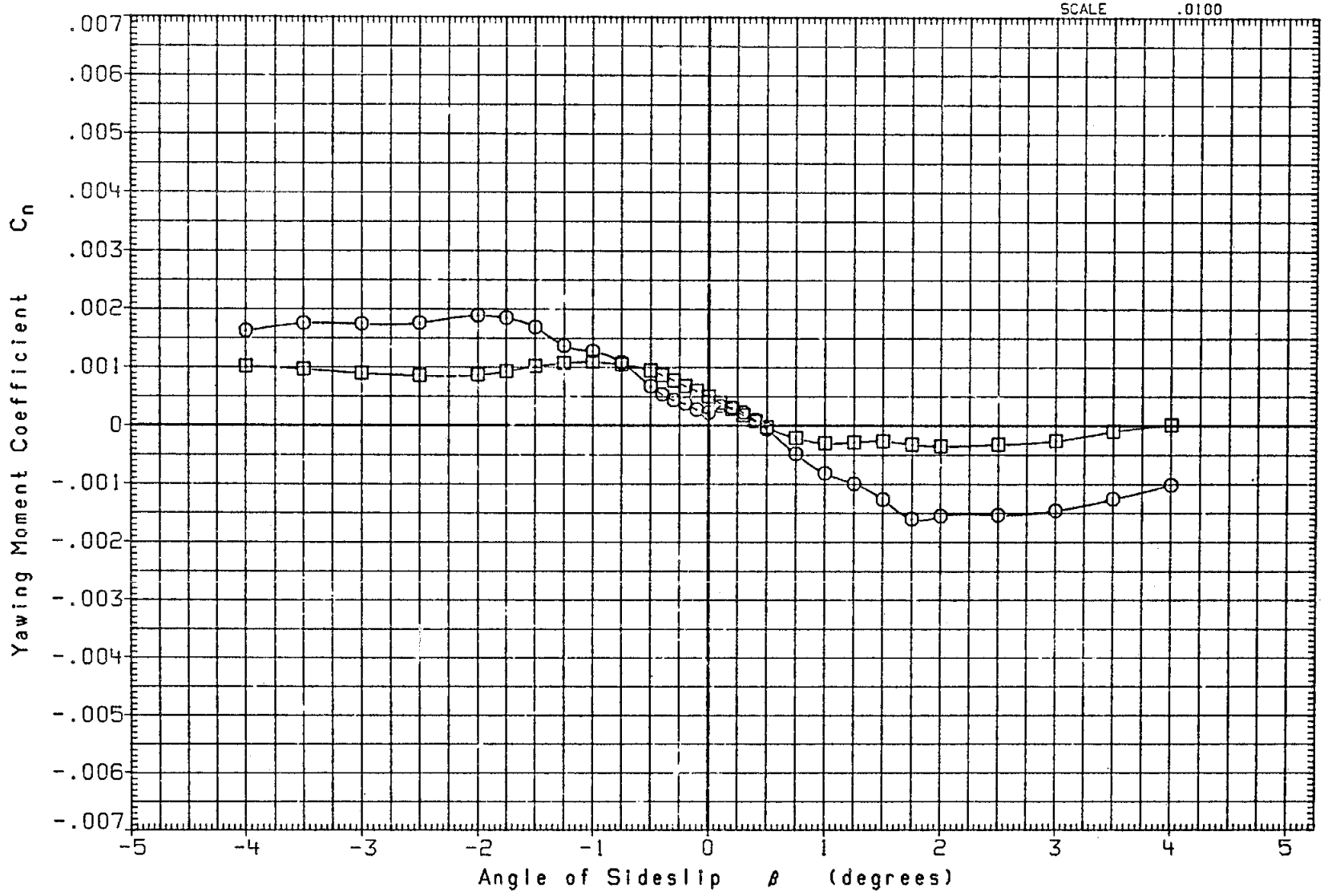


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(F) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3055 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	1.993	CONFIG	5.000	SPDBRK	87.200
□	4.396	ALPHA	15.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

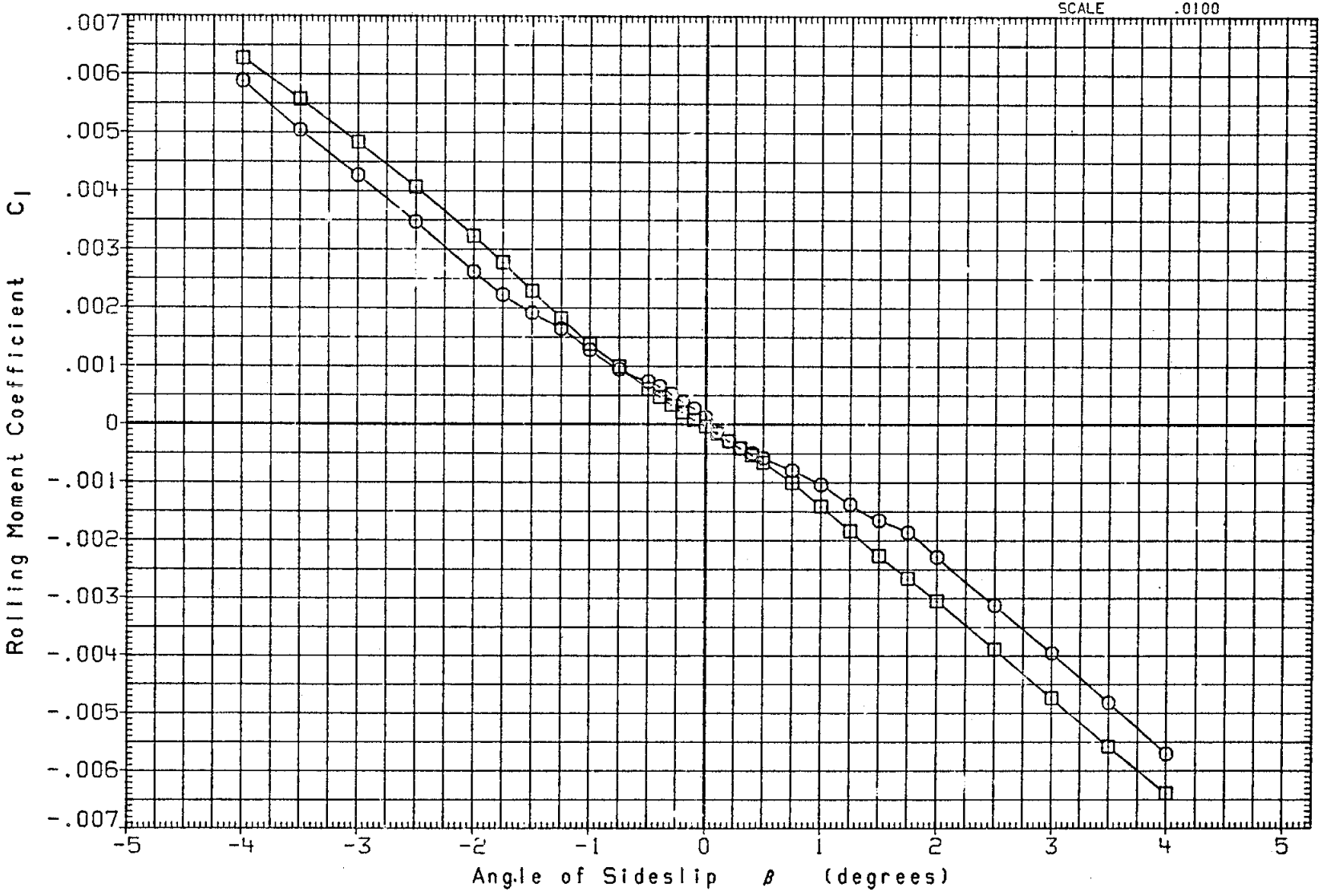


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(F) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3055 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	1.993	CONFIG	5.000	SPDBRK	87.200
□	4.396	ALPHA	15.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

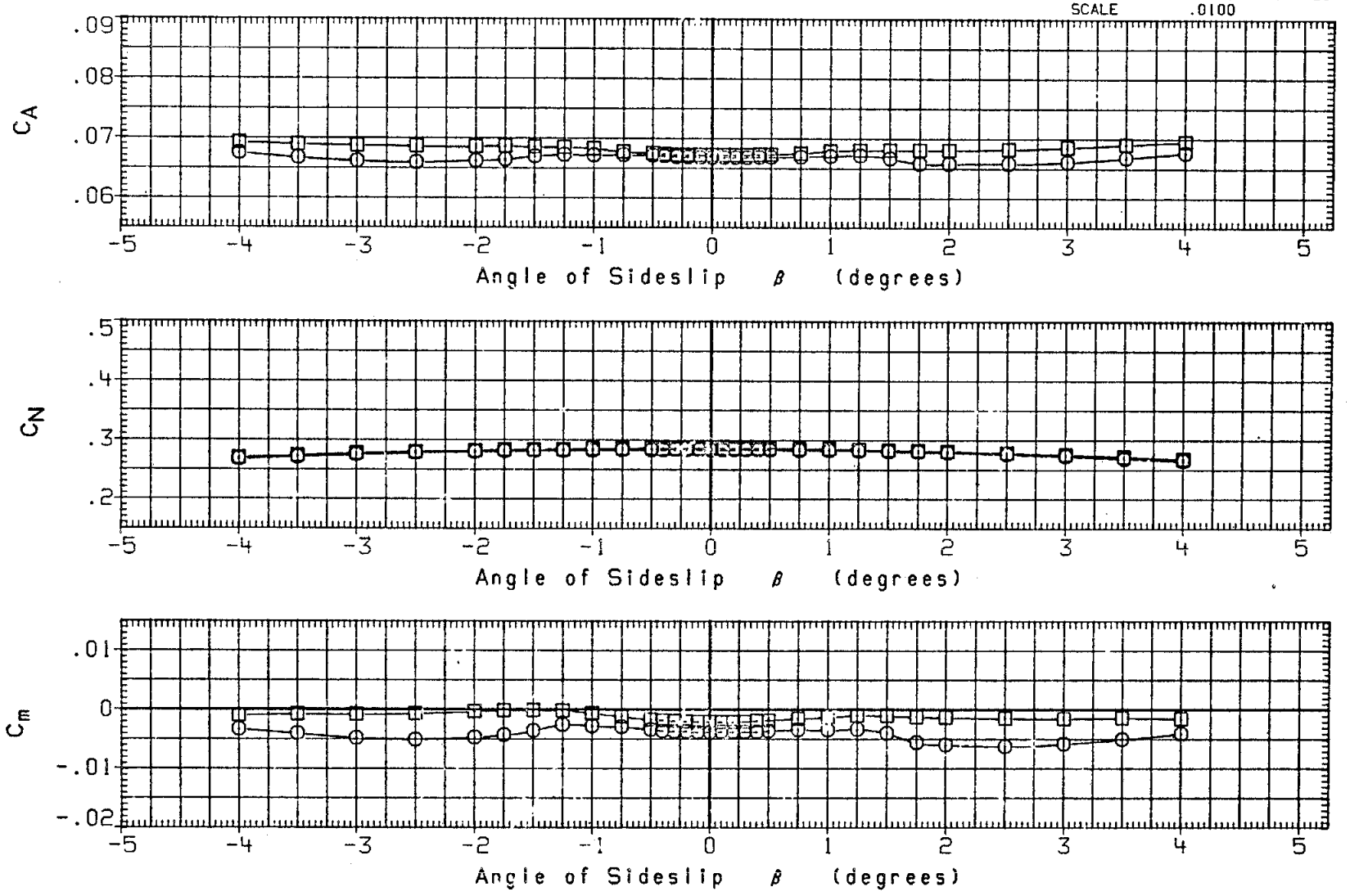


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(F) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

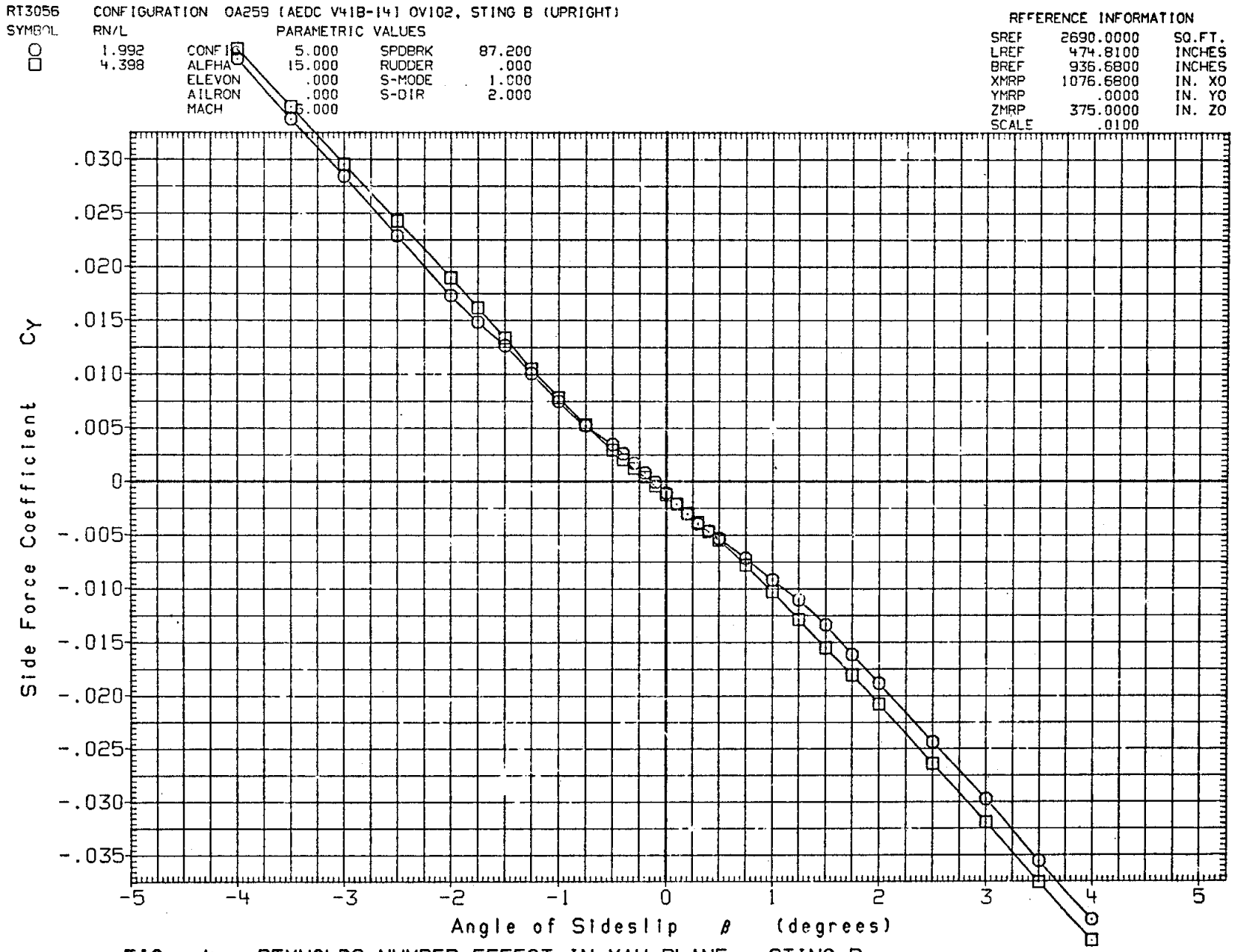


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(F) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3056 CONFIGURATION 0A259 (AEDC V41B-141 OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	1.992
□	4.398

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	15.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

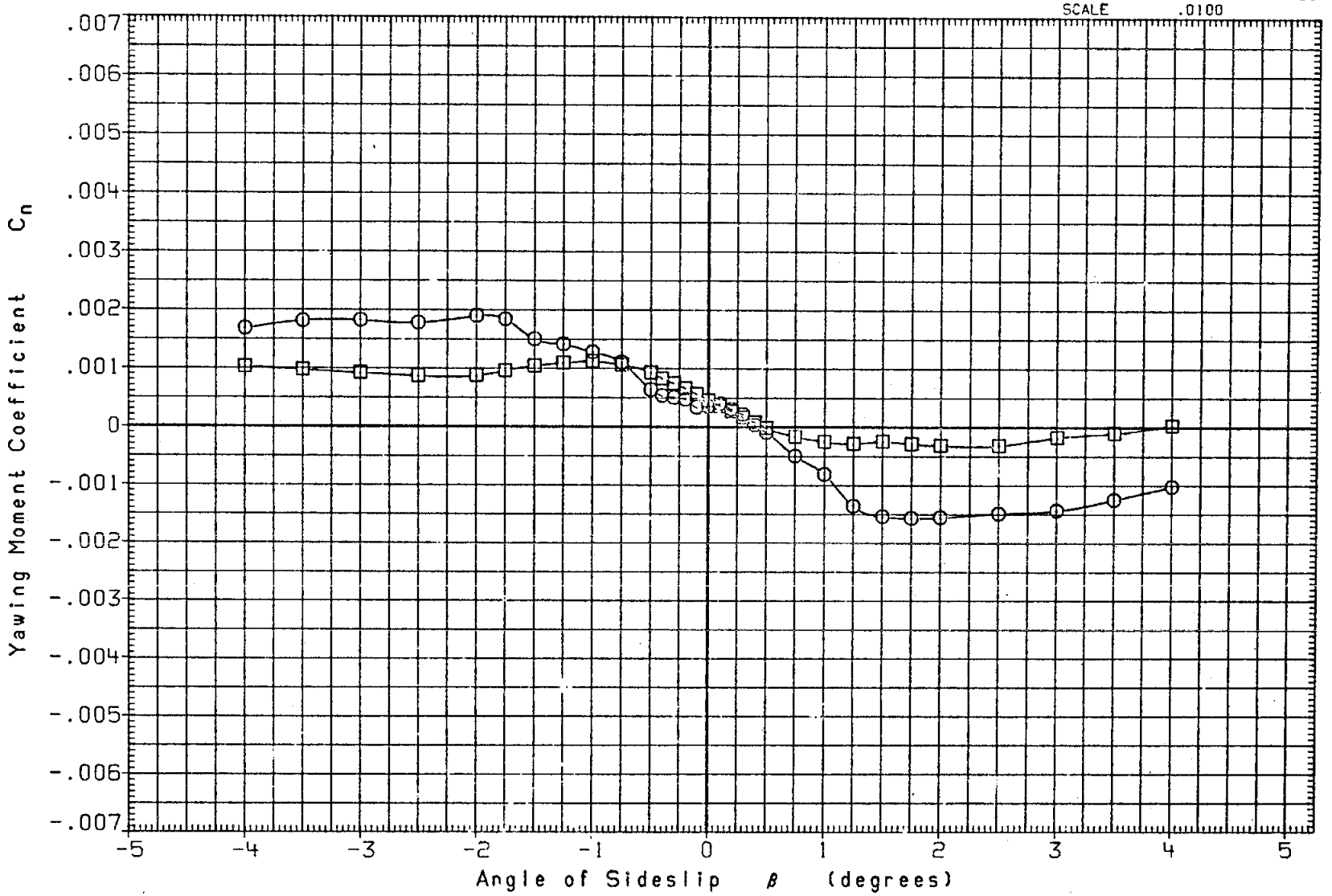


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(F) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3056 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	1.992
□	4.398

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	15.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

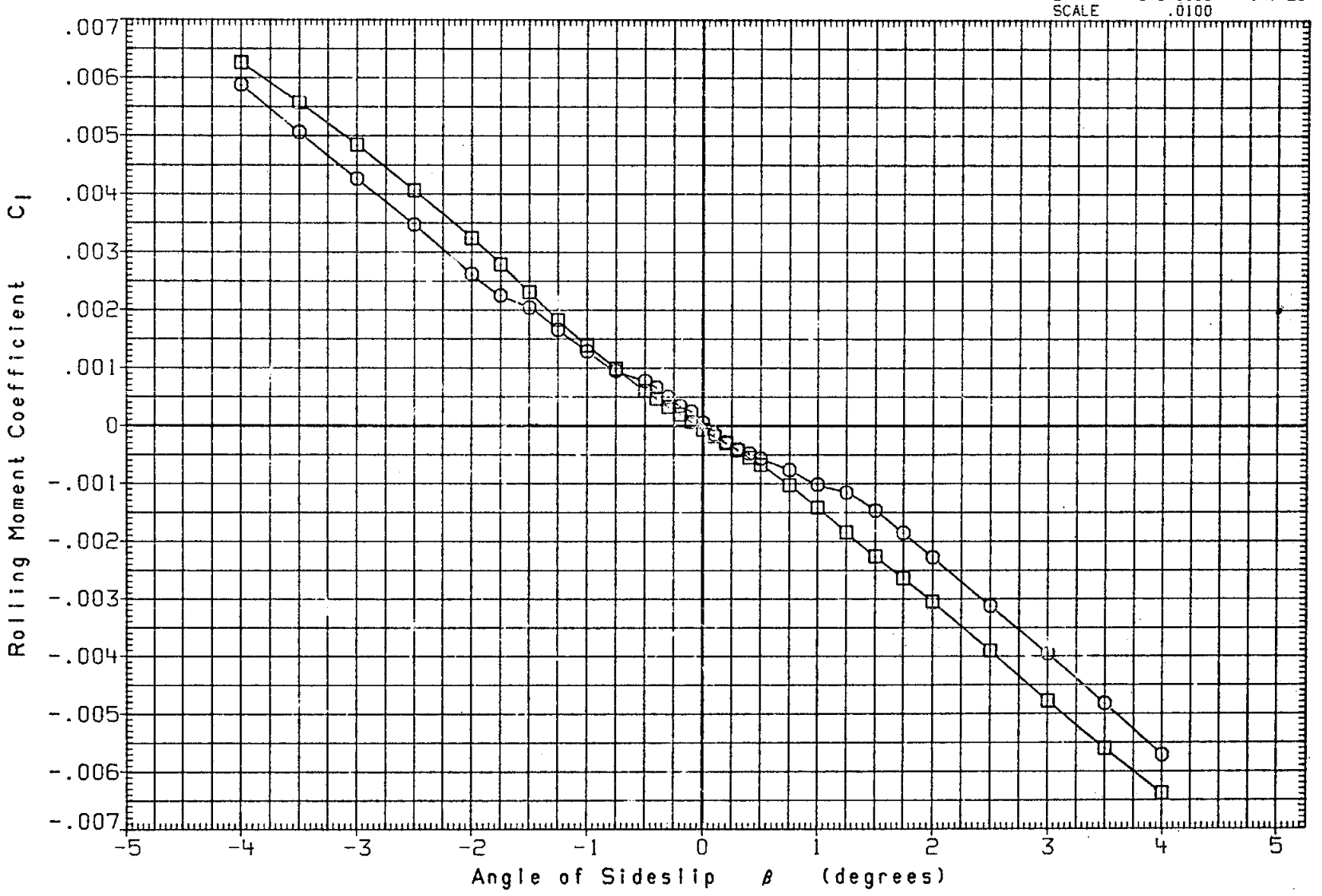


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(F) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3056 CONFIGURATION OA259 (AEDC V41B-14) OV12, STING B (UPRIGHT)

SYMBOL	RN/L
○	1.992
□	4.398

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	15.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

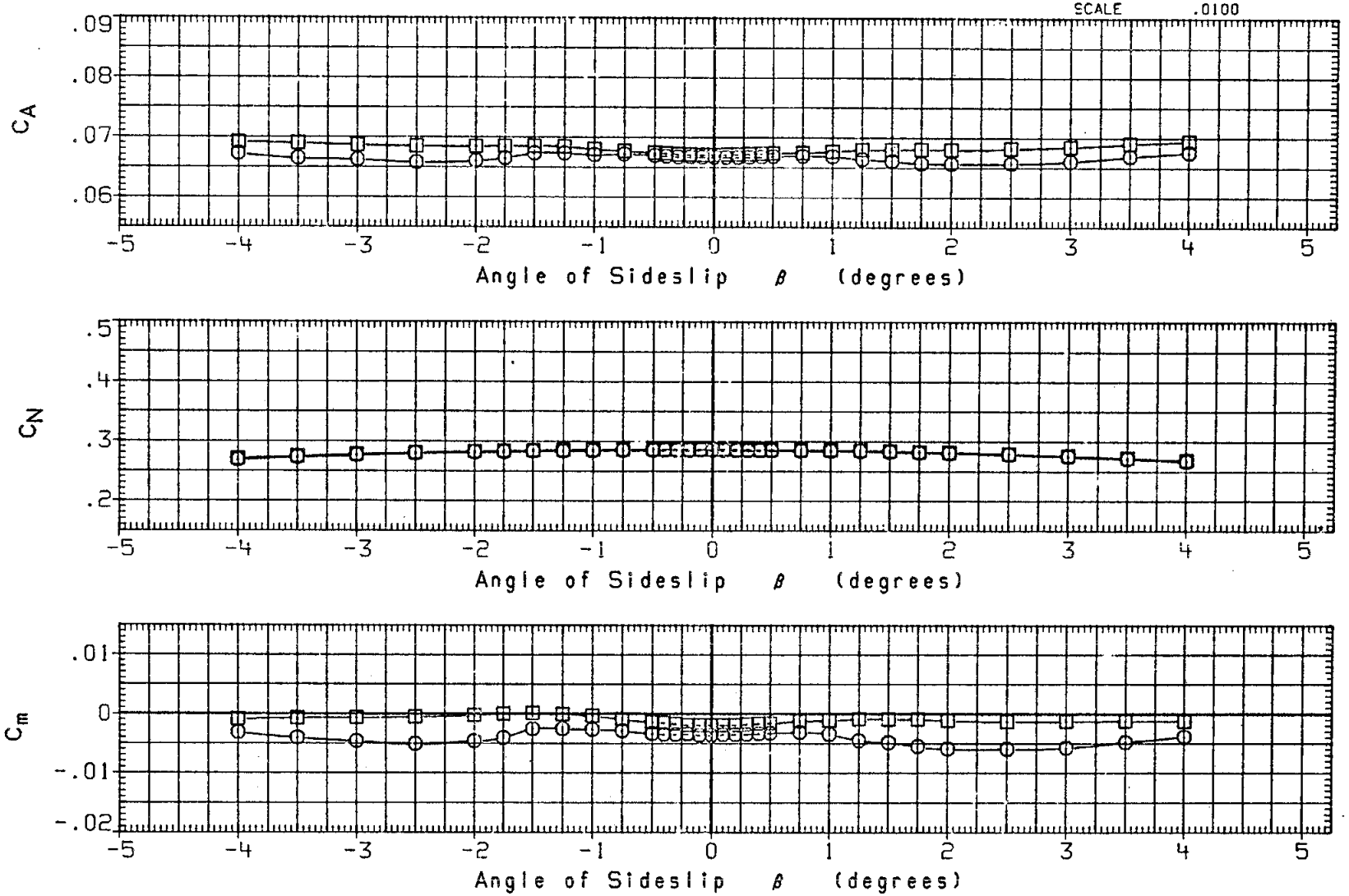


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(F) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

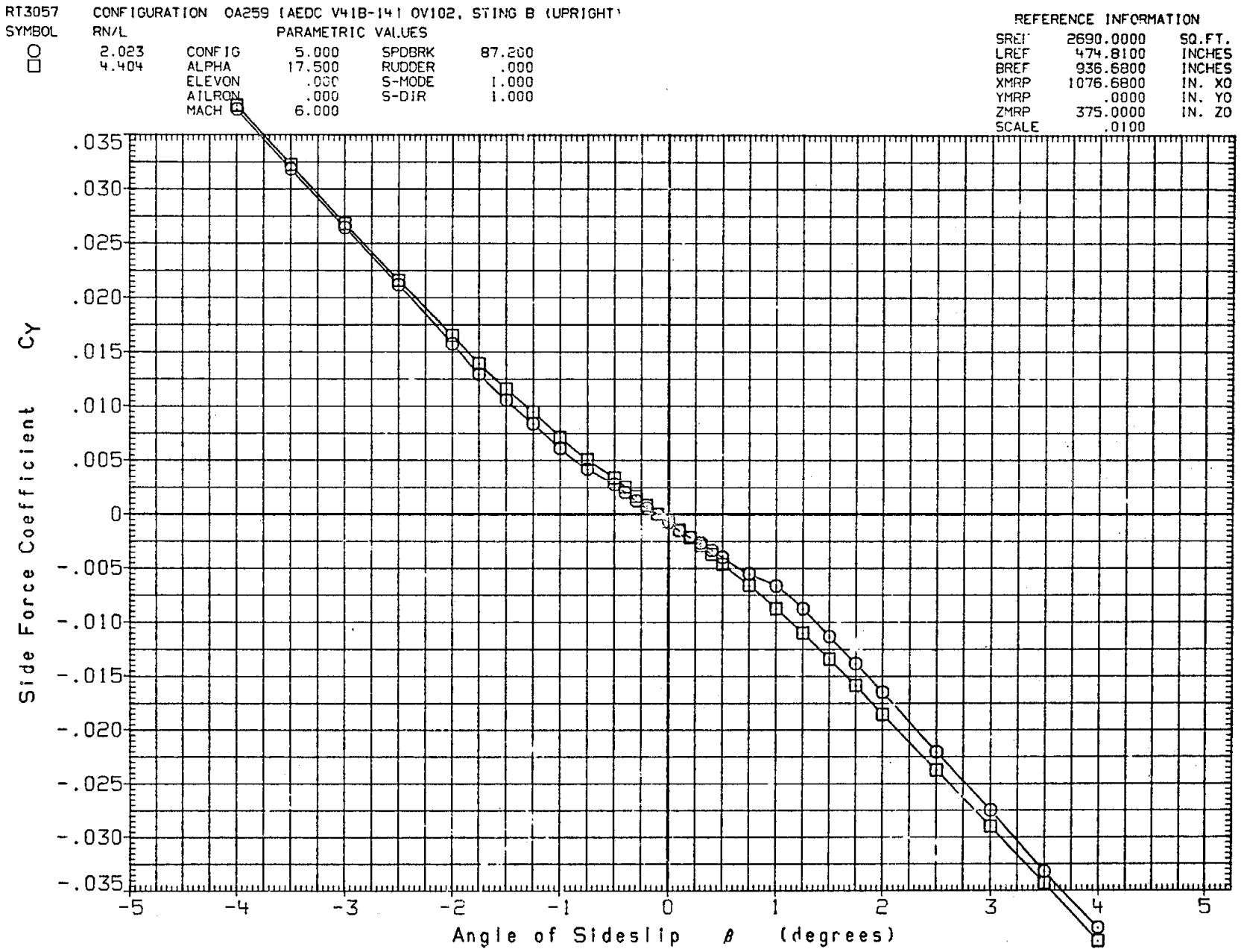


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(G) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3057 CONFIGURATION OA259 [AEDC V41B-141 OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.023
□	4.404

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	17.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

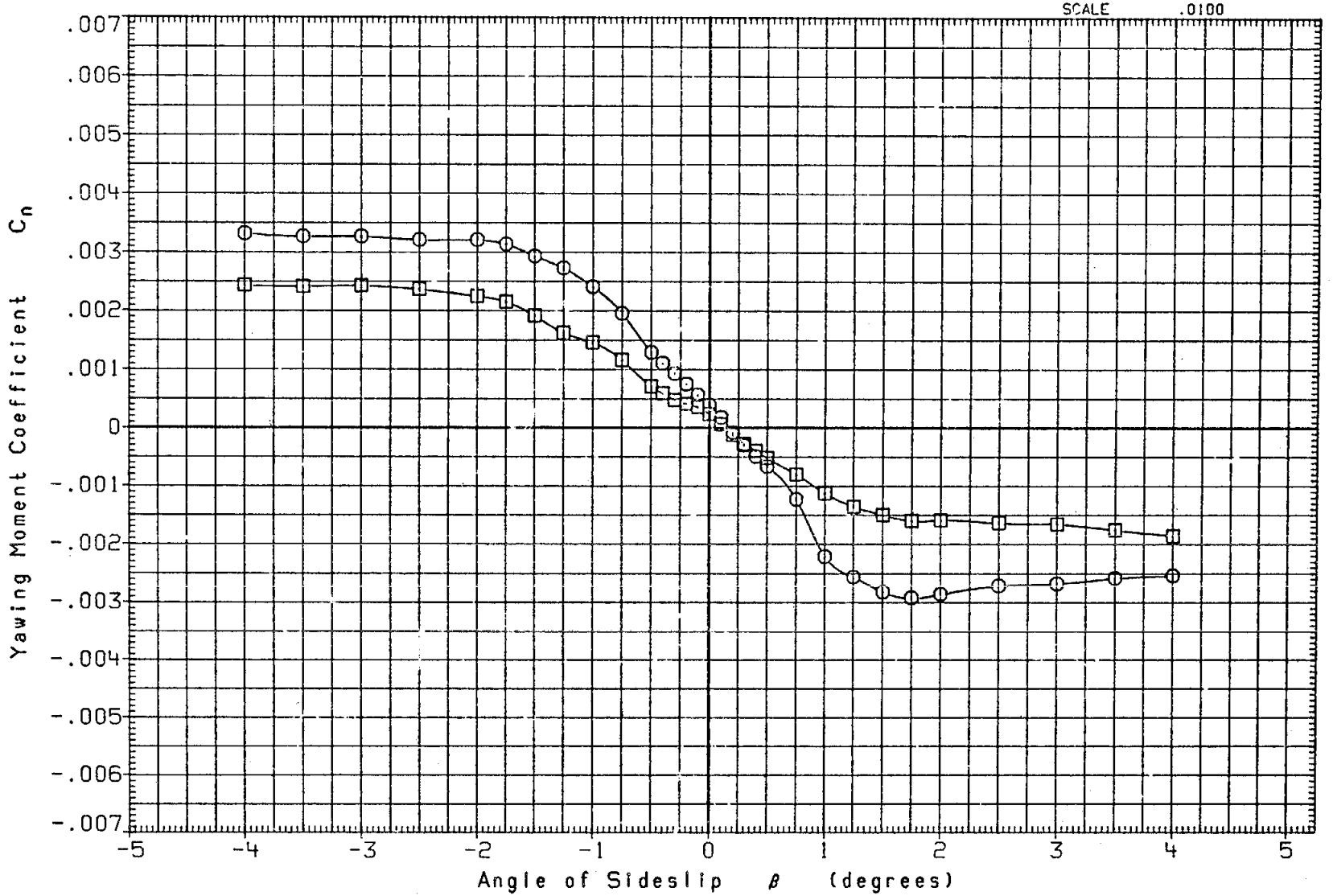


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(G) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3057 CONFIGURATION 0A259 [AEDC V41B-14] 0V102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.023	CONFIG	5.000	SPDBRK	87.200
□	4.404	ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

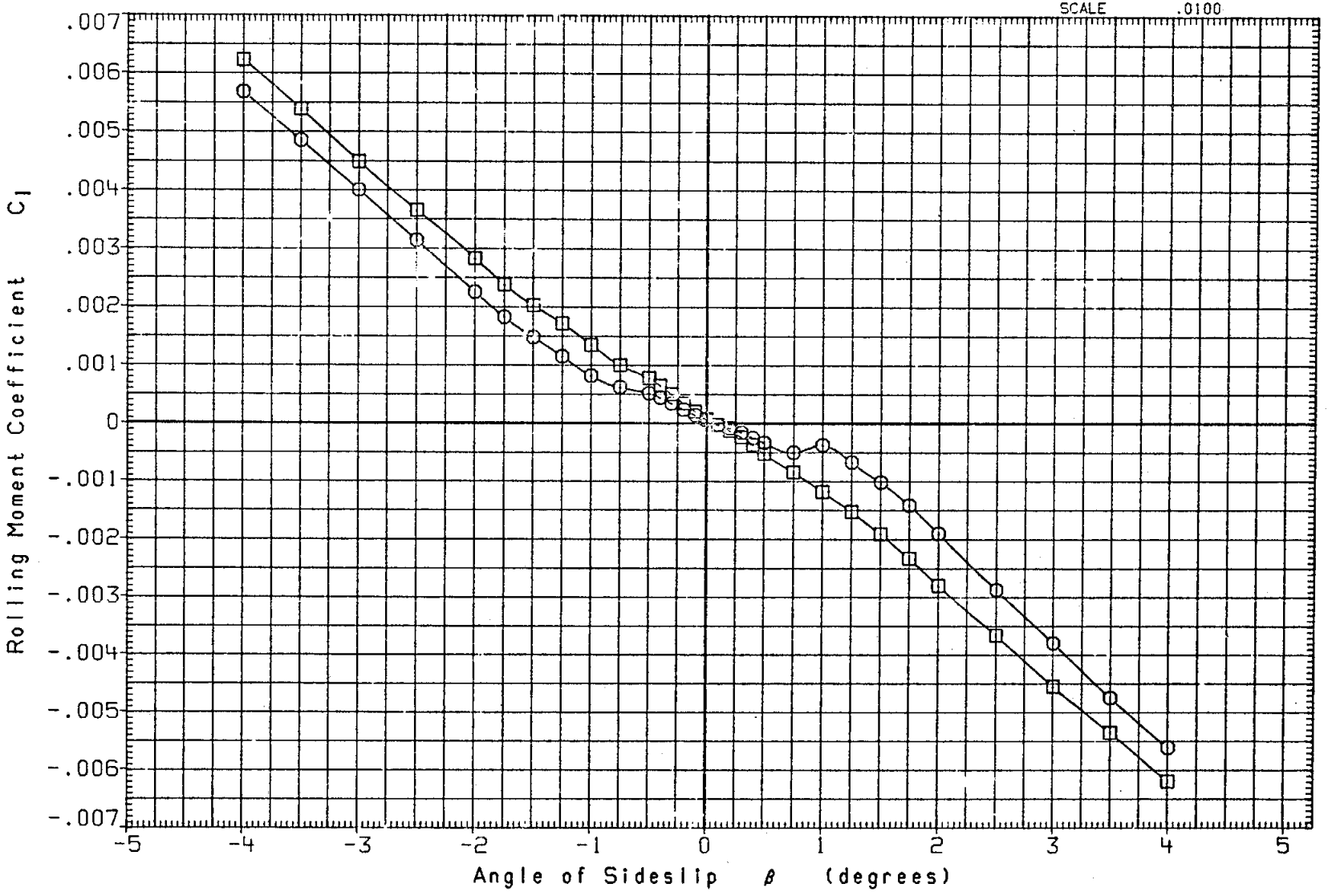


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(G) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3057 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.023	CONFIG	5.000	SPDBRK	87.200
□	4.404	ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

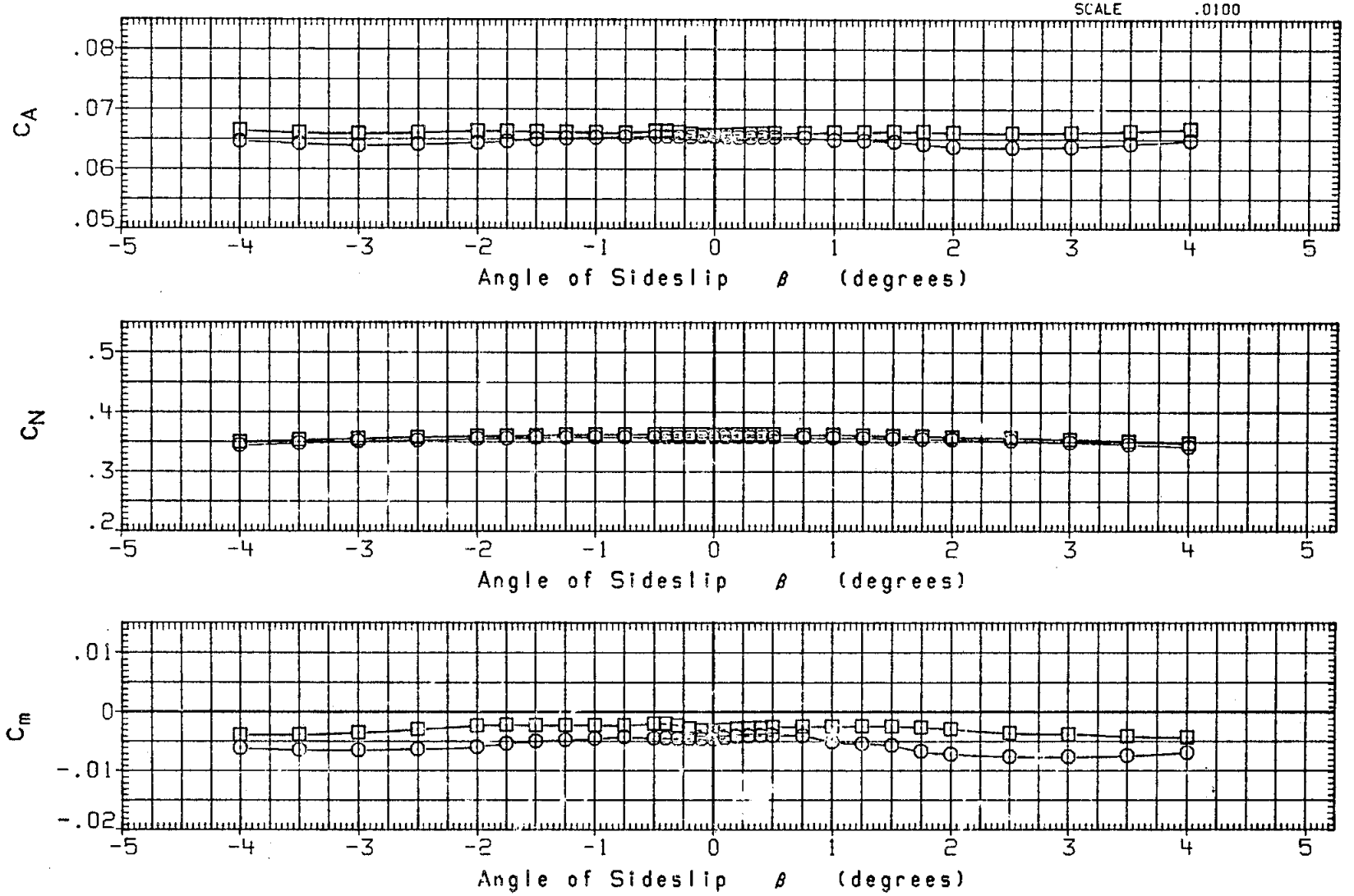


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(G) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

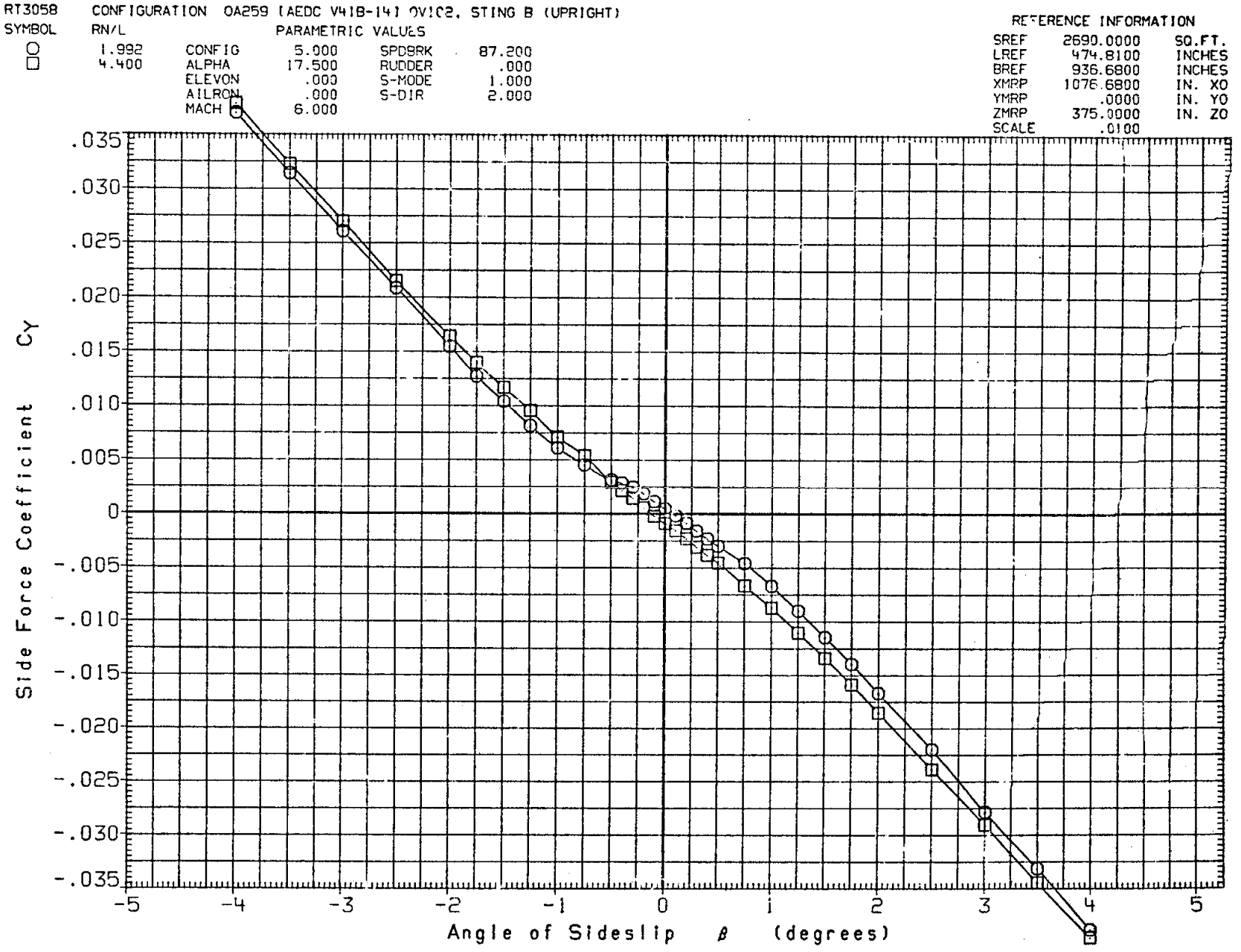


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(G) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3058 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	1.992
□	4.400

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	17.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

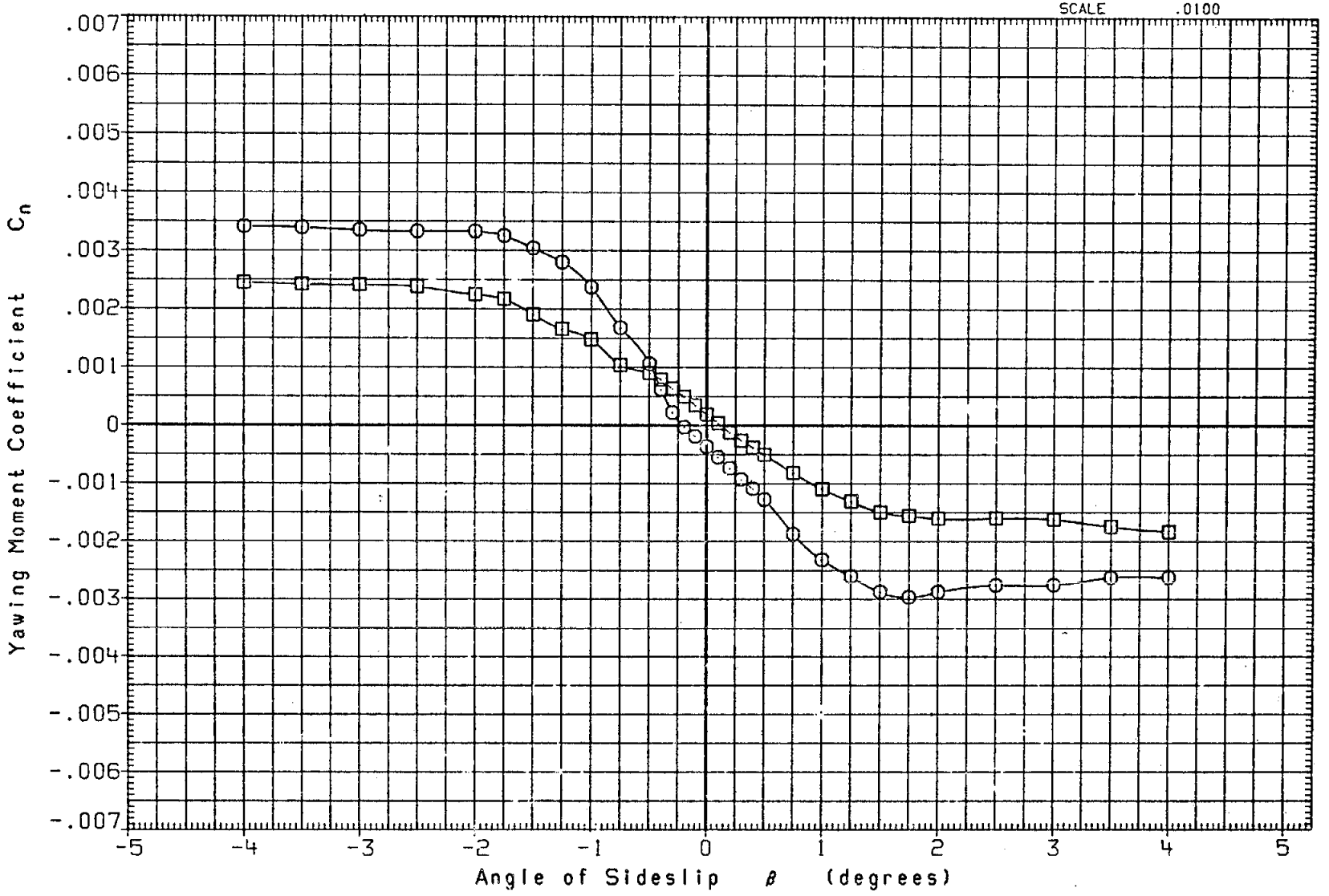


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(G) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3058 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	1.992	CONFIG	5.000	SPDBRK	87.200
□	4.400	ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

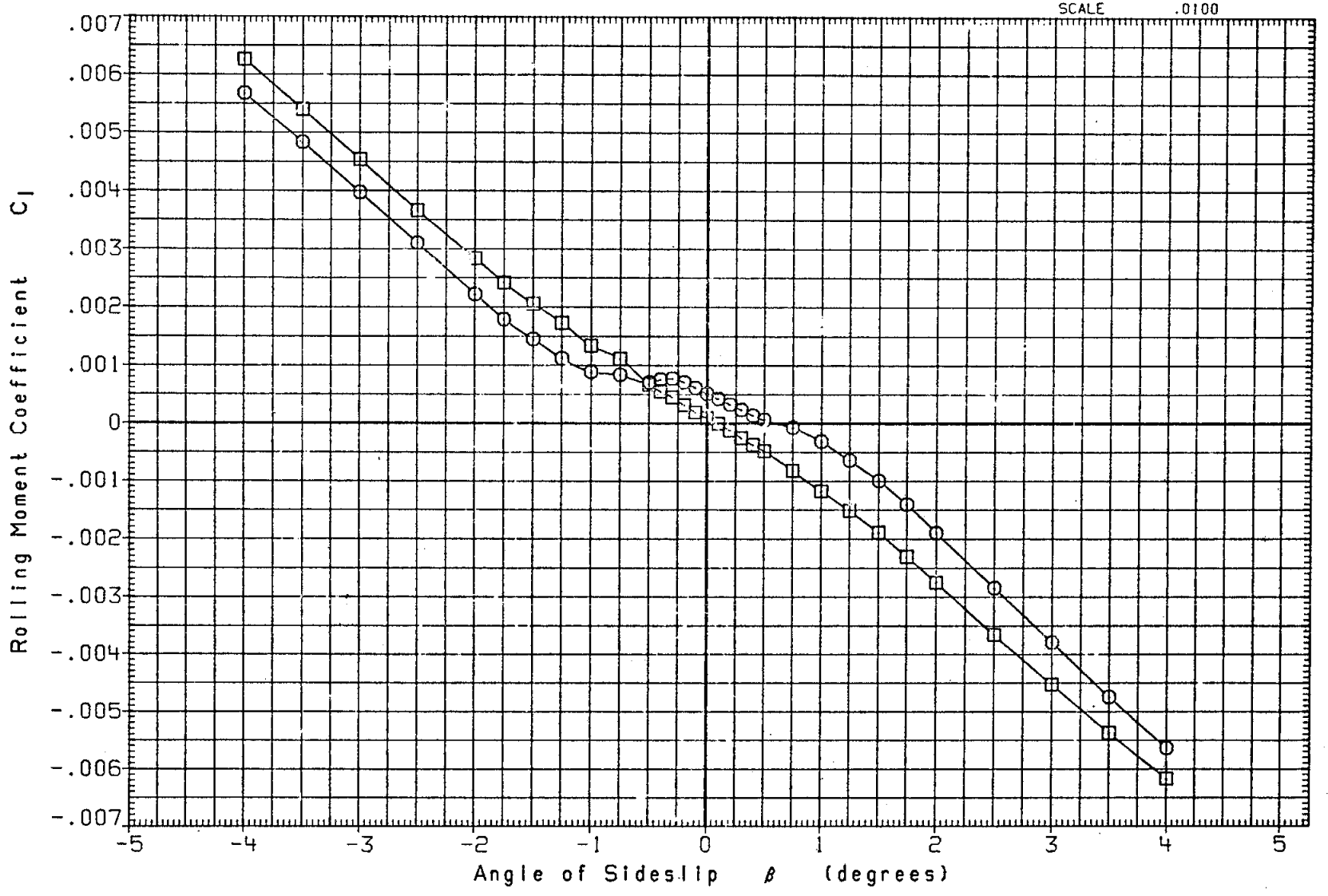


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(G) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3058 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	1.992	CONFIG	5.000	SPDBRK	87.200
□	4.400	ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

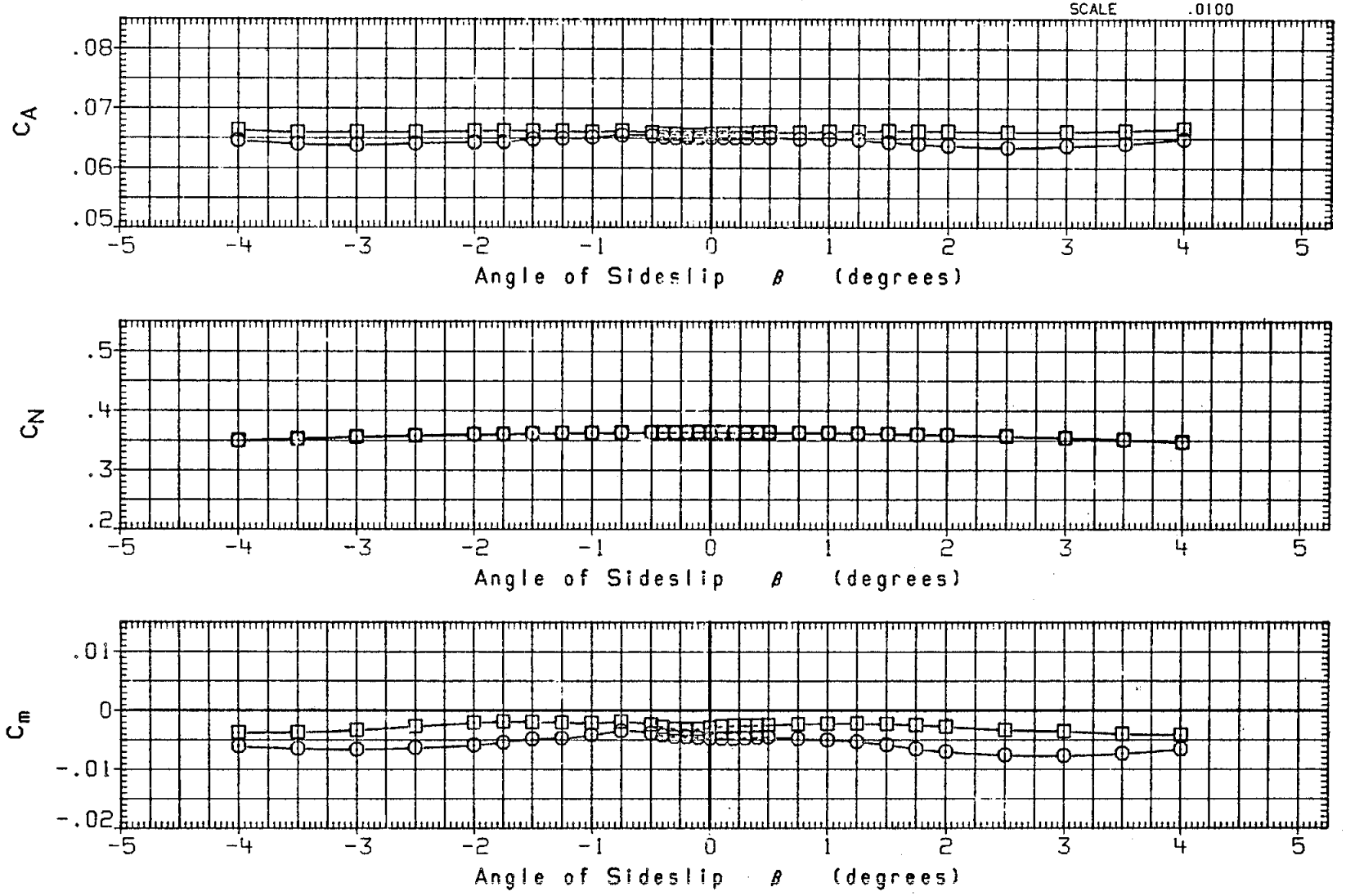


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(G) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3059 CONFIGURATION 0A259 [AEDC V41B-14] 0V102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.026
□	4.407

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	20.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

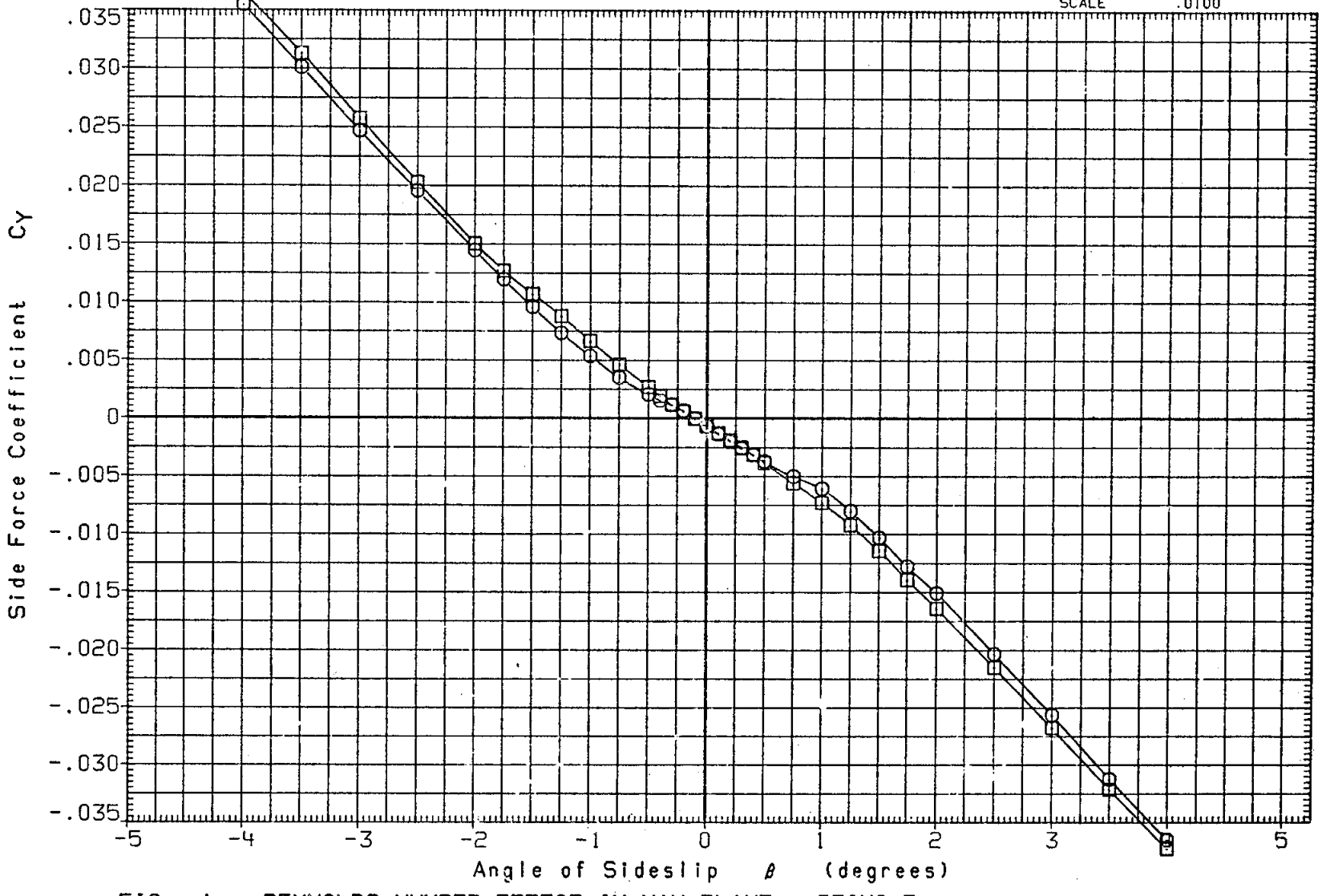


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(H) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3059 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.026
□	4.407

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	20.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

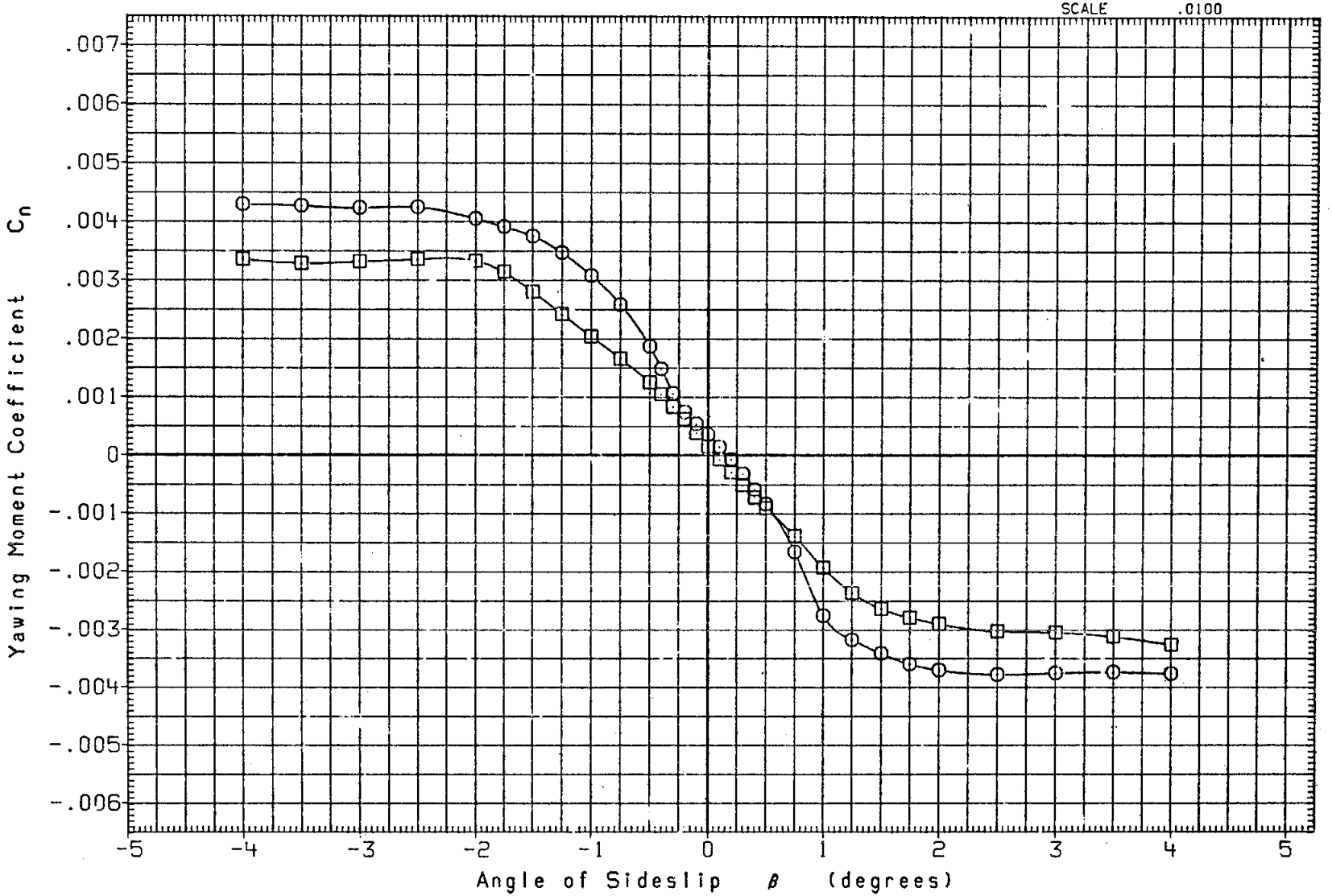


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(H) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3059 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.026	CONFIG	5.000	SPDBRK	87.200
□	4.407	ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	5.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

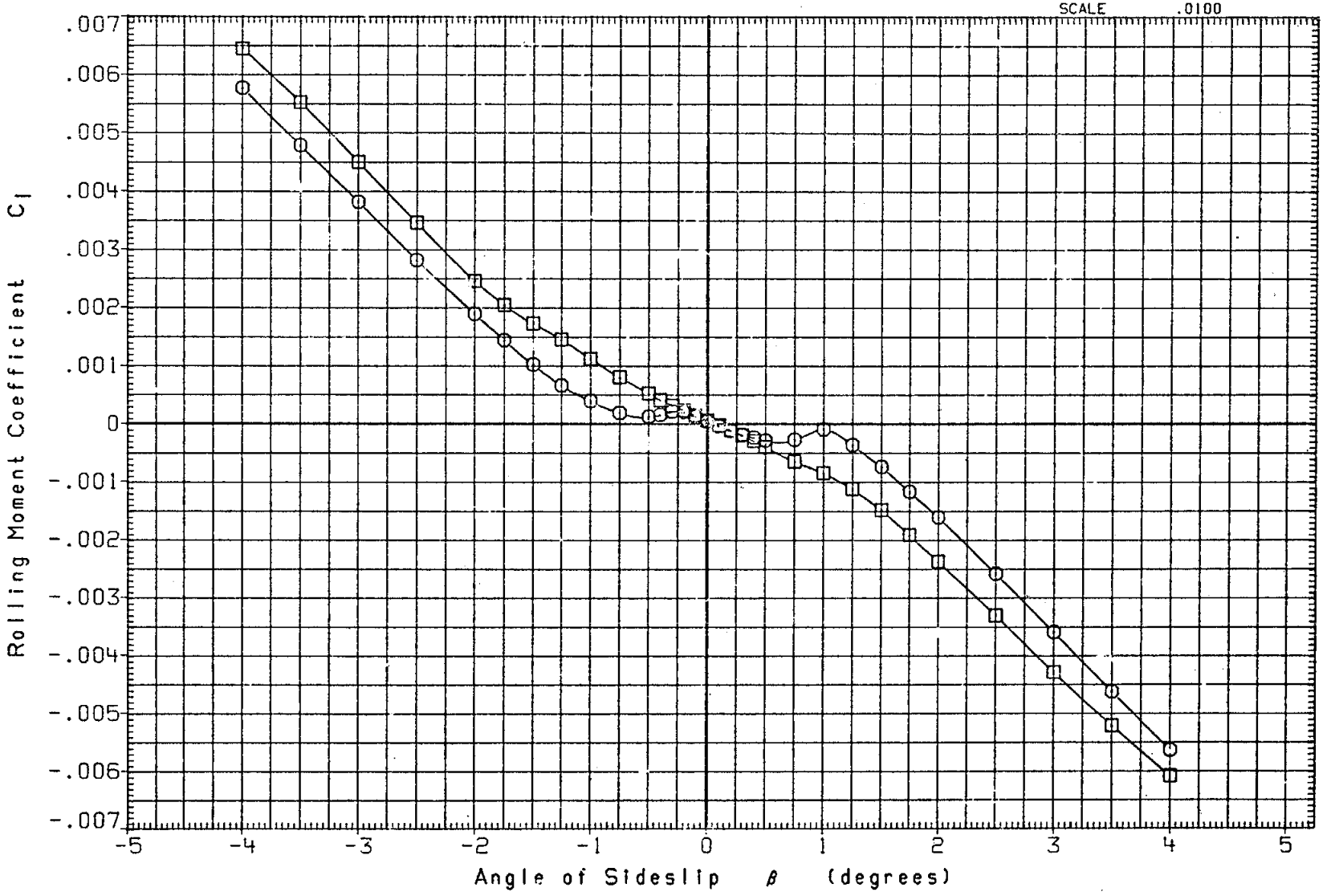


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(H) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3059 CONFIGURATION 0A259 [AEDC V41B-141 OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.026	CONFIG	5.000	SPDBRK	87.200
□	4.407	ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

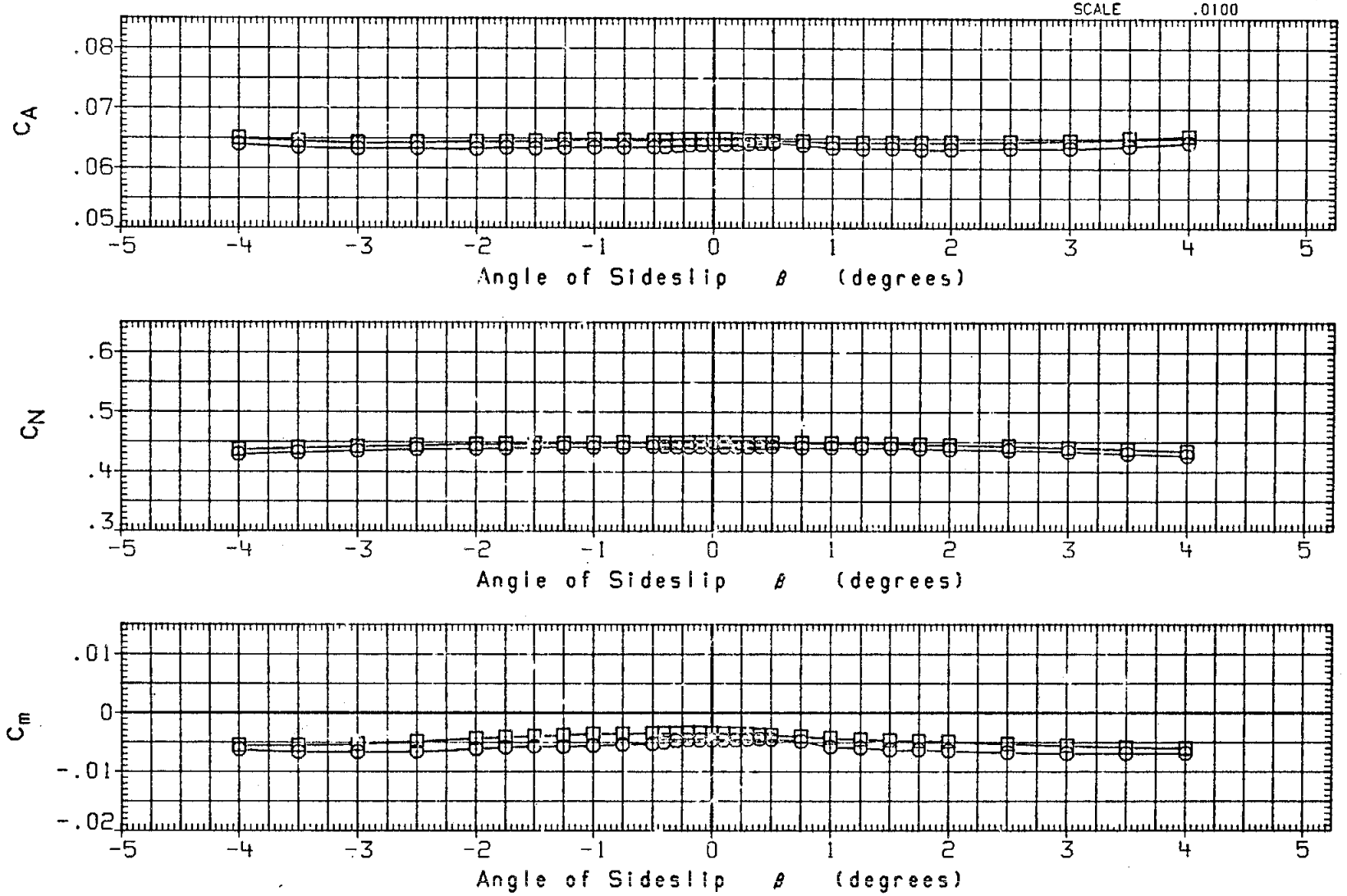


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(H) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3060 CONFIGURATION 0A259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.024
□	4.405

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	20.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

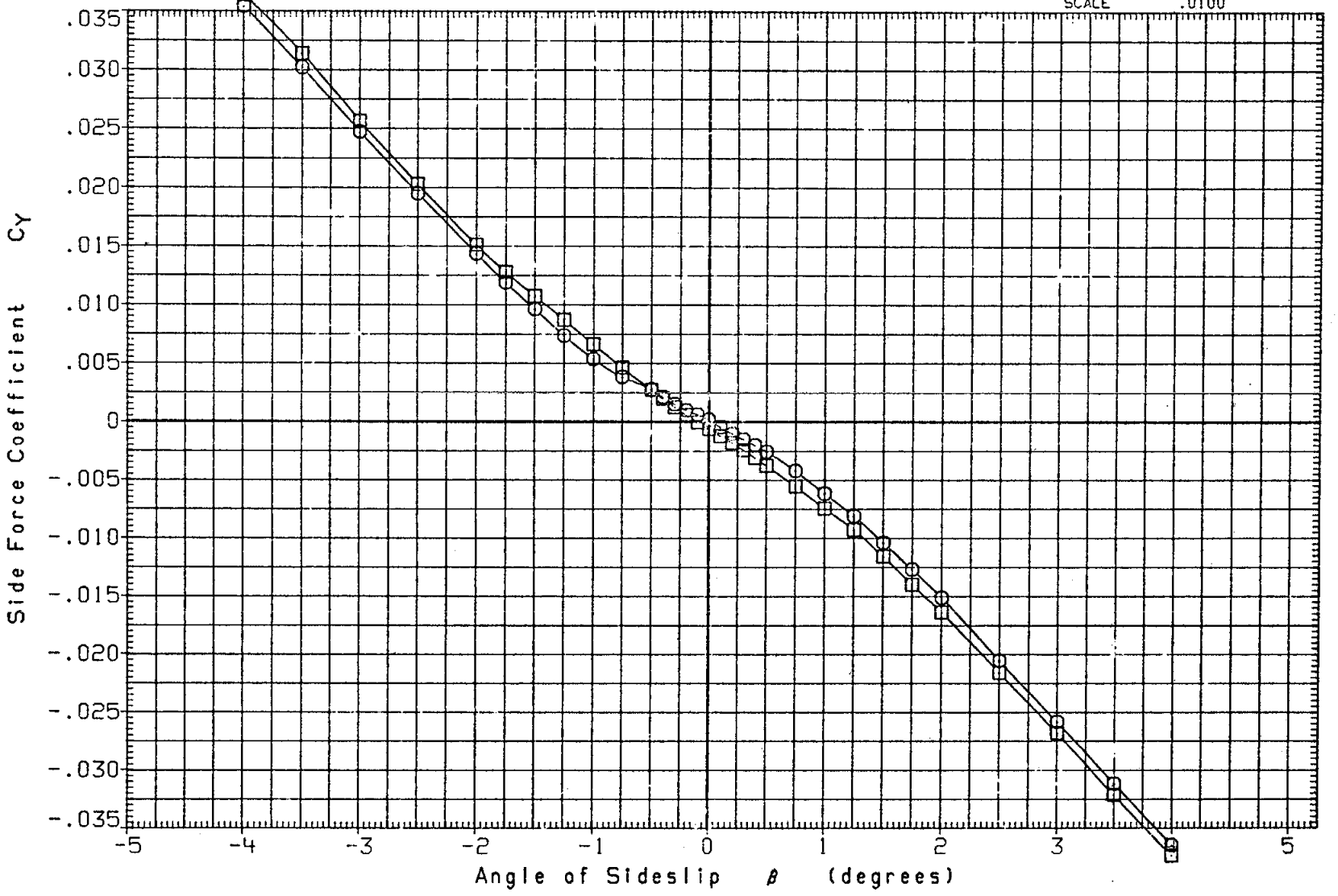


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(H) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3060 CONFIGURATION OA259 (AEDC V41B-141 OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.024	CONFIG	5.000	SPDBRK	87.200
□	4.405	ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6900	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

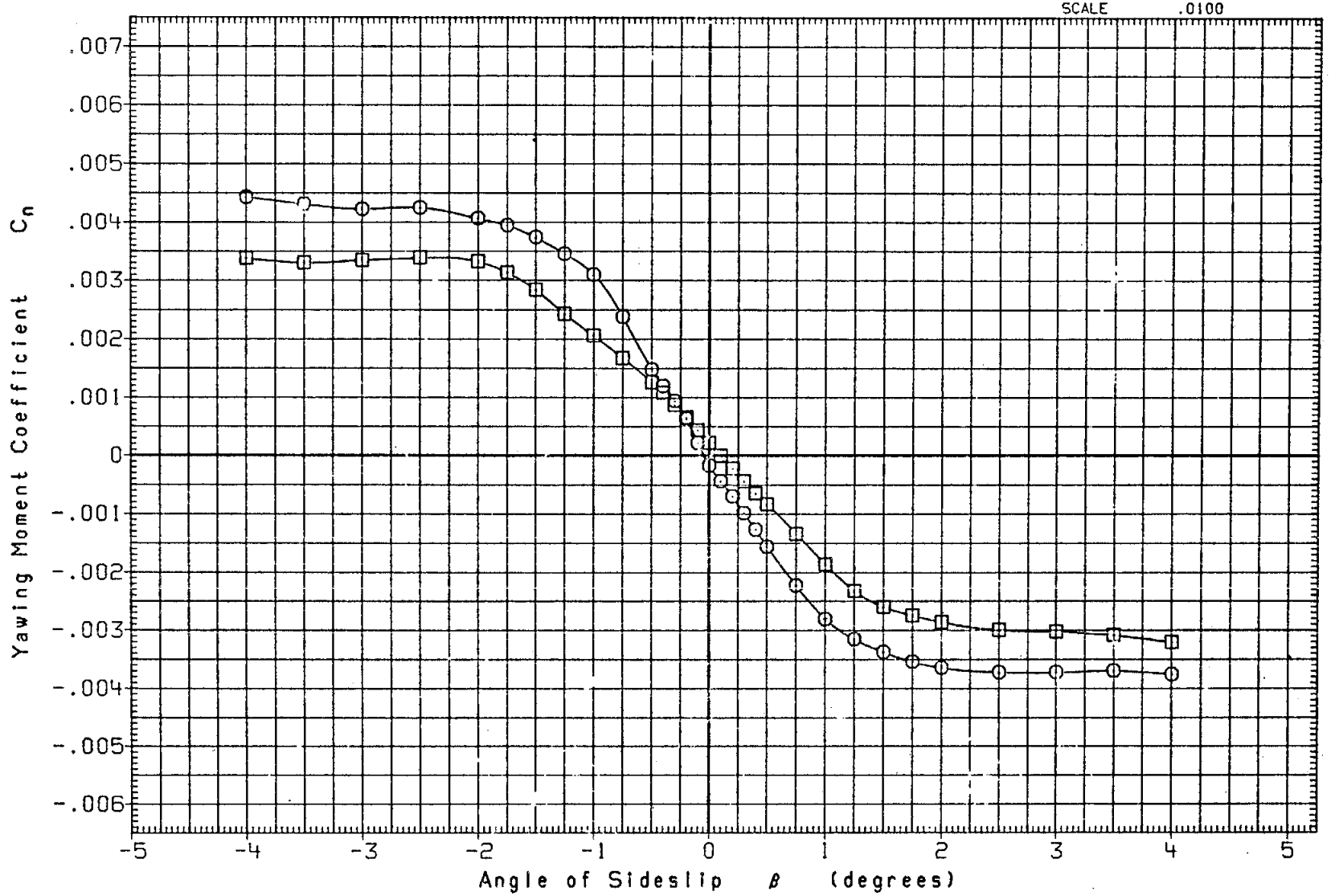


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(H) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3060 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.024
□	4.405

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	20.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

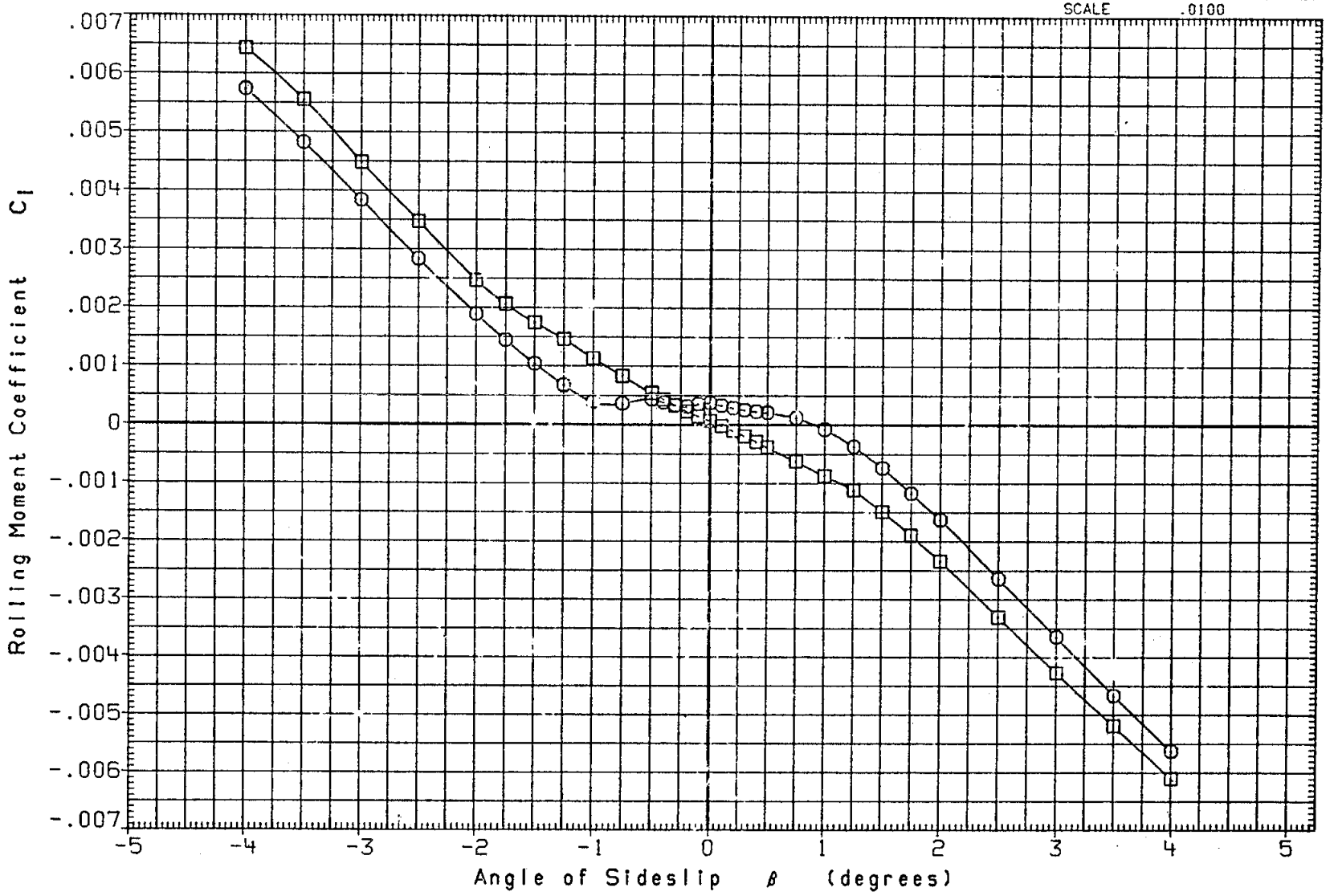


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(H) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3060 CONFIGURATION 0A259 [AEDC V41B-14] 0V102 STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.024	CONFIG	5.000	SPDBRK	87.200
□	4.405	ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

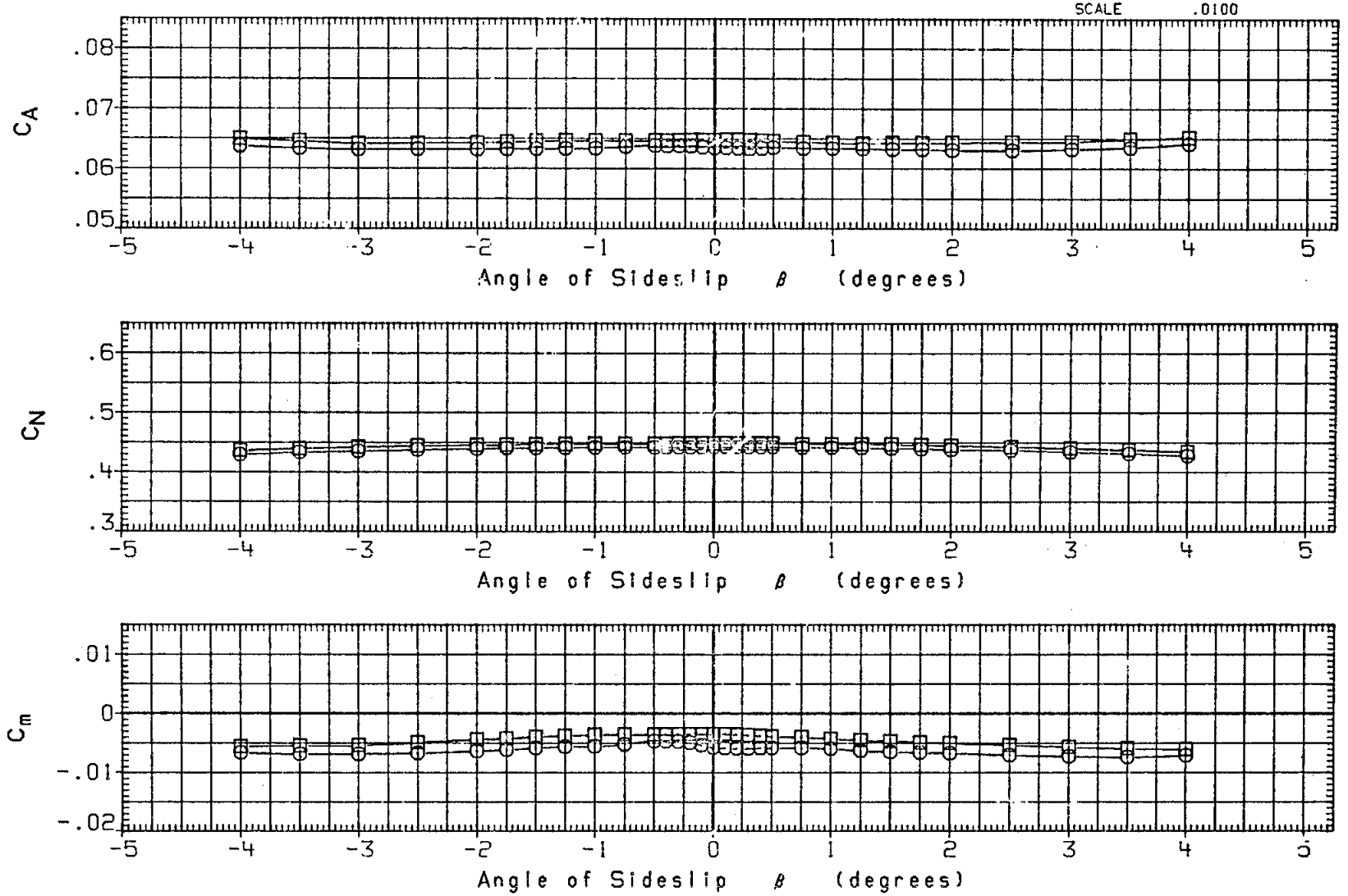


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(H) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3061 CONFIGURATION 0A259 [AEDC V41B-14] GV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.025
□	4.403

PARAMETRIC VALUES

CONFIG	5.000	SPOBRK	87.200
ALPHA	22.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	8.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

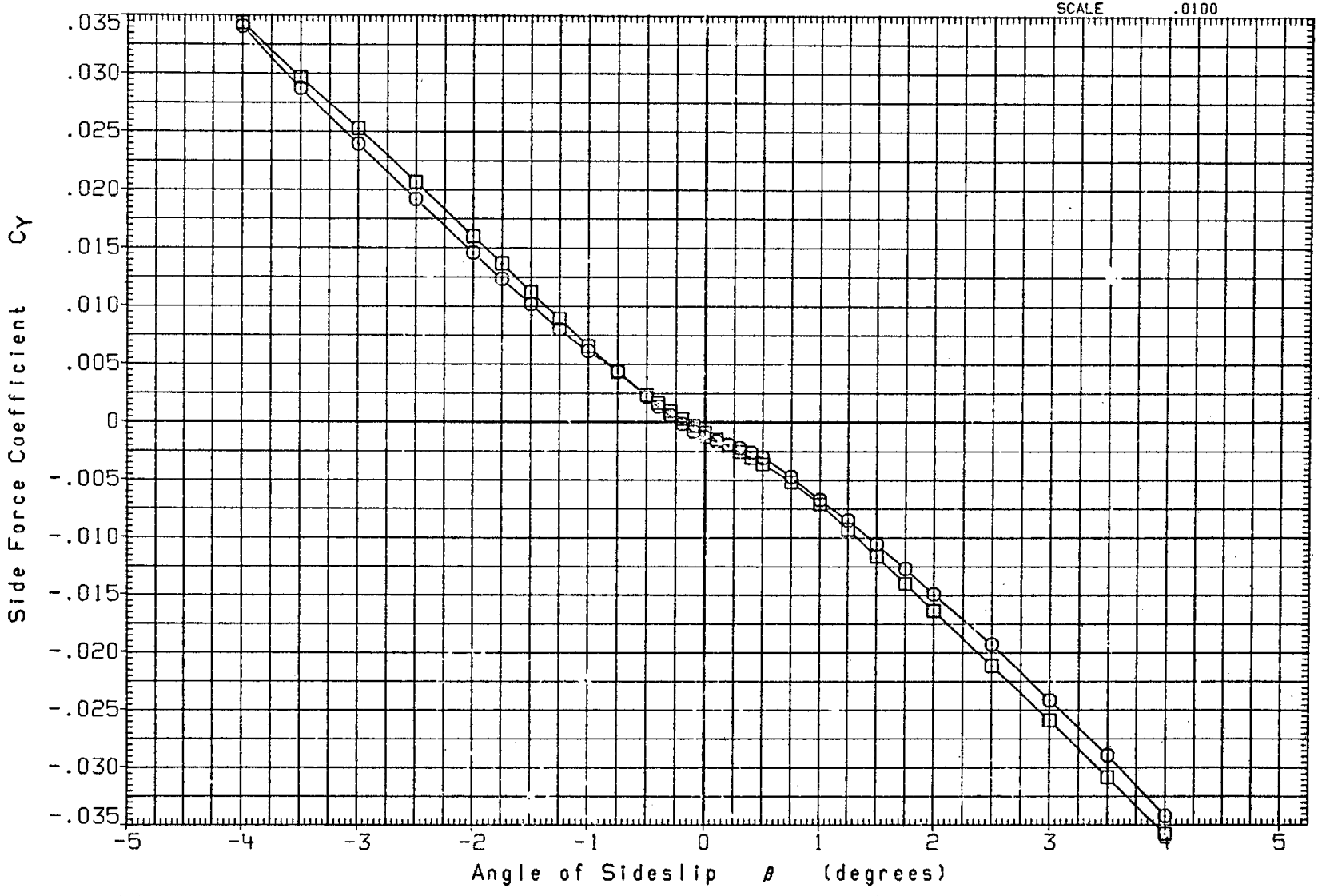


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(I) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3061 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.025	CONFIG	5.000	SPDBRK	87.200
□	4.403	ALPHA	22.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

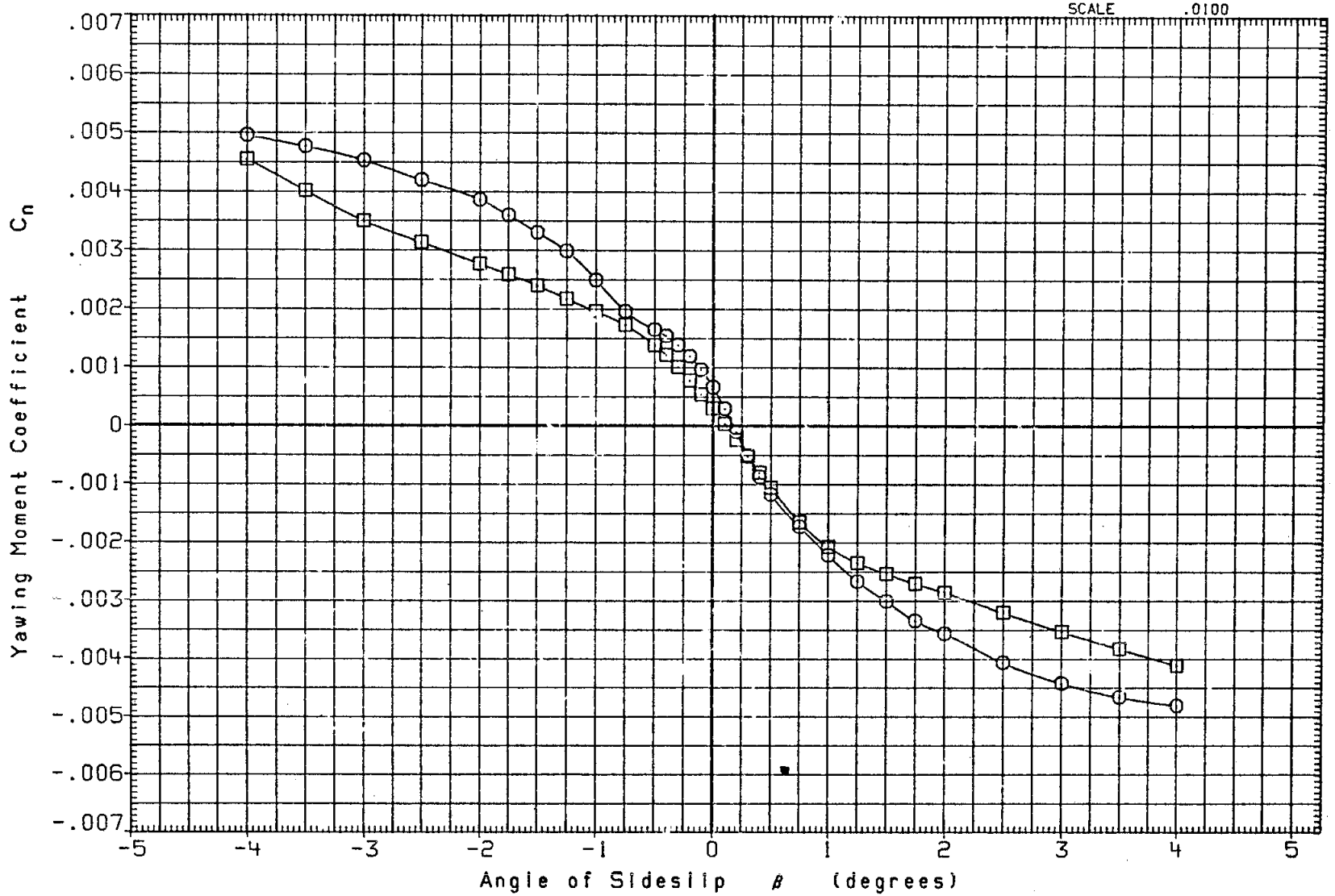


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(I) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3061 CONFIGURATION 0A259 (AEDC V41B-14) CV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.025	CONFIG	5.000	SPDBRK	87.200
□	4.403	ALPHA	22.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

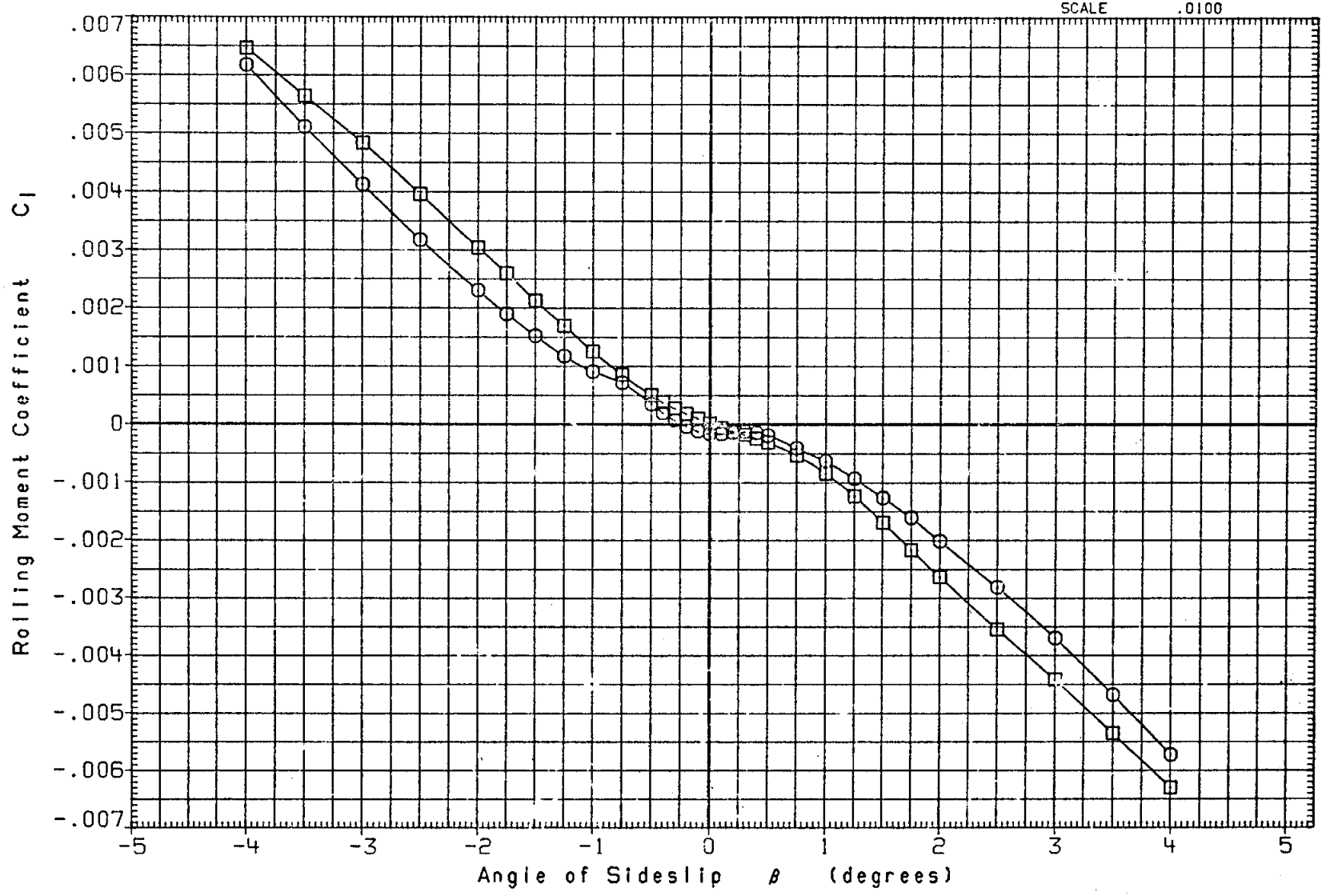


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(I) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3061 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.025
□	4.403

PARAMETRIC VALUES

CONFIG	5.000	SPDBRK	87.200
ALPHA	22.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFFRENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

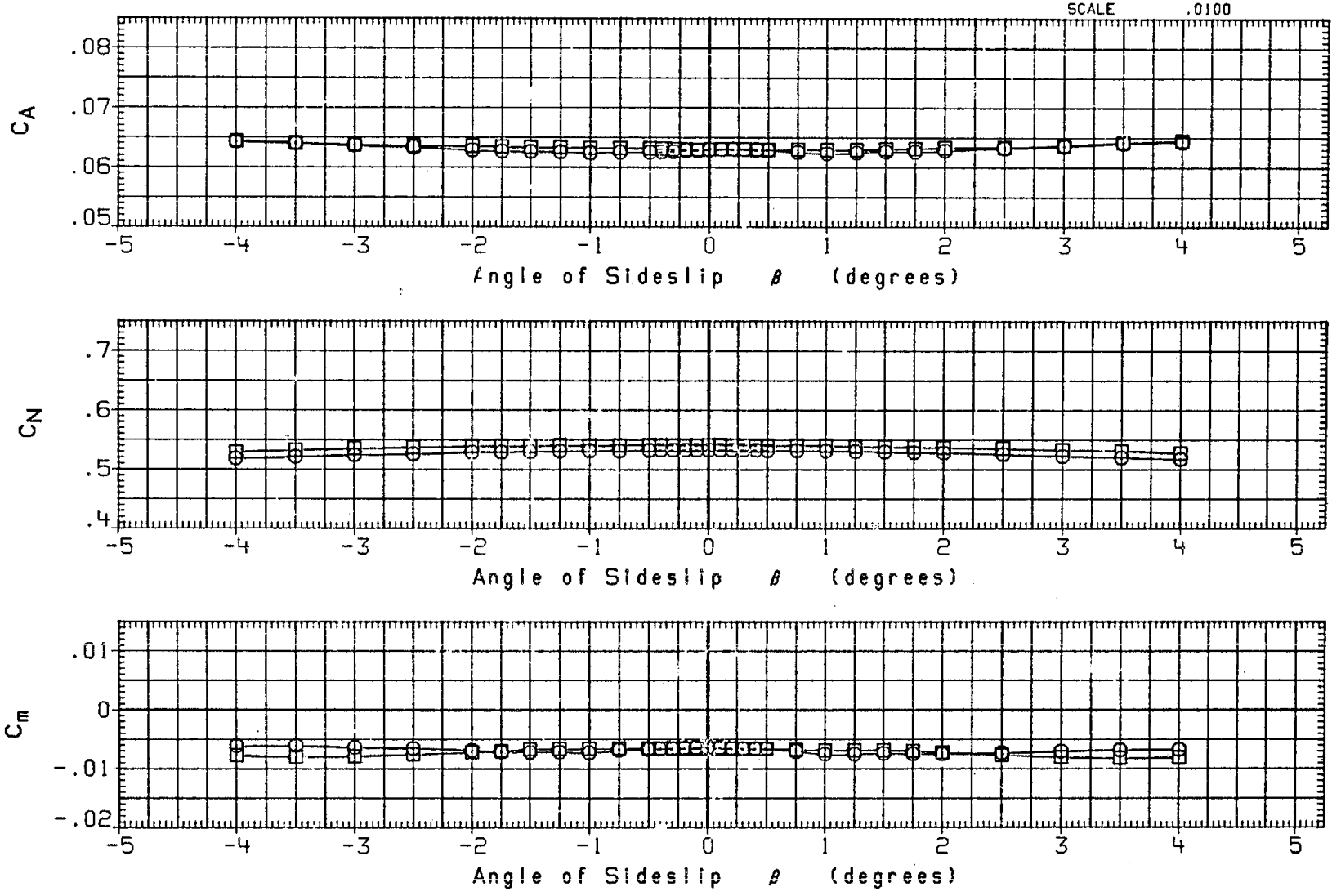


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(I) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3062 CONFIGURATION OA259 (AEDC V41B-141 OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.031	CONFIG	5.000	SPDBRK	87.200
□	4.406	ALPHA	25.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

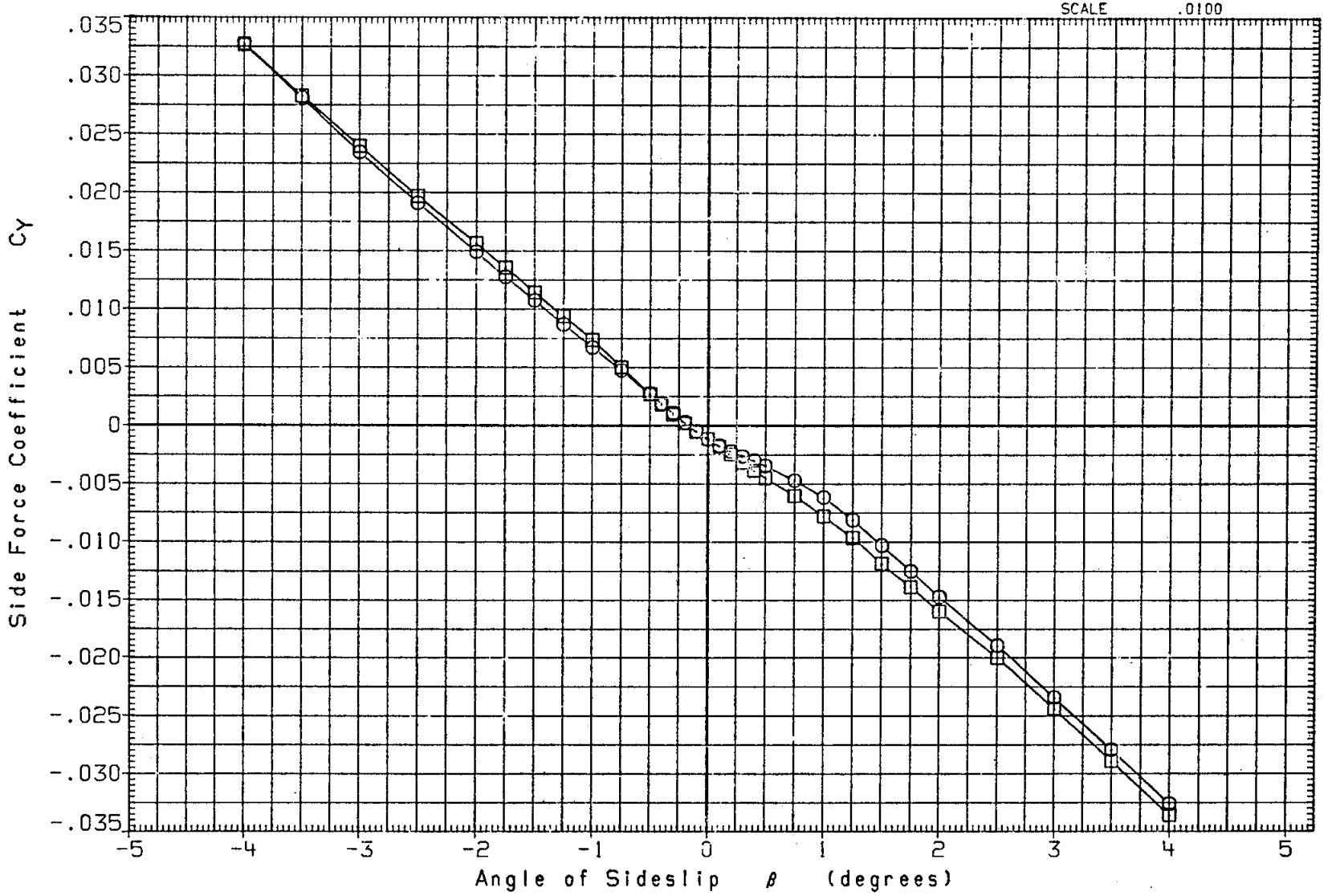


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(J) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3062 CONFIGURATION 0A259 (AEDC V41B-14) 07102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.031	CONFIG	5.000	SPDBRK	87.200
□	4.406	ALPHA	25.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

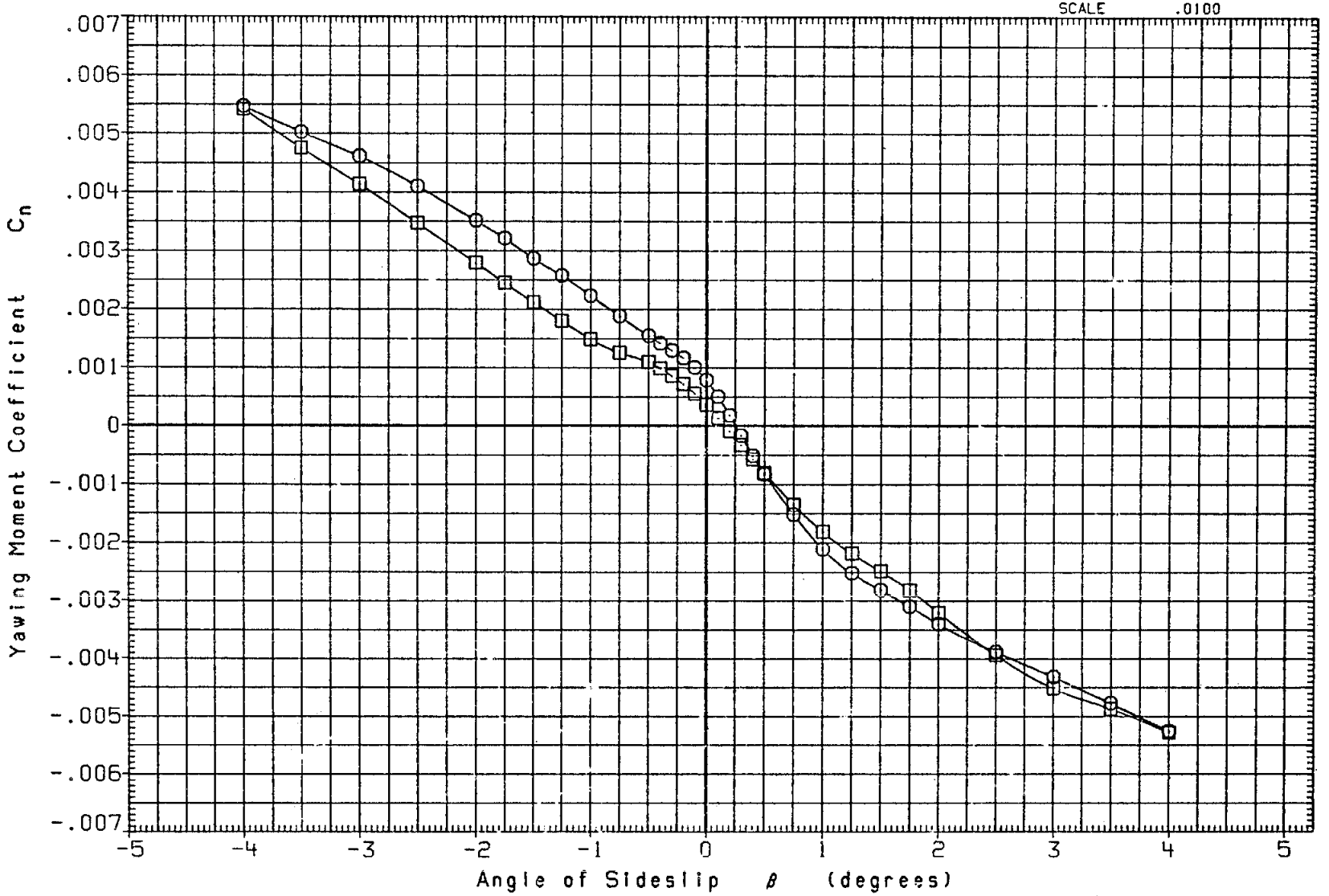


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(J) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3062 CONFIGURATION 0A259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.031	CONFIG	5.000	SPDBRK	87.200
□	4.406	ALPHA	25.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

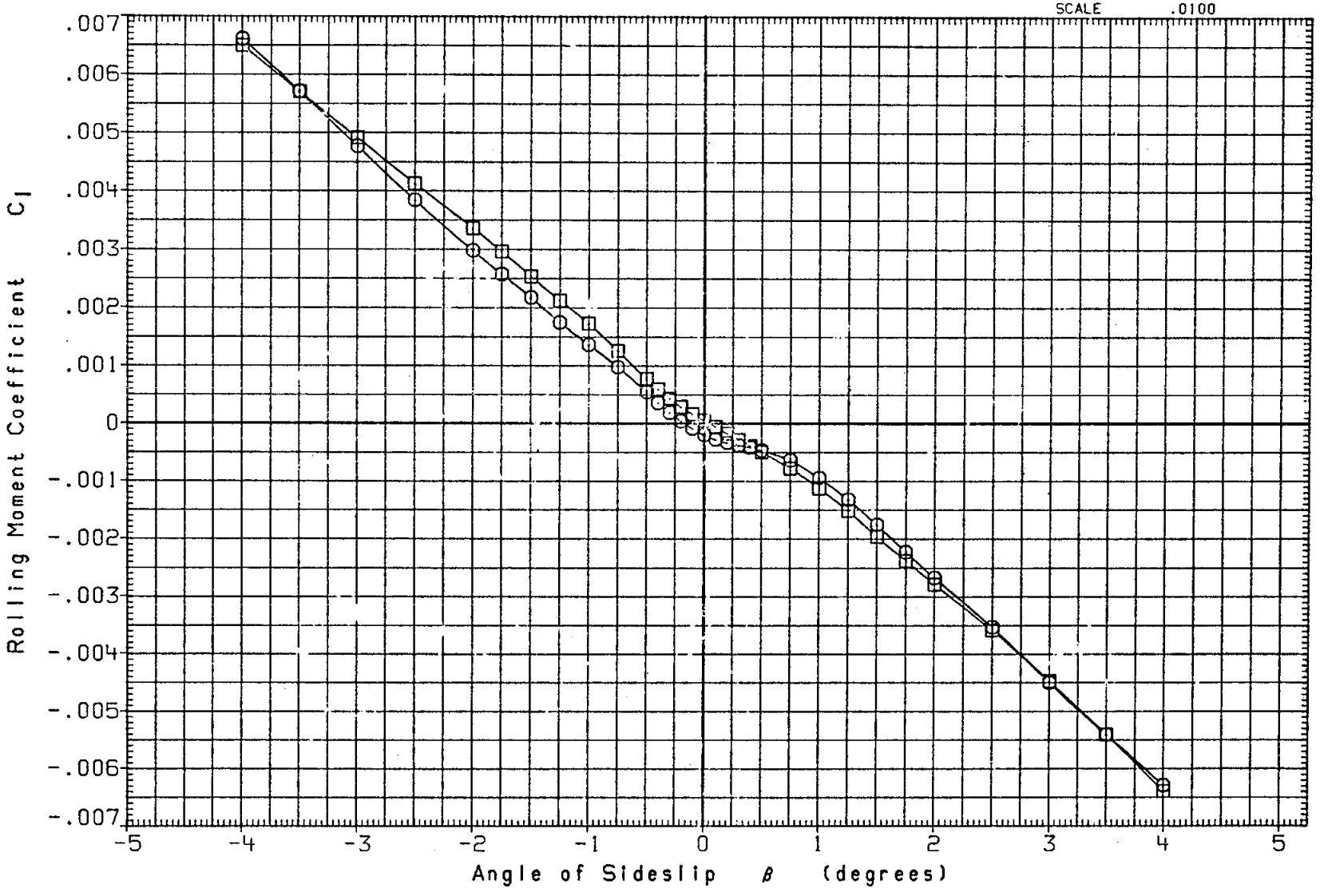


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(J) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3062 CONFIGURATION 0A259 [AEDC V41B-141 OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.031	CONFIG	5.000	SPDBRK	87.200
□	4.406	ALPHA	25.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

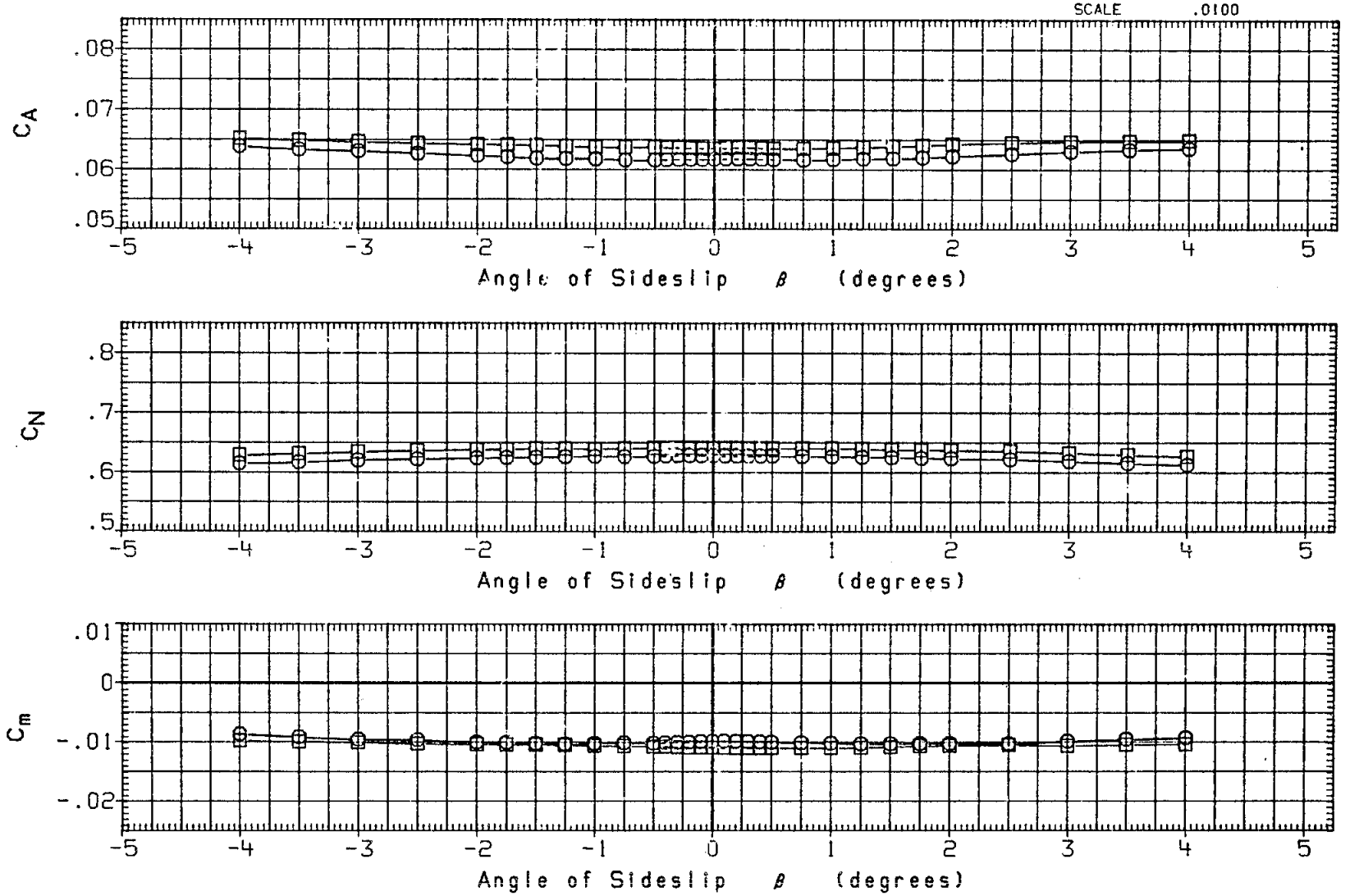


FIG. 4 REYNOLDS NUMBER EFFECT IN YAW PLANE, STING B
(J) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION
DATE 02 MAR 81

RT3063 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.033	CONFIG	5.000	MACH	6.000
□	4.373	ALPHA	.000	SPDBRK	87.200
		BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

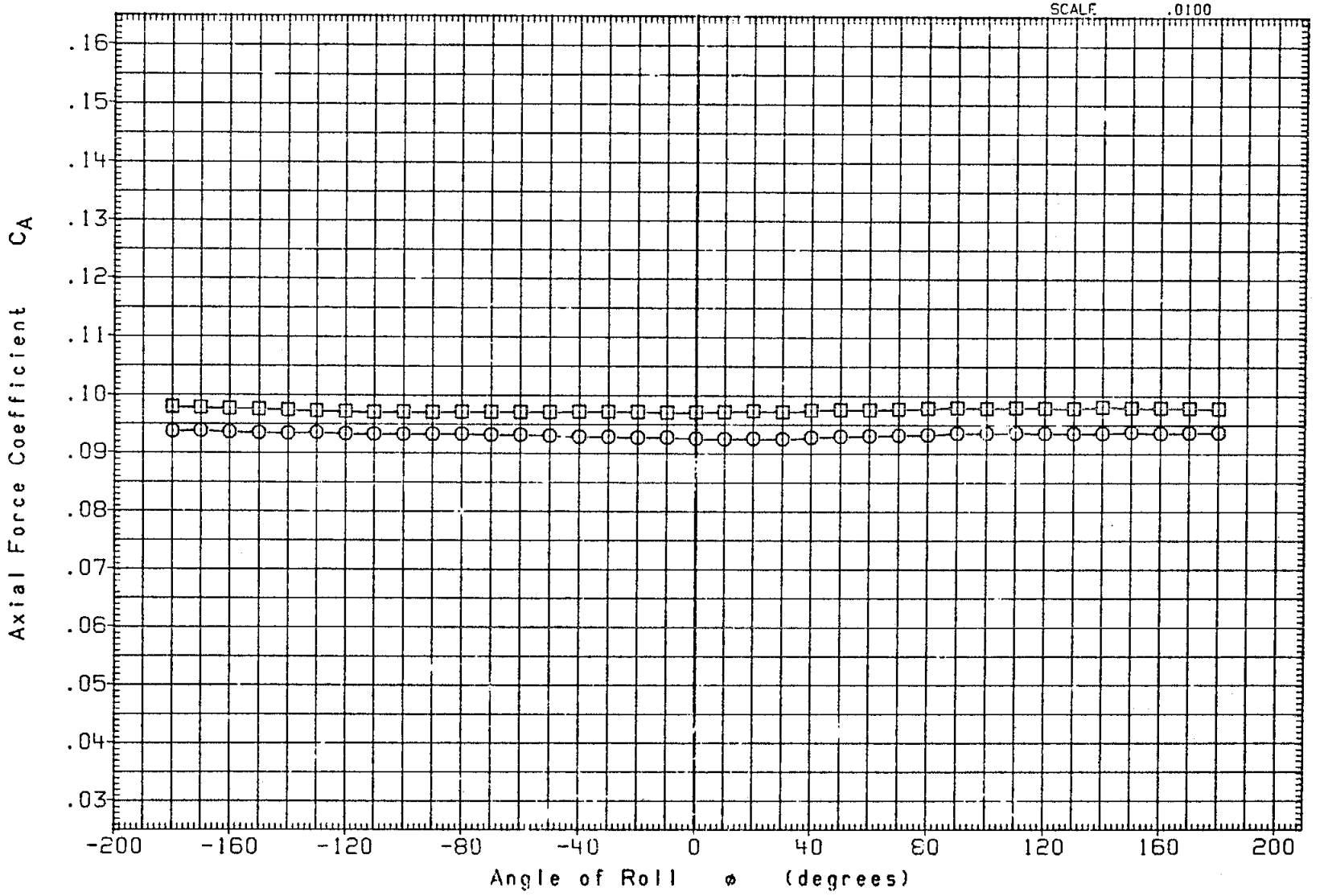


FIG. 5 REYNOLDS NUMBER EFFECT IN ROLL, STING B
BASELINE CONFIGURATION

DATE 02 MAR 81

RT3063 CONFIGURATION 0A259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.033	CONFIG	5.000	MACH	6.000
□	4.373	ALPHA	.000	SPDBRK	87.200
		BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

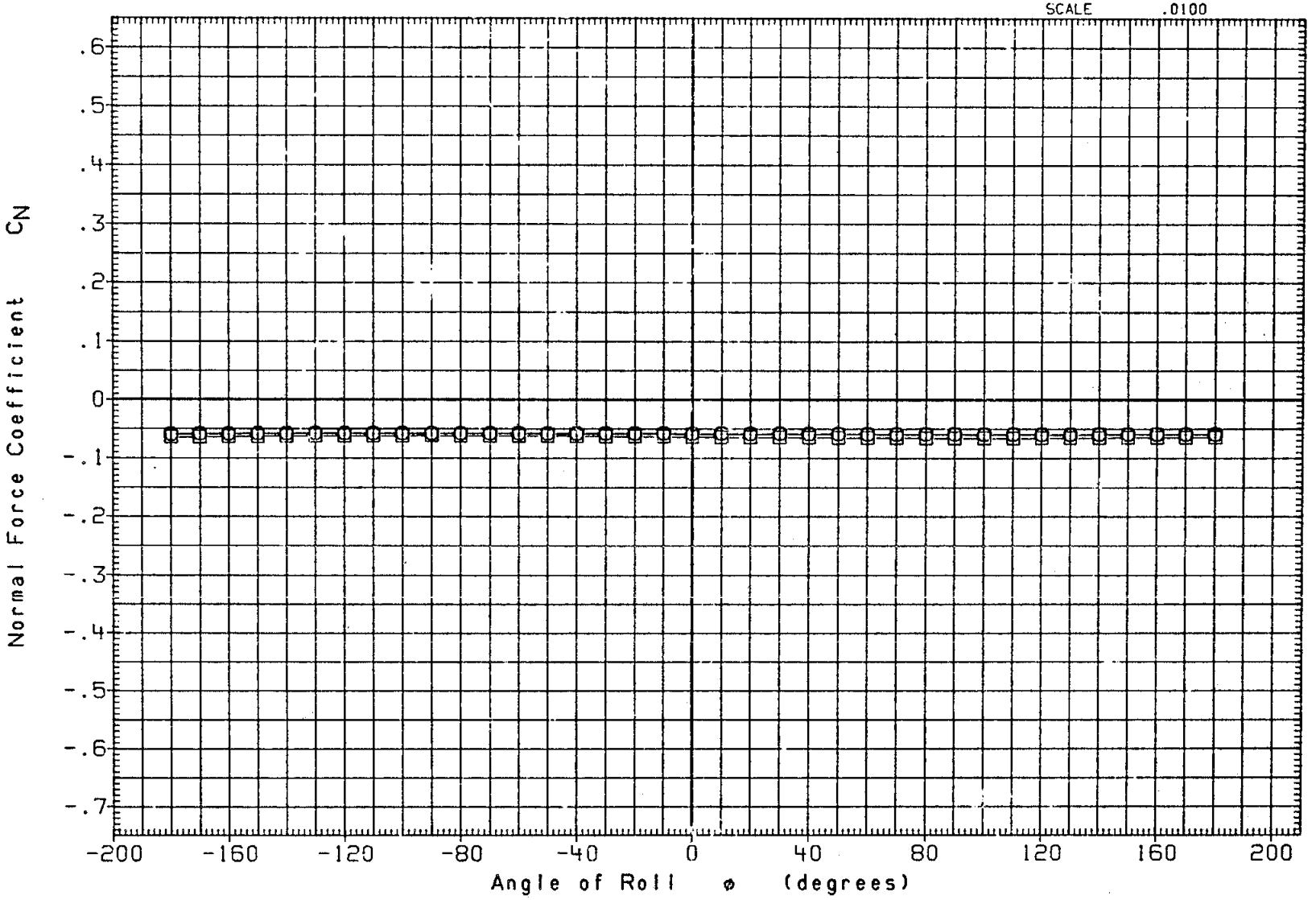


FIG. 5 REYNOLDS NUMBER EFFECT IN ROLL, STING B BASELINE CONFIGURATION

DATE 02 MAR 81

RT3063 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.033	CONFIG	5.000	MACH	6.000
□	4.373	ALPHA	.000	SPDBRK	87.200
		BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

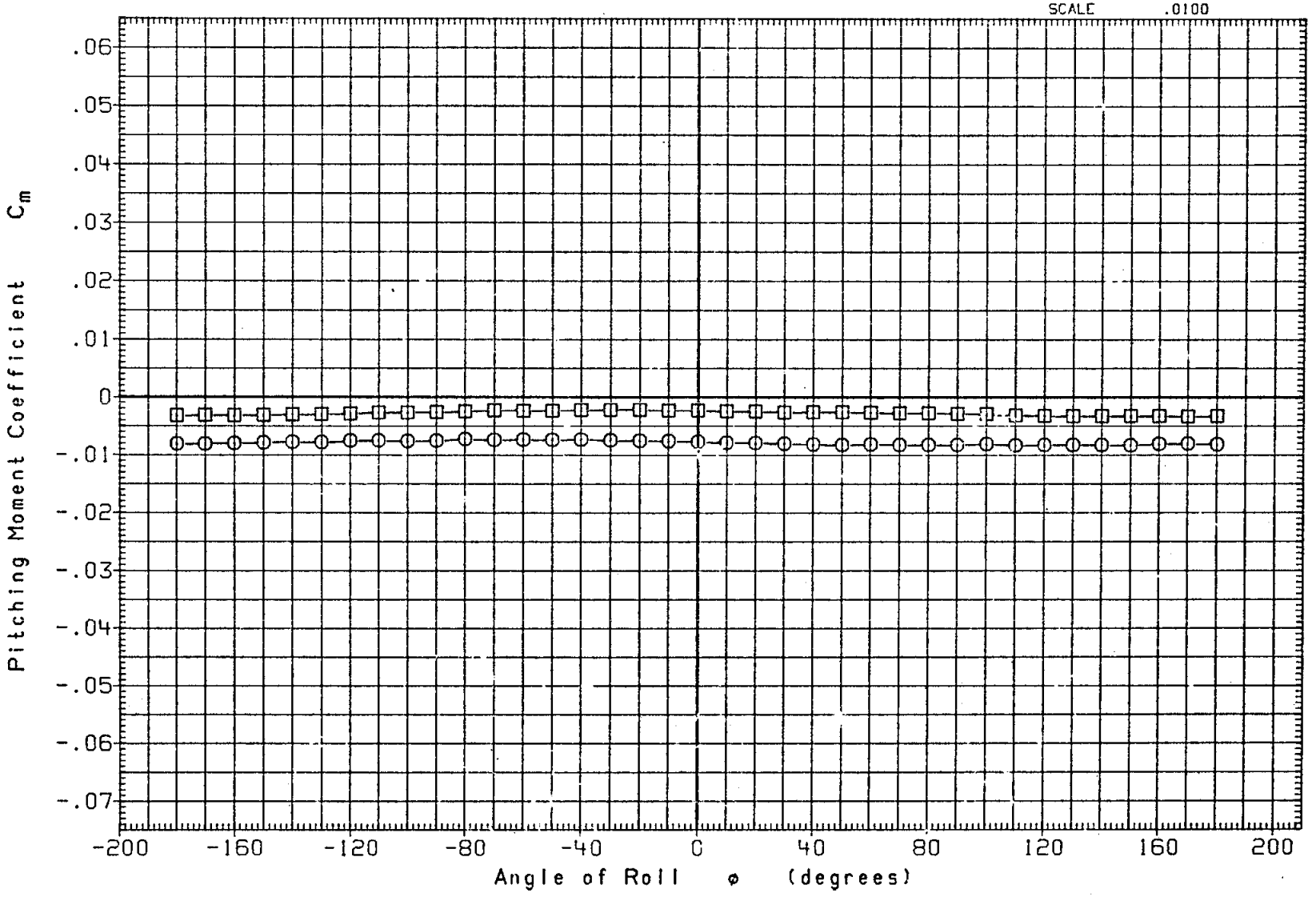


FIG. 5 REYNOLDS NUMBER EFFECT IN ROLL, STING B BASELINE CONFIGURATION

DATE 02 MAR 81

RT3063 CONFIGURATION OA259 [AEDC V41B-141 OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.033	CONFIG	5.000	MACH	6.000
□	4.373	ALPHA	.000	SPDBRK	87.200
		BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

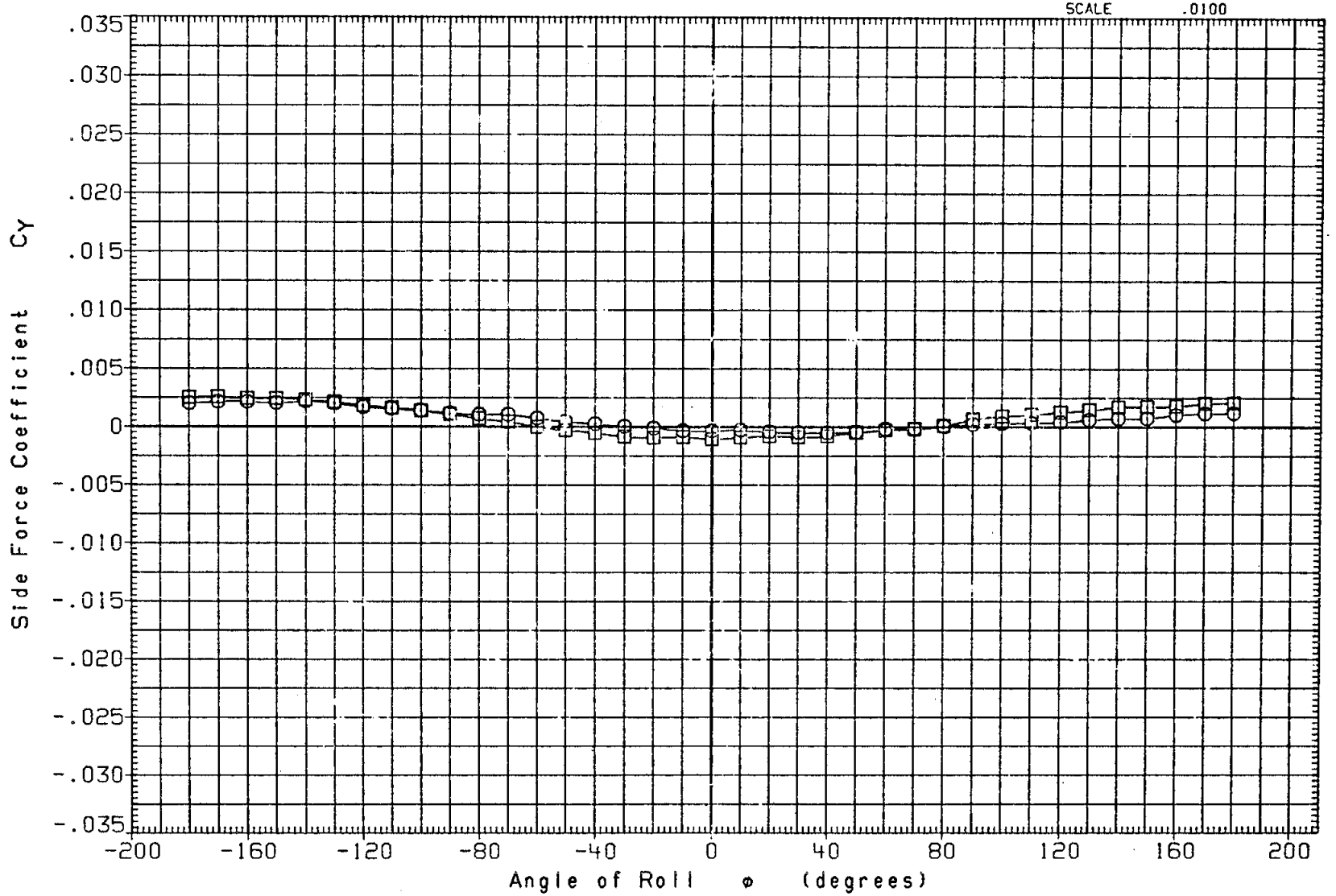


FIG. 5 REYNOLDS NUMBER EFFECT IN ROLL, STING B BASELINE CONFIGURATION

DATE 02 MAR 81

PT3063 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.033	CONFIG	5.000	MACH	6.000
□	4.373	ALPHA	.000	SPDBRK	87.200
		BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

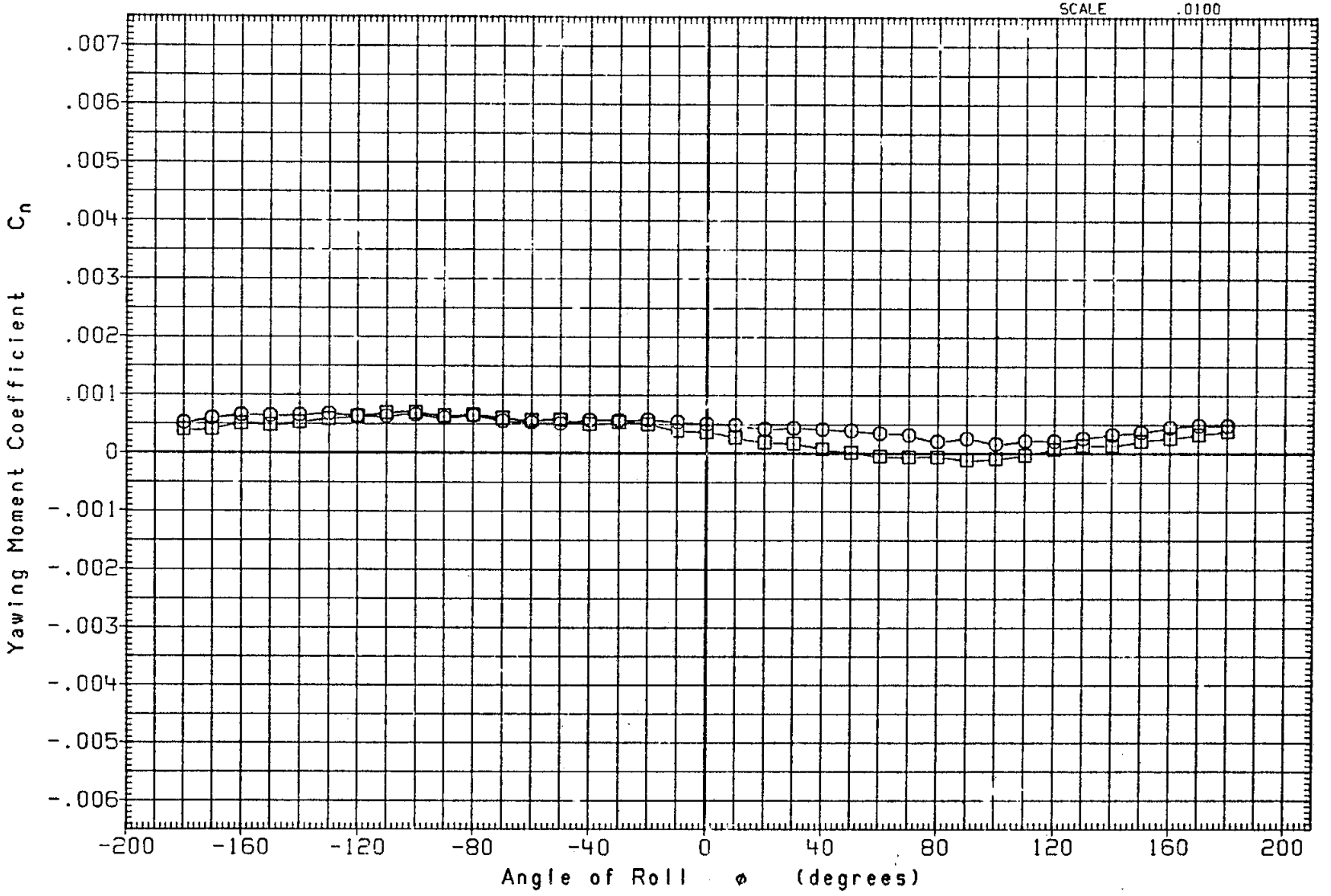


FIG. 5 REYNOLDS NUMBER EFFECT IN ROLL, STING B BASELINE CONFIGURATION

DATE 02 MAR 81

RT3063 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.033	CONFIG	5.000	MACH	6.000
□	4.373	ALPHA	.000	SPDBRK	87.200
		BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

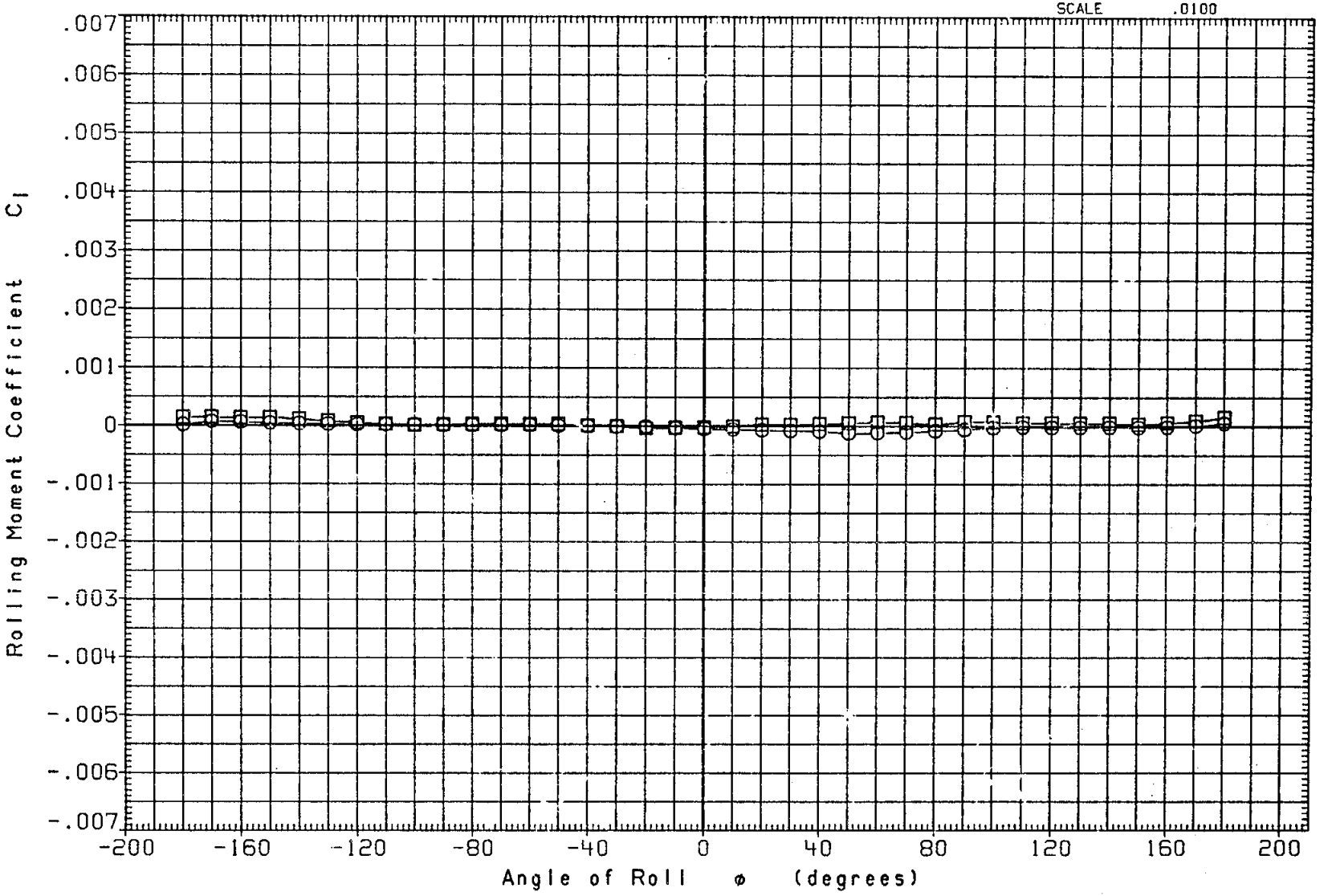


FIG. 5 REYNOLDS NUMBER EFFECT IN ROLL, STING B BASELINE CONFIGURATION

DATE 02 MAR 81

RT3064 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.020	CONFIG	5.000	MACH	6.000
□	4.378	ALPHA	.000	SPDBRK	87.200
		BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

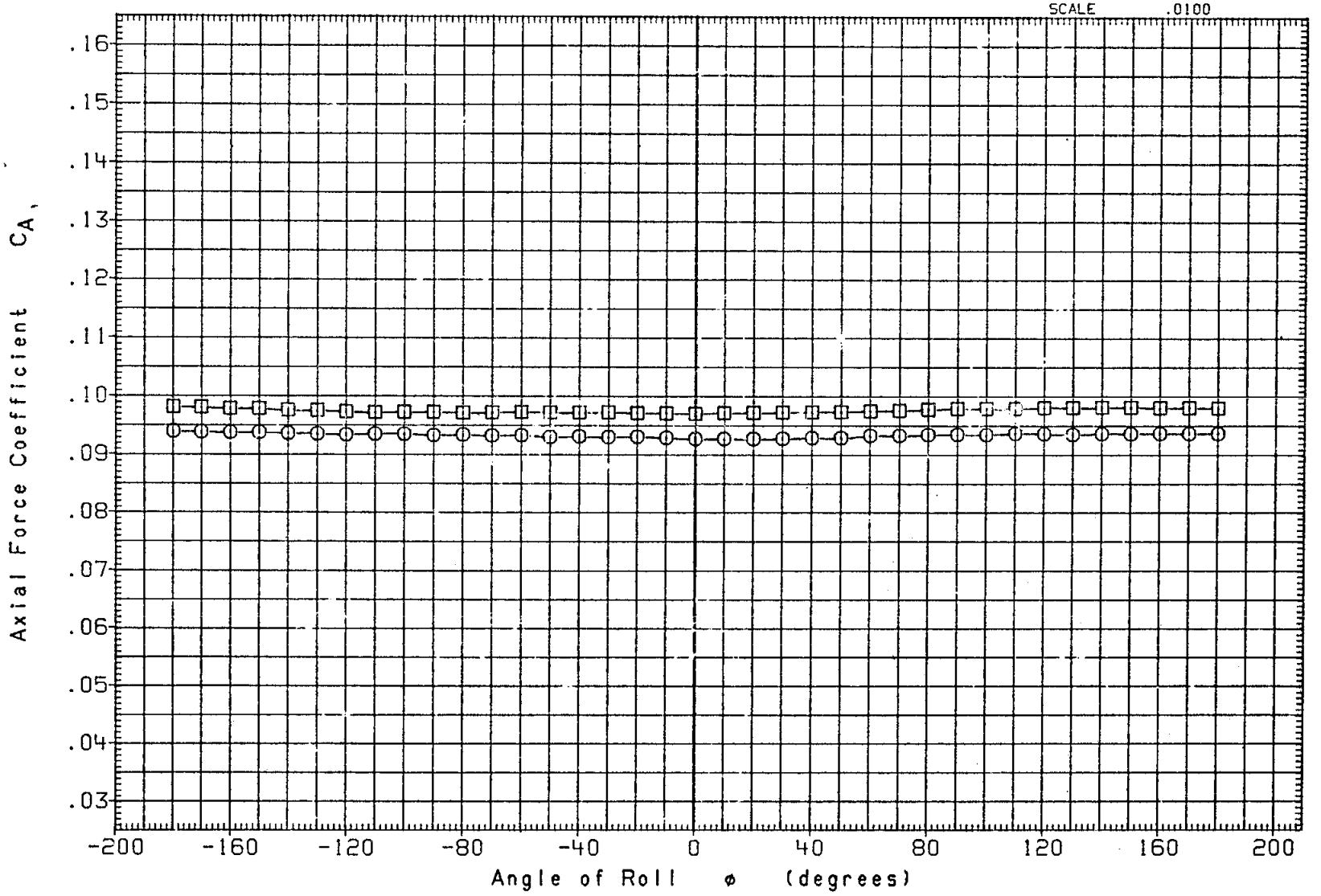


FIG. 5 REYNOLDS NUMBER EFFECT IN ROLL, STING B
BASELINE CONFIGURATION

DATE 02 MAR 81

RT3064 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.020
□	4.378

PARAMETRIC VALUES

CONFIG	5.000	MACH	6.000
ALPHA	.000	SPDBRK	97.200
BETA	.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

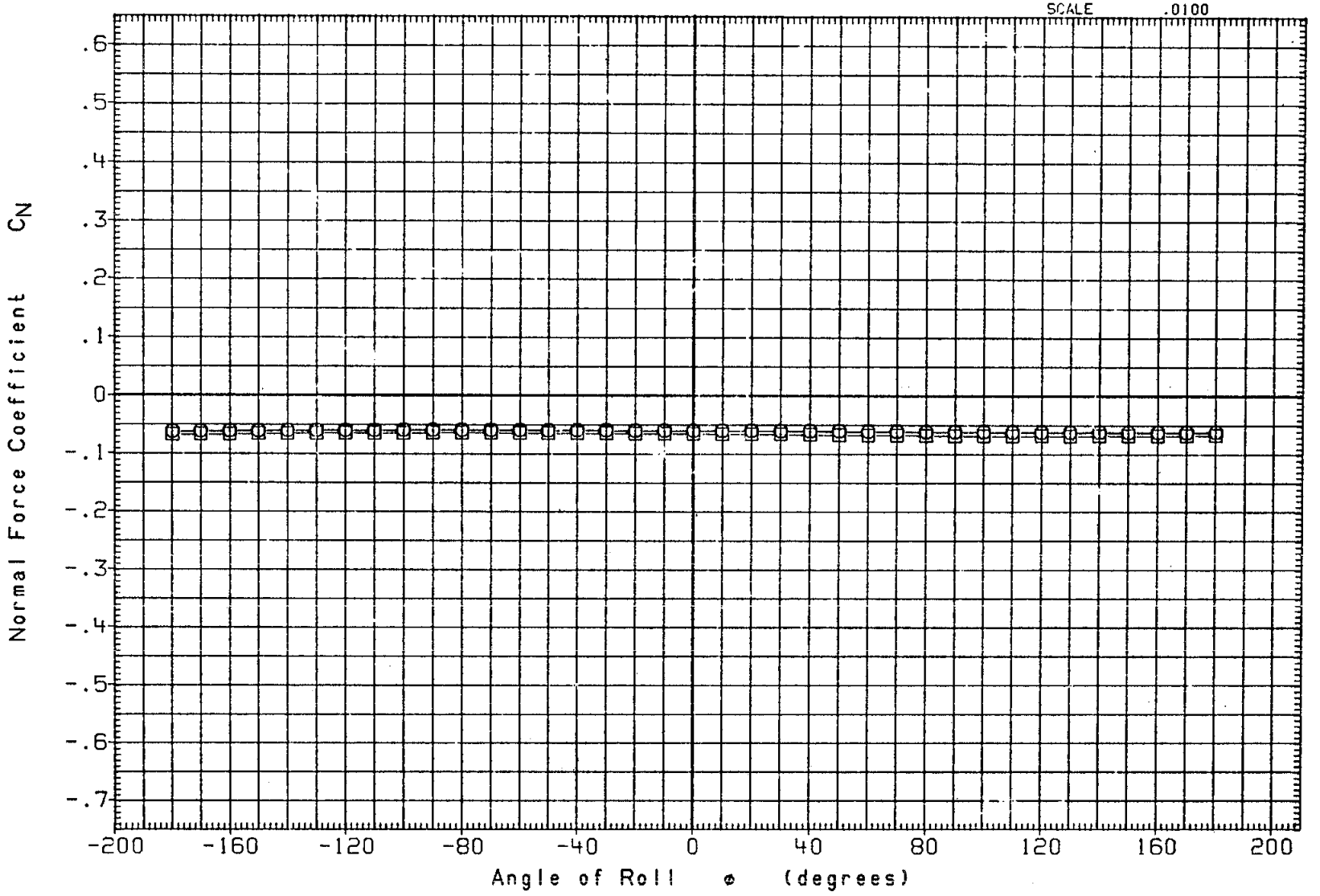


FIG. 5 REYNOLDS NUMBER EFFECT IN ROLL, STING B
BASELINE CONFIGURATION

DATE 02 MAR 81

RT3064 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.020
□	4.378

PARAMETRIC VALUES

CONFIG	5.000	MACH	6.000
ALPHA	.000	SPDBRK	87.200
BETA	.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMPP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

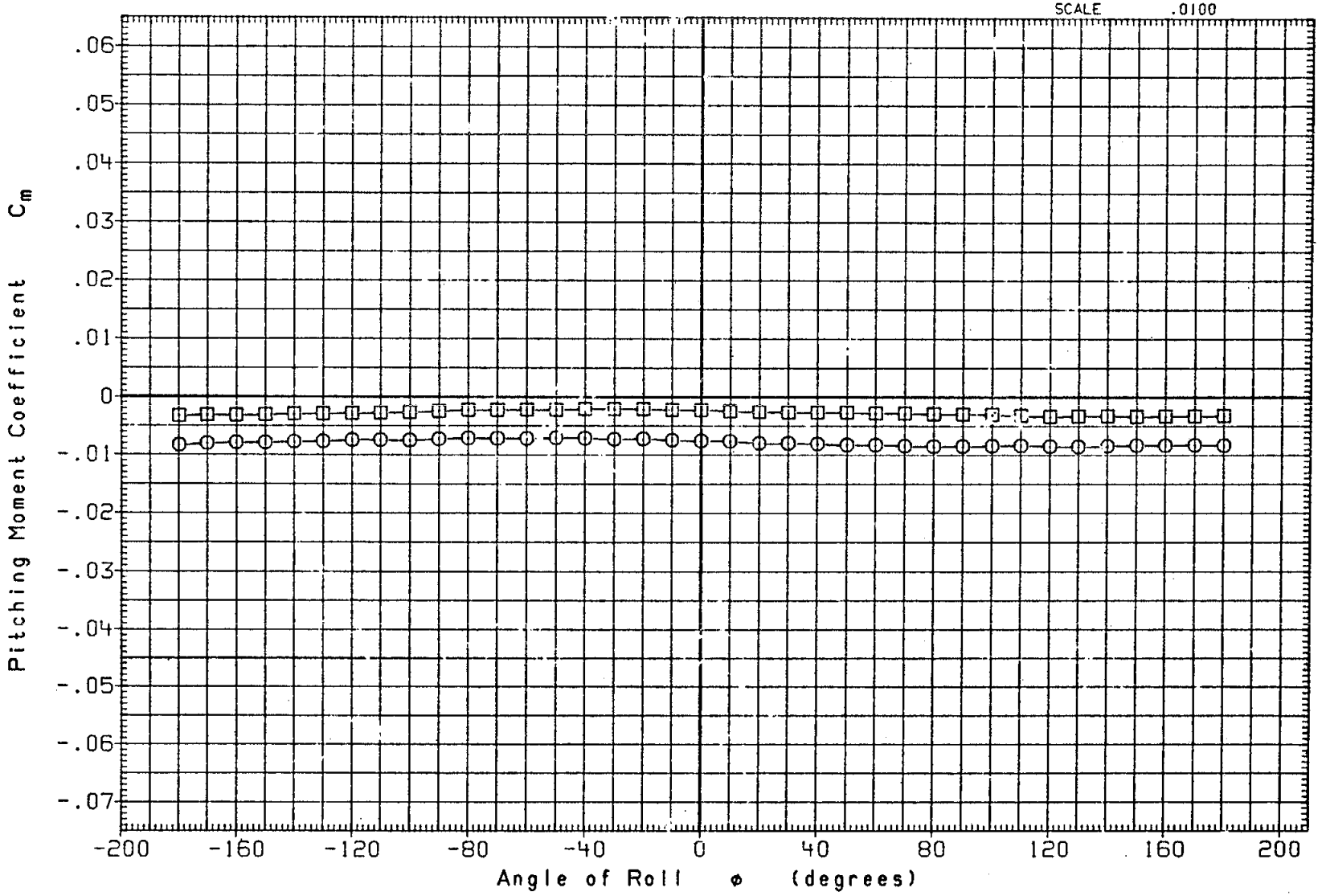


FIG. 5 REYNOLDS NUMBER EFFECT IN ROLL, STING B BASELINE CONFIGURATION

DATE 02 MAR 81

RT3064 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.020
□	4.378

PARAMETRIC VALUES

CONFIG	5.000	MACH	6.000
ALPHA	.000	SPDBRK	87.200
BETA	.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

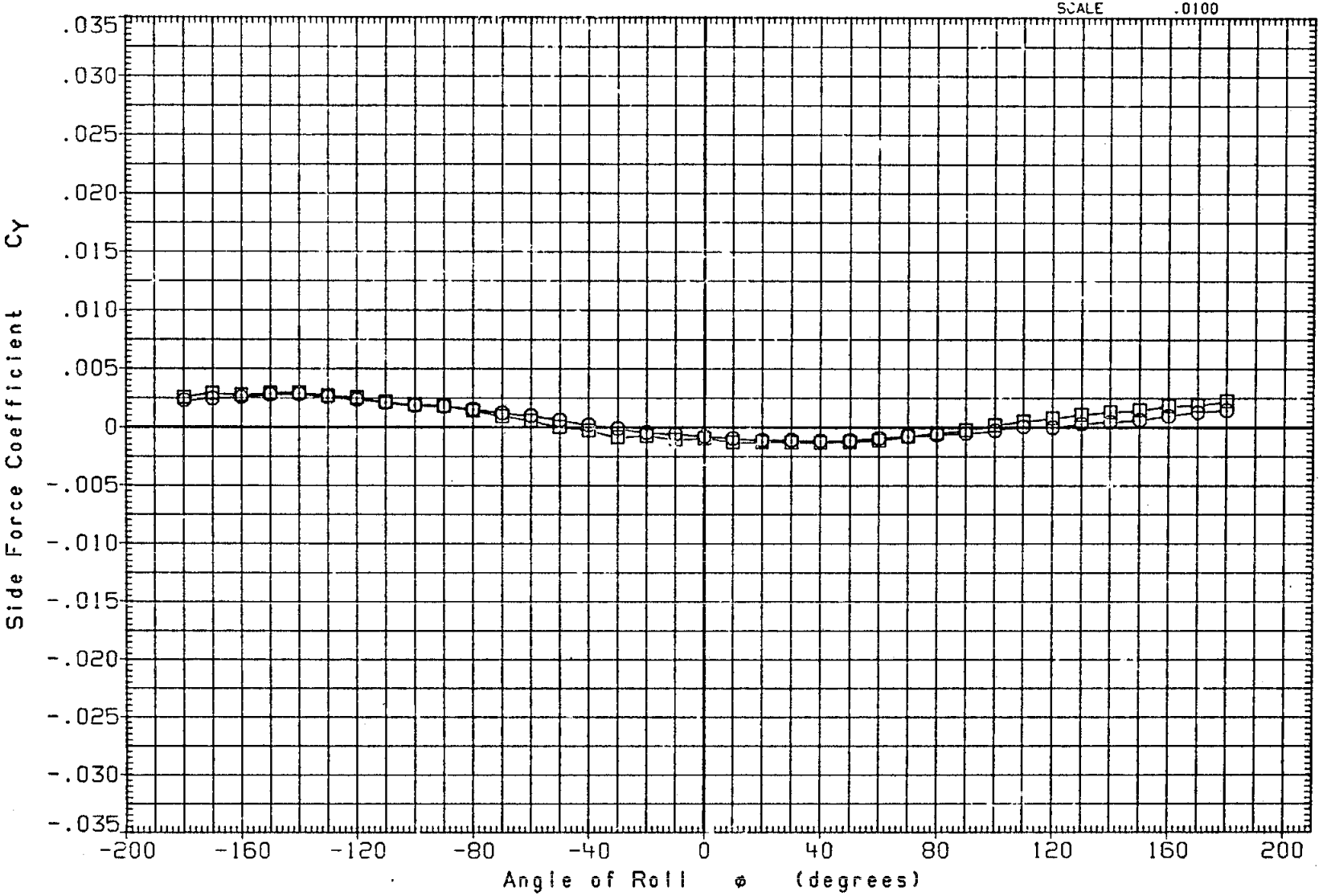


FIG. 5 REYNOLDS NUMBER EFFECT IN ROLL, STING B
BASELINE CONFIGURATION

DATE 02 MAR 81

RT3064 CONFIGURATION 0A259 (AEDC V41B-14) OV'02, STING B (UPRIGHT)

SYMBOL	RN/L
○	2.020
□	4.378

PARAMETRIC VALUES

CONFIG	5.000	MACH	6.000
ALPHA	.000	SPDBRK	87.200
BETA	.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

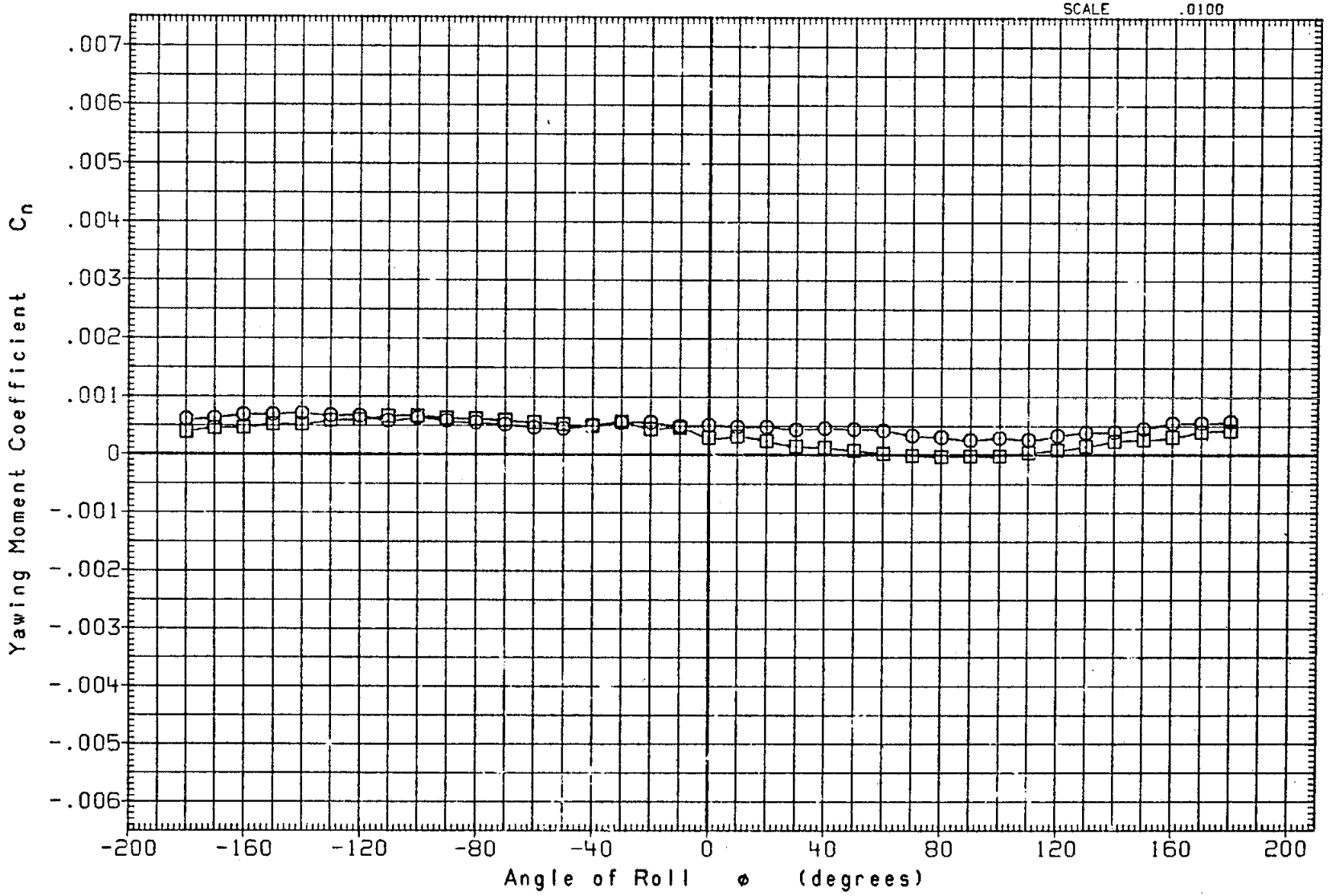


FIG. 5 REYNOLDS NUMBER EFFECT IN ROLL, STING B BASELINE CONFIGURATION

DATE 02 MAR 81

RT3064 CONFIGURATION 0A259 [AEDC V41B-14] OV102, STING B (UPRIGHT)

SYMBOL	RN/L	PARAMETRIC VALUES			
○	2.020	CONFIG	5.000	MACH	6.000
□	4.378	ALPHA	.000	SPDBRK	87.200
		BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

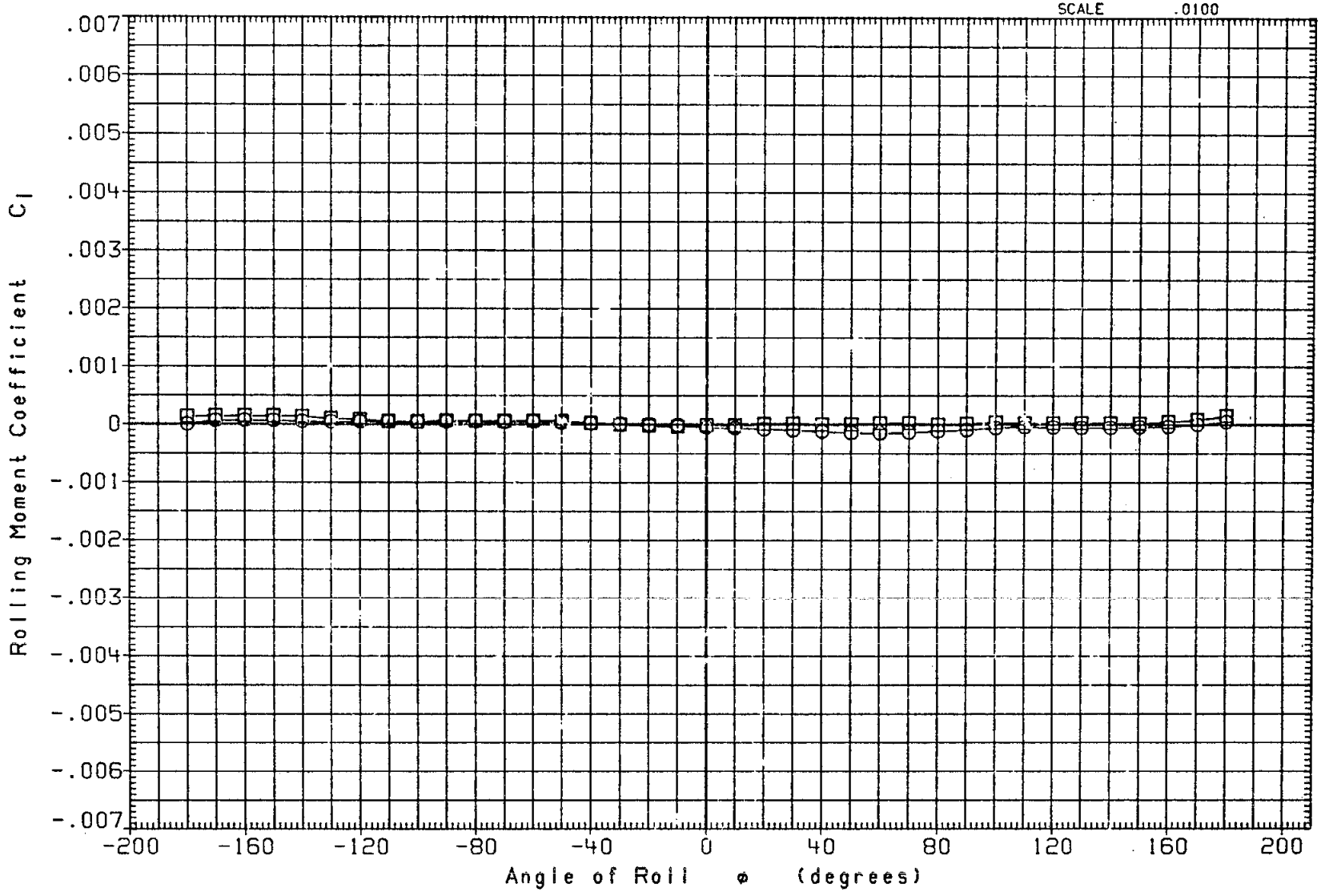


FIG. 5 REYNOLDS NUMBER EFFECT IN ROLL, STING B BASELINE CONFIGURATION

DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3005	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	15.000	INCRSE	CONTNU	2.000	6.000
RT3006	□	DATA NOT AVAILABLE	15.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

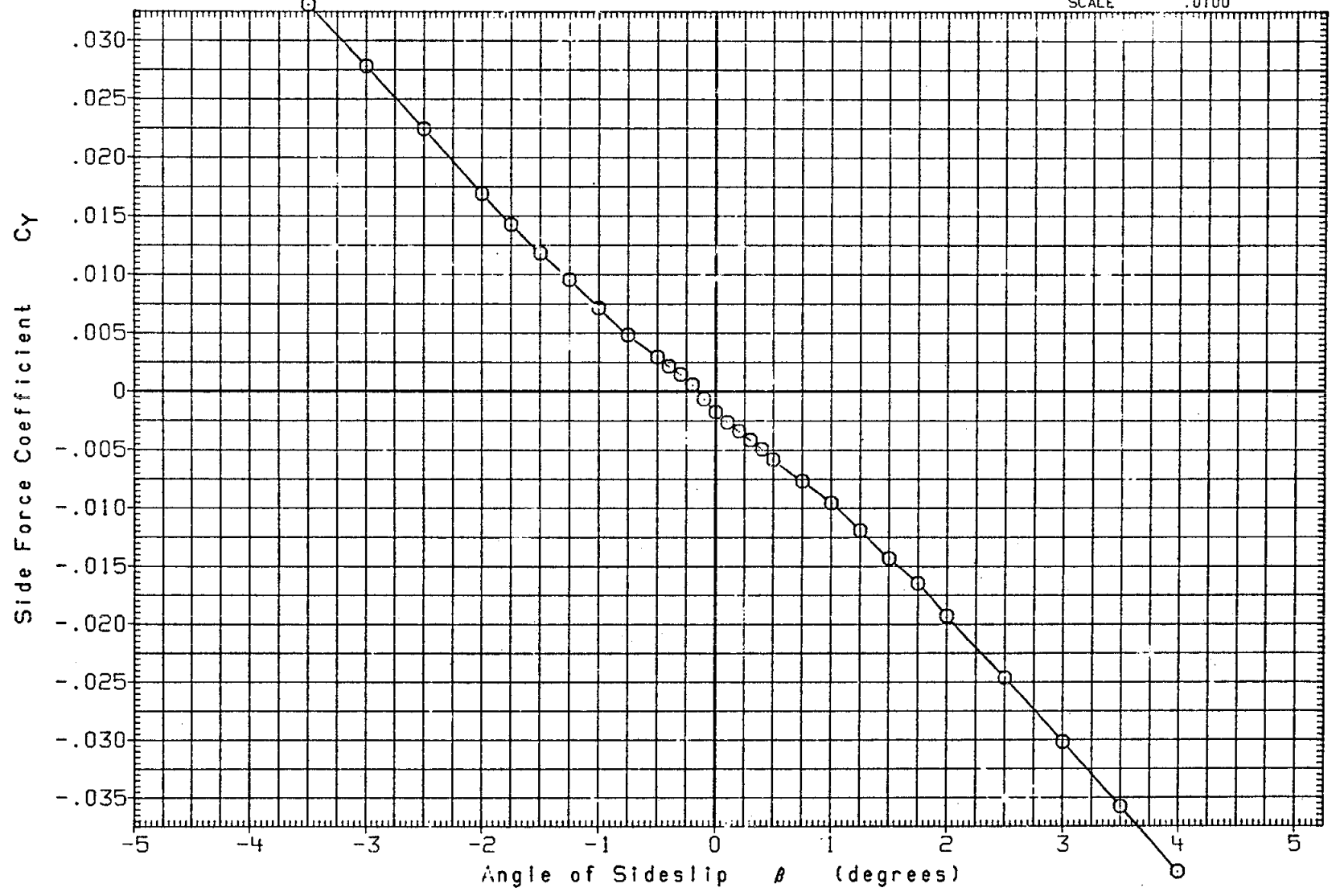


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(A) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3005	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	15.000	INCRSE	CONTNU	2.000	6.000
RT3006	□	DATA NOT AVAILABLE	15.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

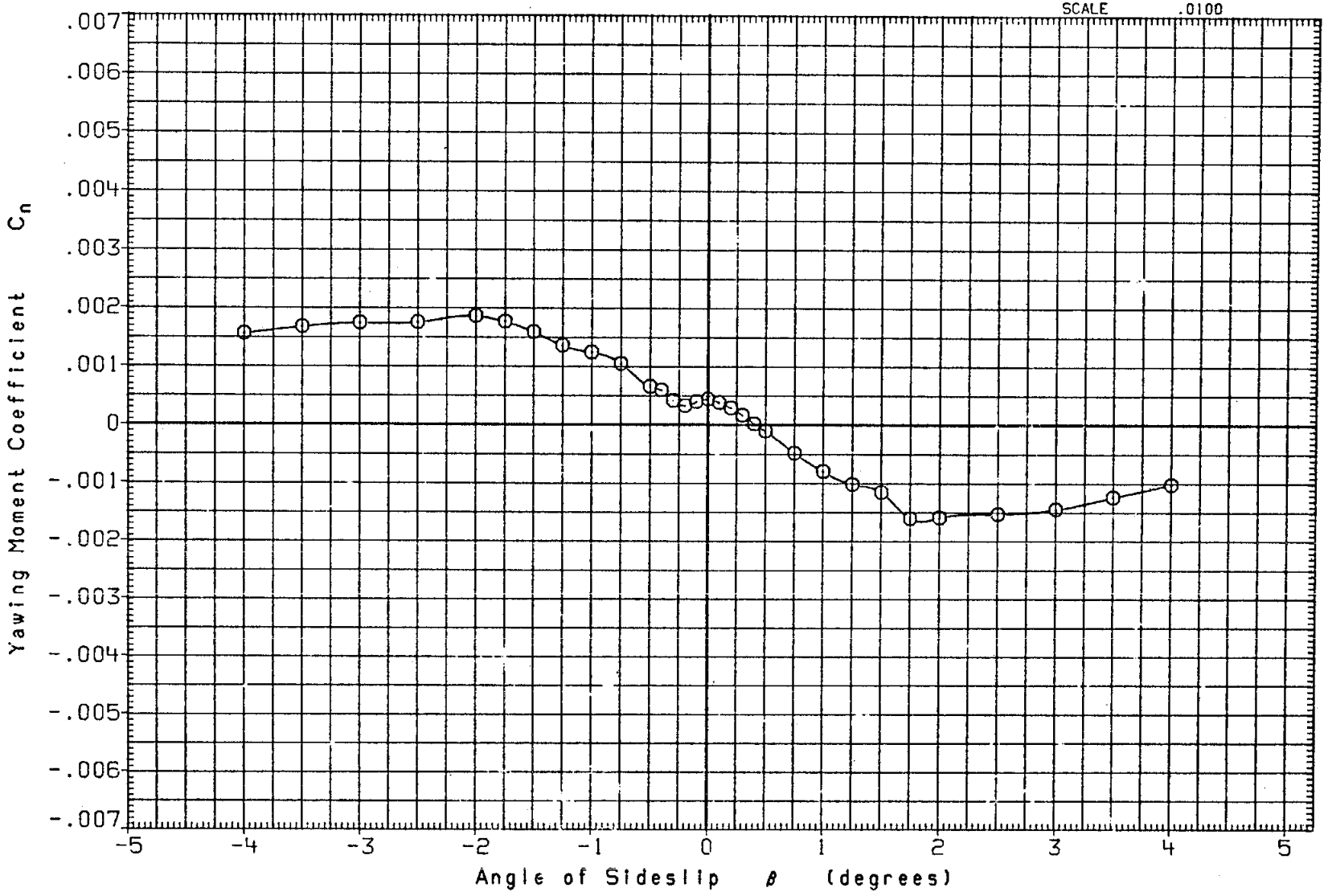


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(A) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3005	○	0A259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	15.000	INCRSE	CONTNU	2.000	6.000
RT3006	□	DATA NOT AVAILABLE	15.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

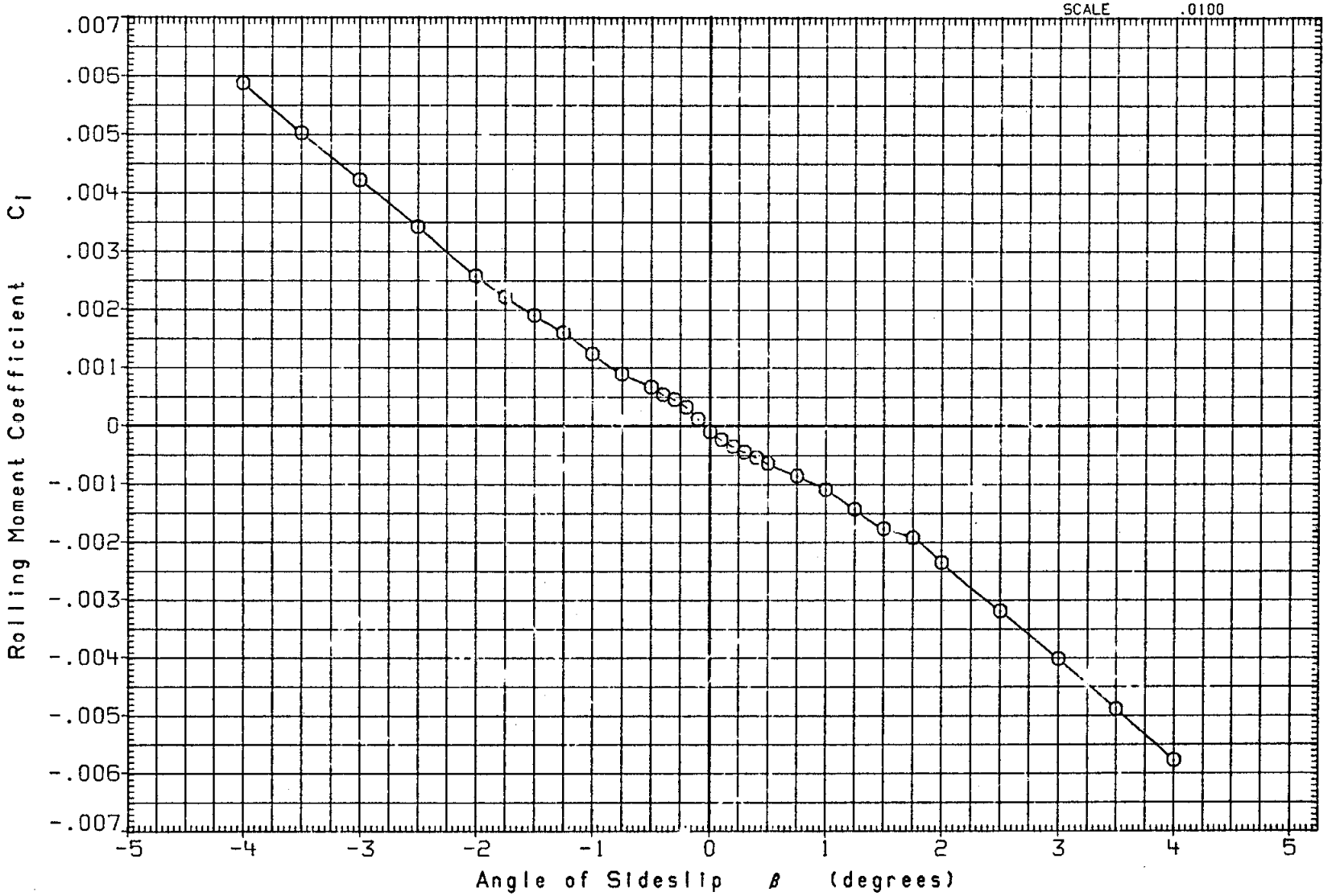


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(A) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3005	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	15.000	INCRSE	CONTNU	2.000	6.000
RT3006	□	DATA NOT AVAILABLE	15.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

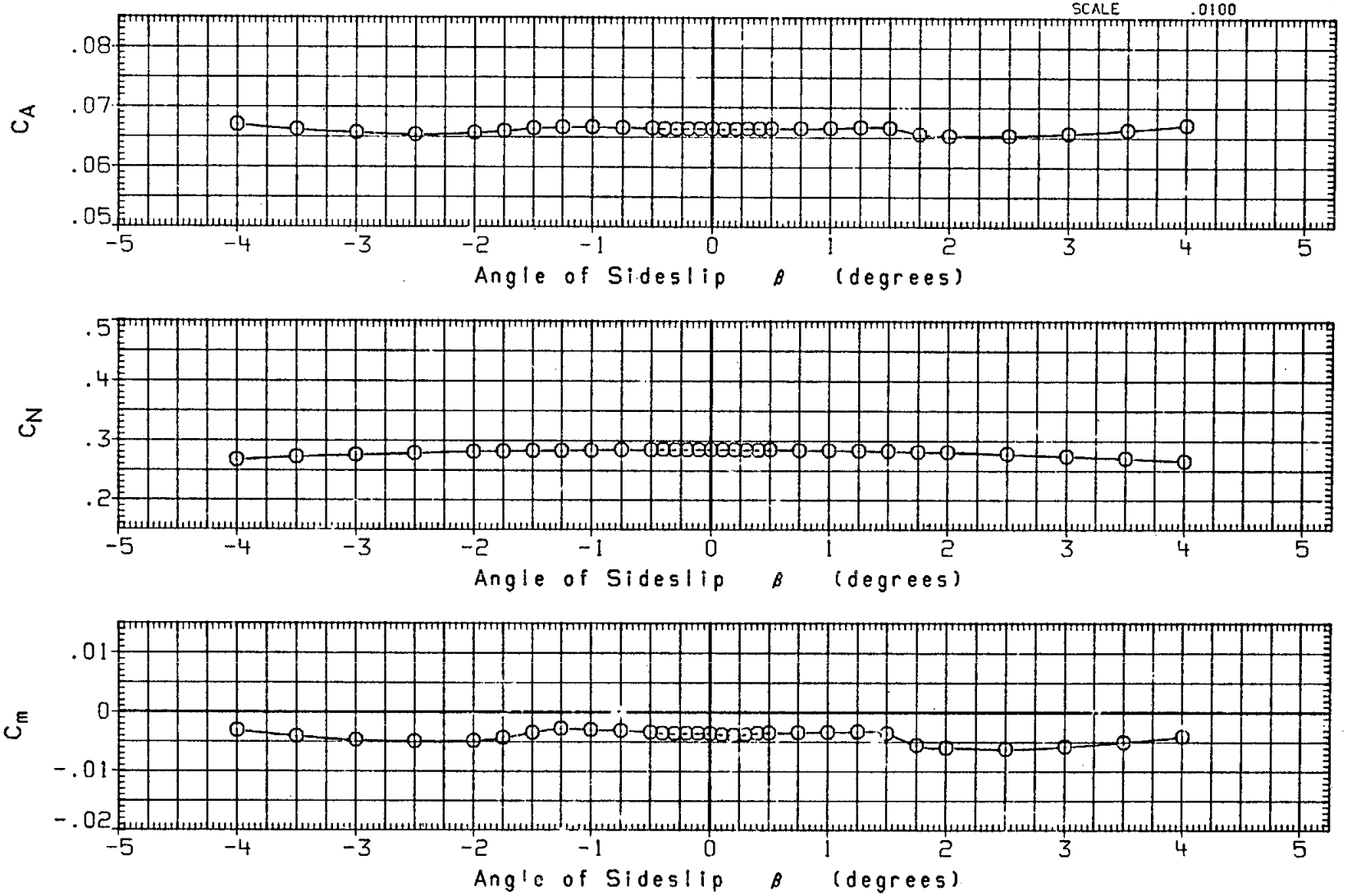


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(A) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3005	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	15.000	INCRSE	CONTNU	2.000	6.000
RT3006	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	15.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	935.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

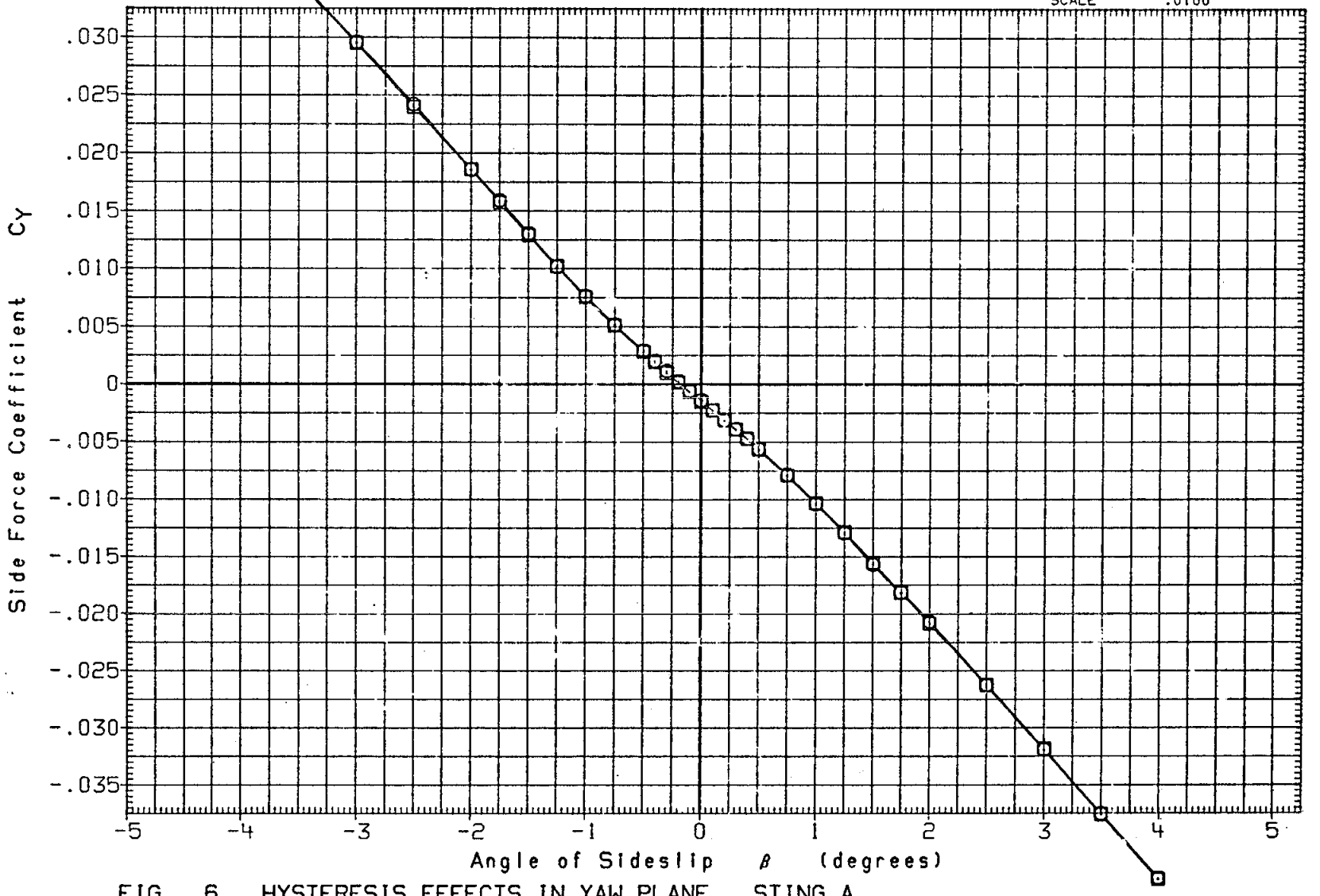


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(A) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.46 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3005	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	15.000	INCRSE	CONTNU	2.000	6.000
RT3006	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	15.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

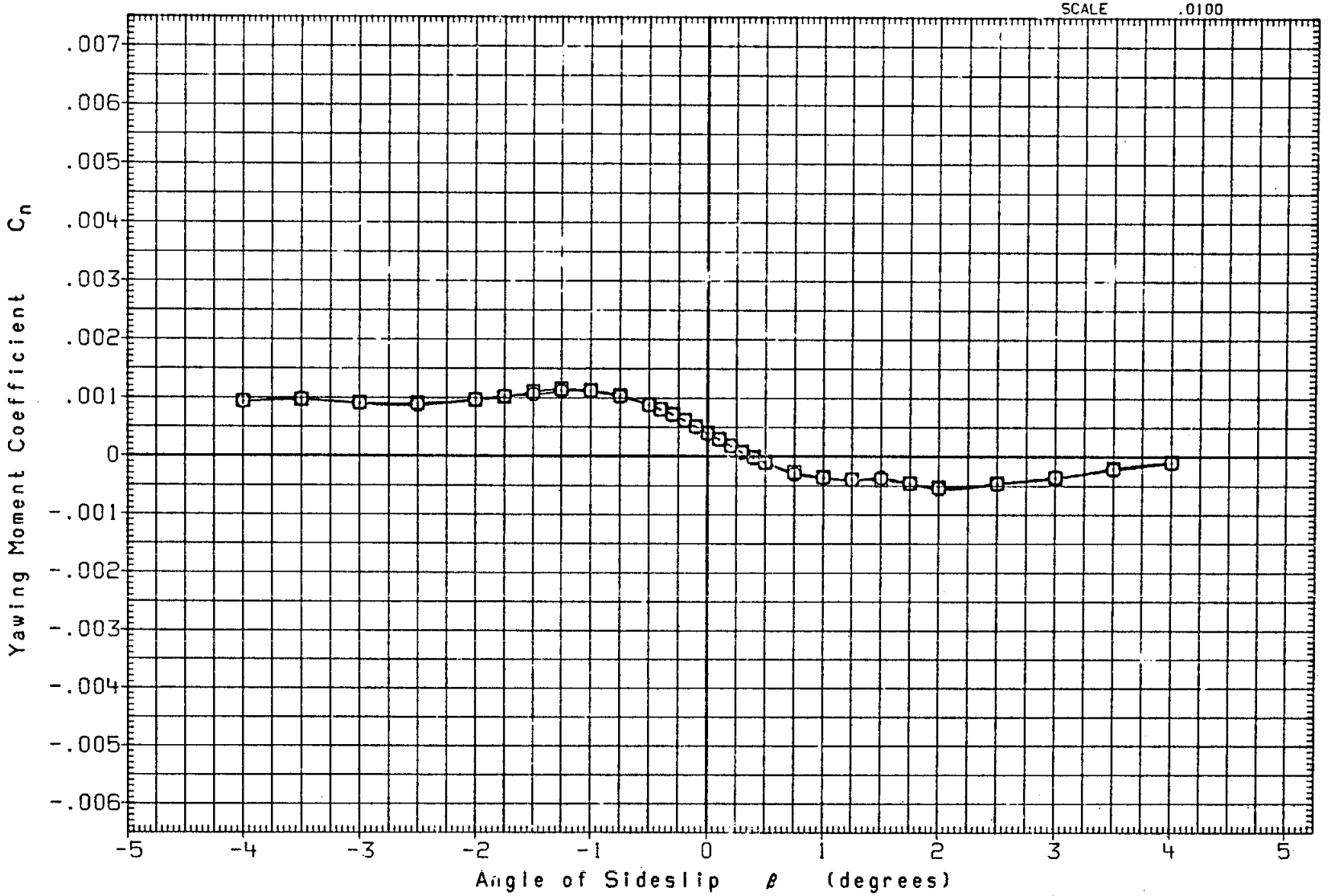


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(A) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.46 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3005	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	15.000	INCRSE	CONTNU	2.000	6.000
RT3006	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	15.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

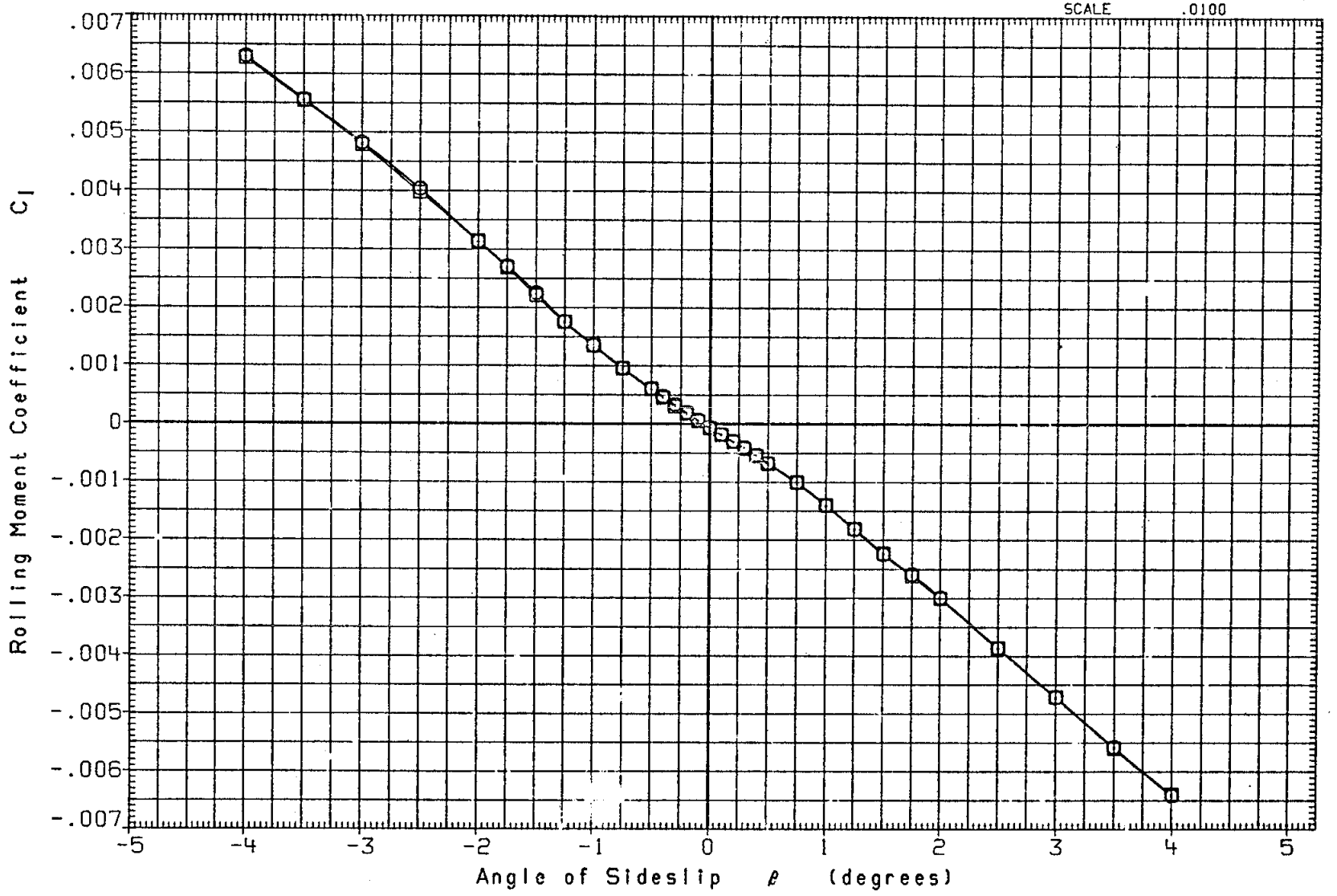


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(A) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.46 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3005	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	15.000	INCRSE	CONTNU	2.000	6.000
RT3006	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	15.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2530.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

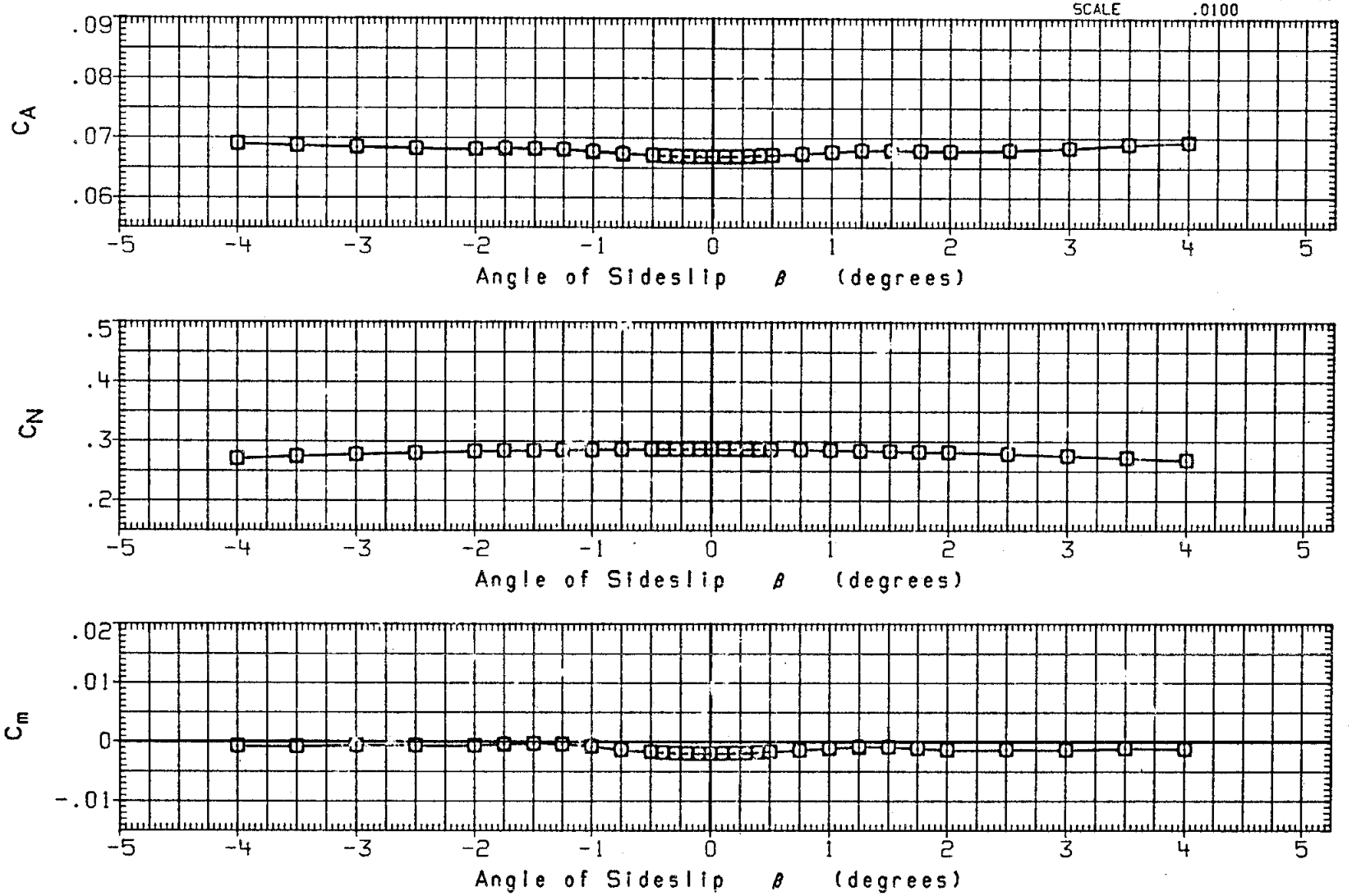


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(A) ALPHA = 15.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.46 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3007	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	17.500	INCRSE	CONTNU	2.000	6.000
RT3008	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	17.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

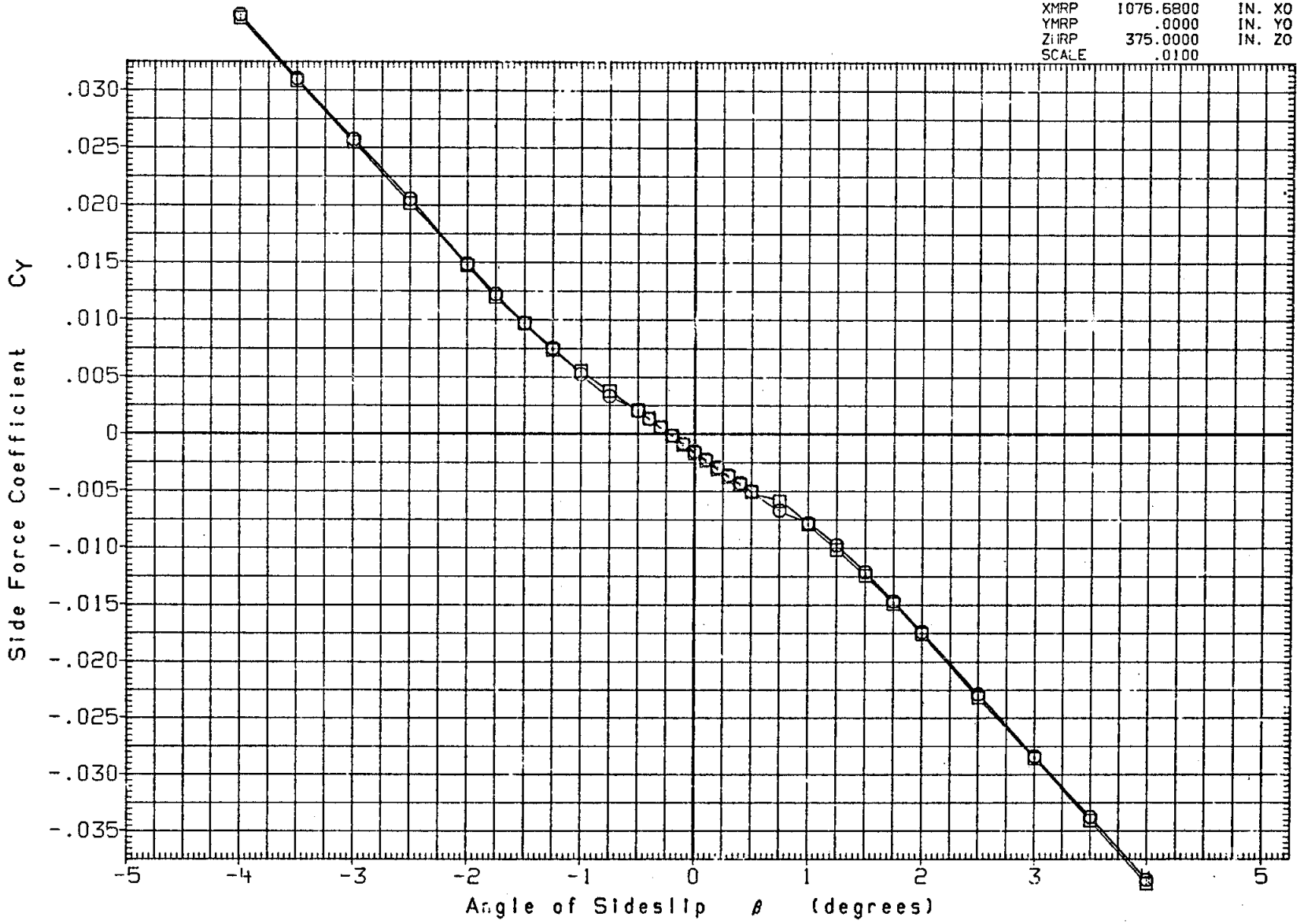


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(B) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.03 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3007	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	17.500	INCRSE	CONTNU	2.000	6.000
RT3008	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	17.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	174.8100	INCHES
BREF	336.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

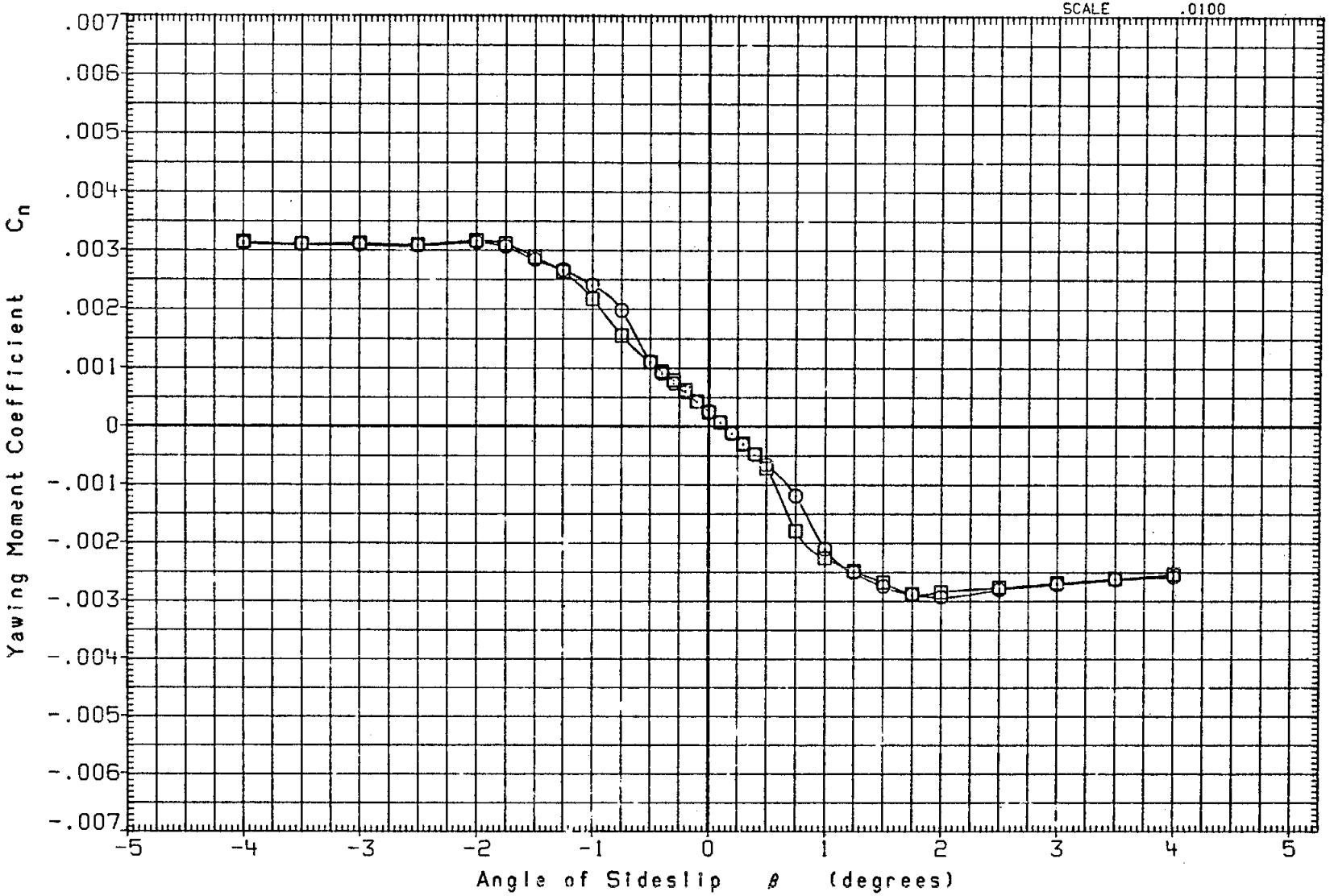


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(B) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.03 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3007	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	17.500	INCRSE	CONTNU	2.000	6.000
RT3008	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	17.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

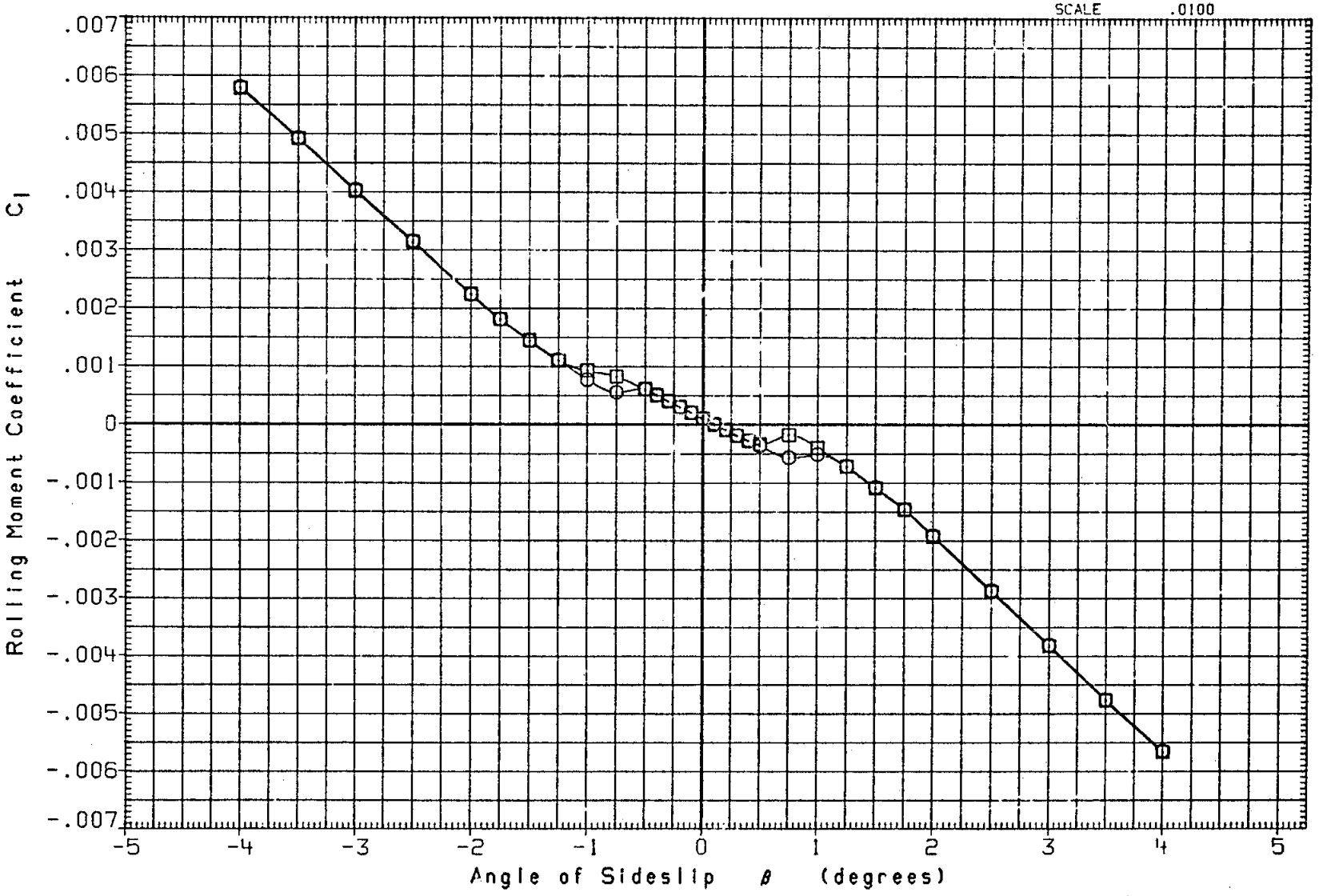


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(B) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.03 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3007	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	17.500	INCRSE	CONTNU	2.000	6.000
RT3008	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	17.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

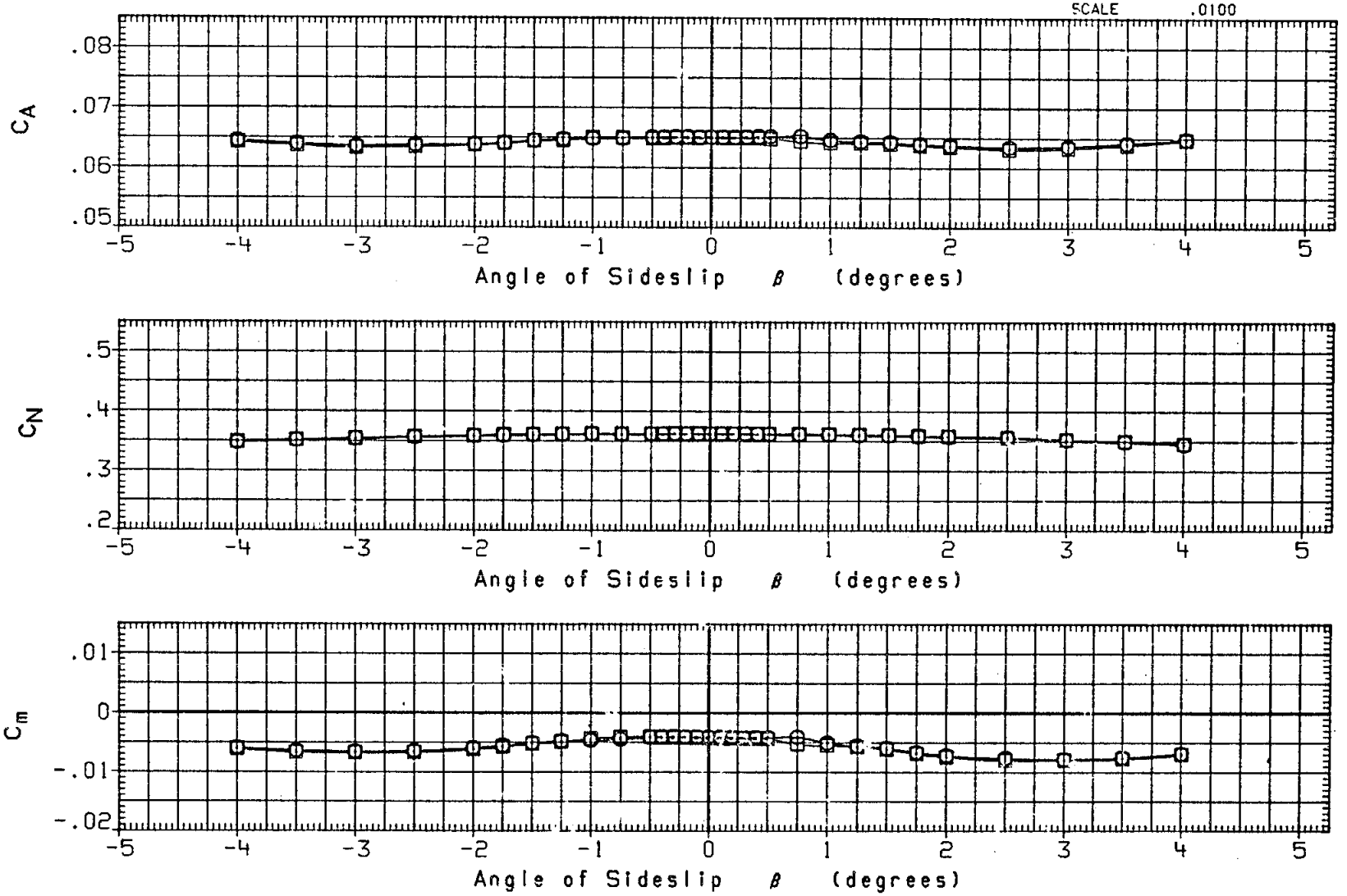


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(B) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.03 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3007	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	17.500	INCRSE	CONTNU	2.000	6.000
RT3008	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	17.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	1690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

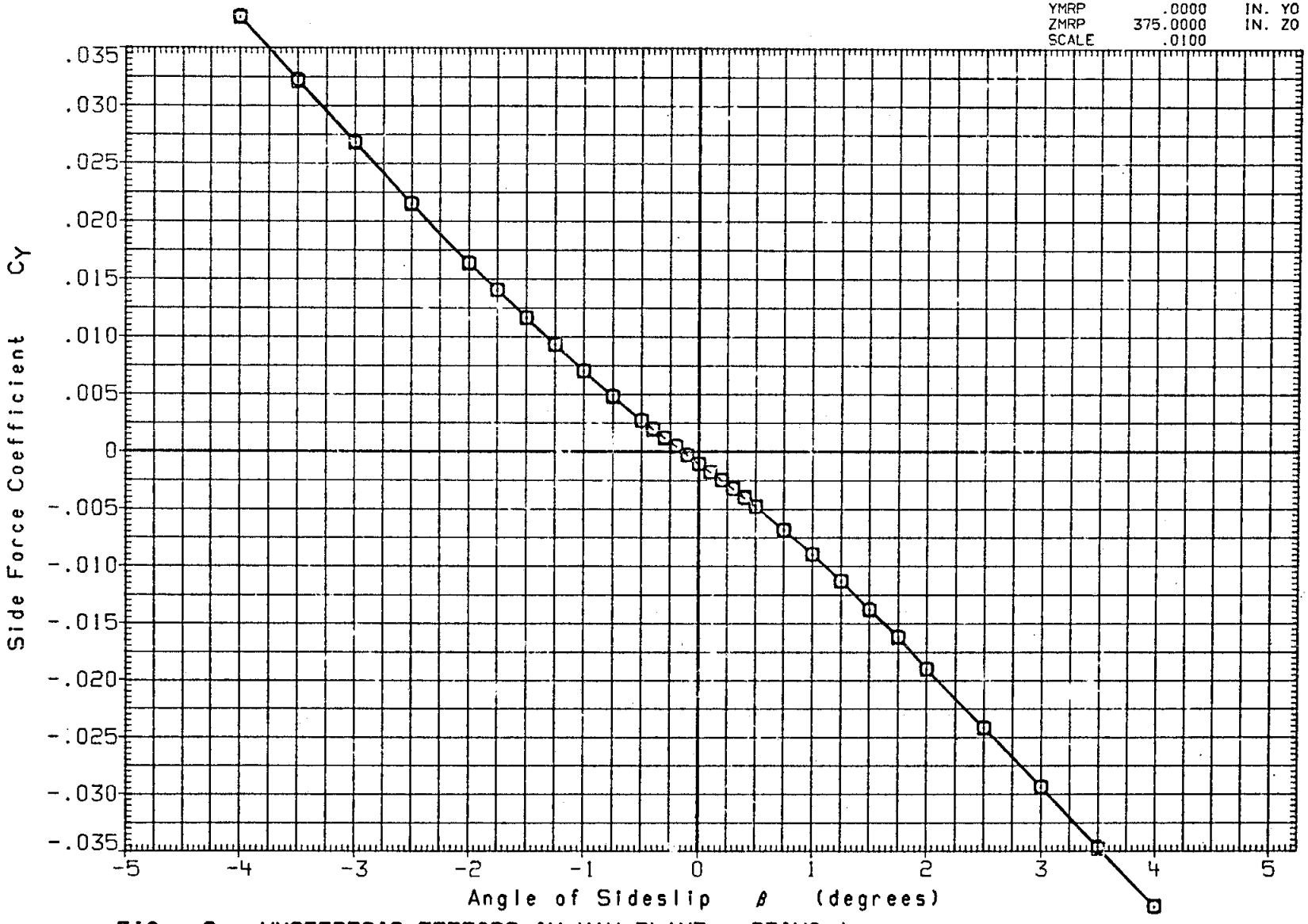


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(B) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.43 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3007	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	17.500	INCRSE	CONTNU	2.000	6.000
RT3008	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	17.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

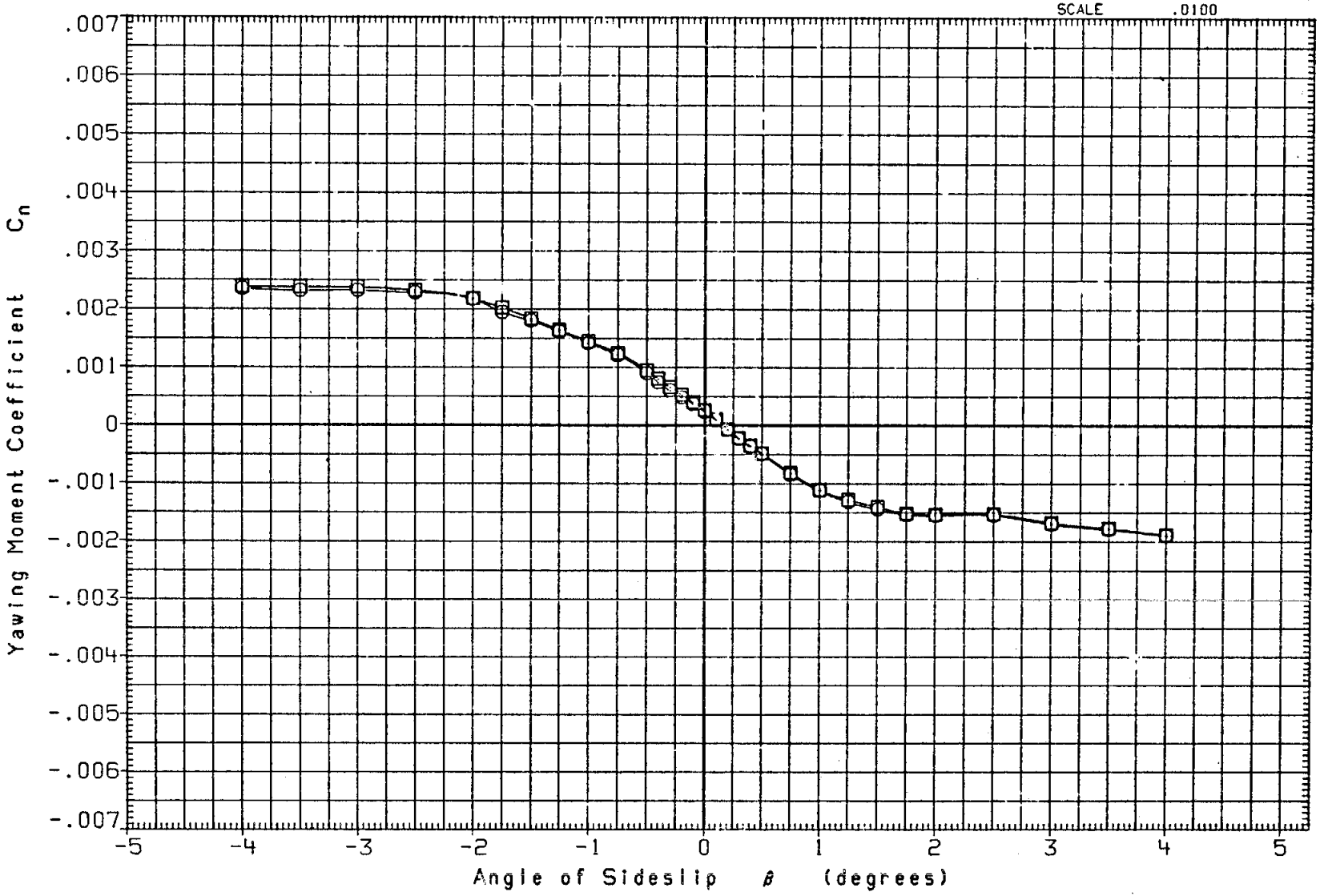


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(B) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.43 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3007	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	17.500	INCRSE	CONTNU	2.000	6.000
RT3008	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	17.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

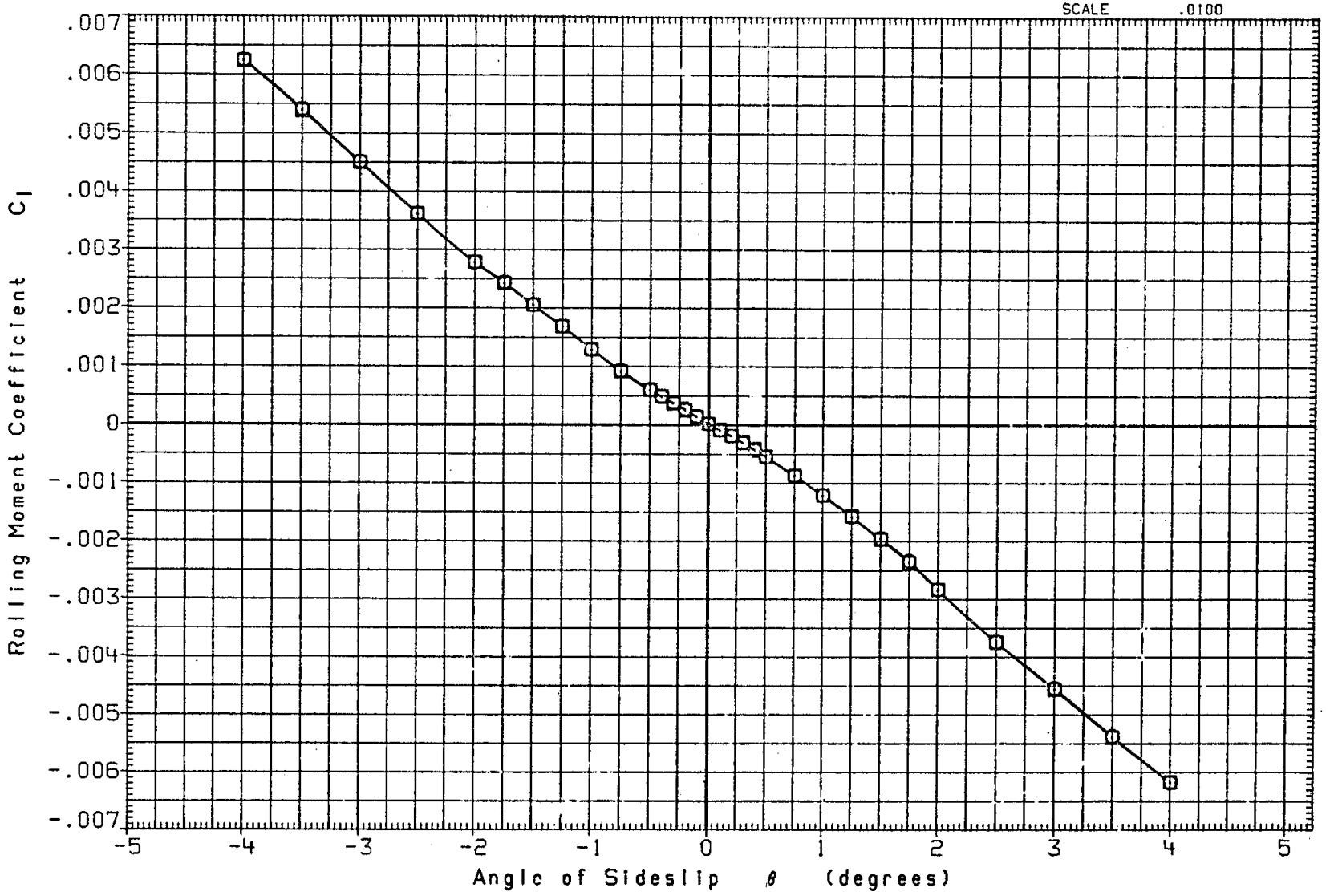


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(B) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.43 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3007	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	17.500	INCRSE	CONTNU	2.000	6.000
RT3008	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	17.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	3890.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

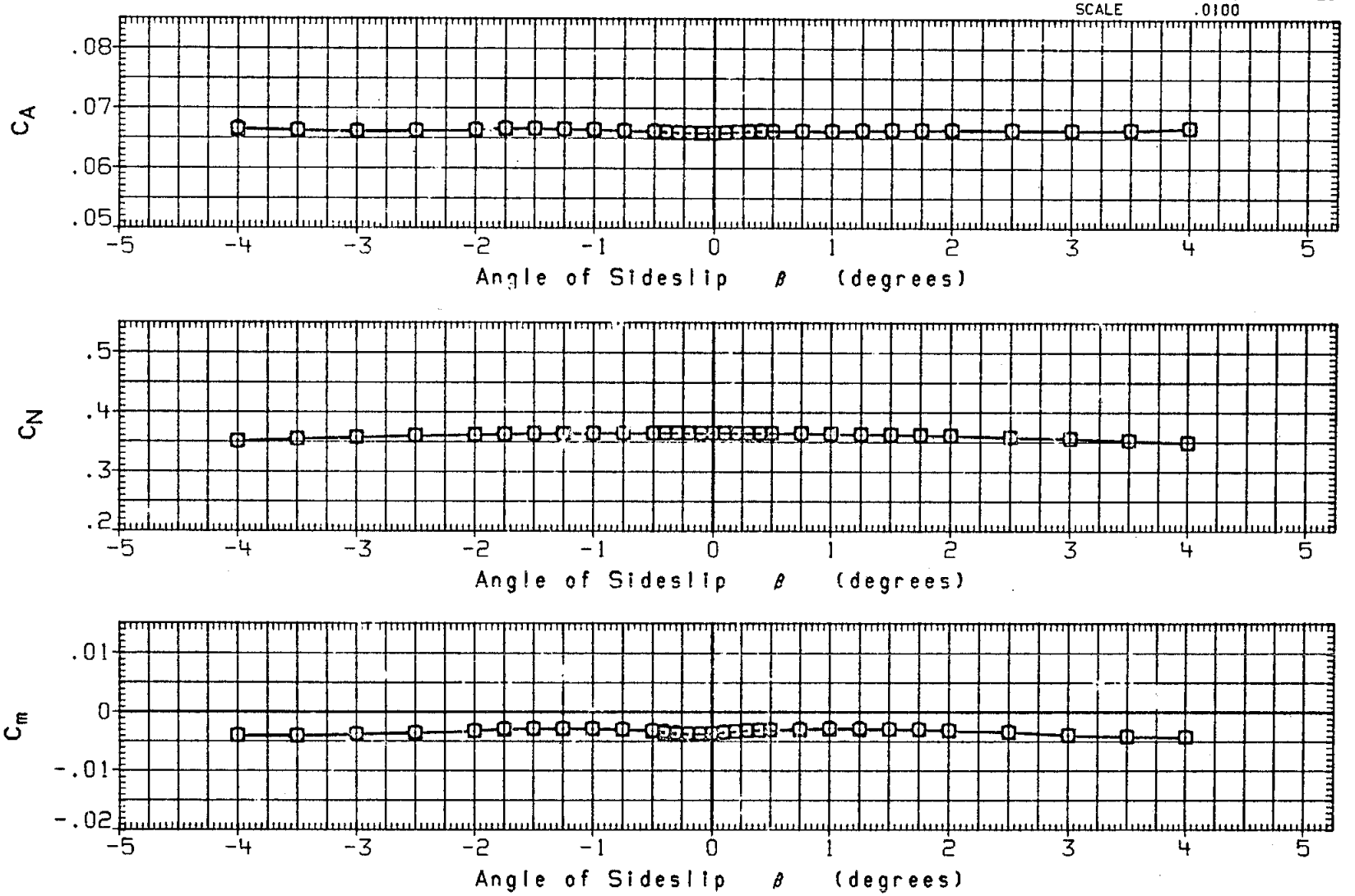


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(B) ALPHA = 17.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.43 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3009	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	20.000	INCRSE	CONTNU	2.000	6.000
RT3010	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	20.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

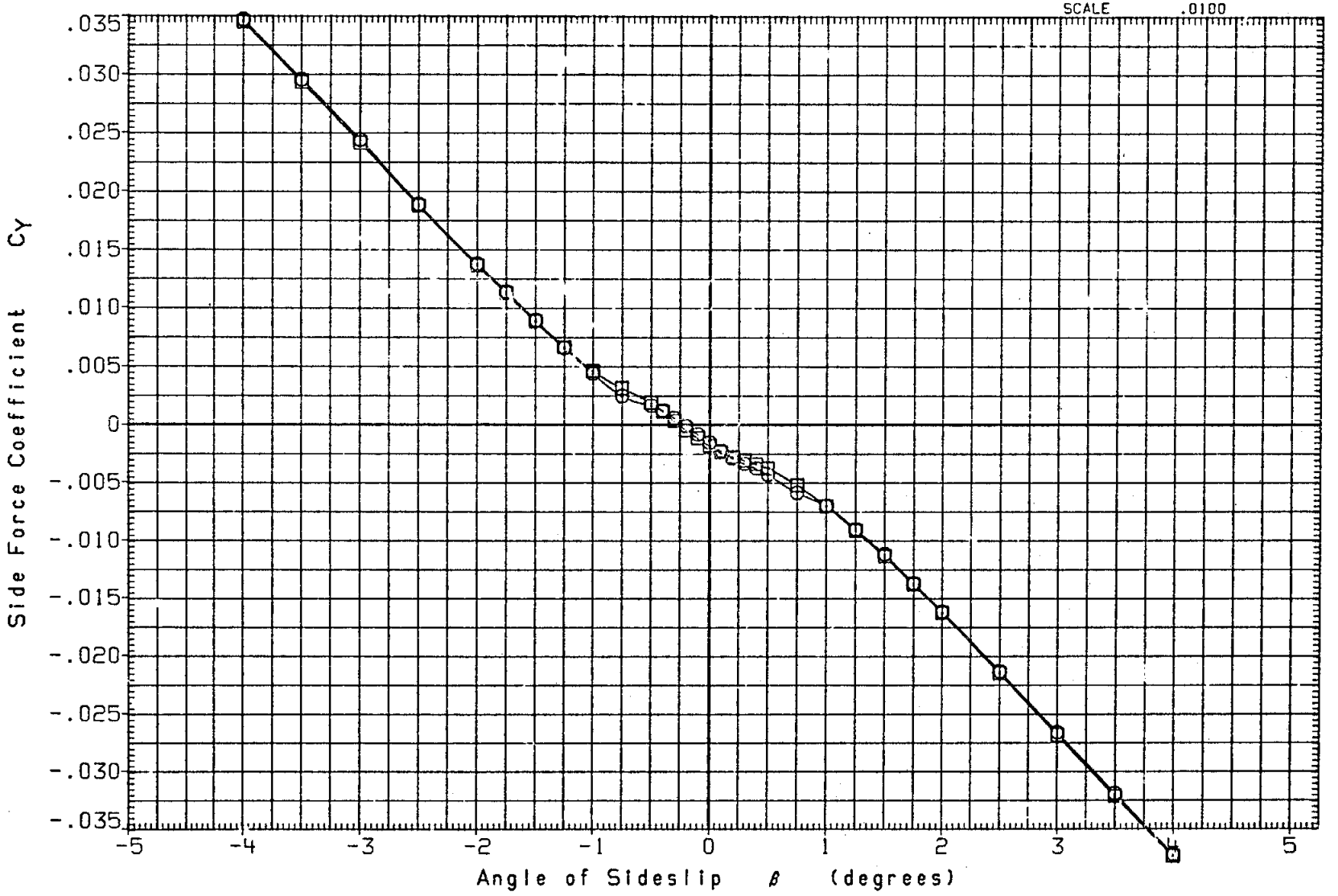


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(C) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3009	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	20.000	INCRSE	CONTNU	2.000	6.000
RT3010	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	20.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

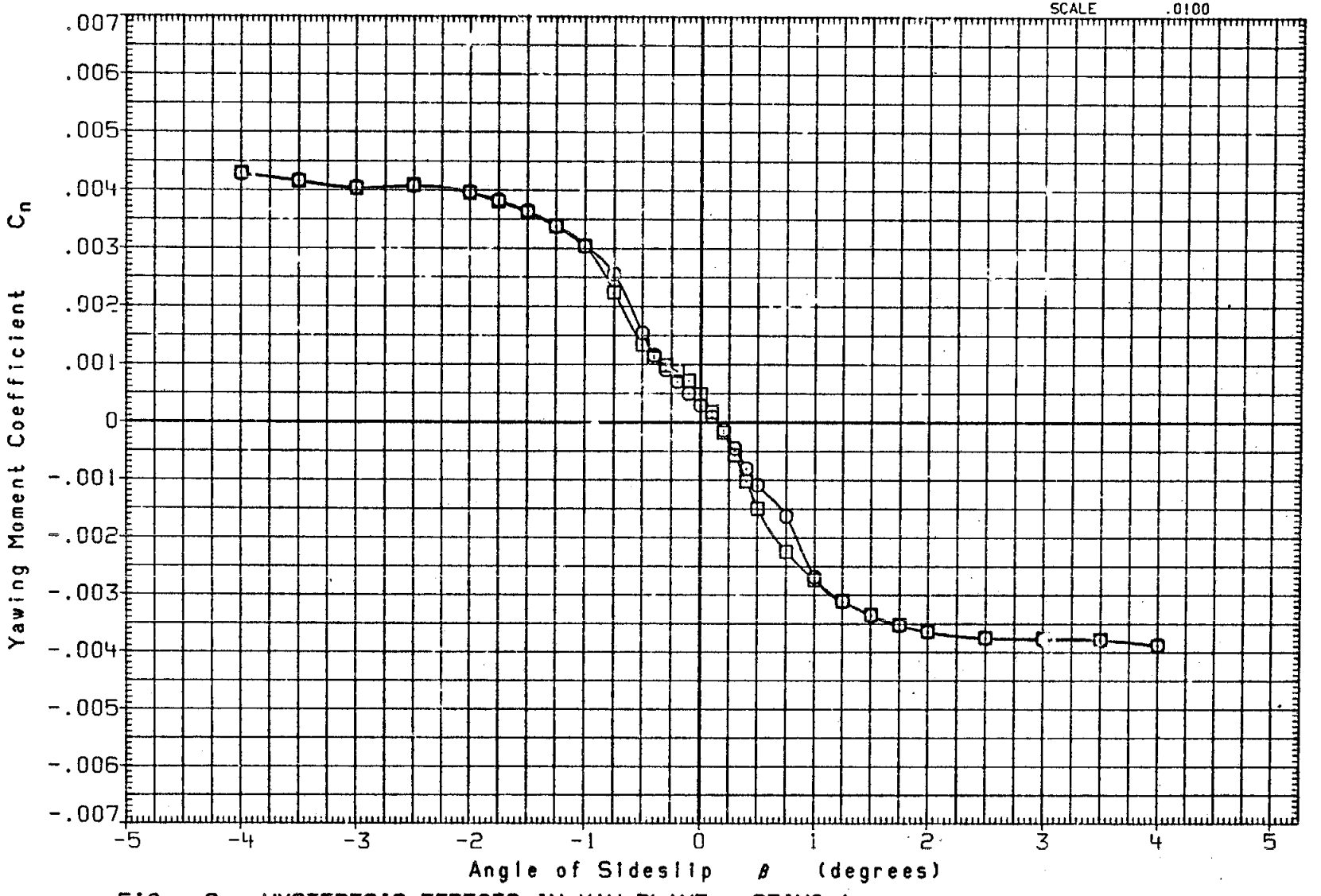


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(C) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3009	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	20.000	INCRSE	CONTNU	2.000	6.000
RT3010	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	20.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

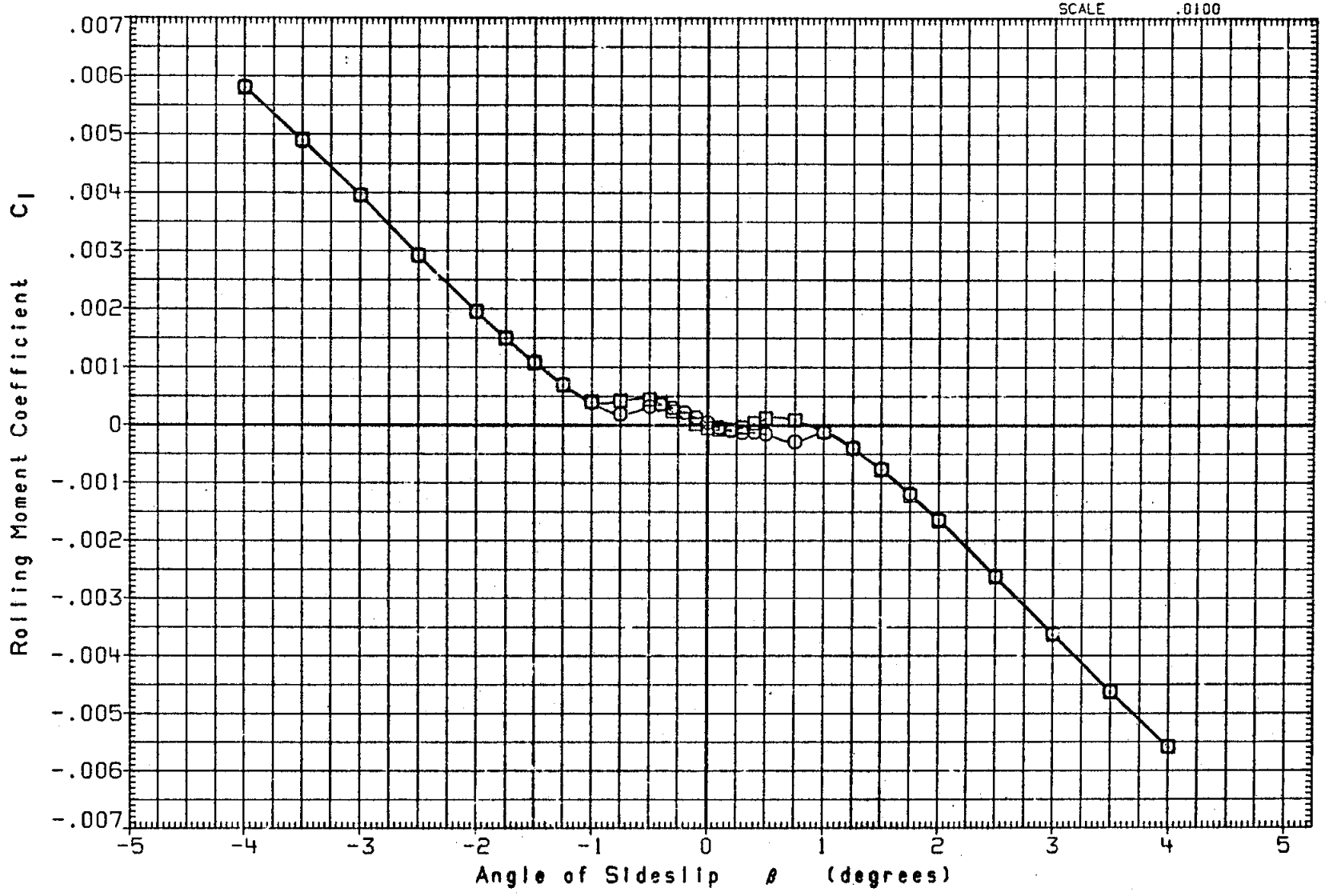


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(C) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3009	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	20.000	INCRSE	CONTNU	2.000	6.000
RT3010	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	20.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

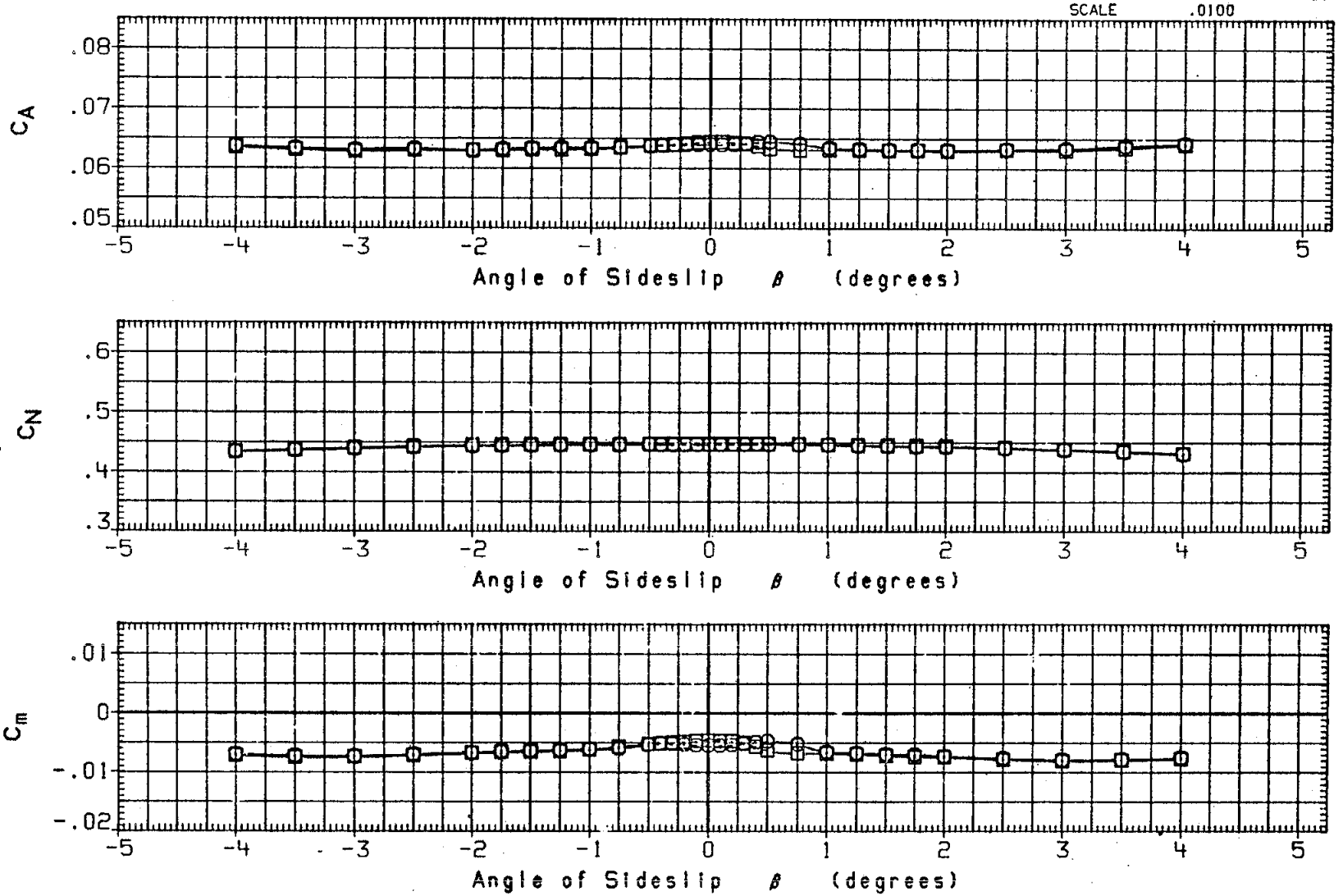


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(C) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3009	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	20.000	INCRSE	CONTNU	2.000	6.000
RT3010	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	20.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

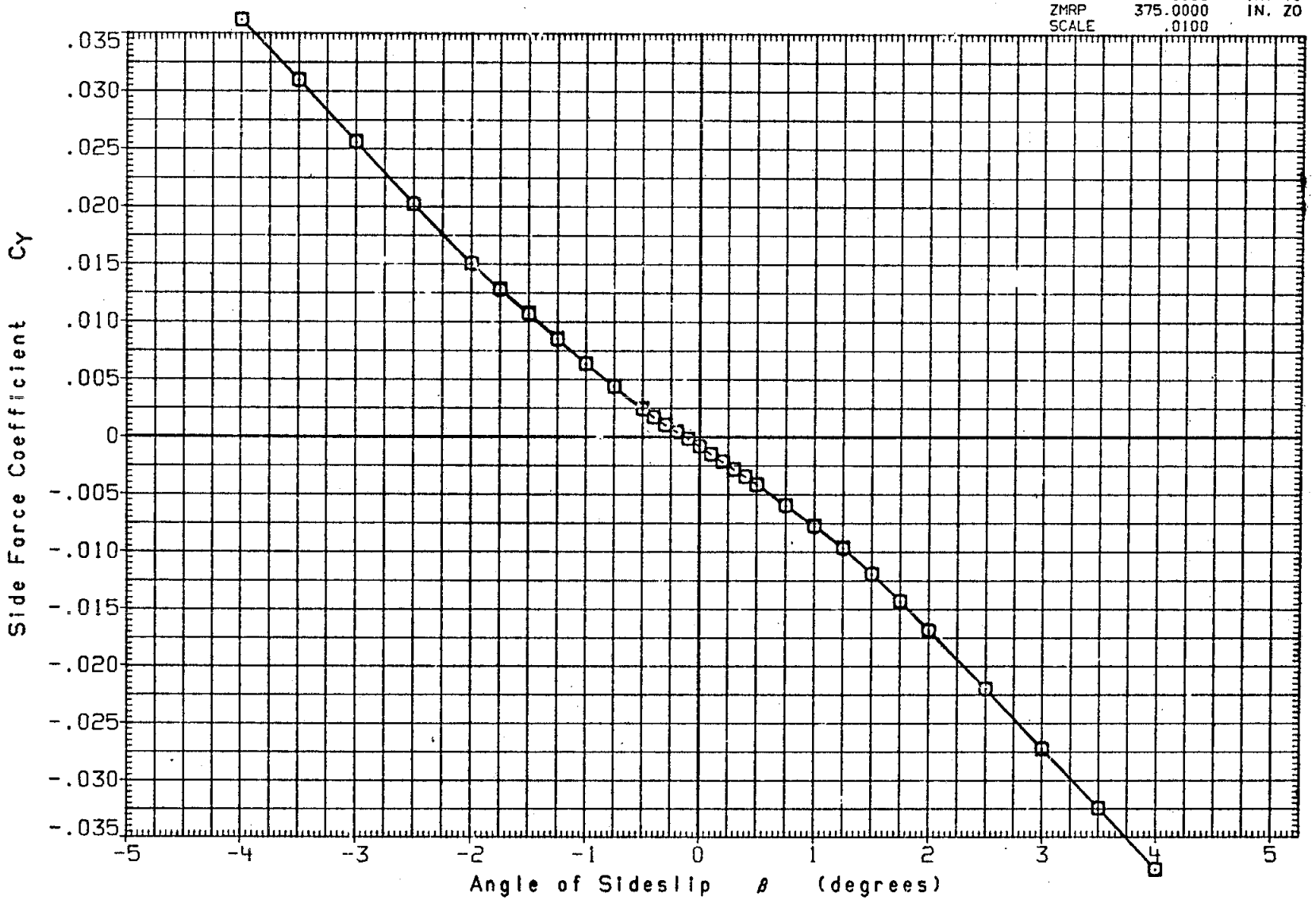


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(C) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.41 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3009	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	20.000	INCRSE	CONTNU	2.000	6.000
RT3010	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	20.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

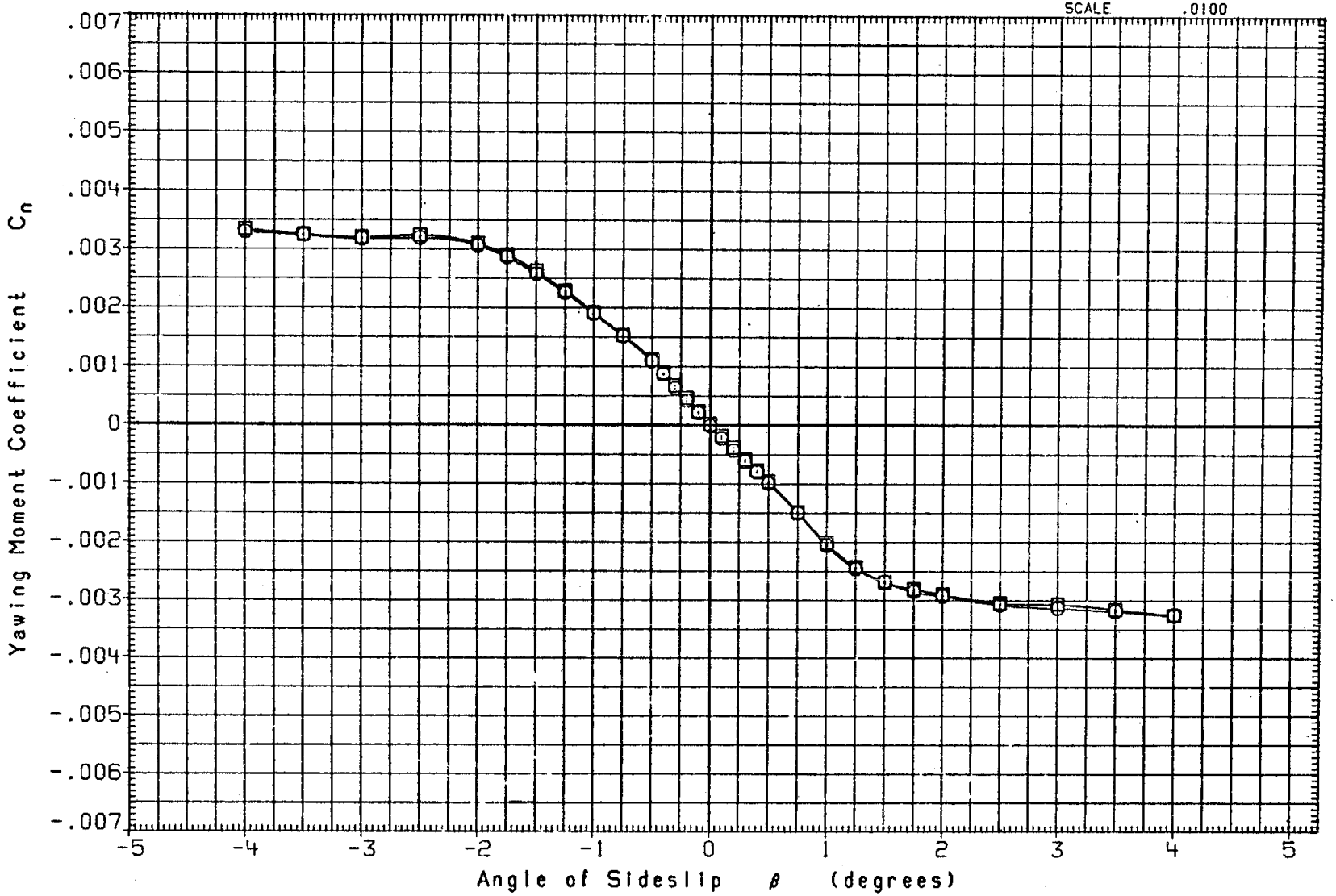


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(C) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.41 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3009	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	20.000	INCRSE	CONTNU	2.000	6.000
RT3010	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	20.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

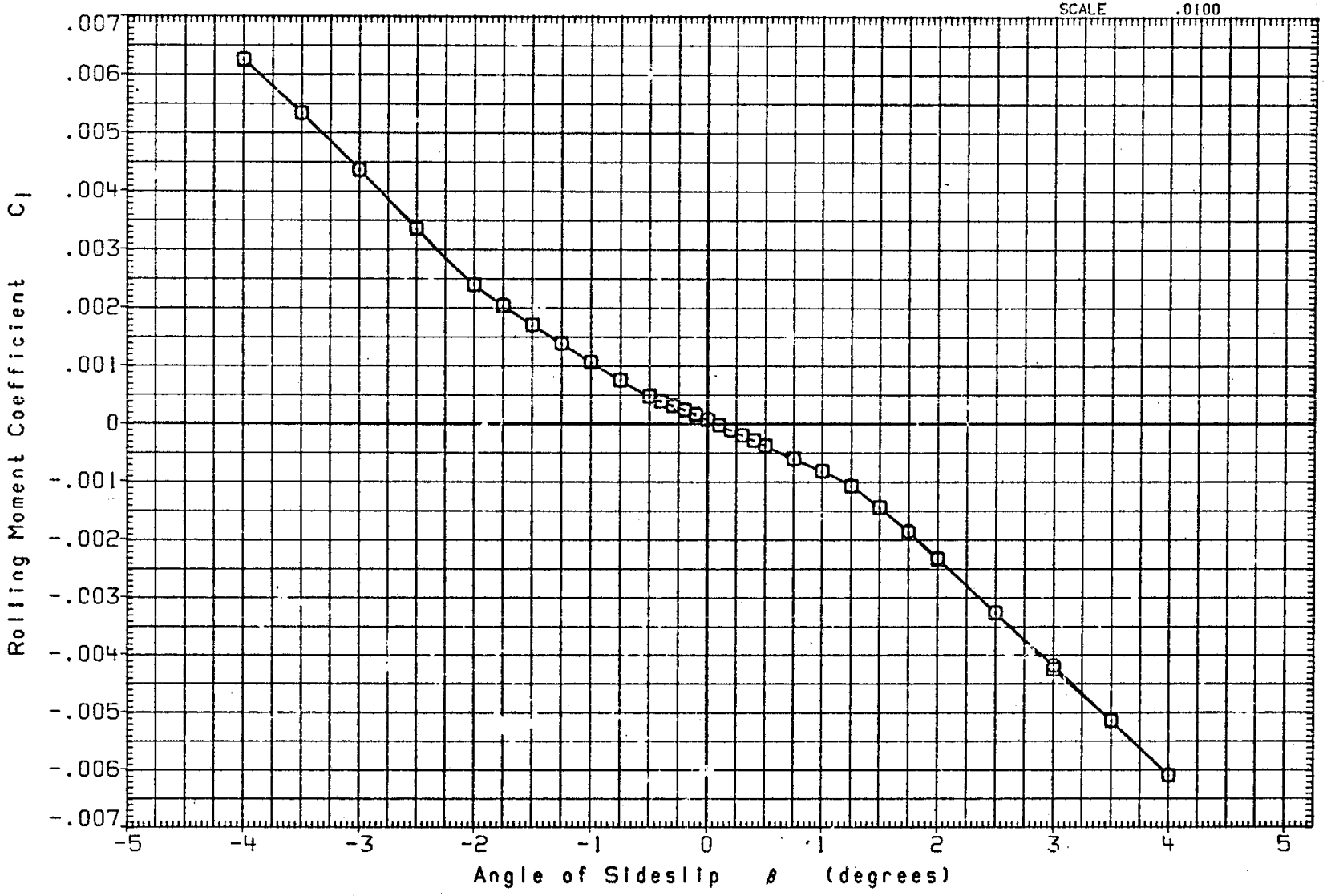


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(C) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.41 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3009	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	20.000	INCRSE	CONTNU	2.000	6.000
RT3010	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	20.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

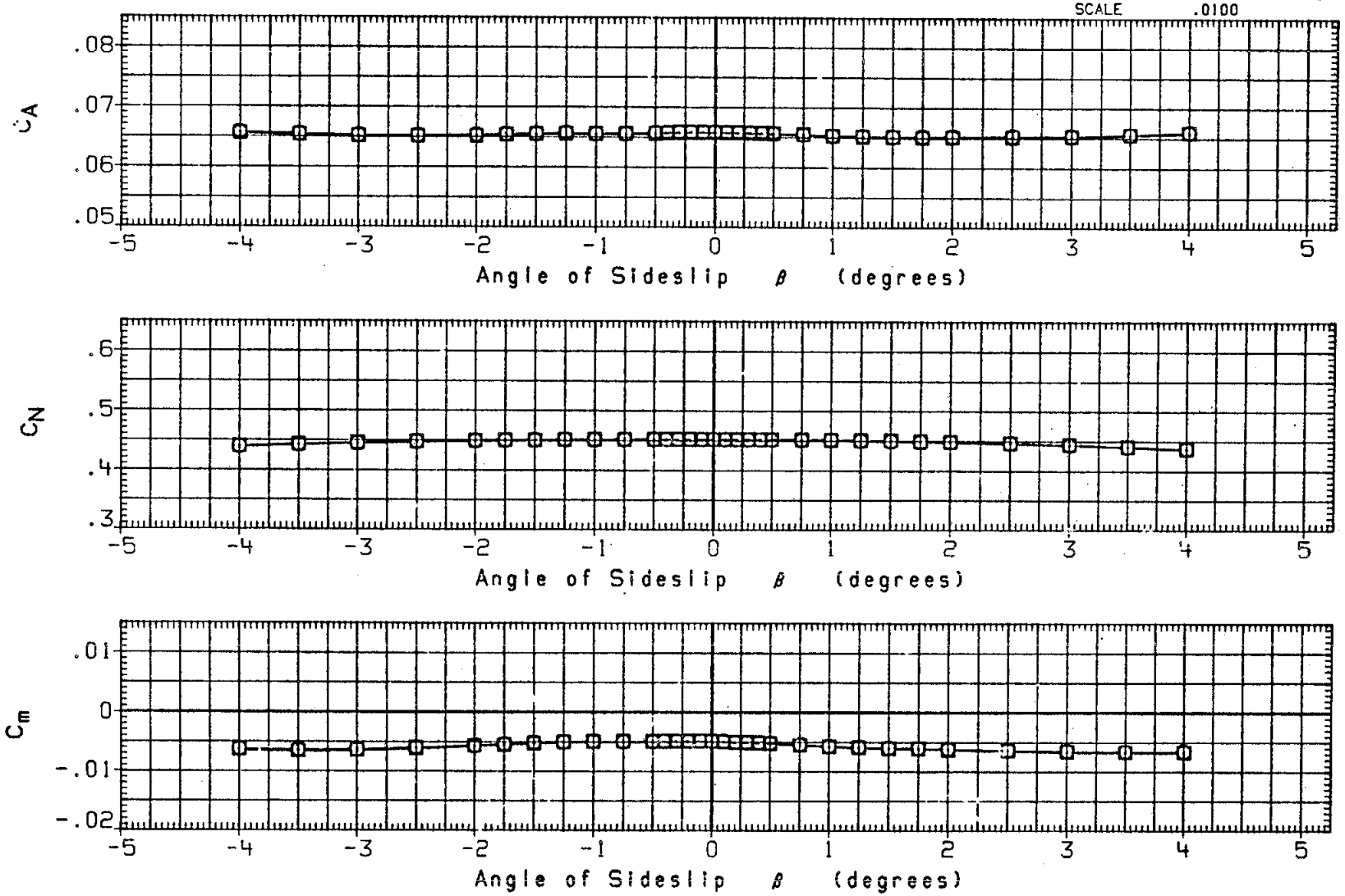


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(C) ALPHA = 20.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.41 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3011	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	22.500	INCRSE	CONTNU	2.000	6.000
RT3012	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	22.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

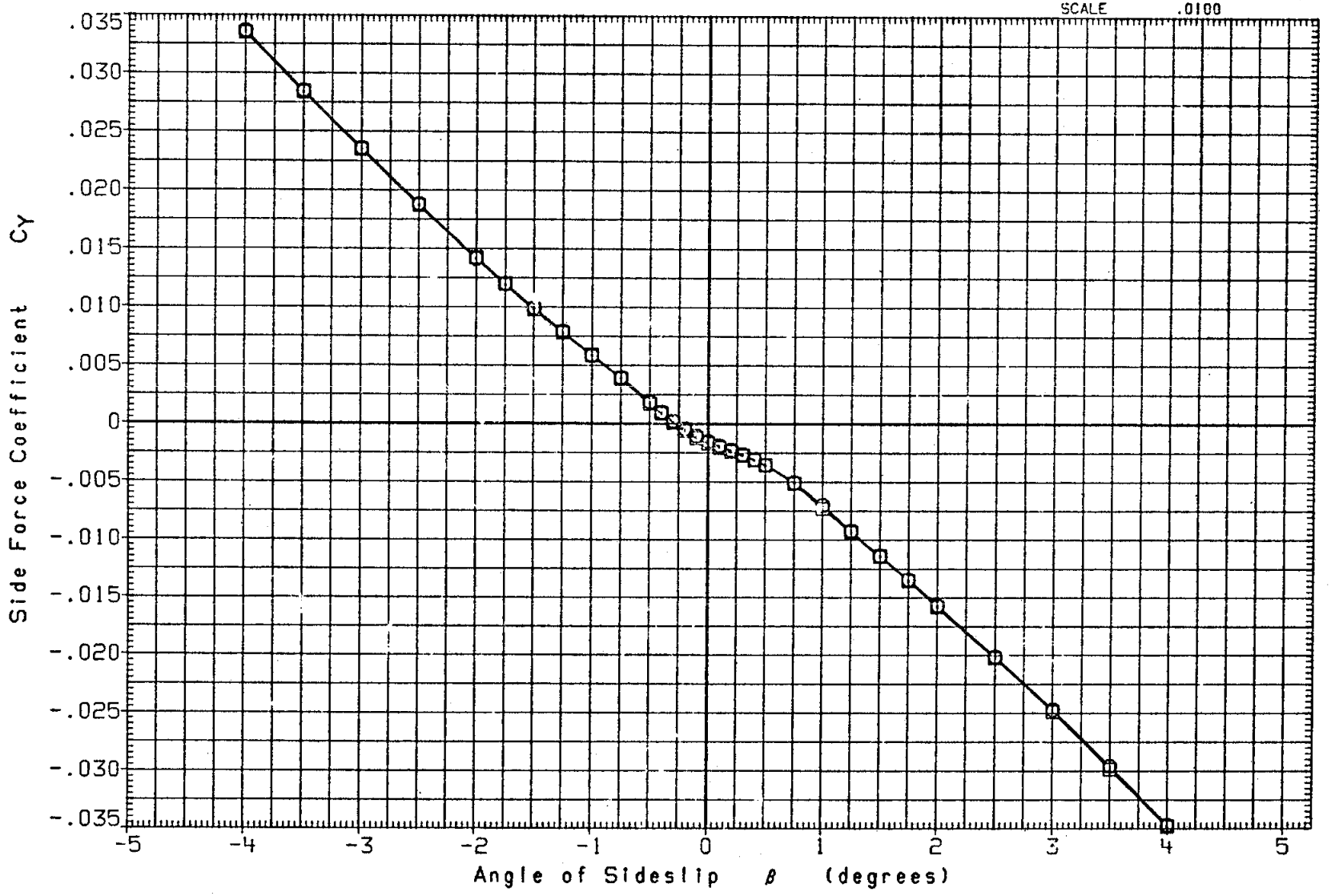


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(D) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.01 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3011	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	22.500	INCRSE	CONTNU	2.000	6.000
RT3012	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	22.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

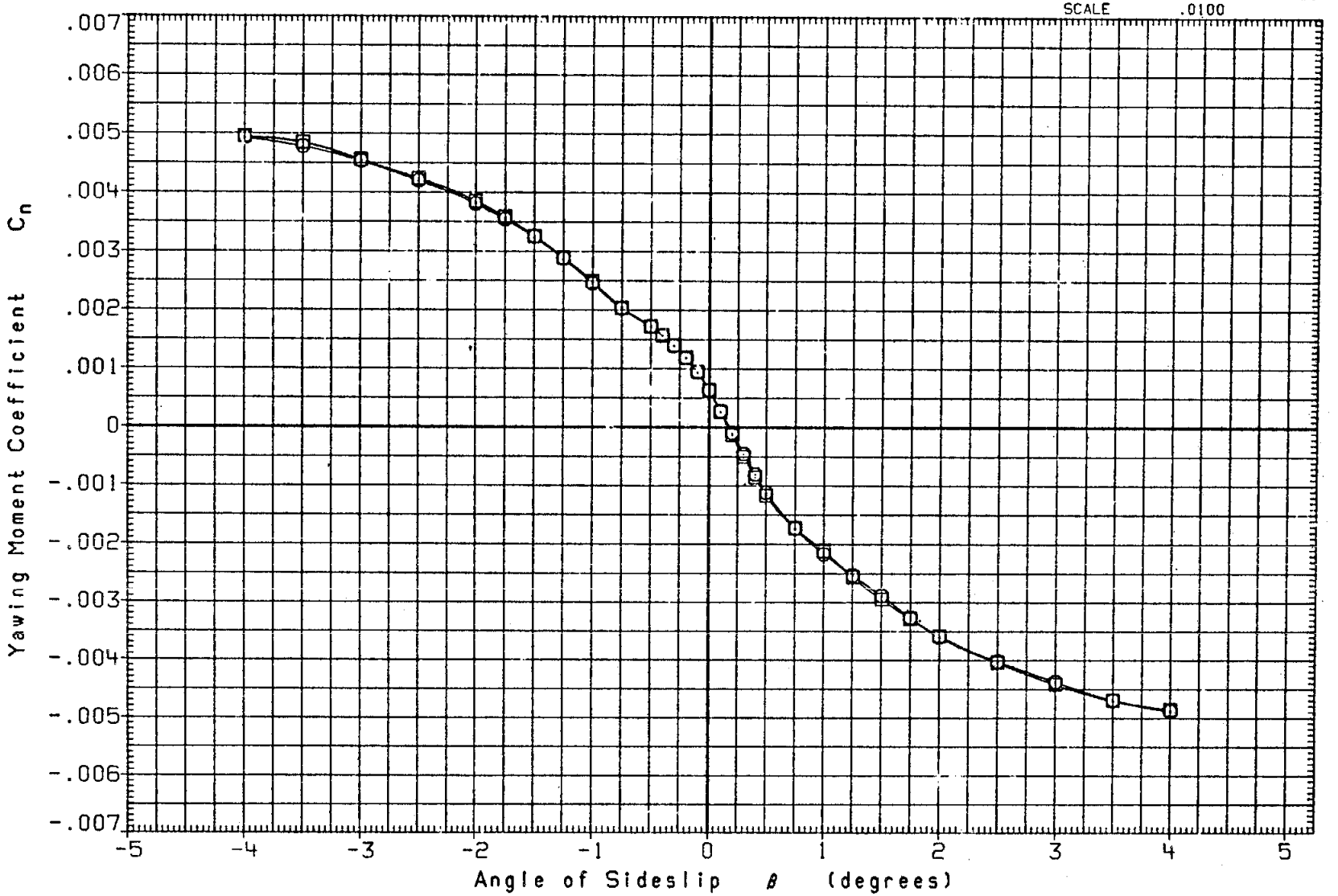


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(D) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.01 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3011	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	22.500	INCRSE	CONTNU	2.000	6.000
RT3012	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	22.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

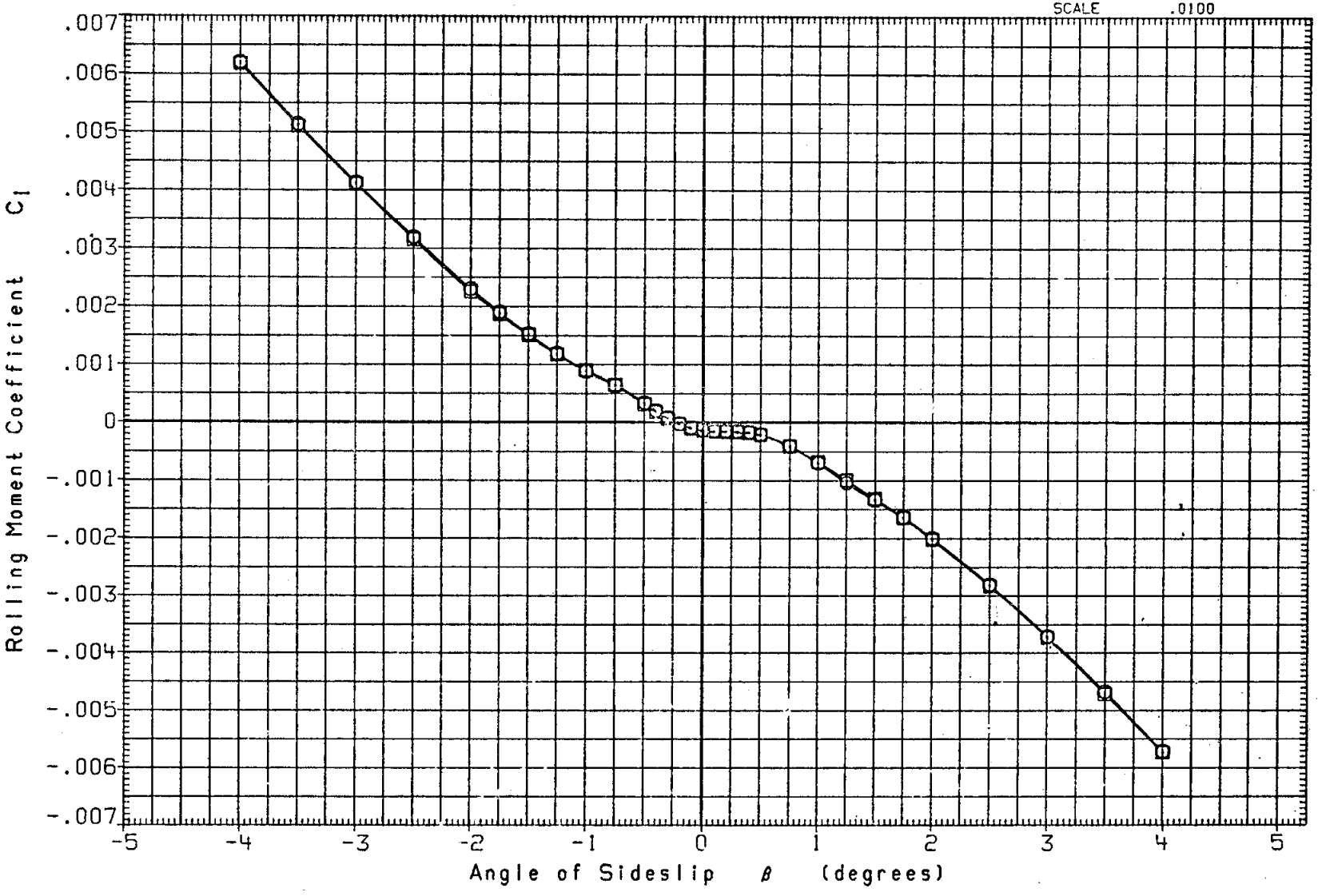


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(D) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.01 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3011	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	22.500	INCRSE	CONTNU	2.000	6.000
RT3012	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	22.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

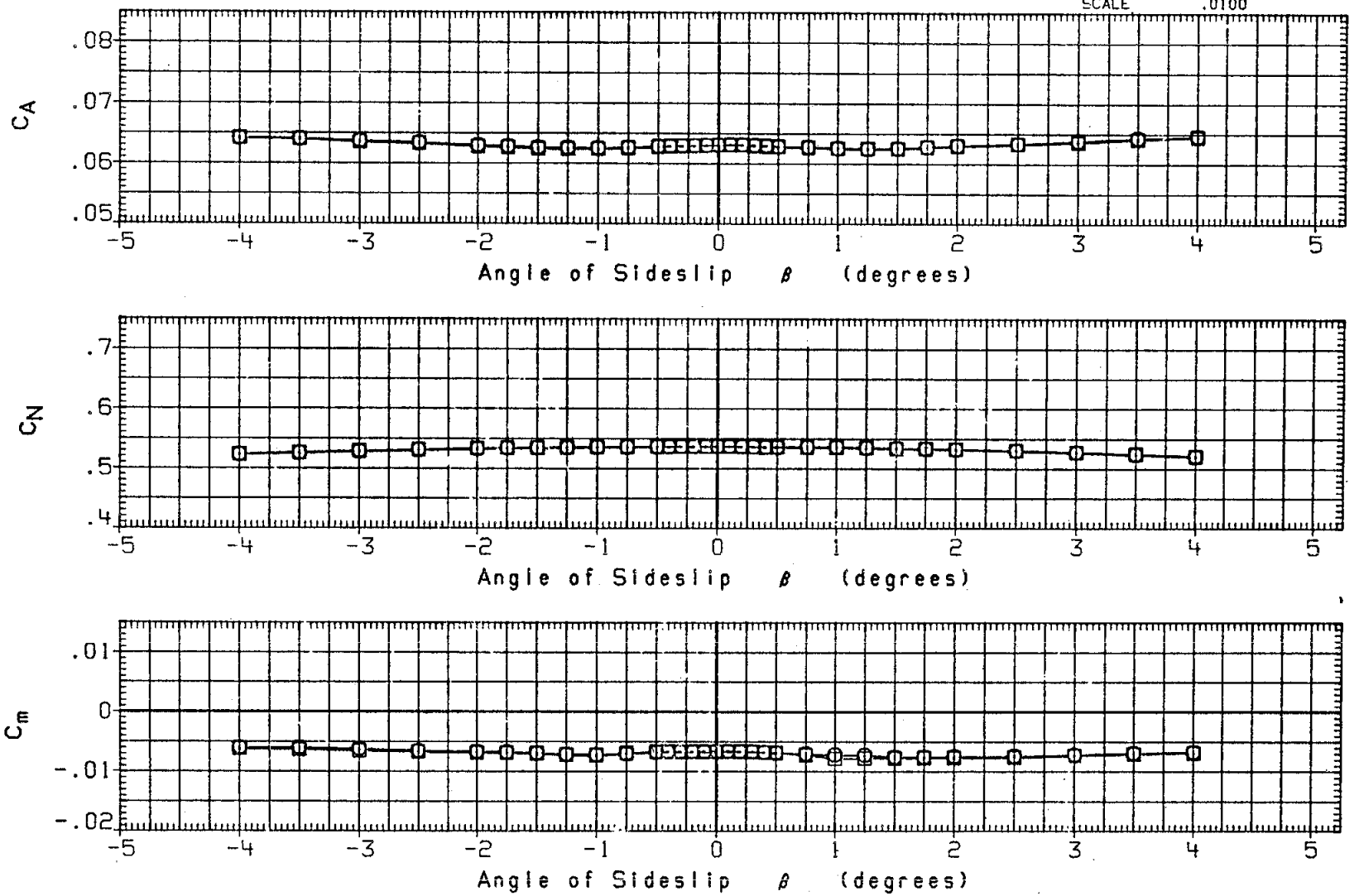


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(D) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.01 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3011	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	22.500	INCRSE	CONTNU	2.000	6.000
RT3012	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	22.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

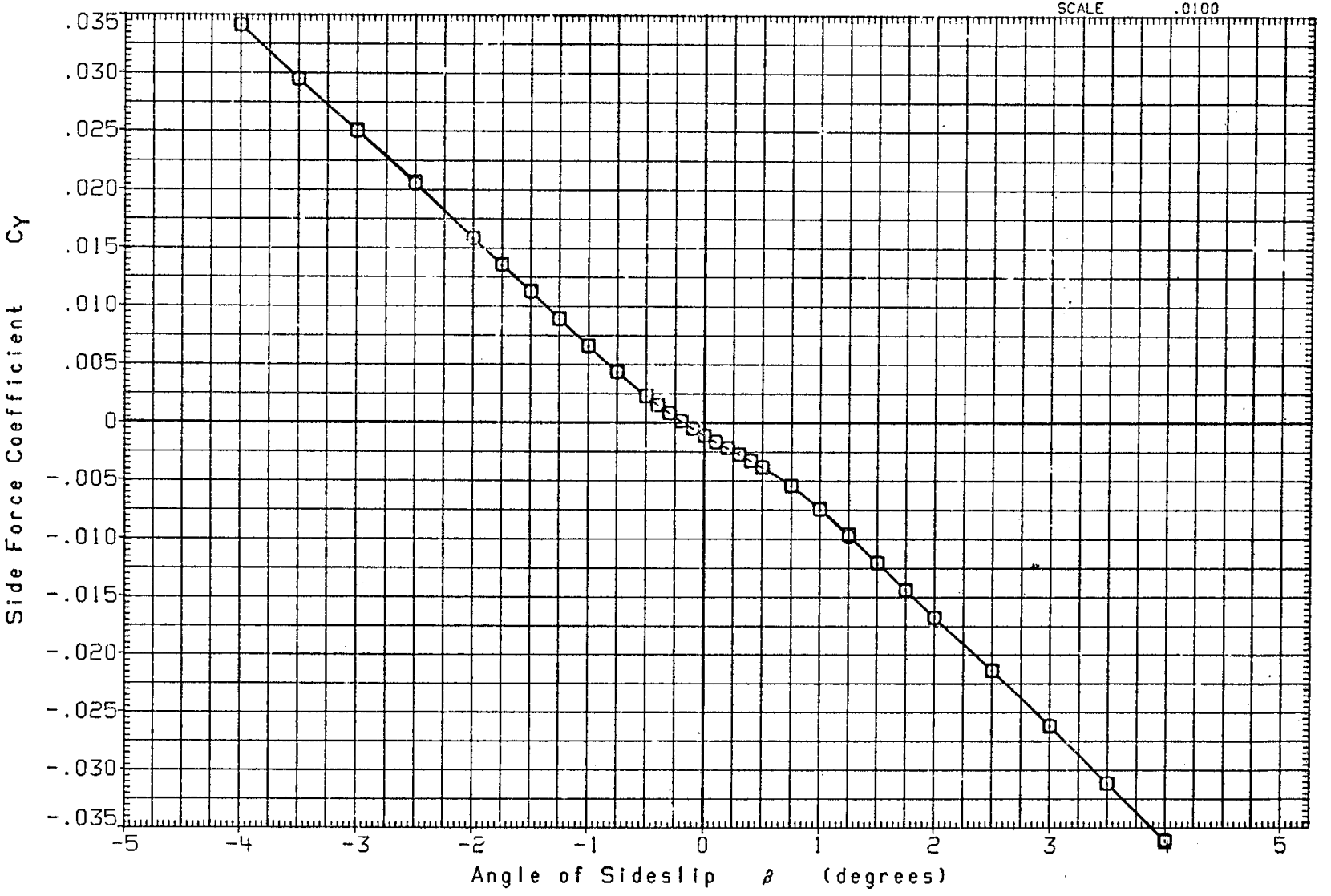


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(D) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.40 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3011	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	22.500	INCRSE	CONTNU	2.000	6.000
RT3012	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	22.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

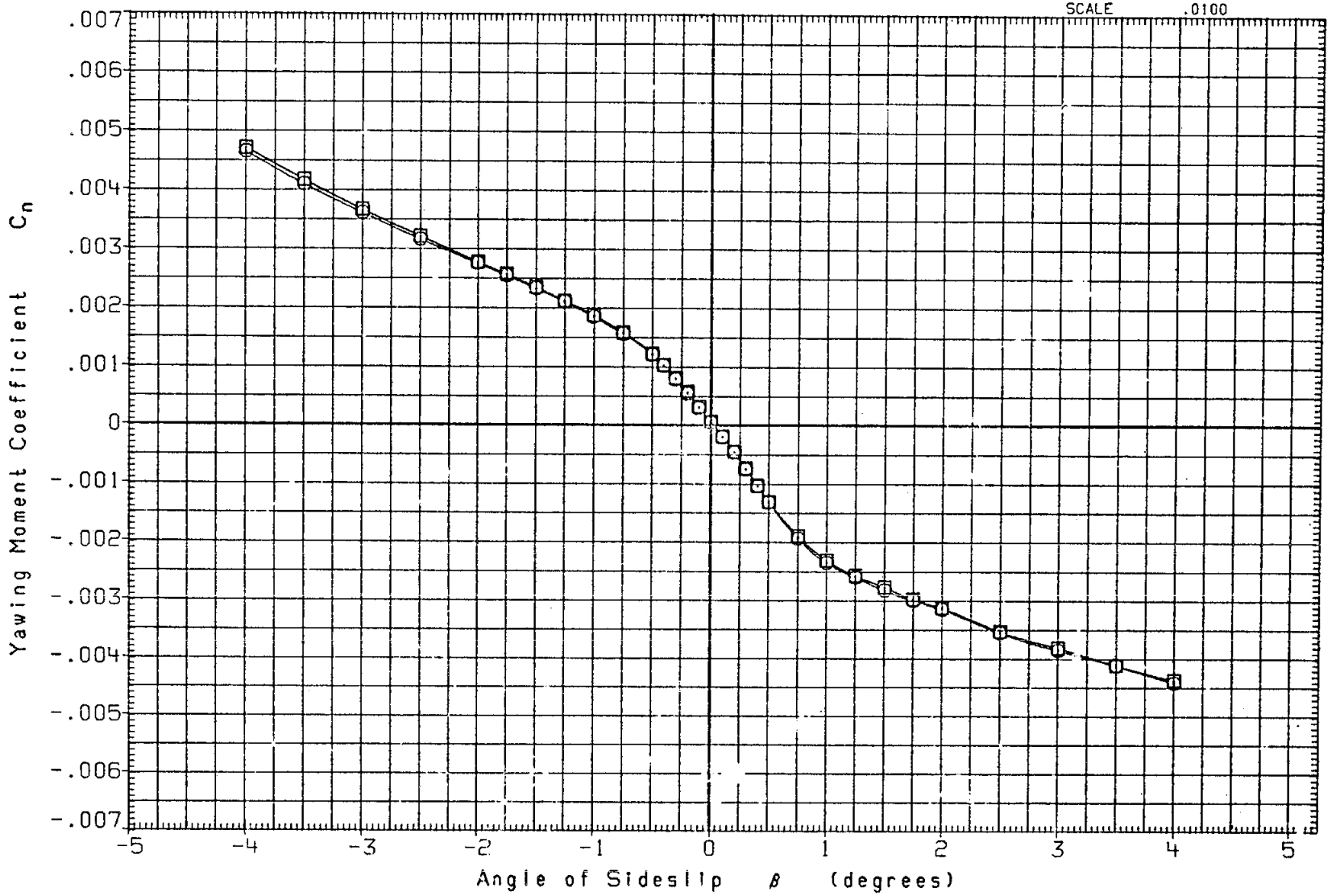


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(D) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.40 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3011	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	22.500	INCRSE	CONTNU	2.000	6.000
RT3012	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	22.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

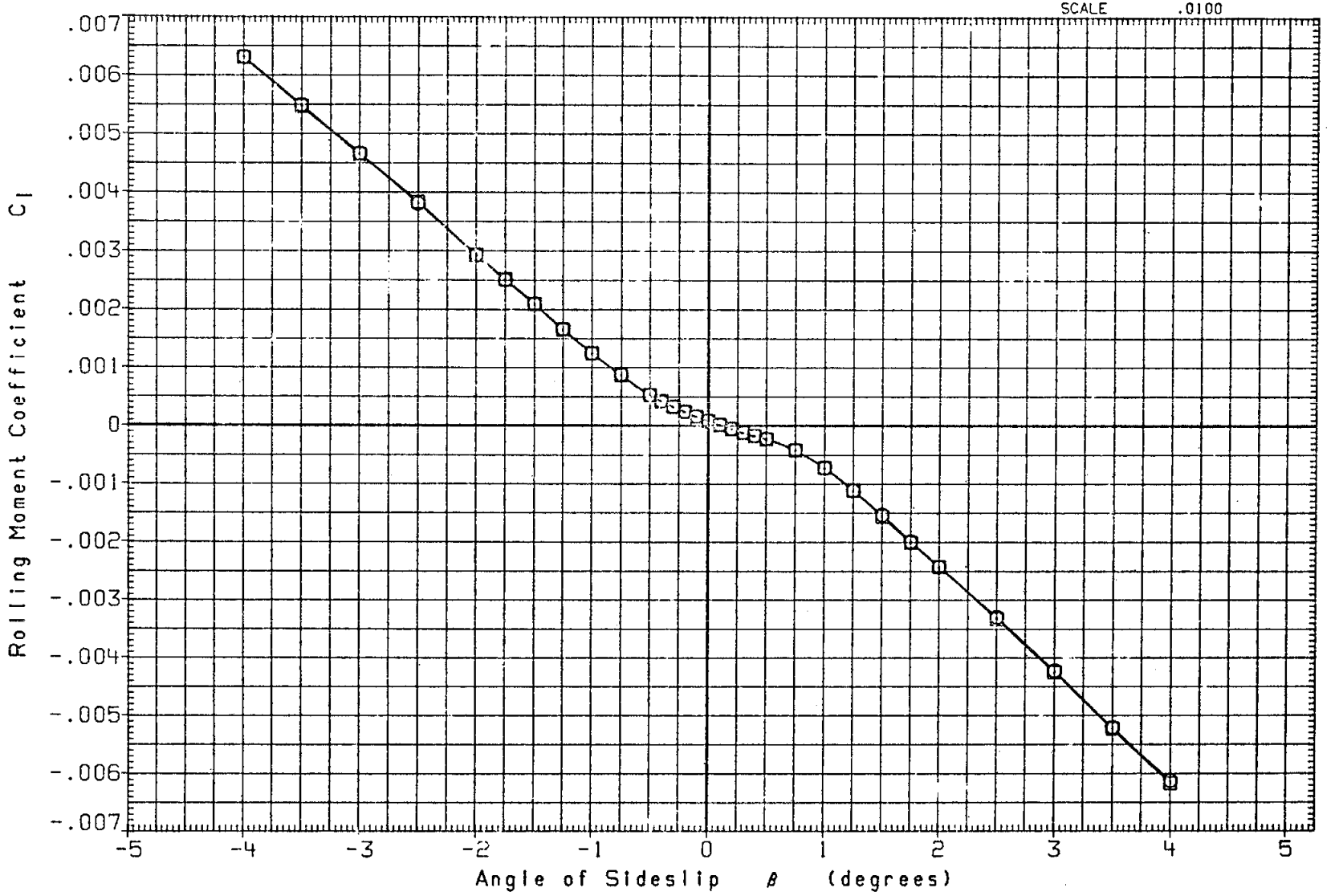


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(D) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.40 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3011	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	22.500	INCRSE	CONTNU	2.000	6.000
RT3012	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	22.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

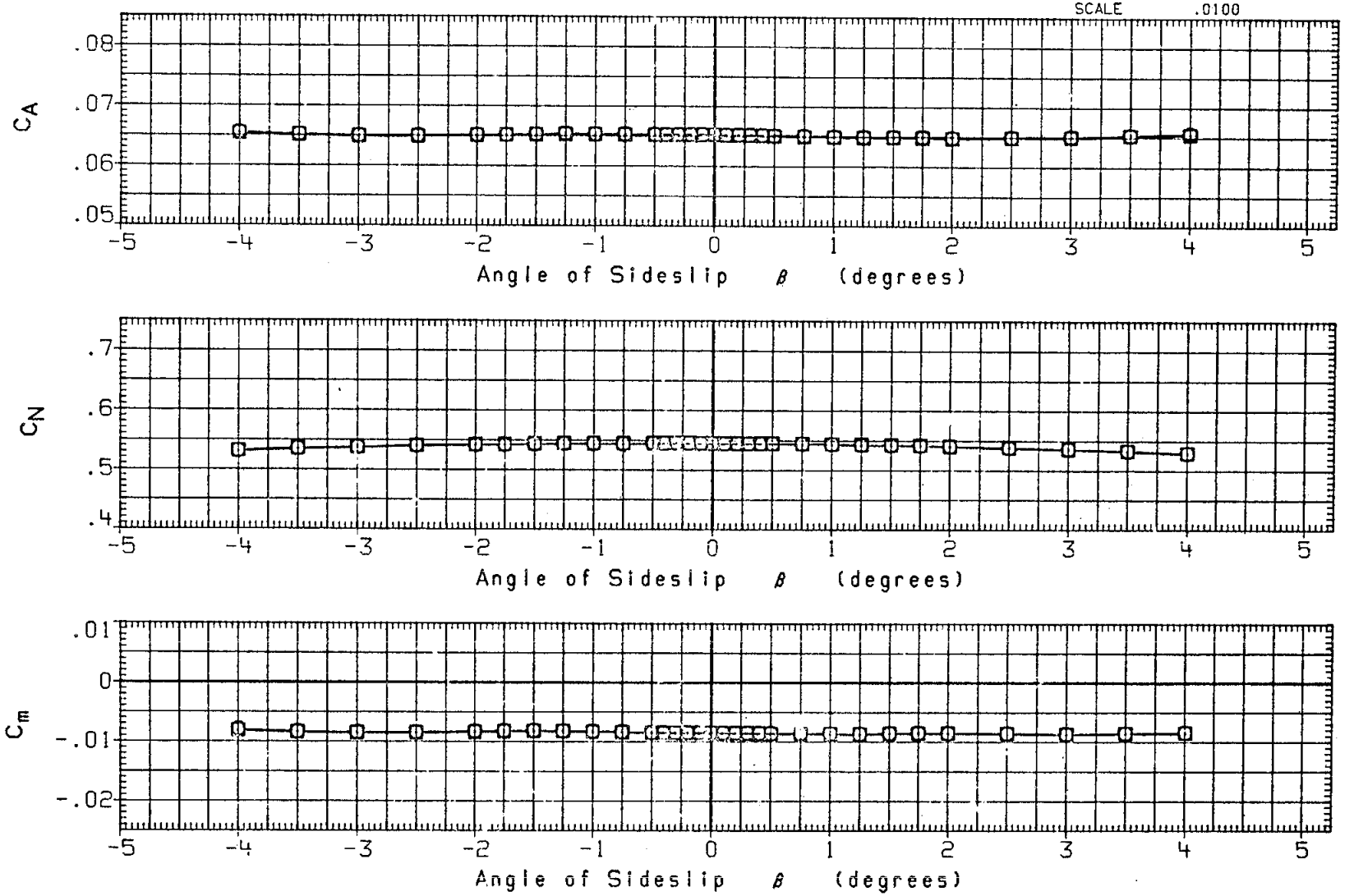


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(D) ALPHA = 22.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.40 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3013	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	25.000	INCRSE	CONTNU	2.000	6.000
RT3014	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	25.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

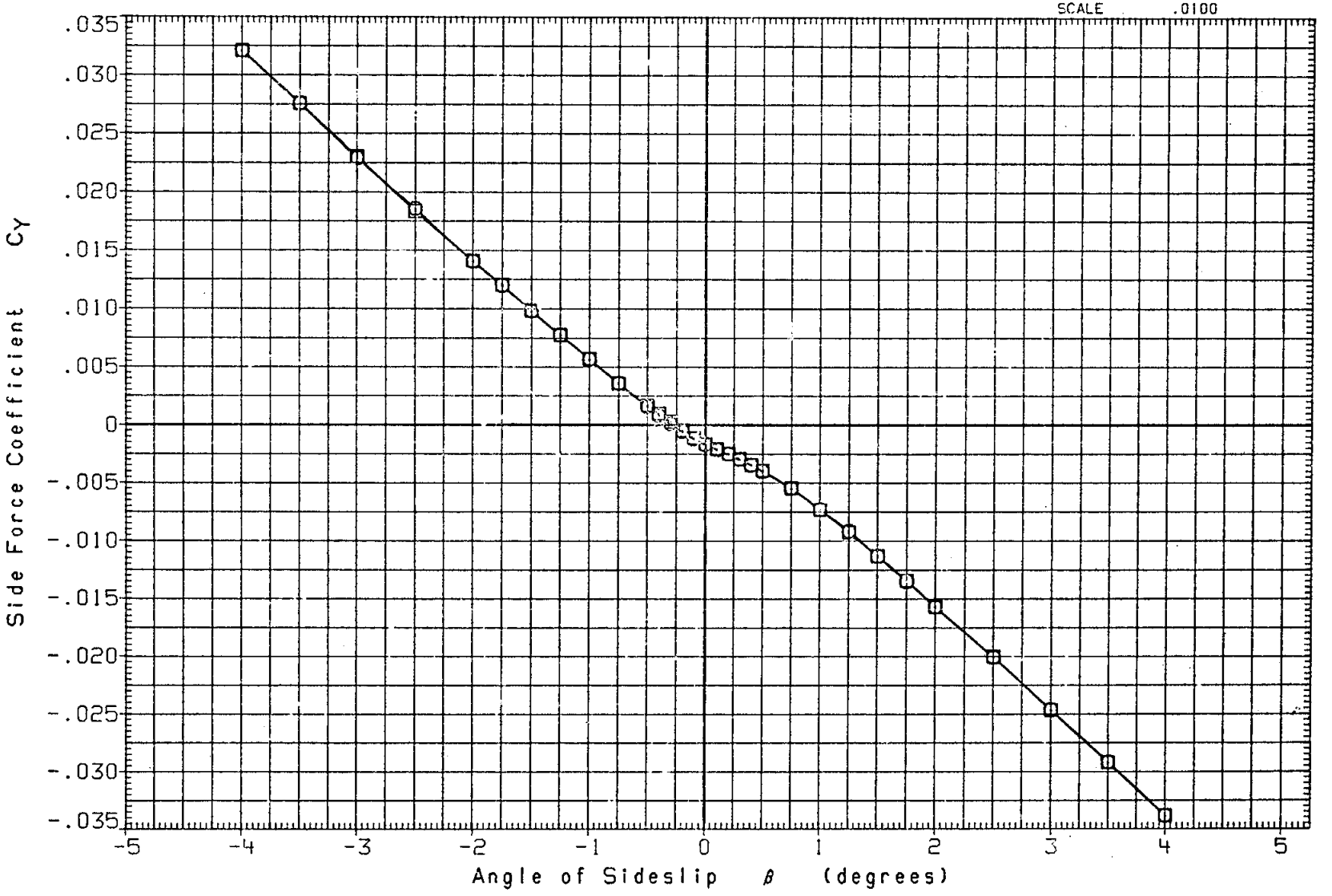


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(E) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.00 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3013	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	25.000	INCRSE	CONTNU	2.000	6.000
RT3014	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	25.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

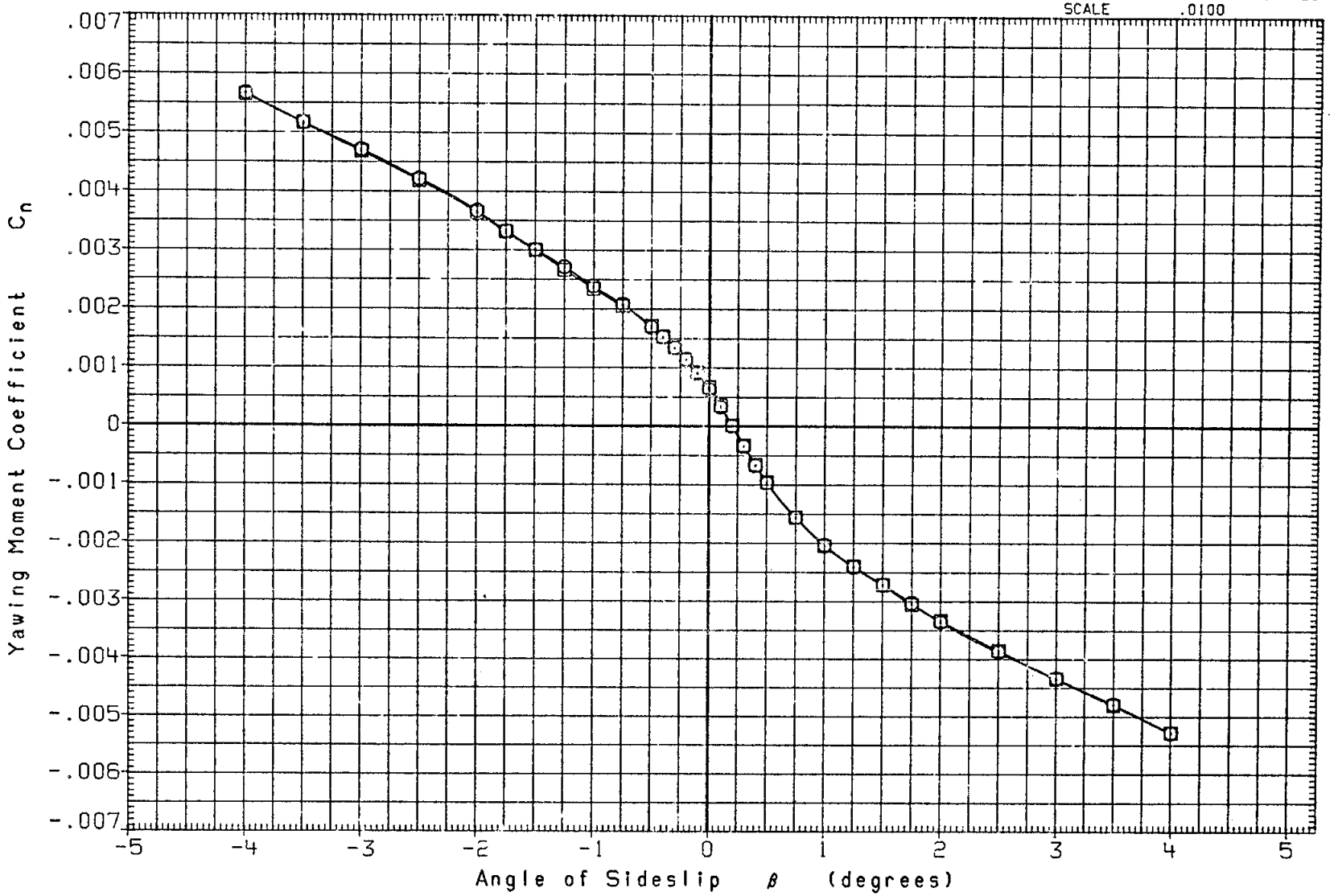


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(E) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.00 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3013	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	25.000	INCRSE	CONTNU	2.000	6.000
RT3014	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	25.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

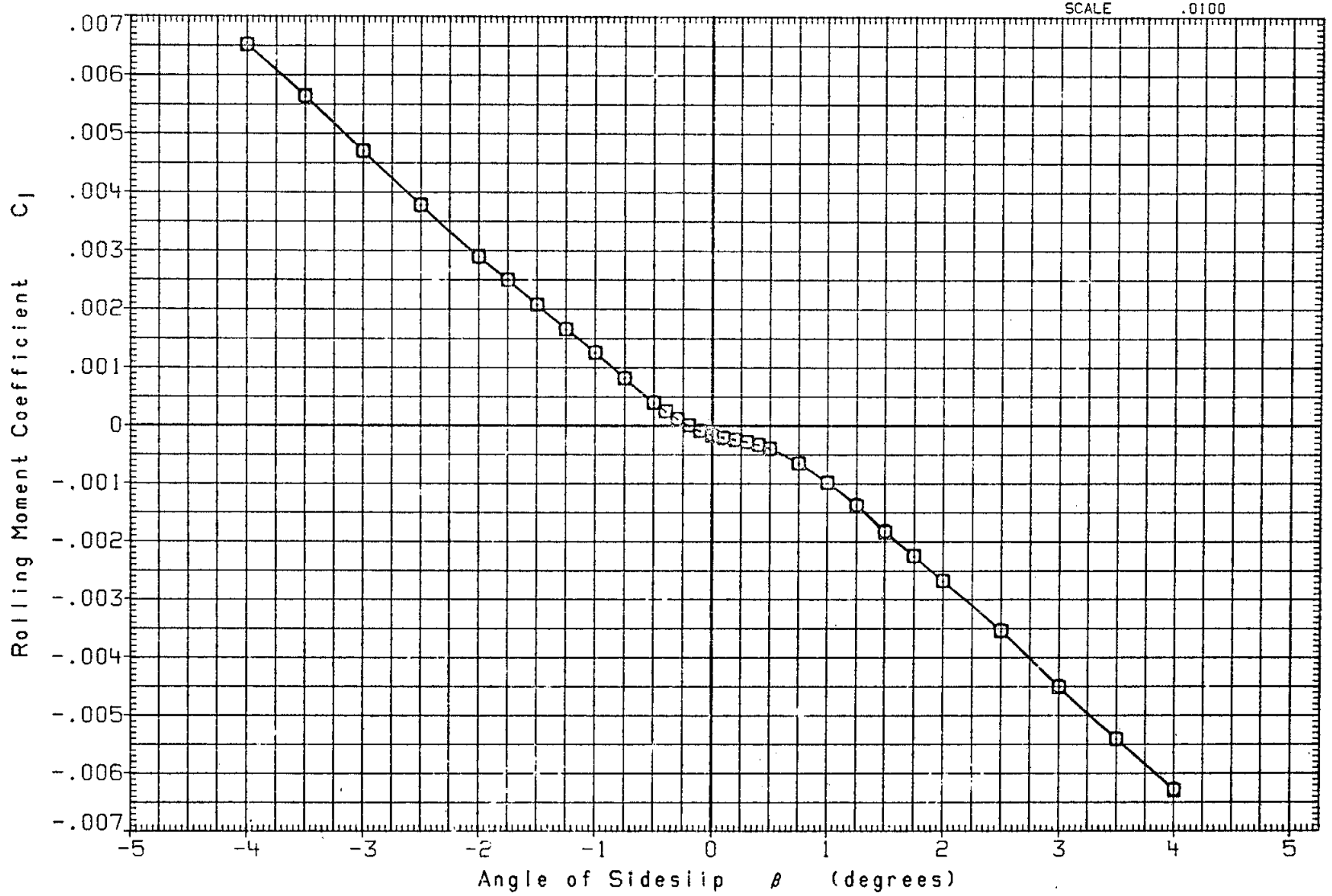


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(E) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.00 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3013	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	25.000	INCRSE	CONTNU	2.000	6.000
RT3014	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	25.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

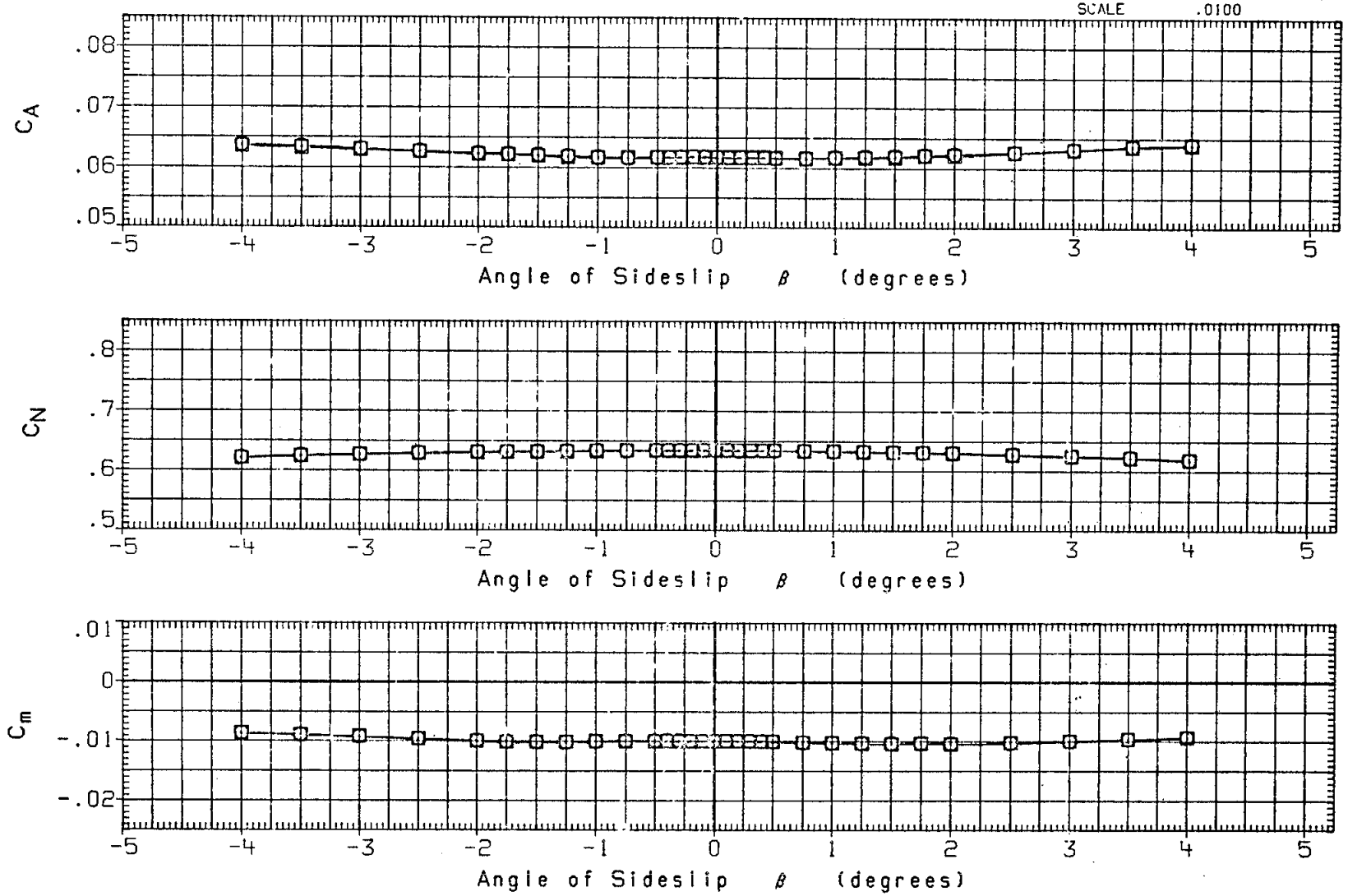


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(E) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.00 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3013	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	25.000	INCRSE	CONTNU	2.000	6.000
RT3014	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	25.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

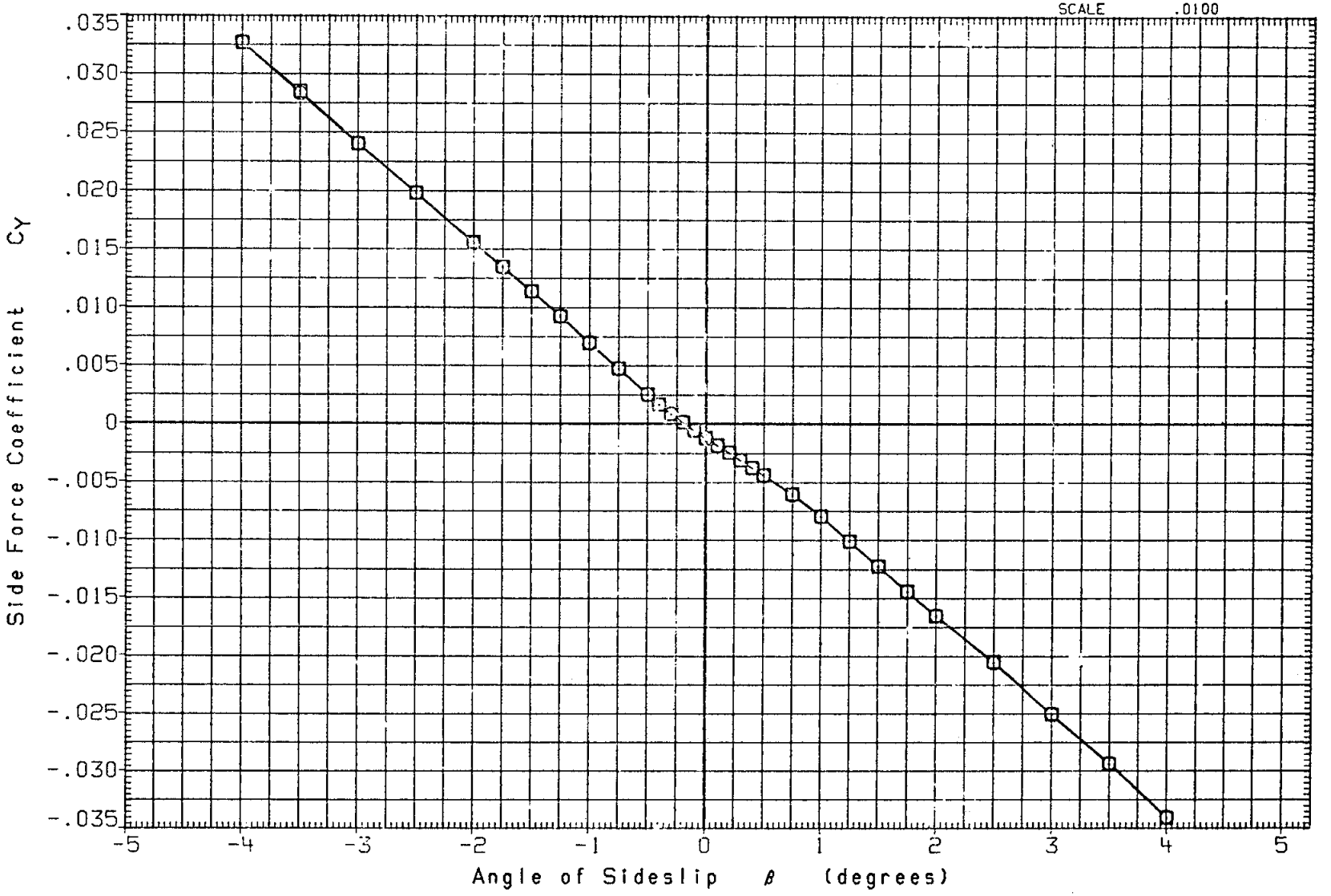


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(E) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.38 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3013	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	25.000	INCRSE	CONTNU	2.000	6.000
RT3014	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	25.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

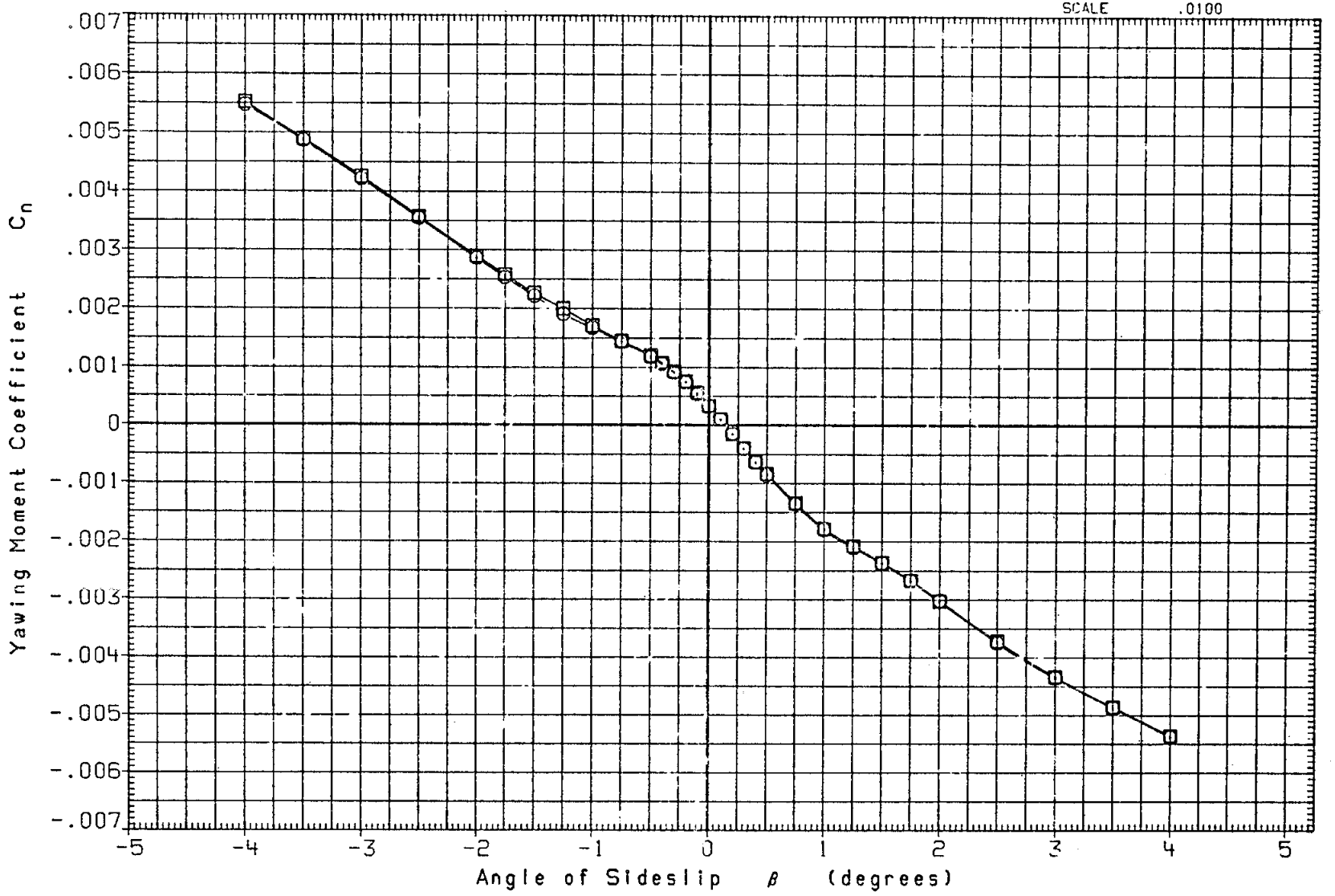


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(E) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.38 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3013	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	25.000	INCRSE	CONTNU	2.000	6.000
RT3014	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	25.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

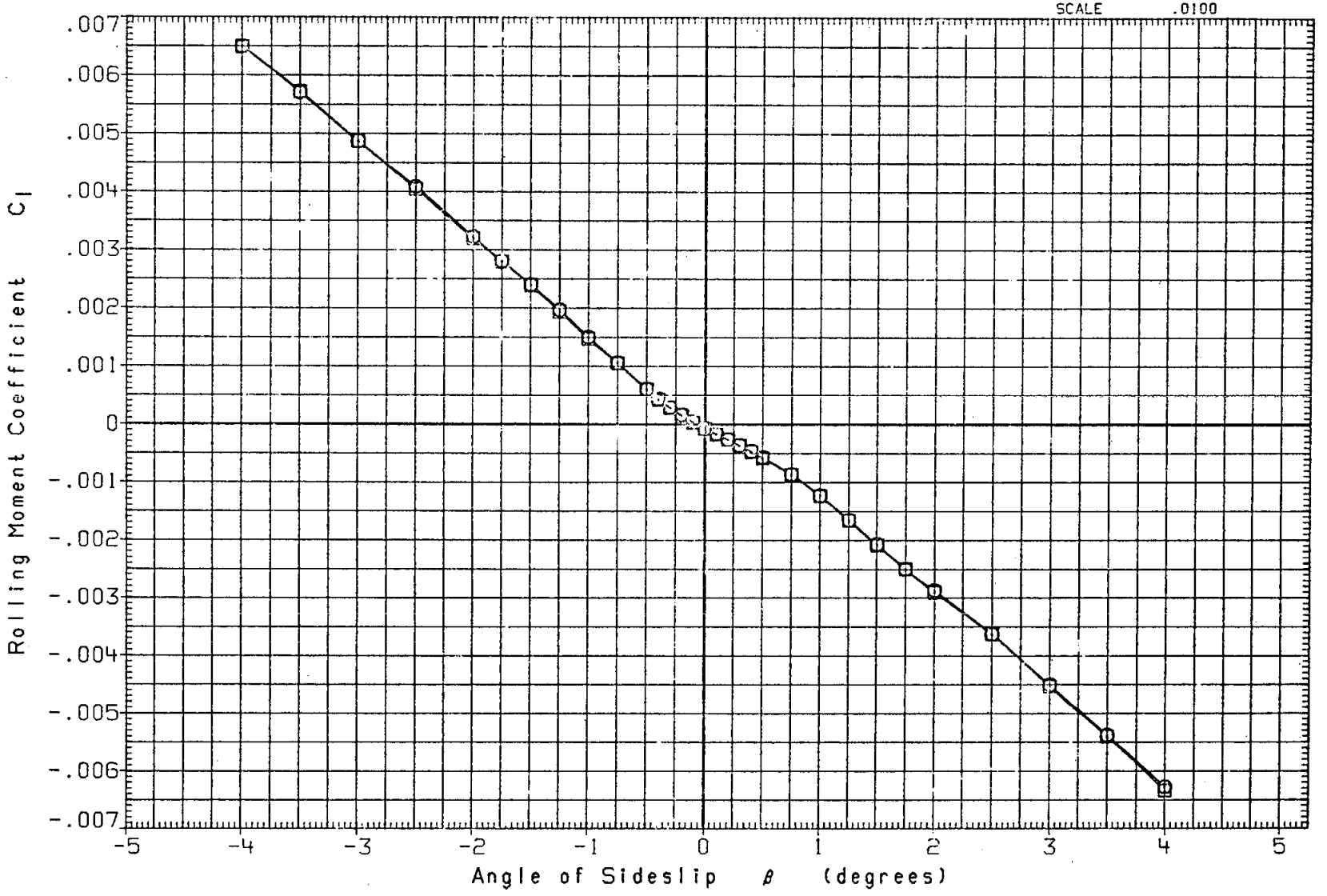


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(E) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.38 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3013	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	25.000	INCRSE	CONTNU	2.000	6.000
RT3014	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	25.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

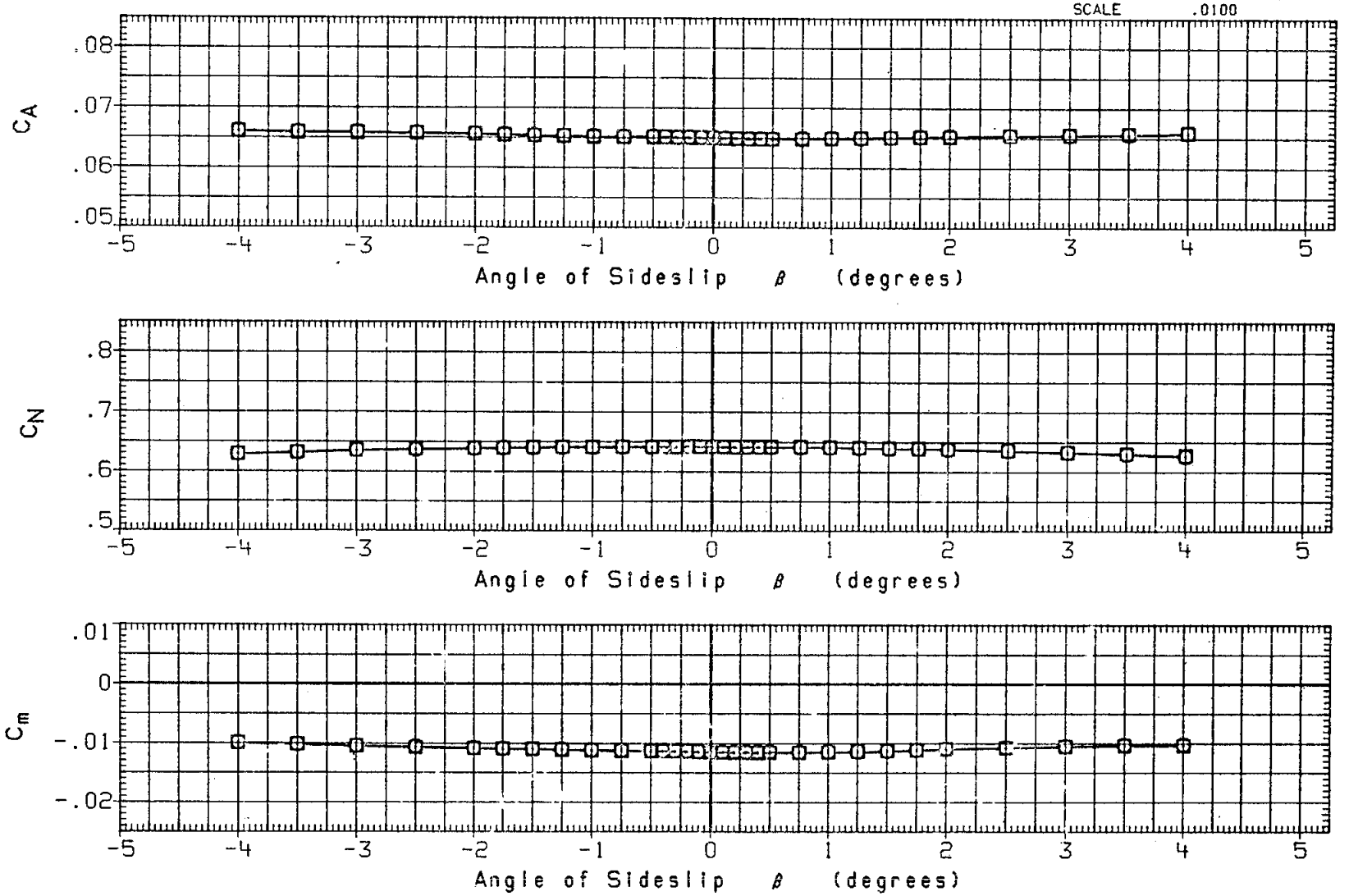


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(E) ALPHA = 25.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.38 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3015	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	27.500	INCRSE	CONTNU	2.000	6.000
RT3016	□	DATA NOT AVAILABLE	27.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

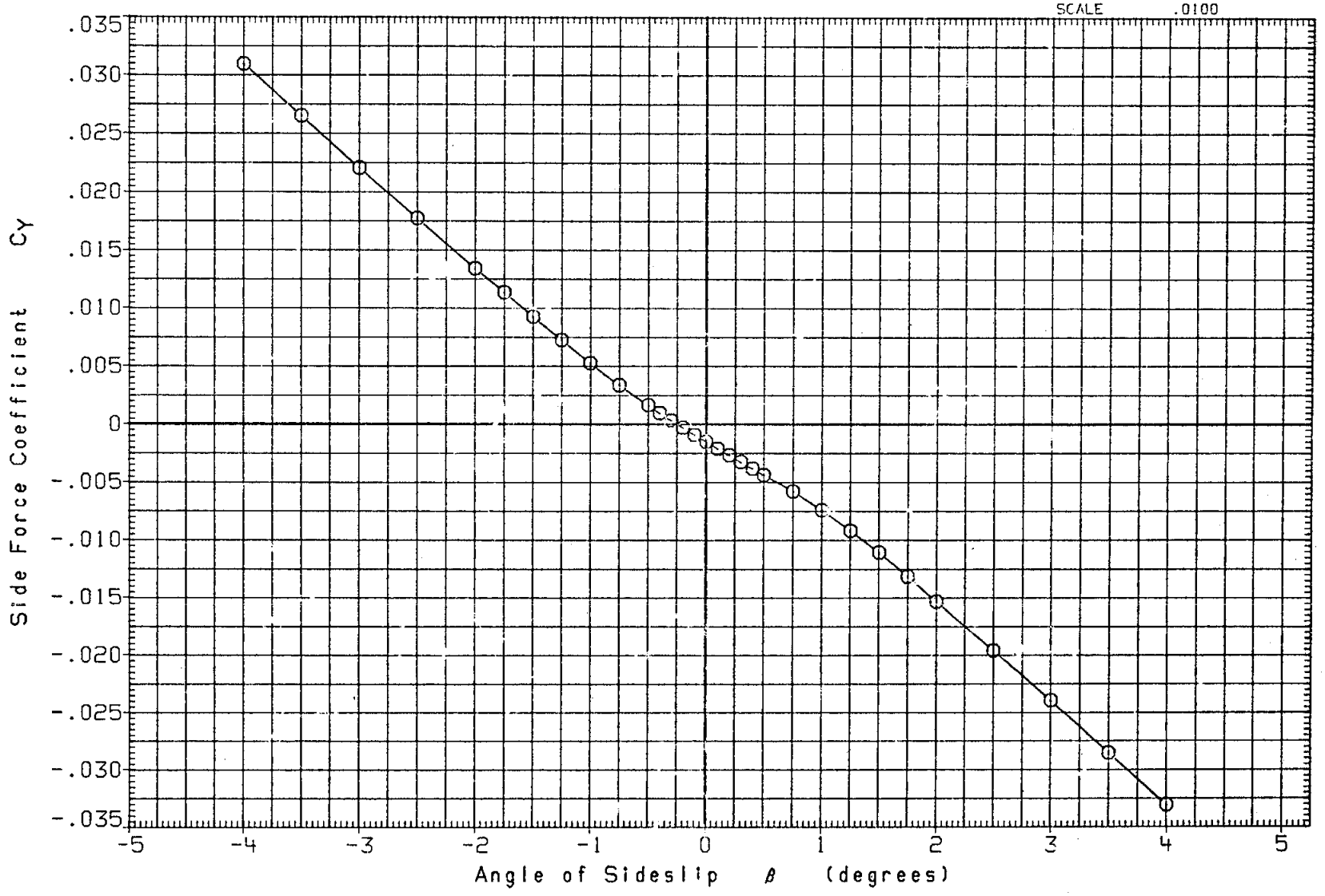


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(F) ALPHA = 27.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.01 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3015	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	27.500	INCRSE	CONTNU	2.000	6.000
RT3016	□	DATA NOT AVAILABLE	27.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

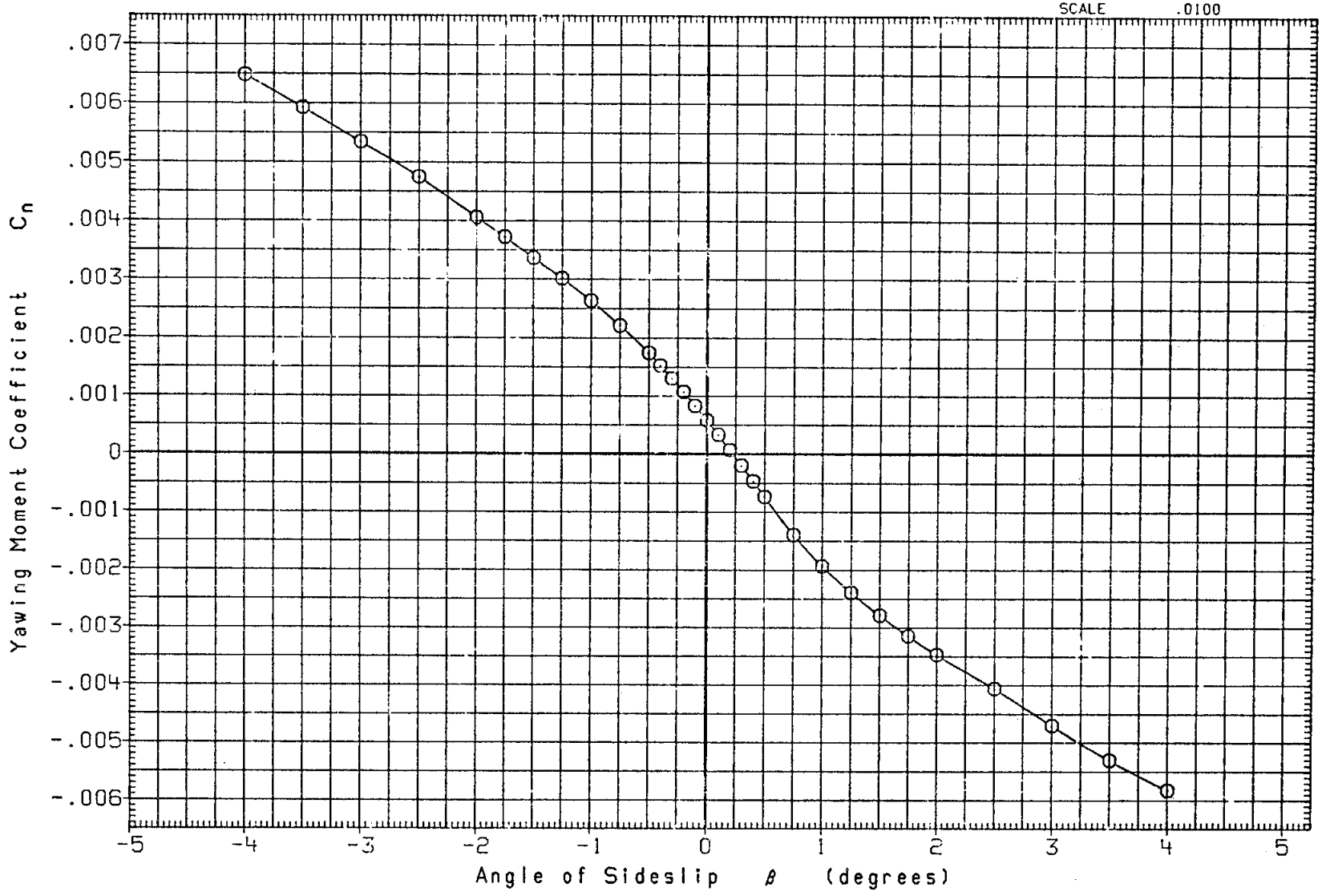


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(F) ALPHA = 27.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.01 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3015	○	0A259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	27.500	INCRSE	CONTNU	2.000	6.000
RT3016	□	DATA NOT AVAILABLE	27.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

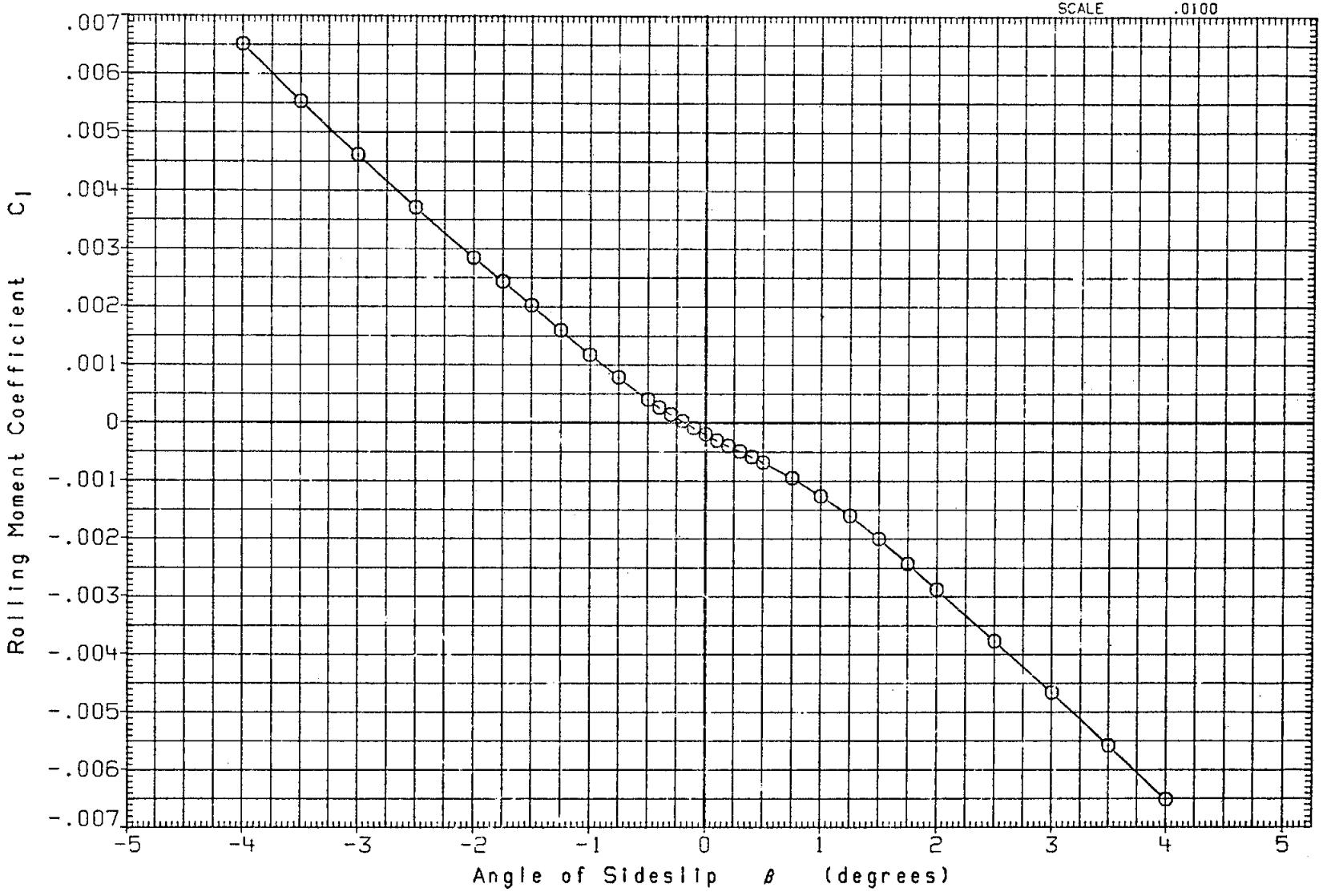


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(F) ALPHA = 27.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.01 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3015	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	27.500	INCRSE	CONTNU	2.000	6.000
RT3016	□	DATA NOT AVAILABLE	27.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

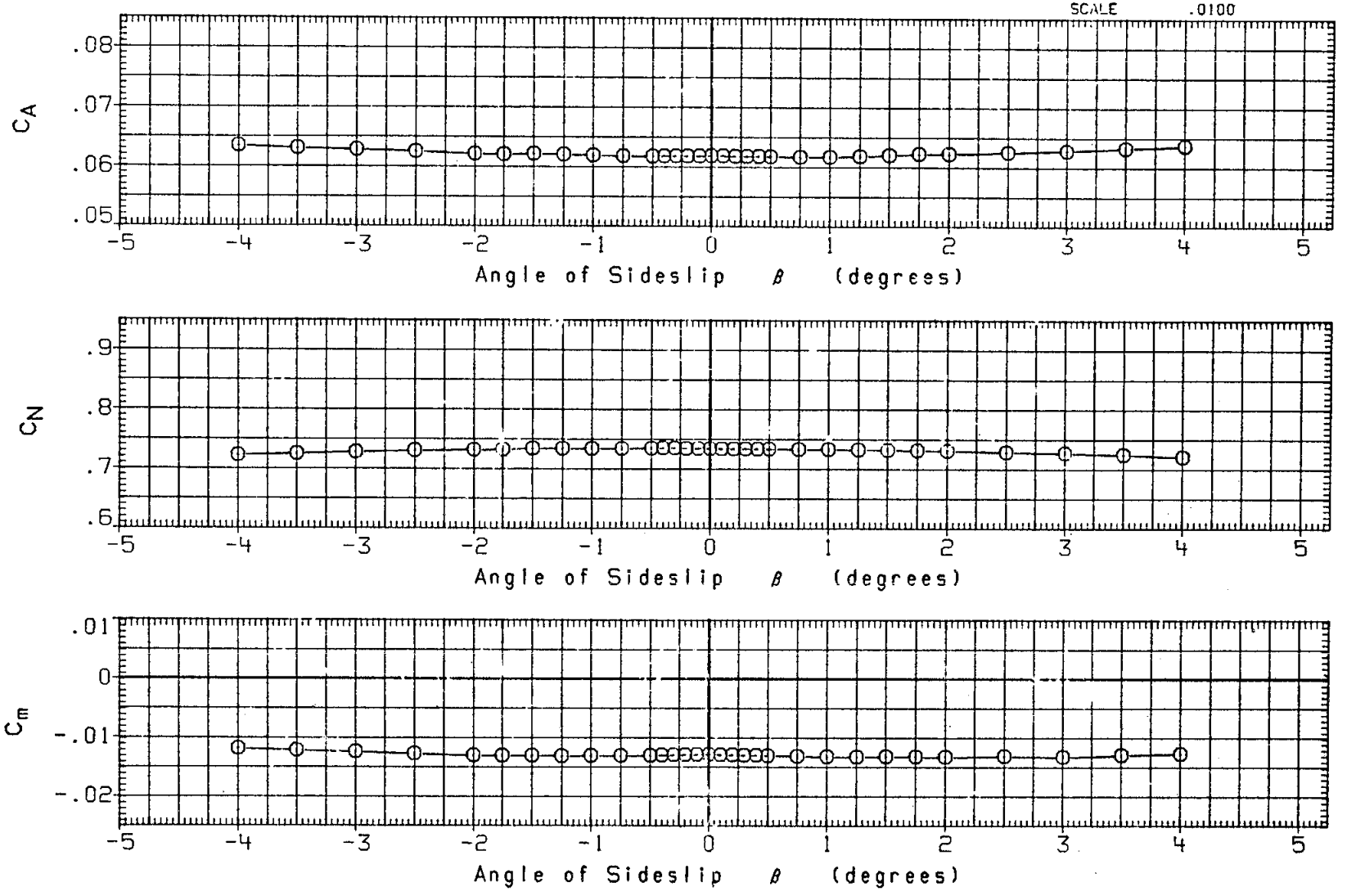


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(F) ALPHA = 27.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.01 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3015	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	27.500	INCRSE	CONTNU	2.000	6.000
RT3016	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	27.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

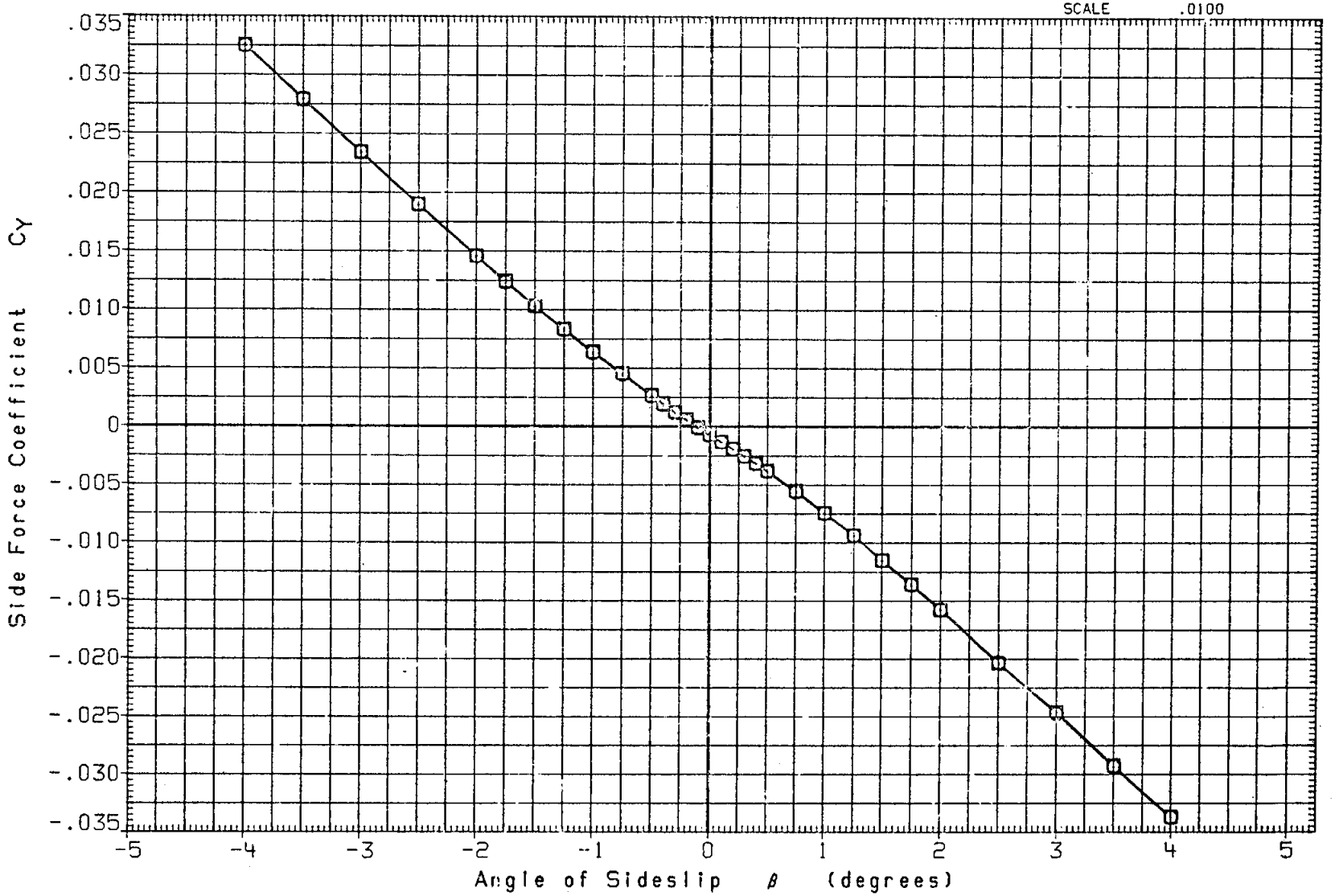


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(F) ALPHA = 27.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.34 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3015	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	27.500	INCRSE	CONTNU	2.000	6.000
RT3016	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	27.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

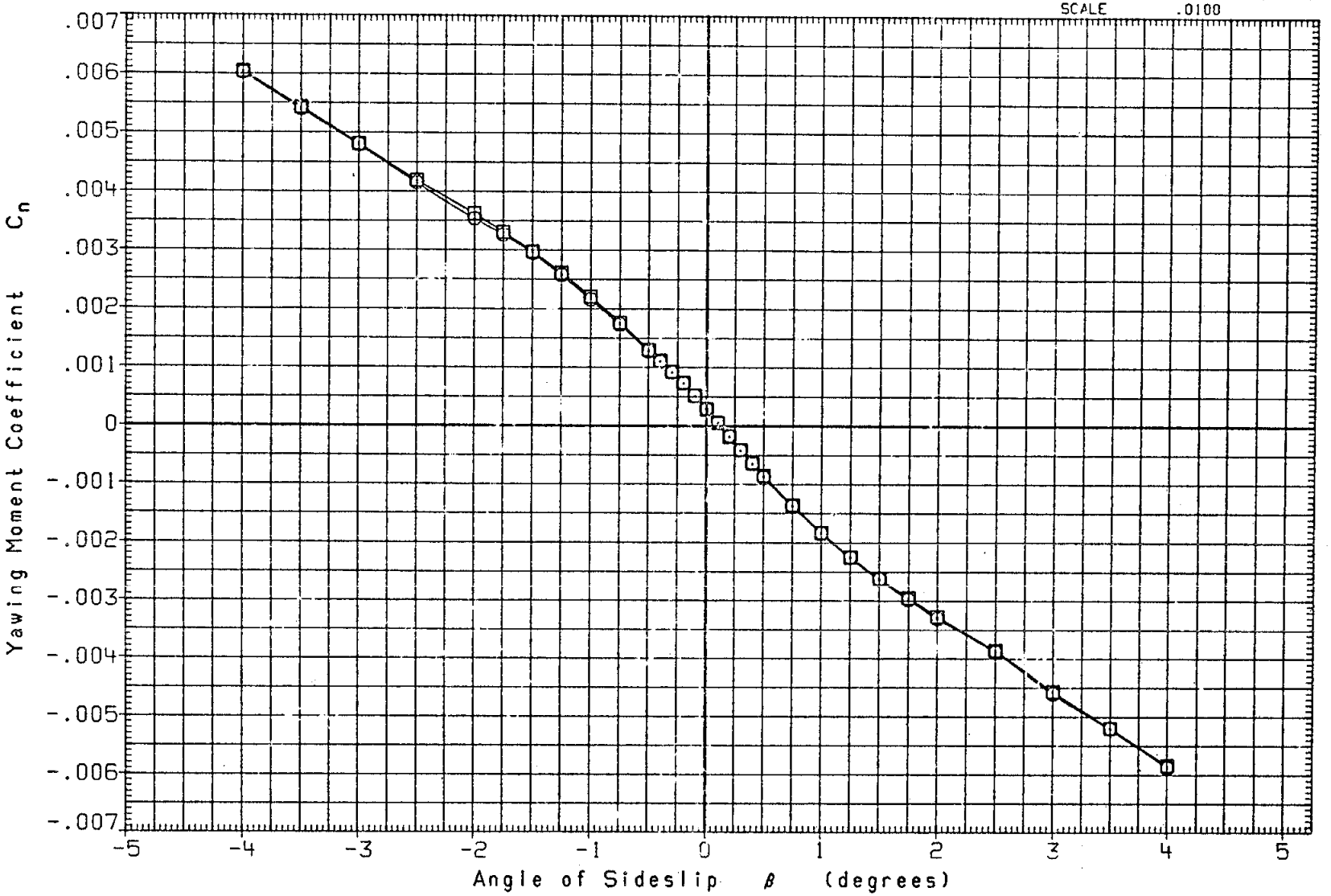


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(F) ALPHA = 27.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.34 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3015	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	27.500	INCRSE	CONTNU	2.000	6.000
RT3016	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	27.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

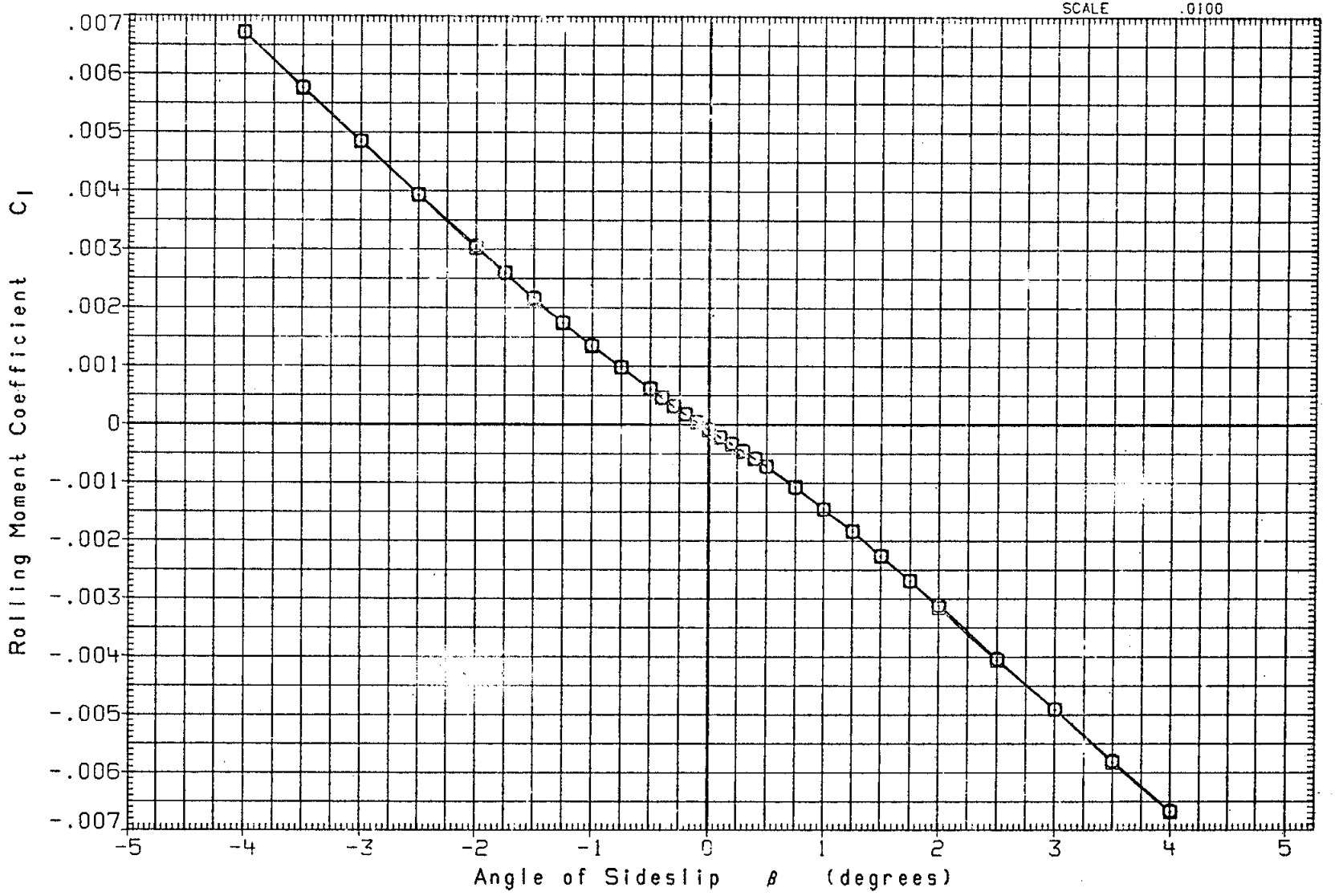


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(F) ALPHA = 27.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.34 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3015	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	27.500	INCRSE	CONTNU	2.000	6.000
RT3016	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	27.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

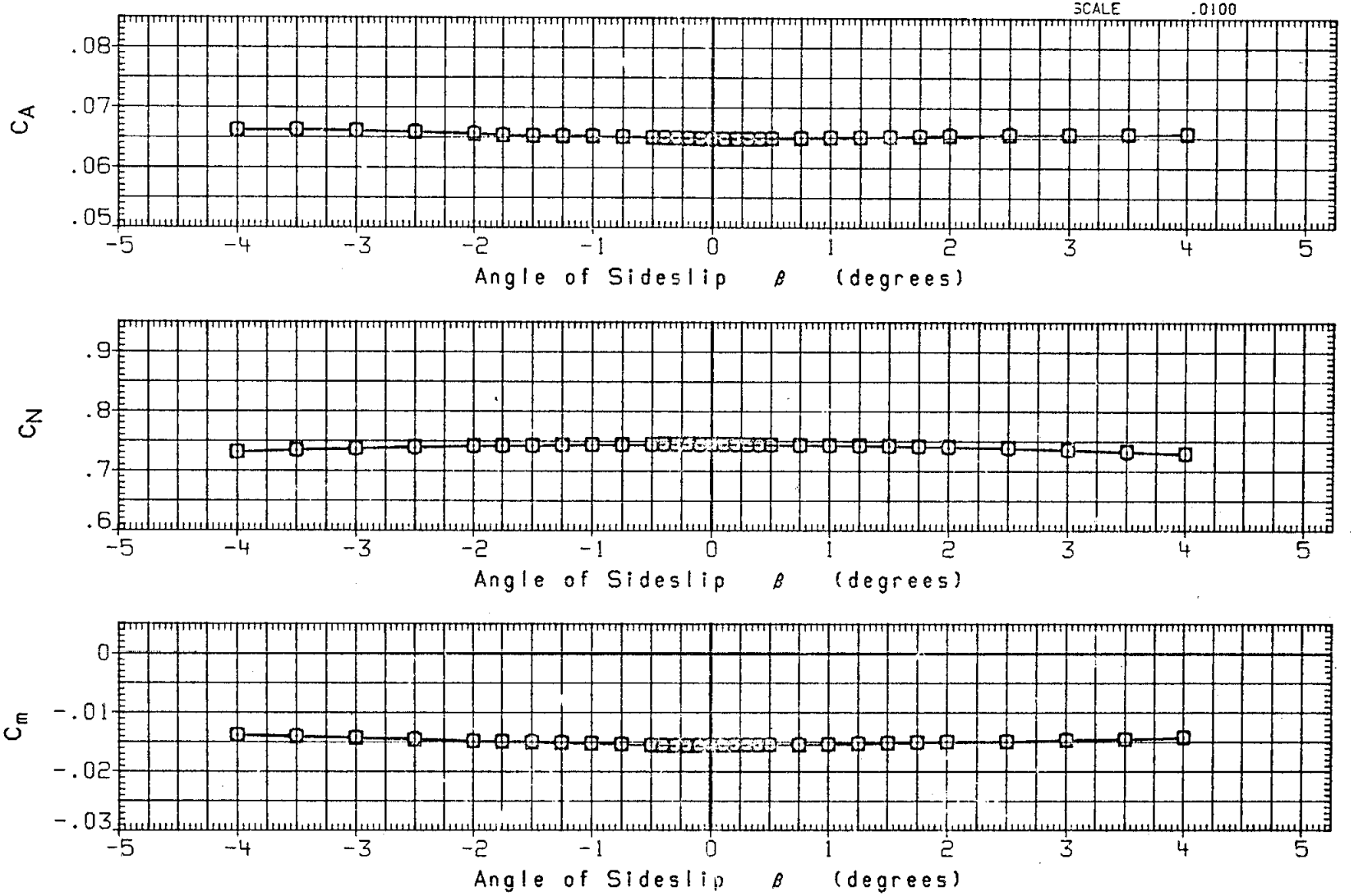


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(F) ALPHA = 27.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.34 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3017	○	0A259 (AEDC V41B-141 OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3018	□	DATA NOT AVAILABLE	30.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

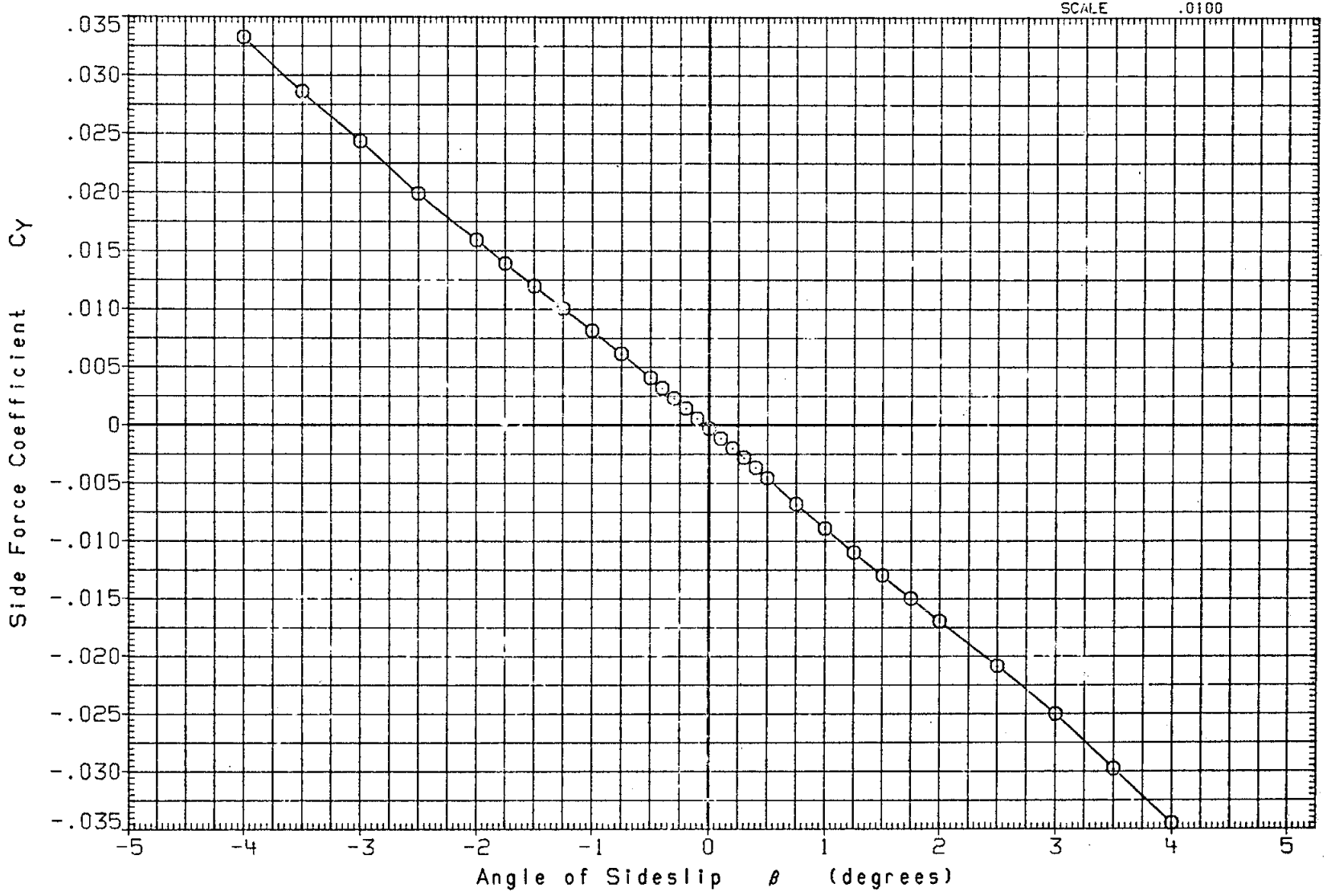


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(G) ALPHA = 30.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.00 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3017	○	0A259 [AEDC V41B-14] 0V102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3018	□	DATA NOT AVAILABLE	30.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

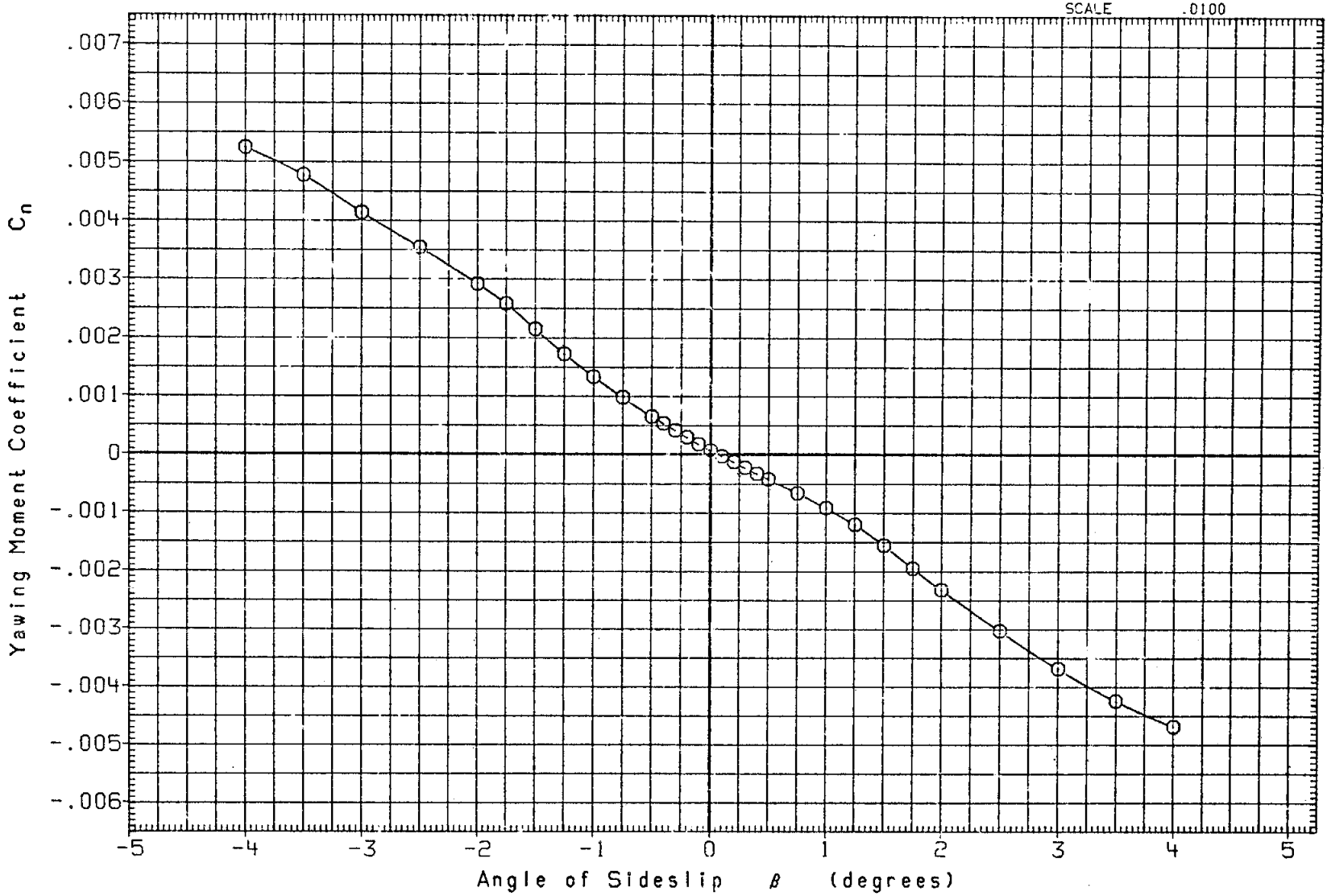


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(G) ALPHA = 30.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.00 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3017	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3018	□	DATA NOT AVAILABLE	30.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

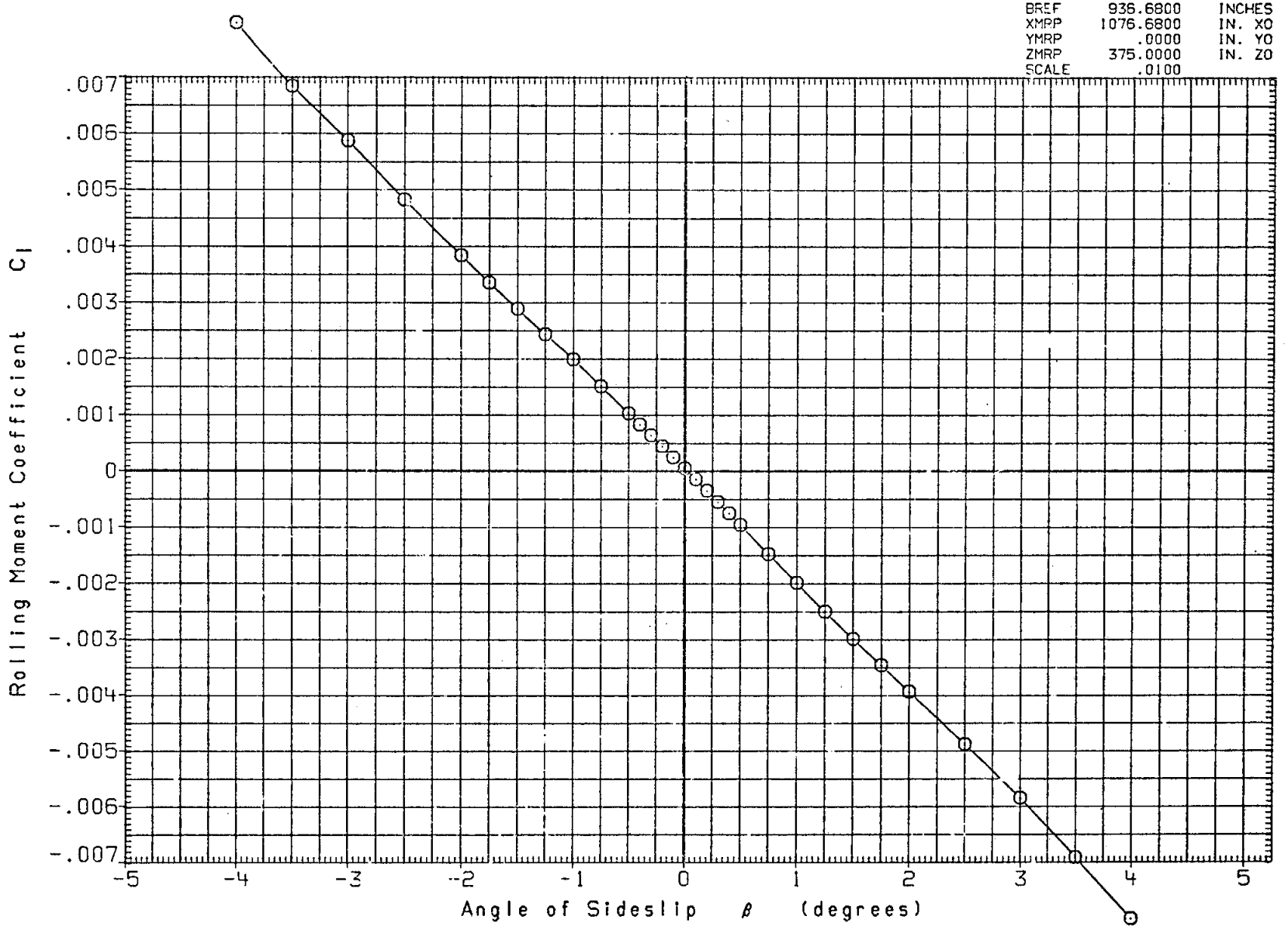


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(G) ALPHA = 30.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.00 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3017	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3018	□	DATA NOT AVAILABLE	30.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

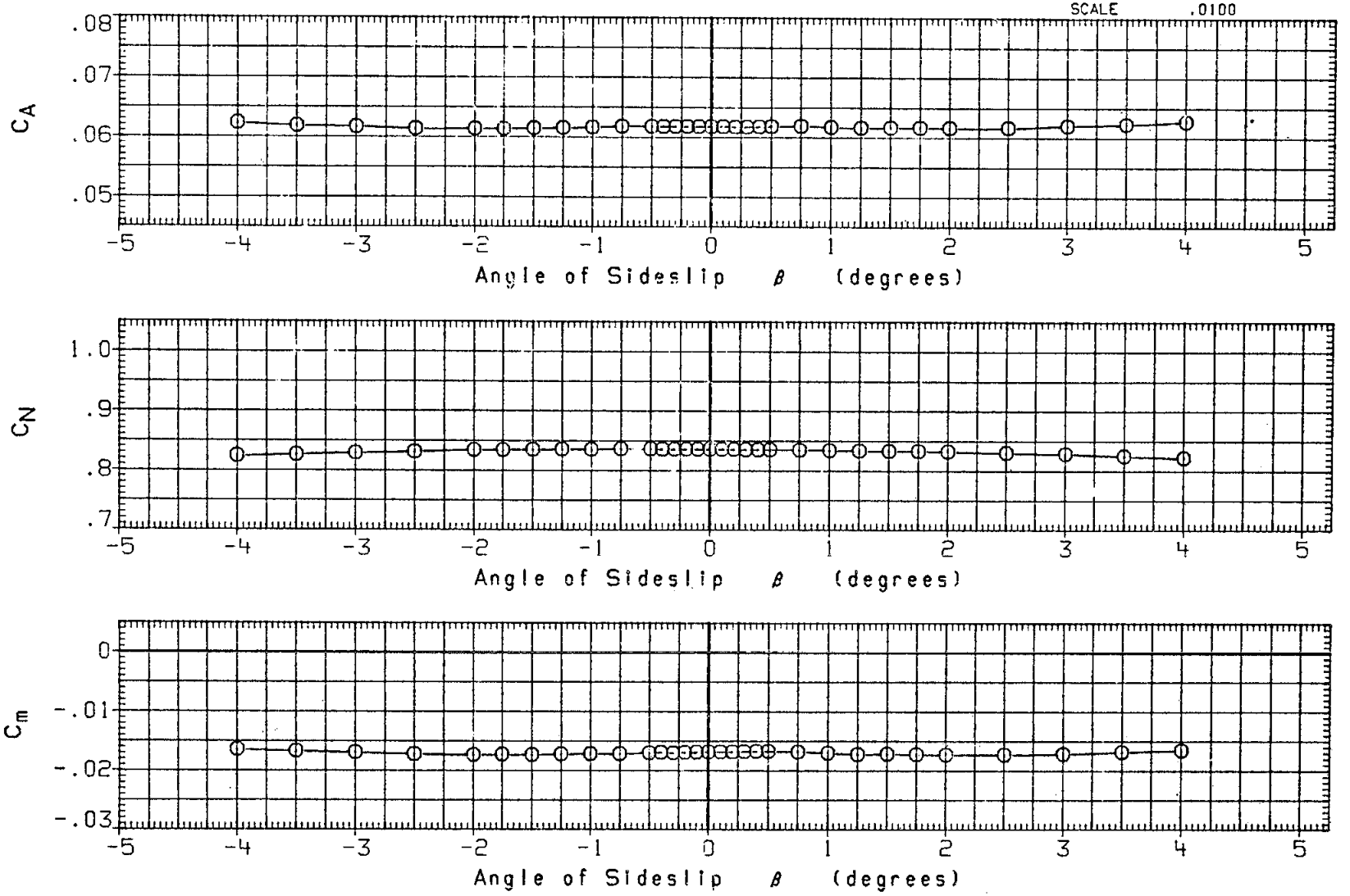


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(G) ALPHA = 30.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.00 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3017	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3018	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	30.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

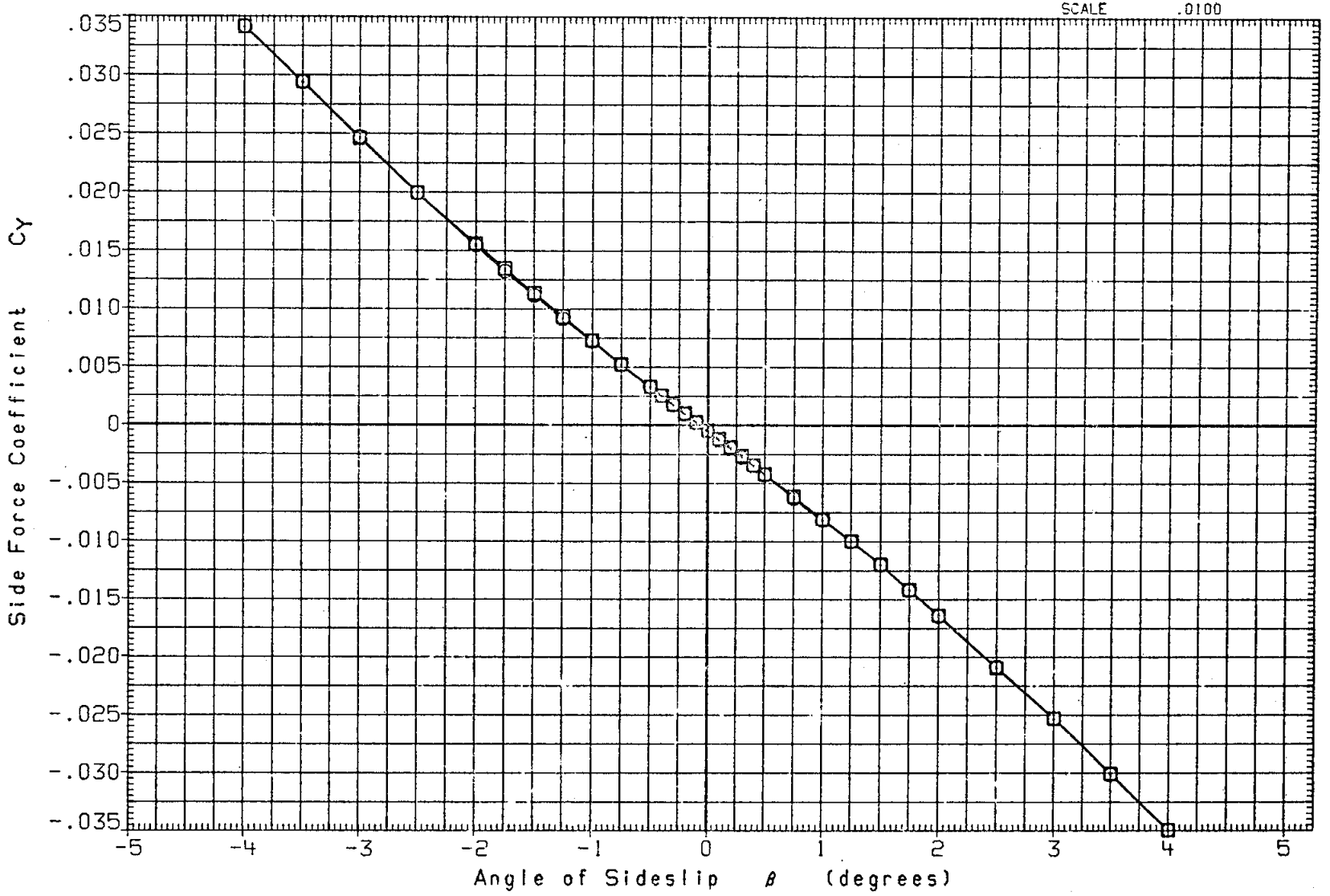


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(C) ALPHA = 30.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.40 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3017	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3018	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	30.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

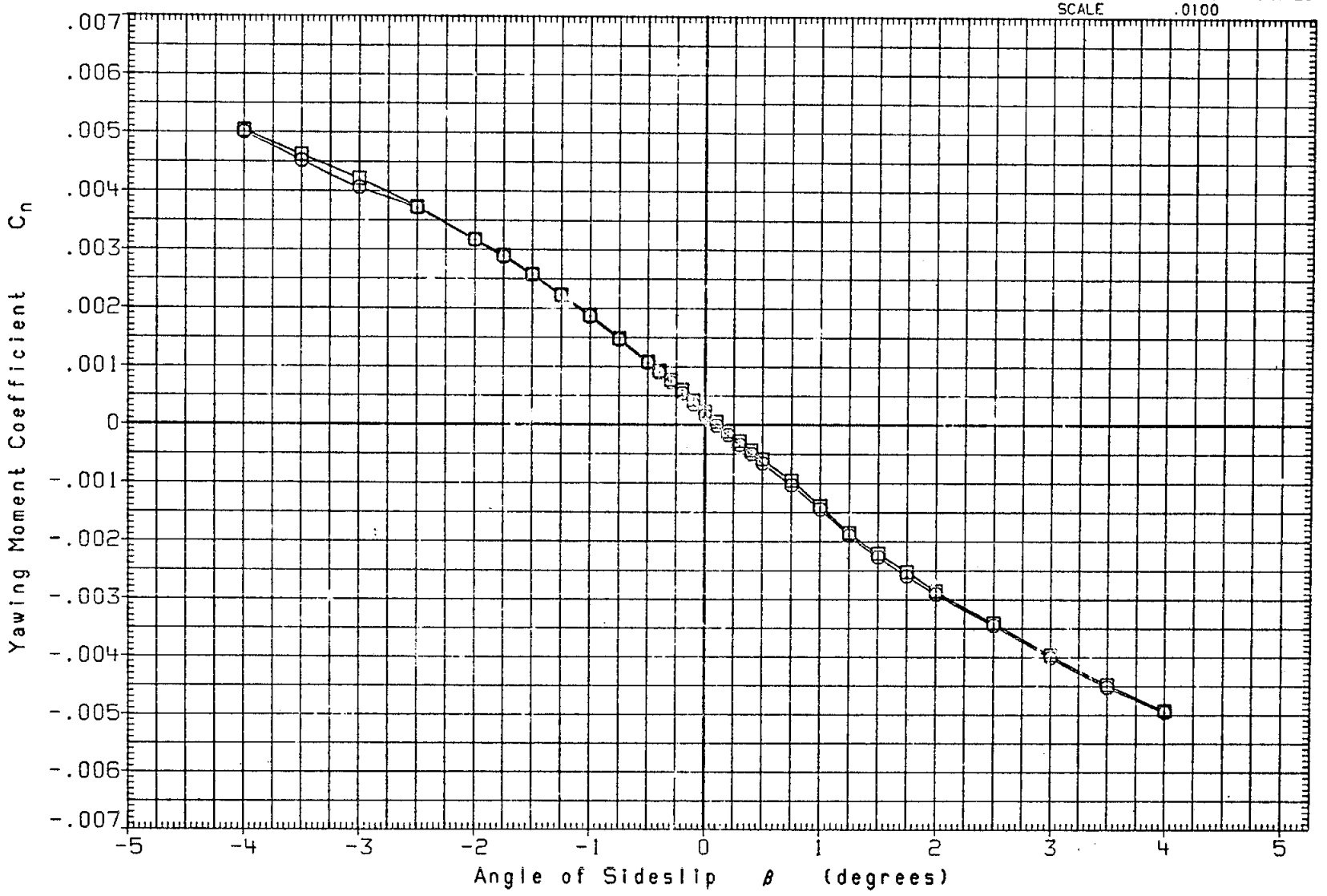


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(G) ALPHA = 30.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.40 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3017	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3018	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

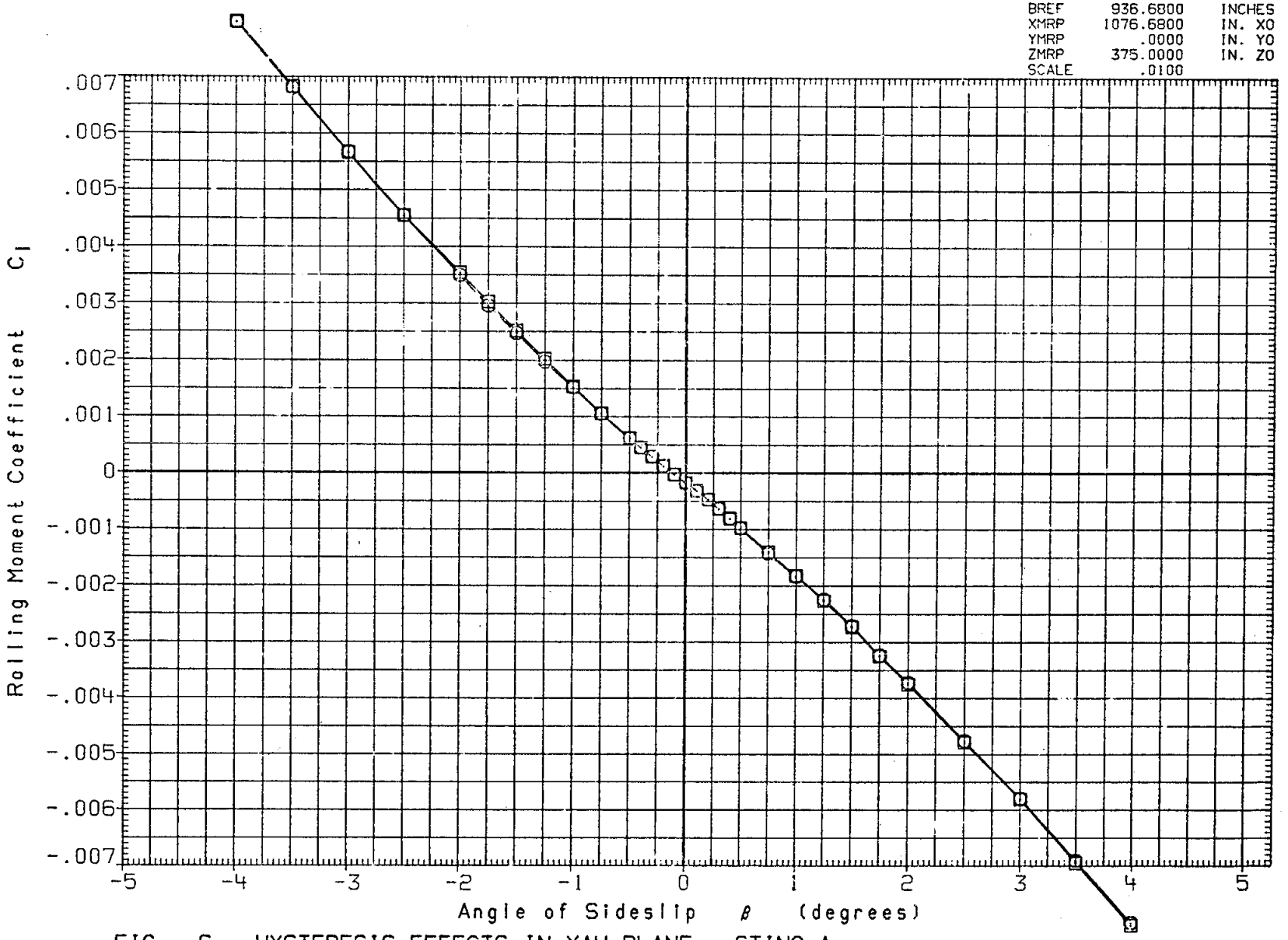


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(G) ALPHA = 30.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.40 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3017	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3018	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

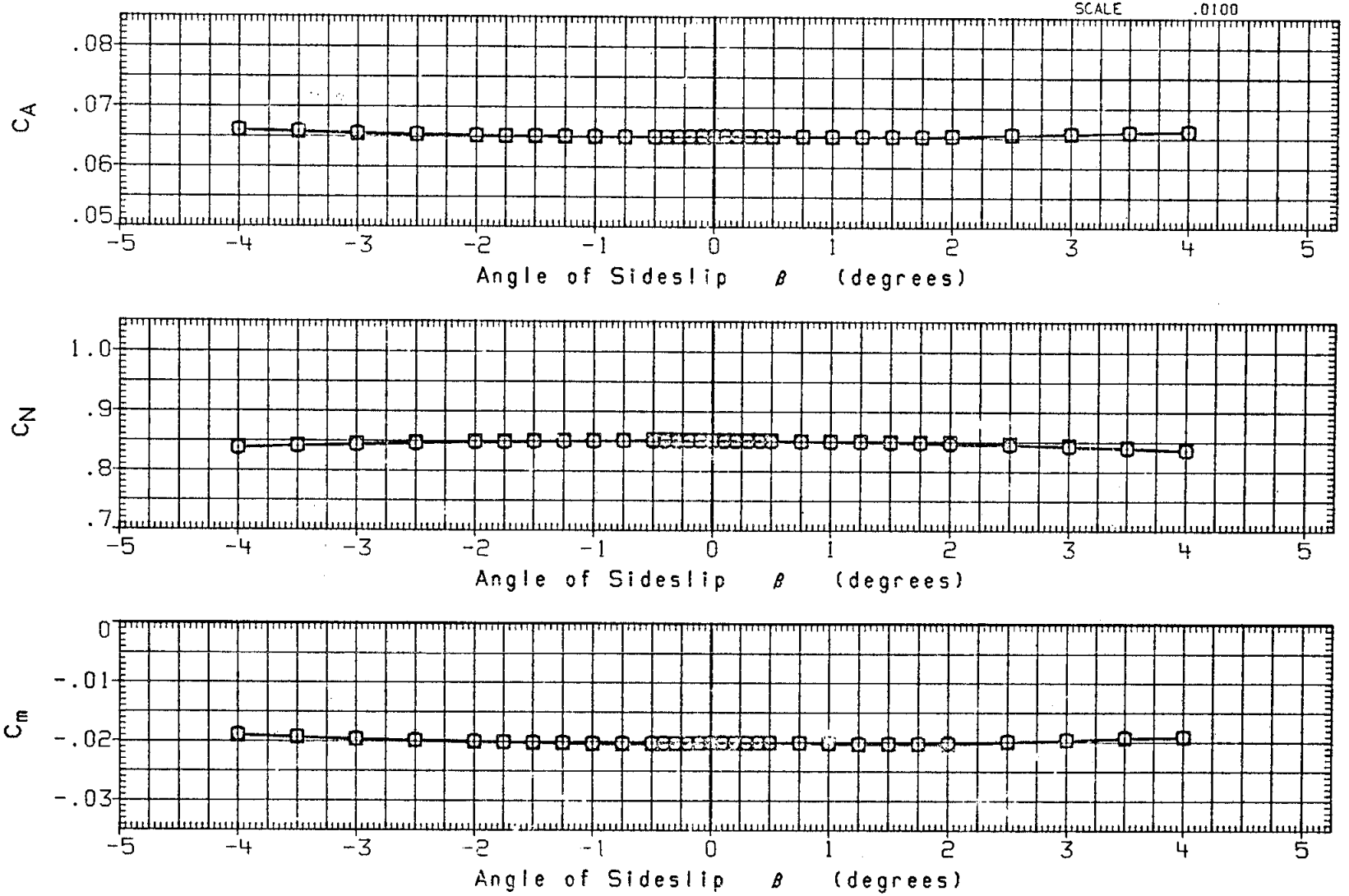


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(G) ALPHA = 30.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.40 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3019	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	32.500	INCRSE	CONTNU	2.000	6.000
RT3020	□	DATA NOT AVAILABLE	32.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

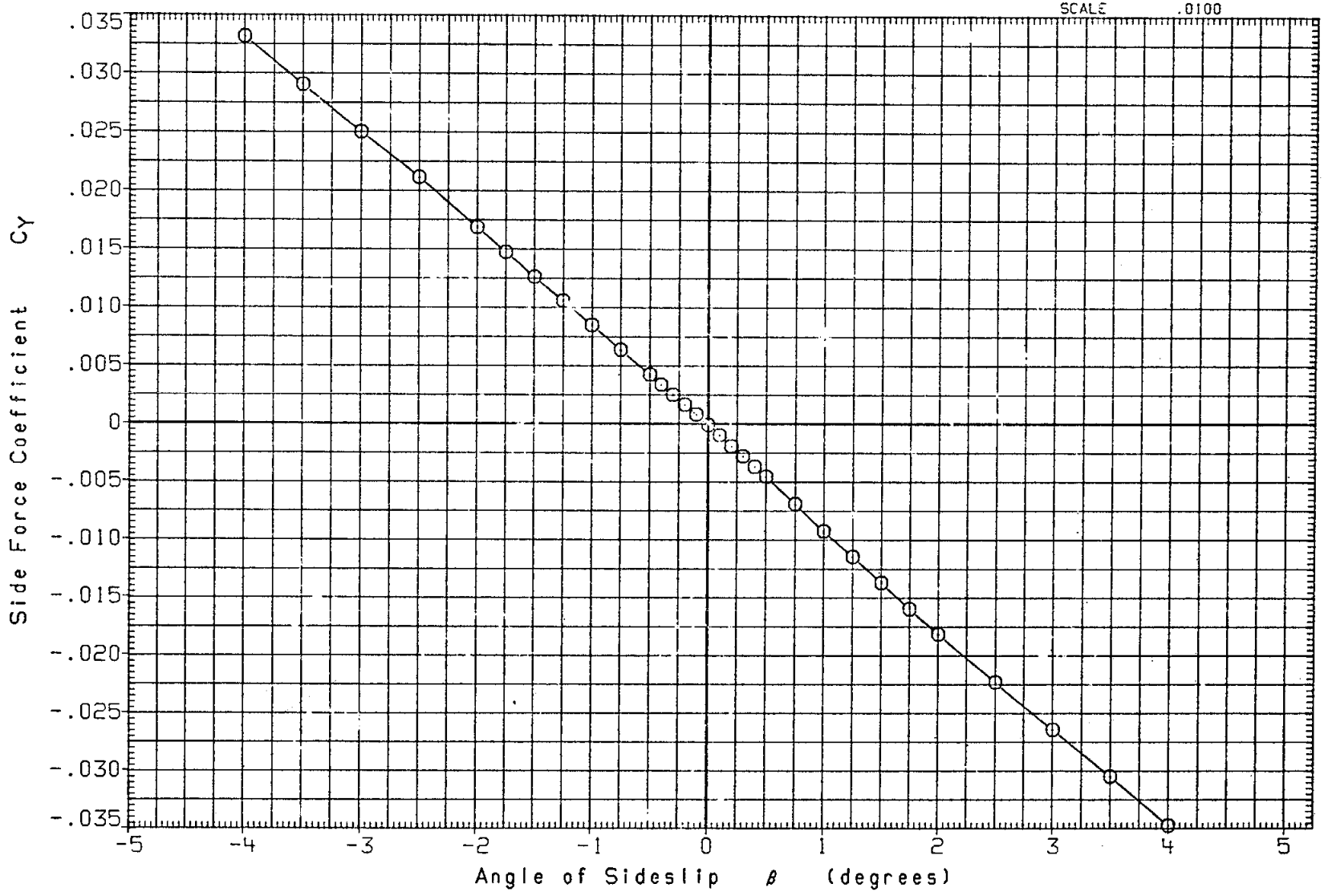


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(H) ALPHA = 32.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3019	○	OA259 [AEDC V41B-141 OV102, STING A (UPRIGHT)	32.500	INCRSE	CONTNU	2.000	6.000
RT3020	□	DATA NOT AVAILABLE	32.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

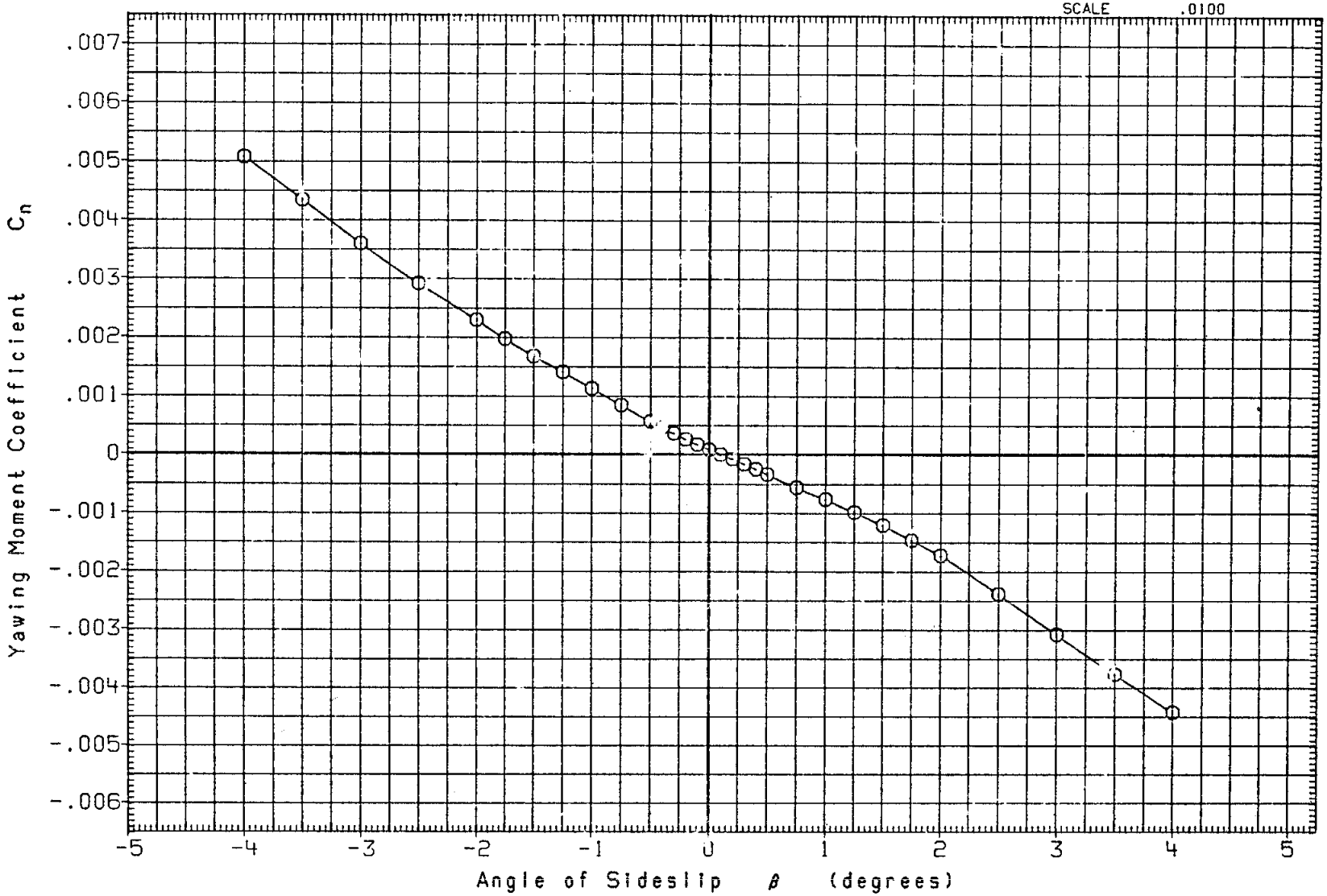


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(H) ALPHA = 32.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3019	○	0A259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	32.500	INCRSE	CONTNU	2.000	6.000
RT3020	□	DATA NOT AVAILABLE	32.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2590.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

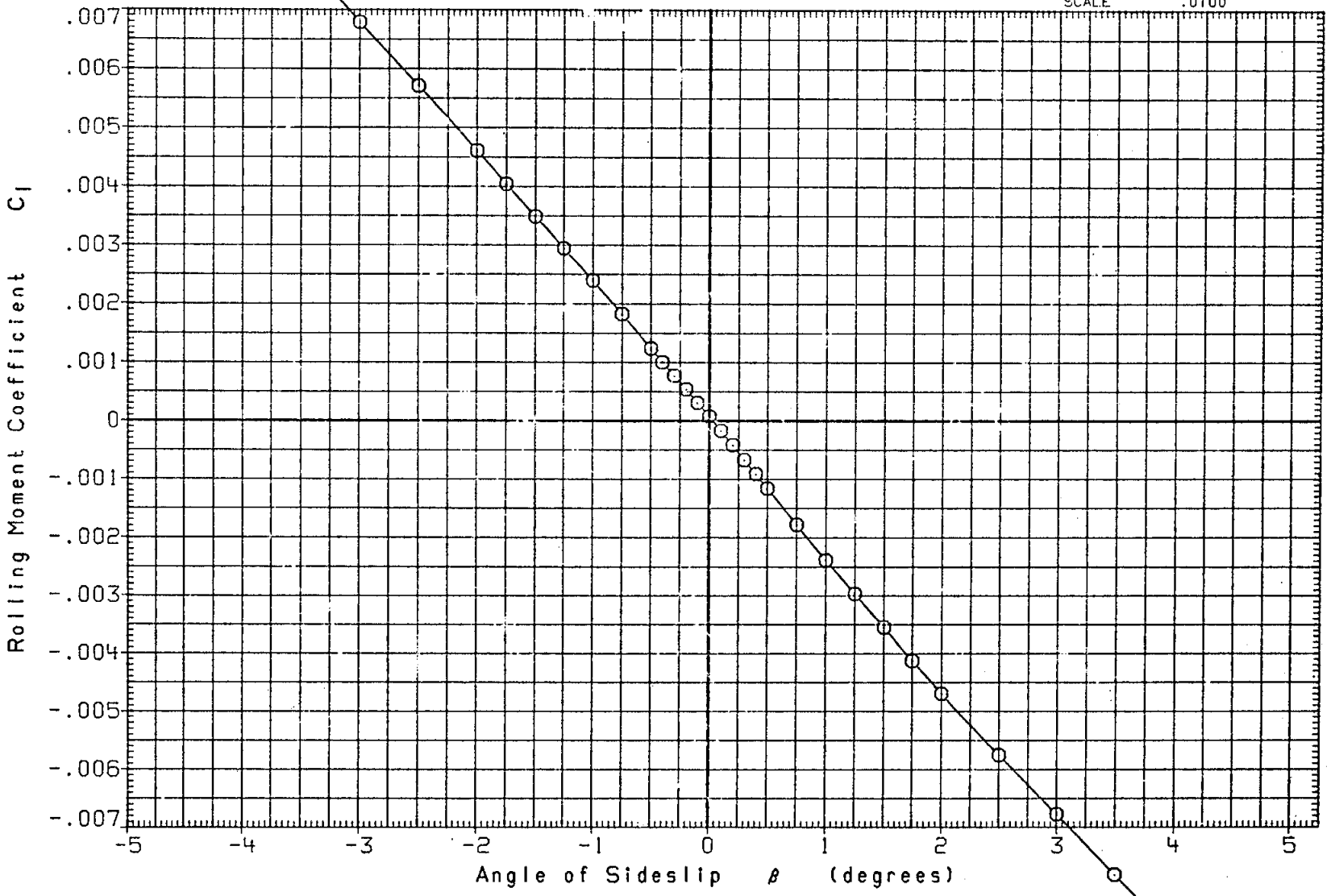


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(H) ALPHA = 32.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3019	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	32.500	INCRSE	CONTNU	2.000	6.000
RT3020	□	DATA NOT AVAILABLE	32.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

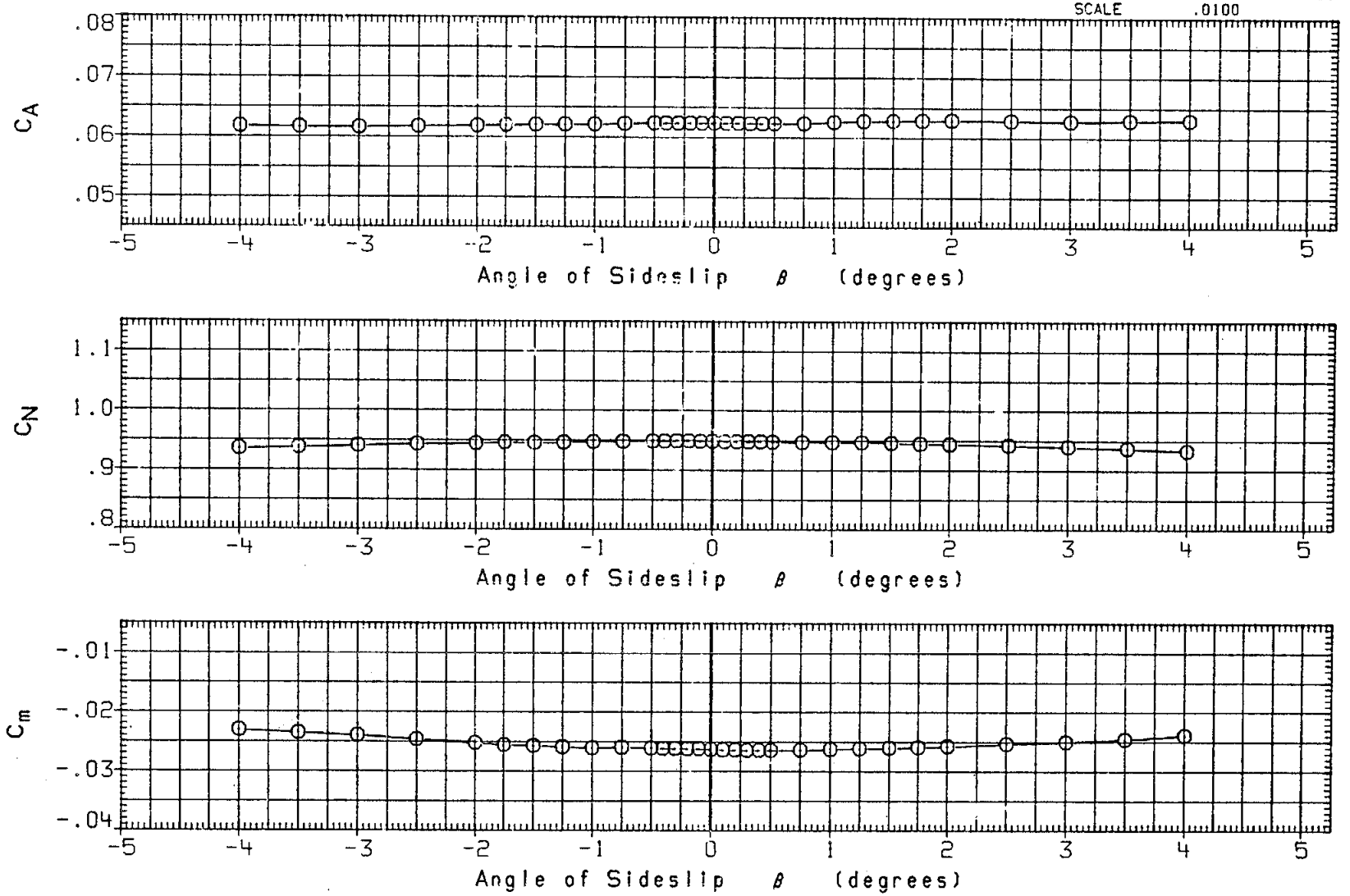


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(H) ALPHA = 32.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3019	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	32.500	INCRSE	CONTNU	2.000	6.000
RT3020	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	32.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

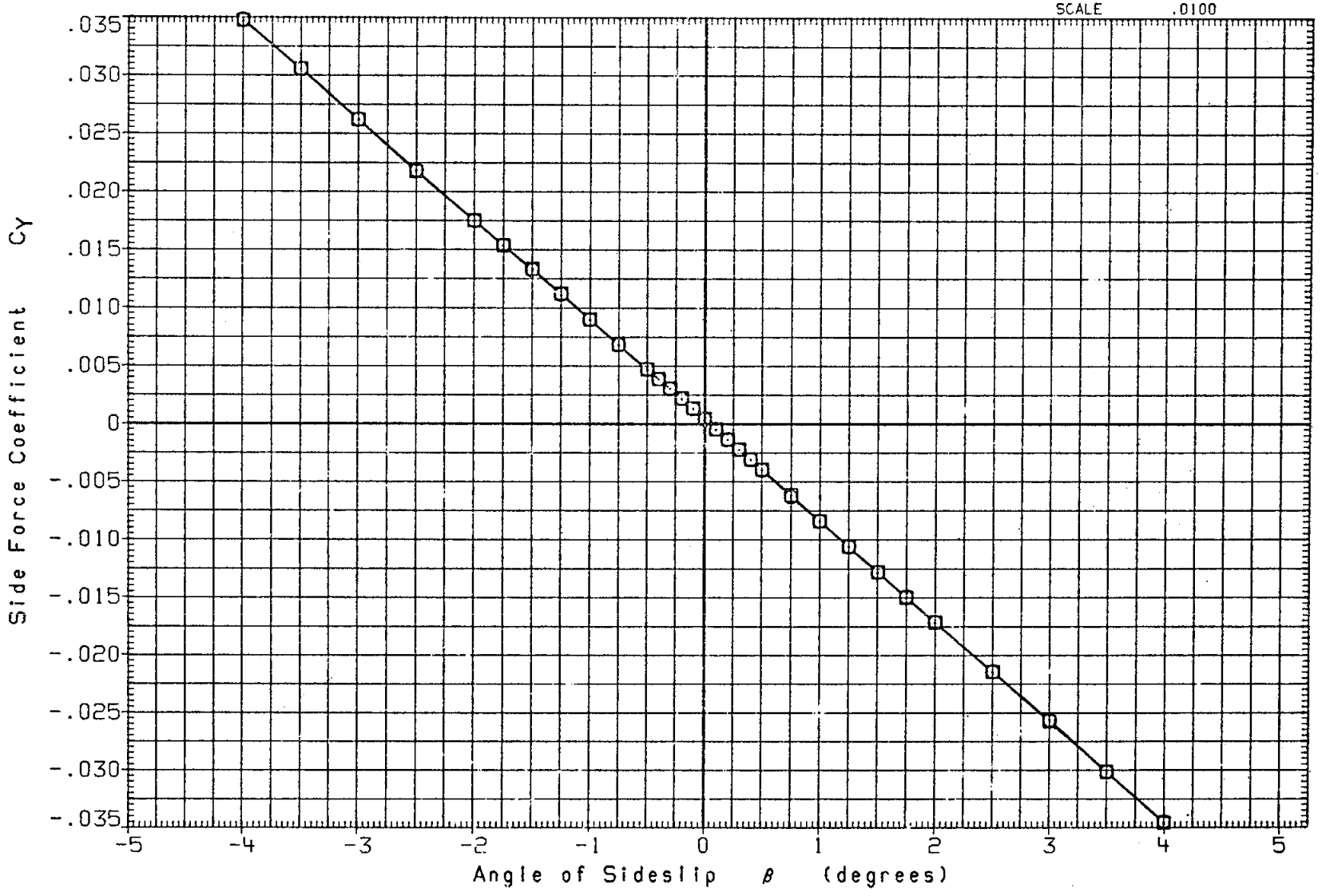


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(H) ALPHA = 32.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.41 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3019	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	32.500	INCRSE	CONTNU	2.000	6.000
RT3020	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	32.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

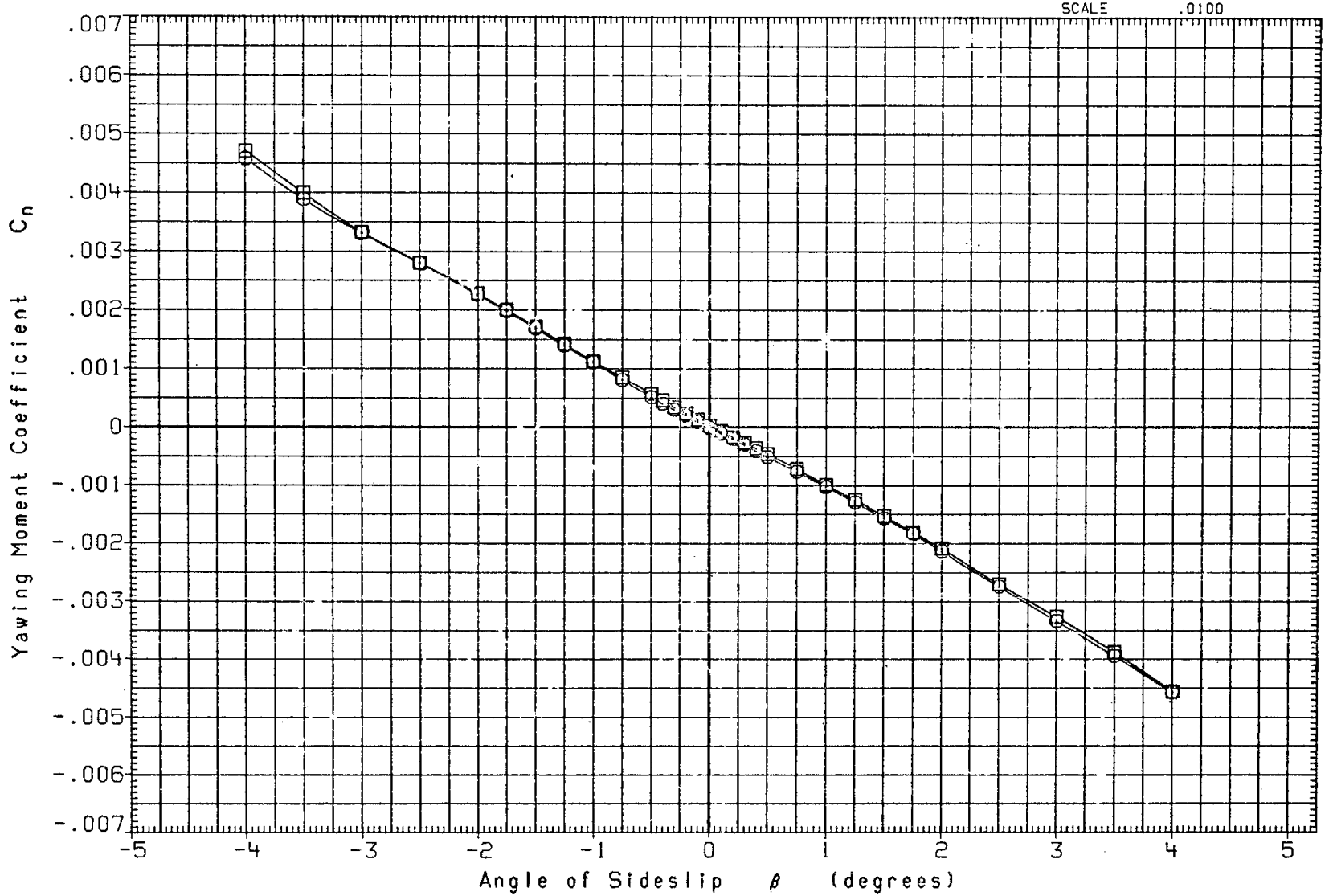


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(H) ALPHA = 32.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.41 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3019	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	32.500	INCRSE	CONTNU	2.000	6.000
RT3020	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	32.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

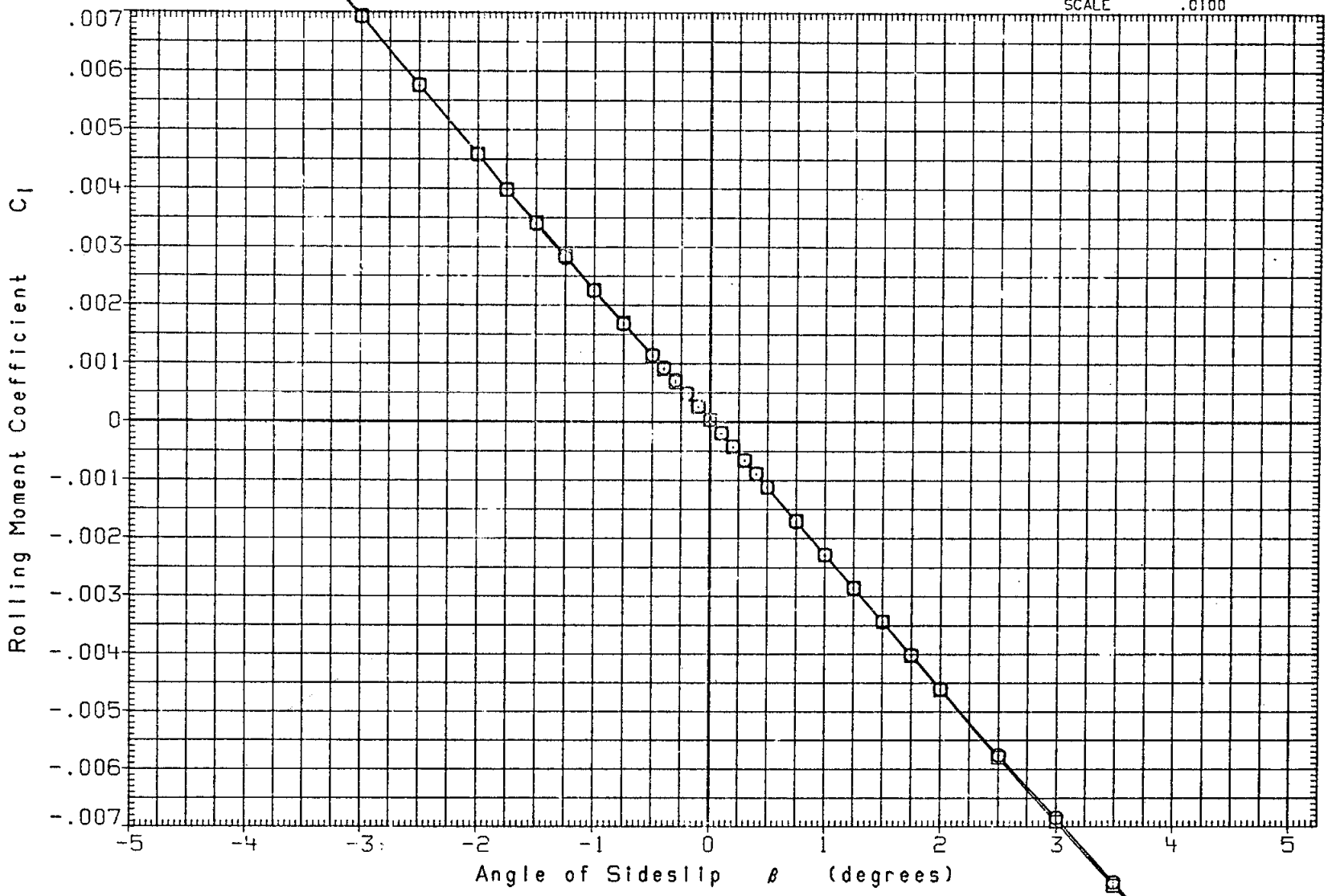


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(H) ALPHA = 32.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.41 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3019	○	OA259 [AEDC V41B-14] OV102, ST.NG A (UPRIGHT)	32.500	INCRSE	CONTNU	2.000	6.000
RT3020	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	32.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

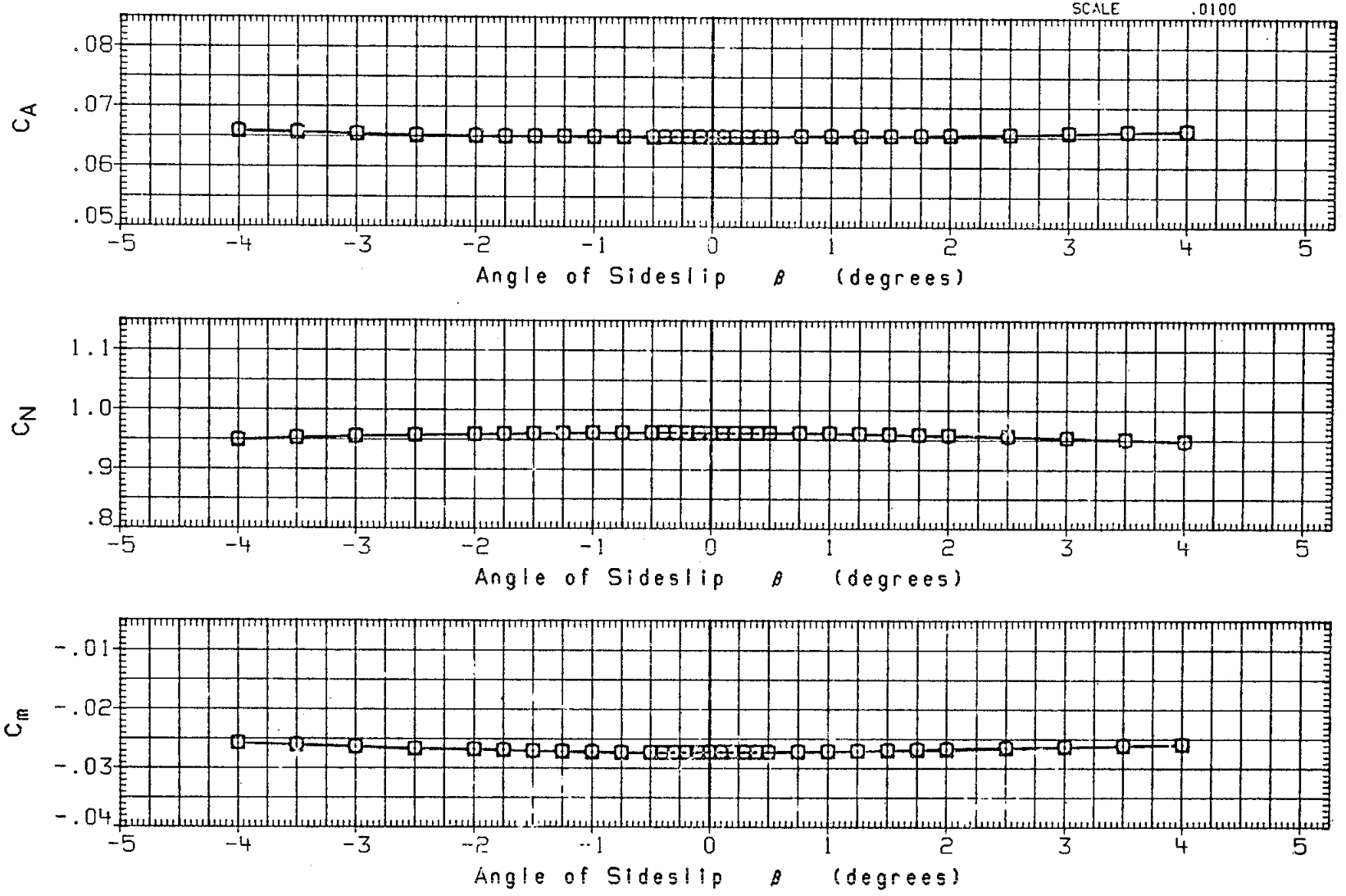


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(H) ALPHA = 32.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.41 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3021	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	35.000	INCRSE	CONTNU	2.000	6.000
RT3022	□	DATA NOT AVAILABLE	35.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

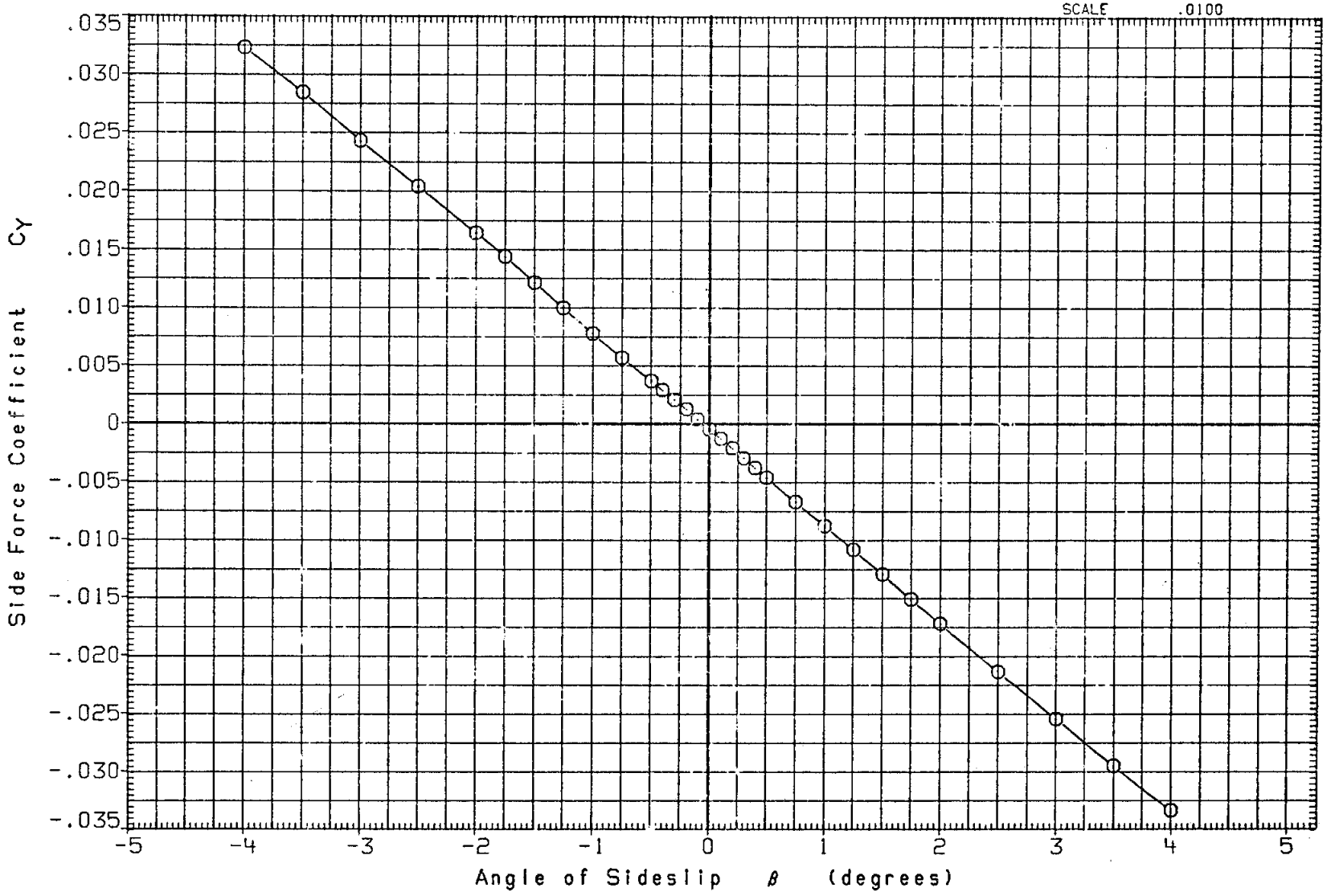


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(I) ALPHA = 35.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3021	○	OA259 (AEDC V41B-14) OV102, ST NG A (UPRIGHT)	35.000	INCRSE	CONTNU	2.000	6.000
RT3022	□	DATA NOT AVAILABLE	35.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

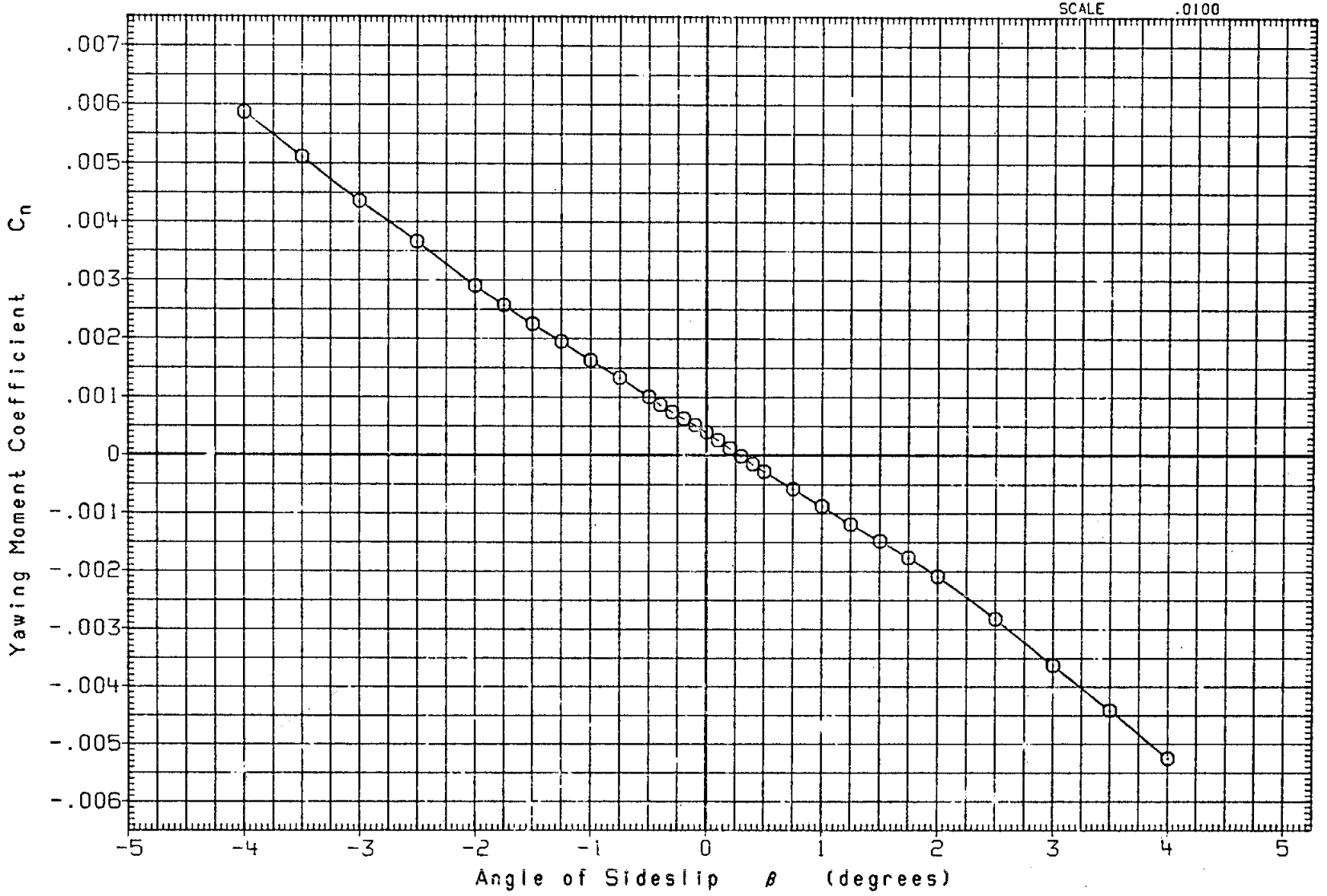


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(I) ALPHA = 35.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3021	○	0A259 [AEDC/41B-14] OV102, STING A (UPRIGHT)	35.000	INCRSE	CONTNU	2.000	6.000
RT3022	□	DATA NOT AVAILABLE	35.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2590.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

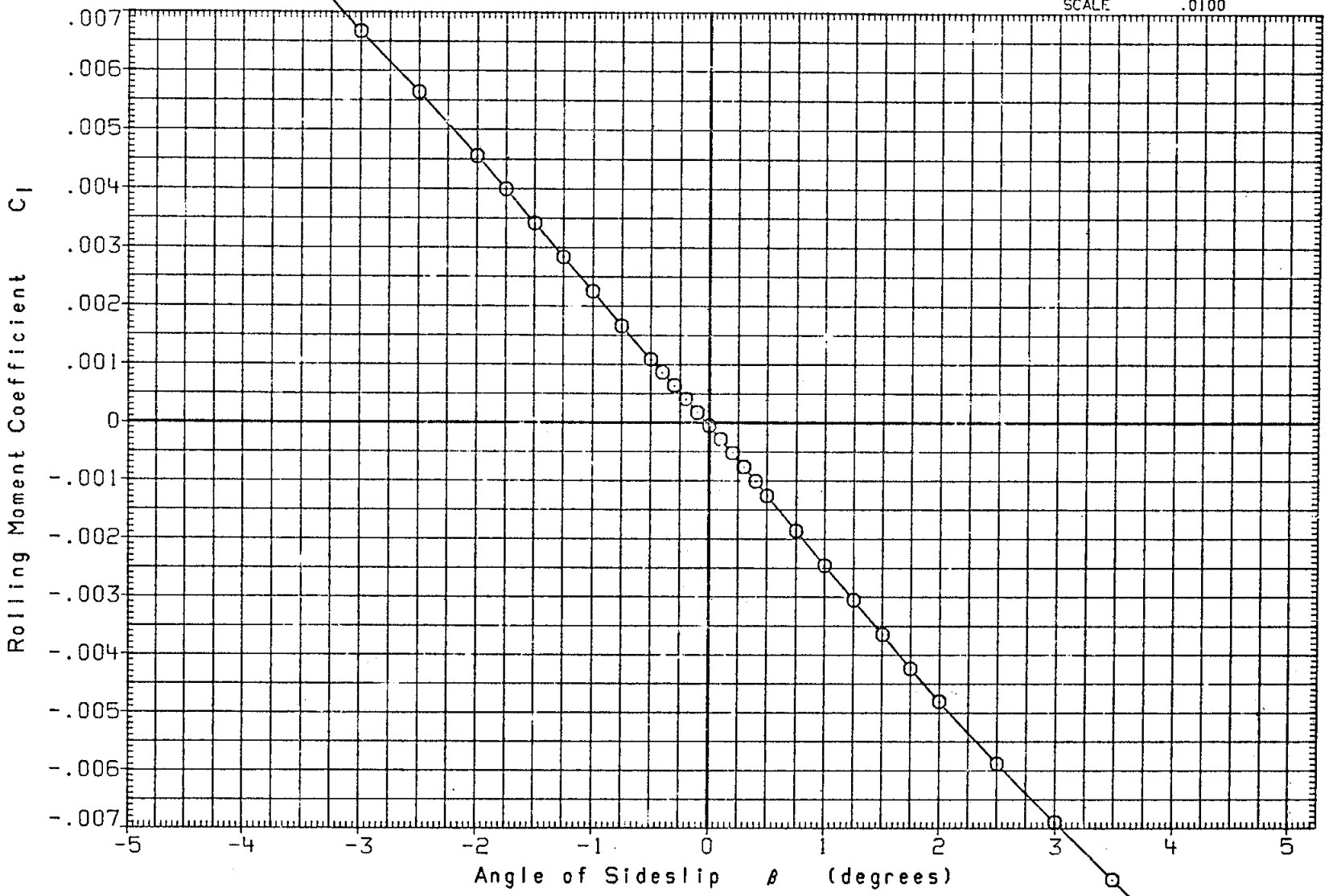


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(I) ALPHA = 35.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3021	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	35.000	INCRSE	CONTNU	2.000	6.000
RT3022	□	DATA NOT AVAILABLE	35.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

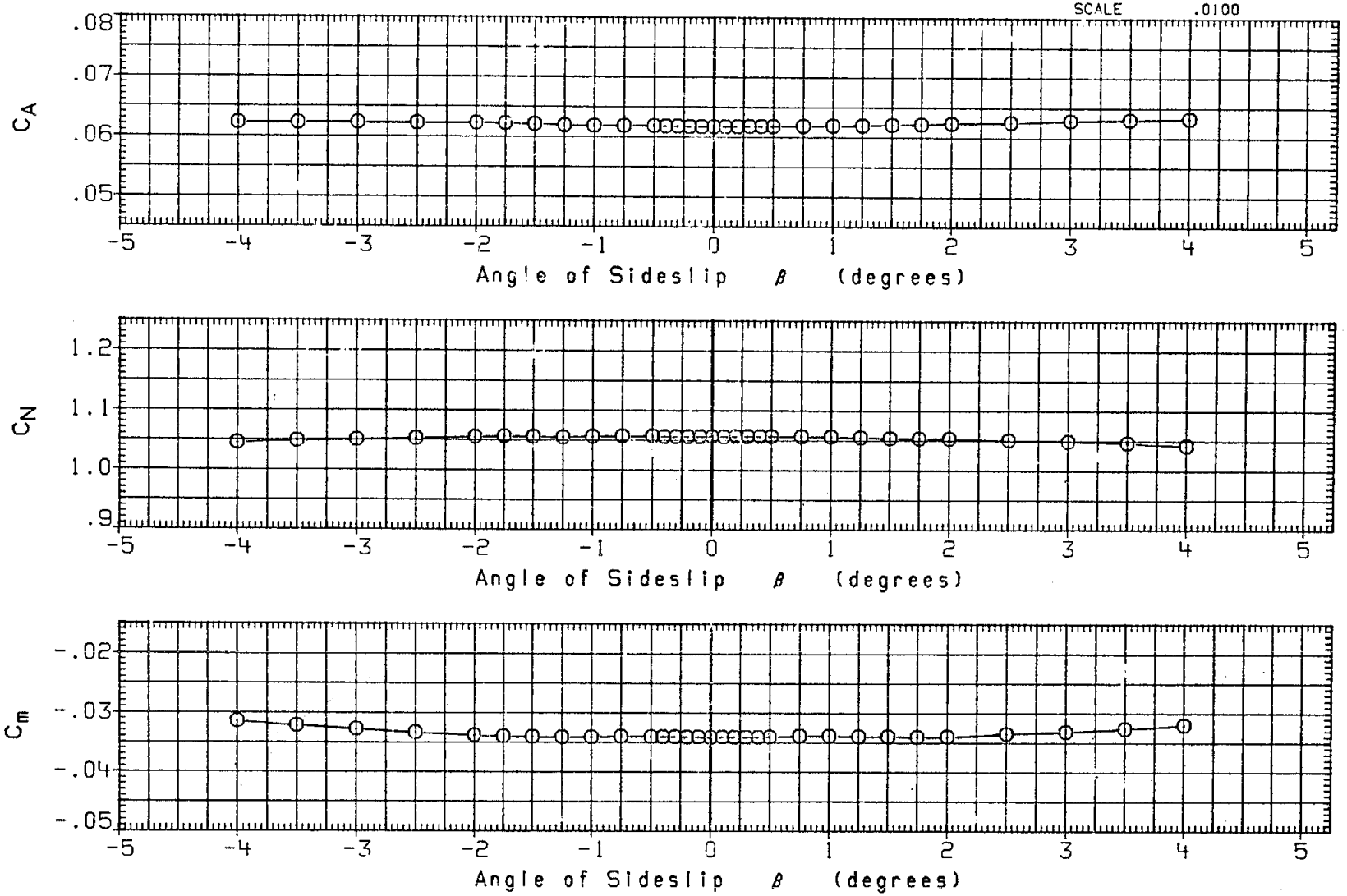


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(I) ALPHA = 35.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3021	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	35.000	INCRSE	CONTNU	2.000	6.000
RT3022	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	35.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

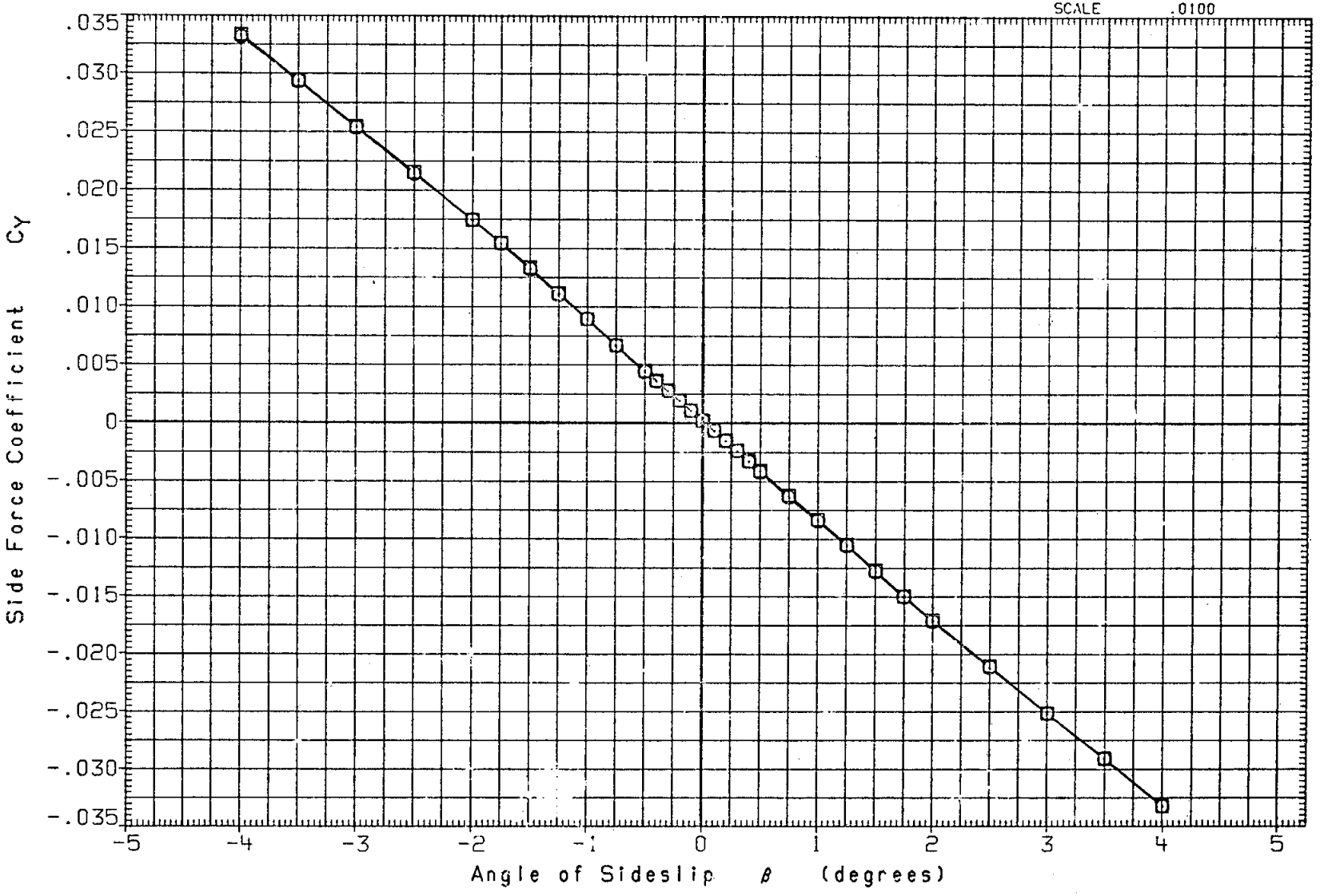


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(I) ALPHA = 35.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.39 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3021	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	35.000	INCRSE	CONTNU	2.000	6.000
RT3022	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	35.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2630.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

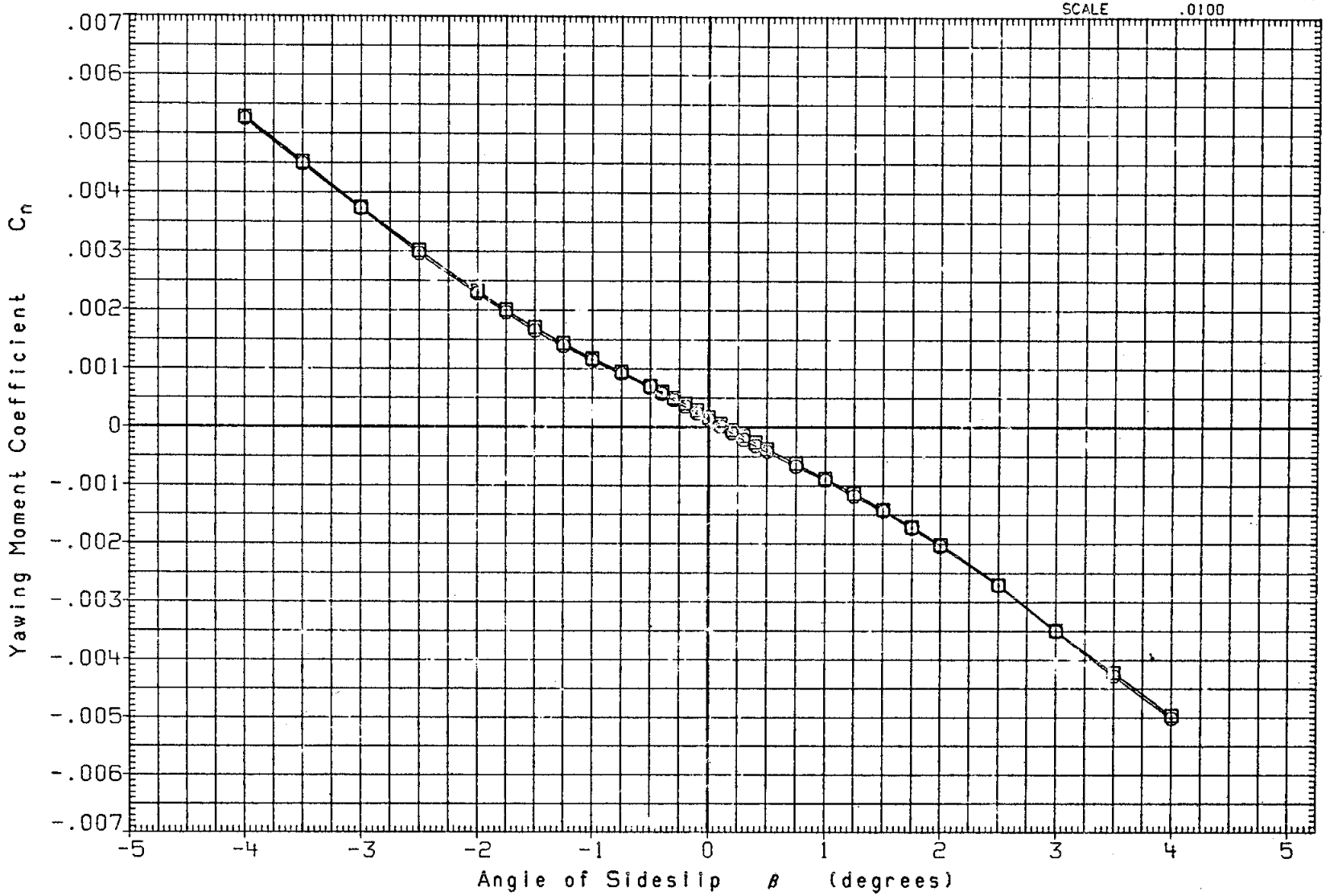


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(I) ALPHA = 35.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.39 DATE 02 MAR 81

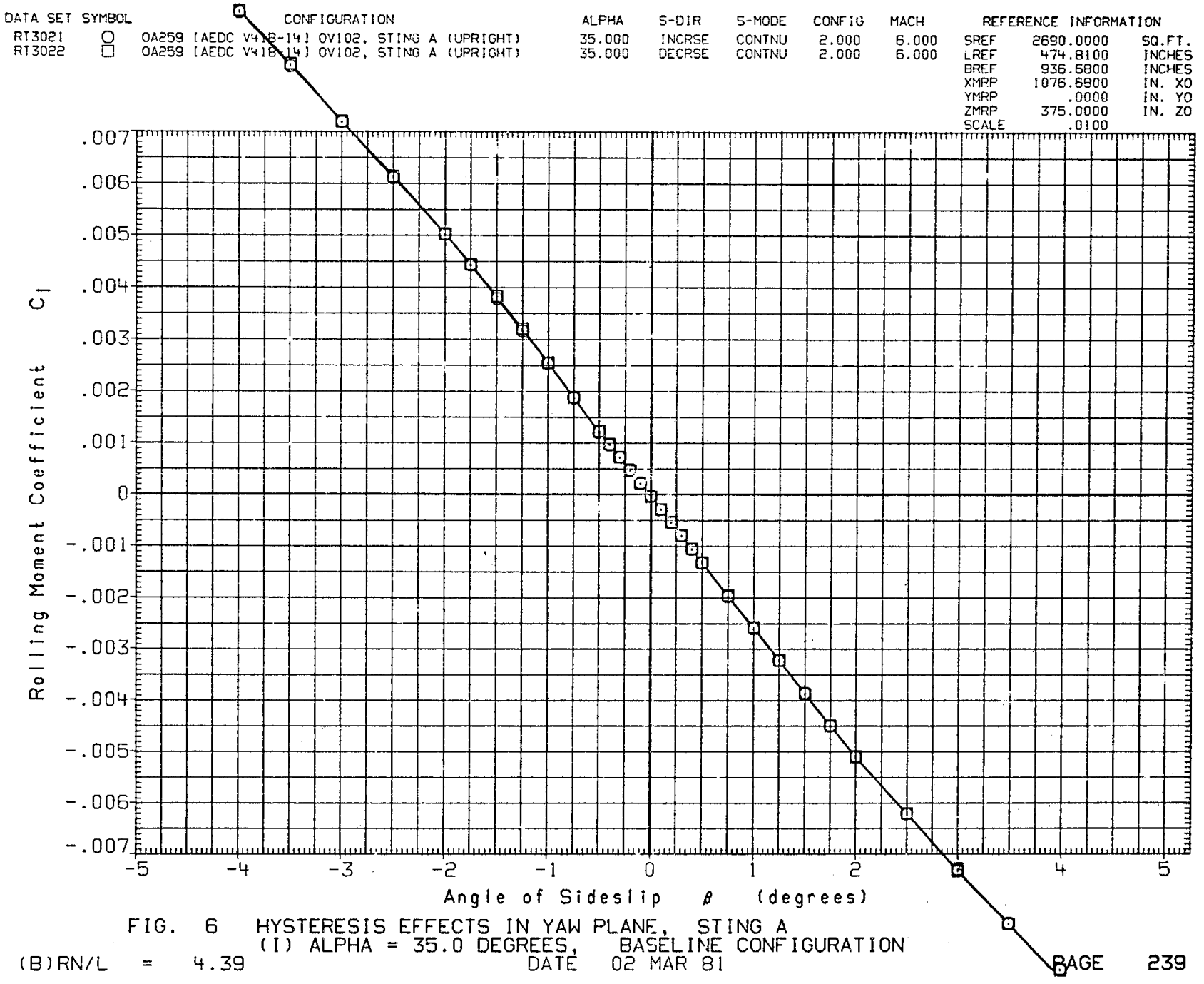


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(I) ALPHA = 35.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.39 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3021	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	35.000	INCRSE	CONTNU	2.000	6.000
RT3022	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	35.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

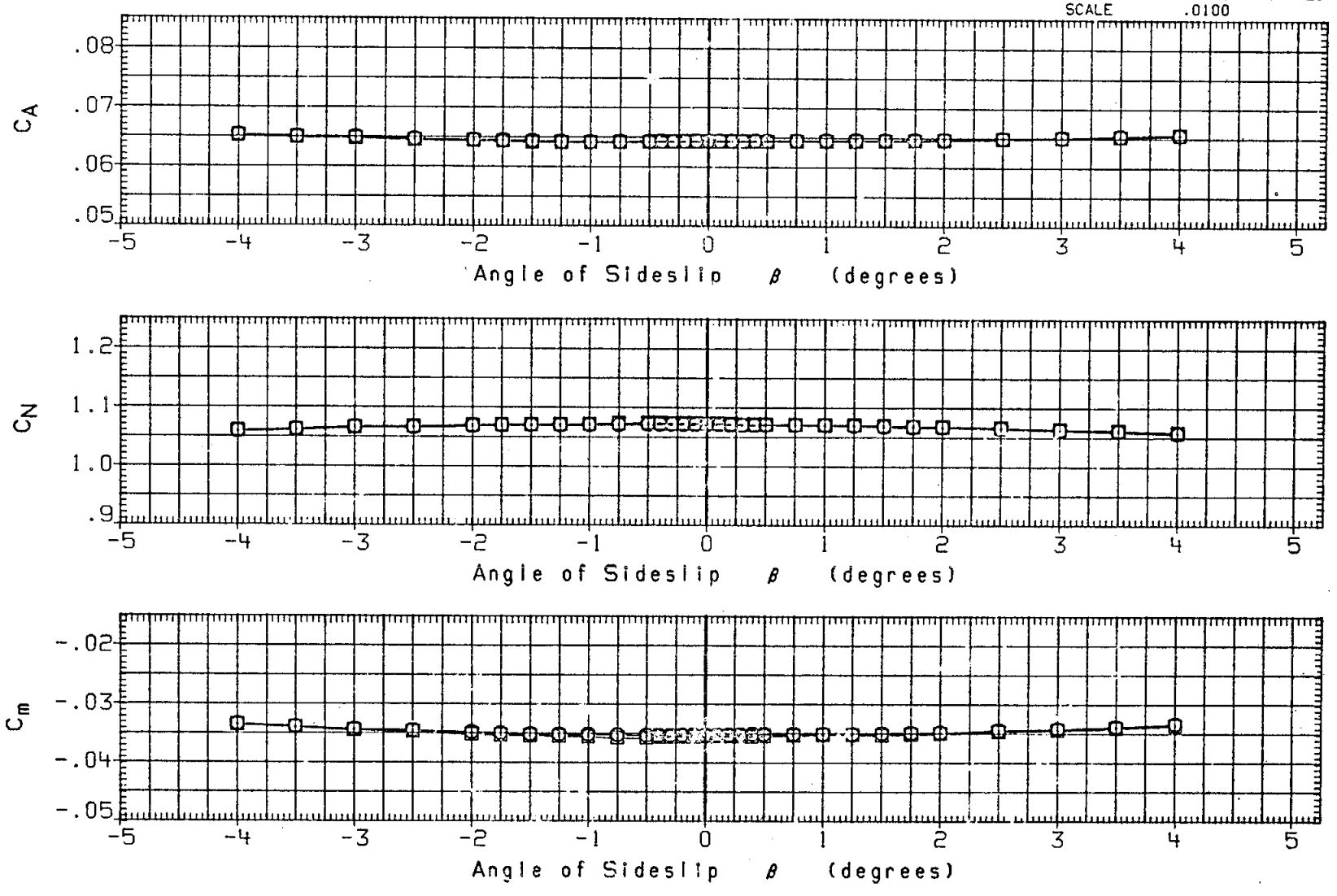


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(I) ALPHA = 35.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.39 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3023	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	37.500	INCRSE	CONTNU	2.000	6.000
RT3024	□	DATA NOT AVAILABLE	37.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

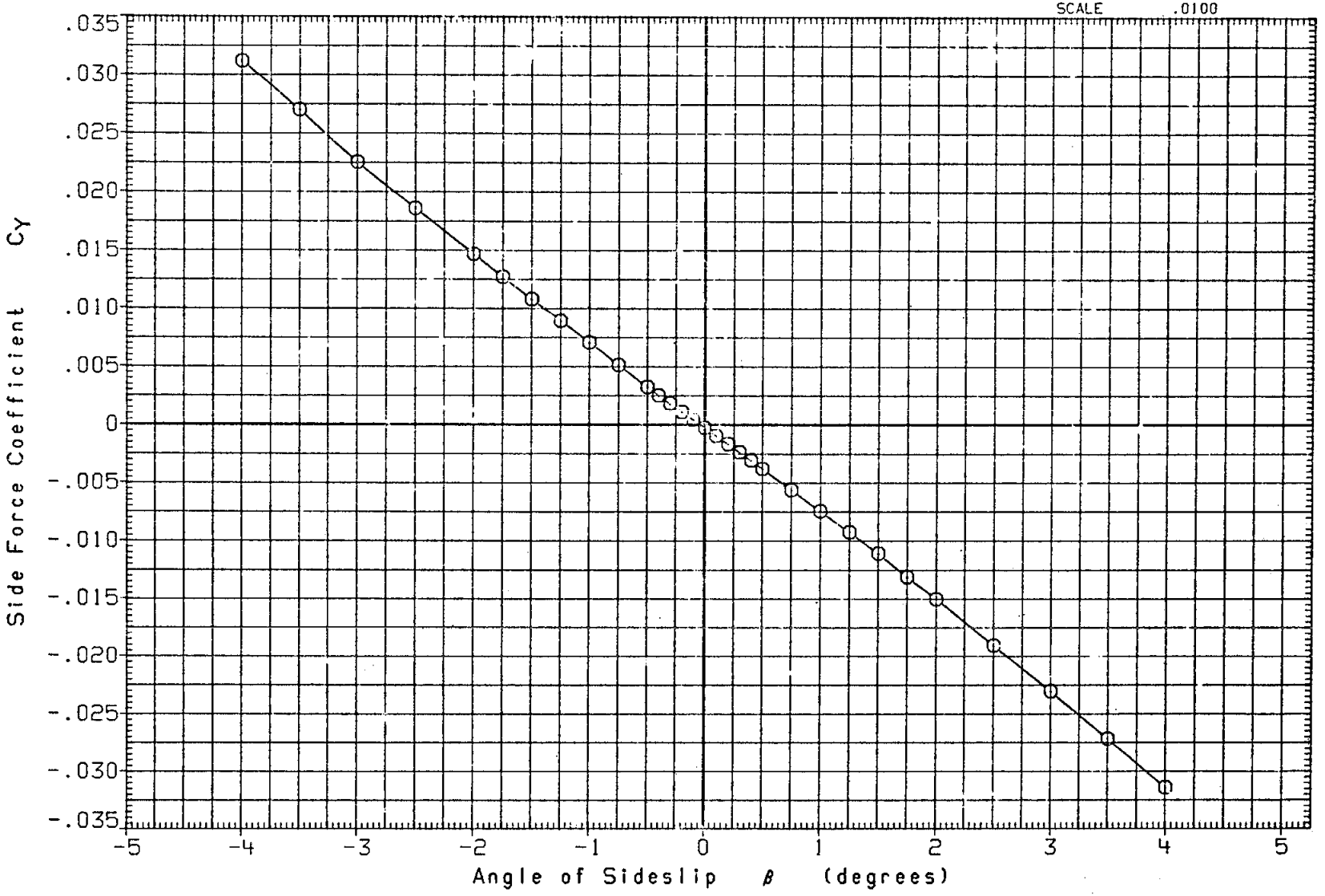


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(J) ALPHA = 37.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3023	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	37.500	INCRSE	CONTNU	2.000	6.000
RT3024	□	DATA NOT AVAILABLE	37.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

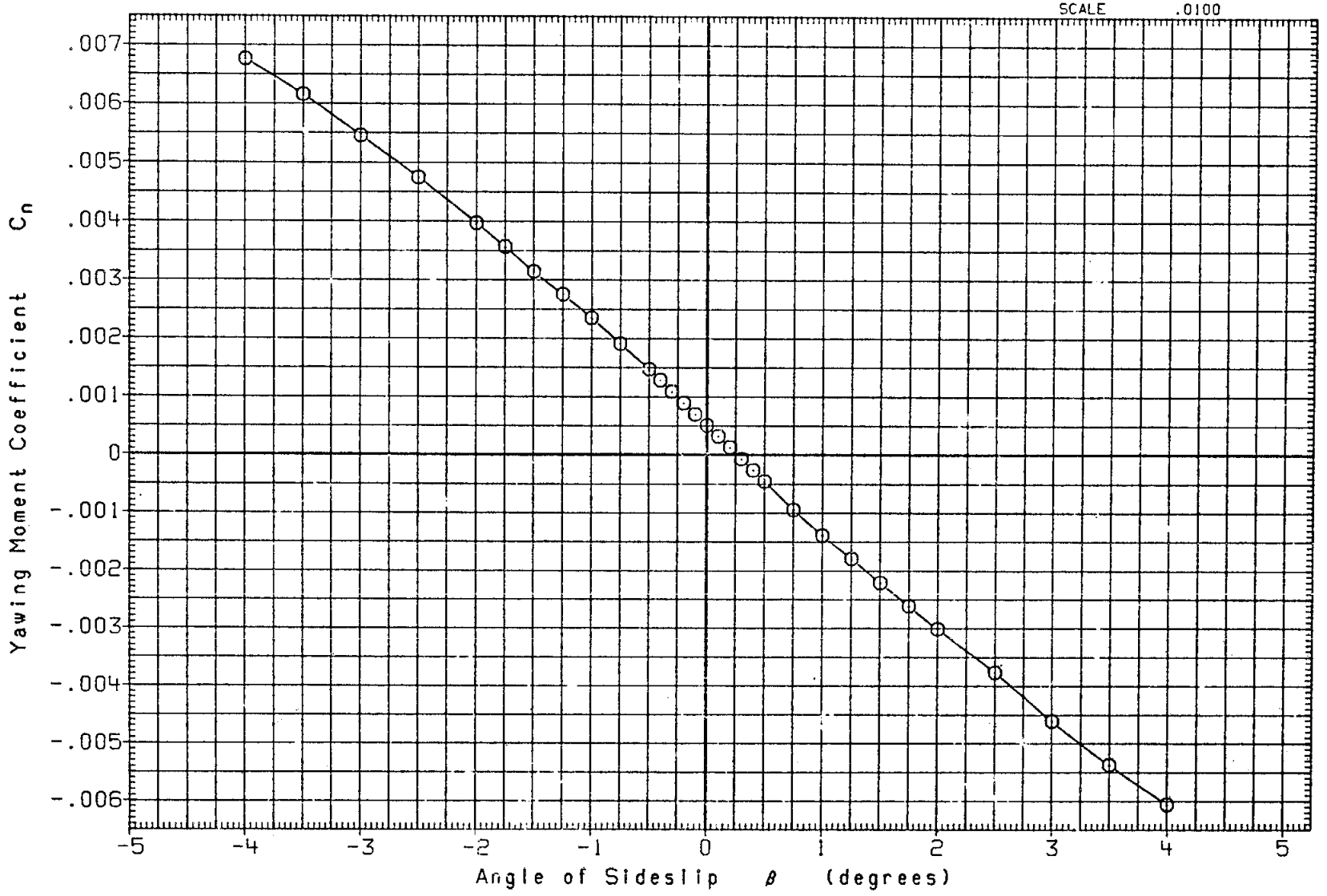


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(J) ALPHA = 37.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3023	○	0A259 (AEDC/41B-14) OV102, STING A (UPRIGHT)	37.500	INCRSE	CONTNU	2.000	6.000
RT3024	□	DATA NOT AVAILABLE	37.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6600	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

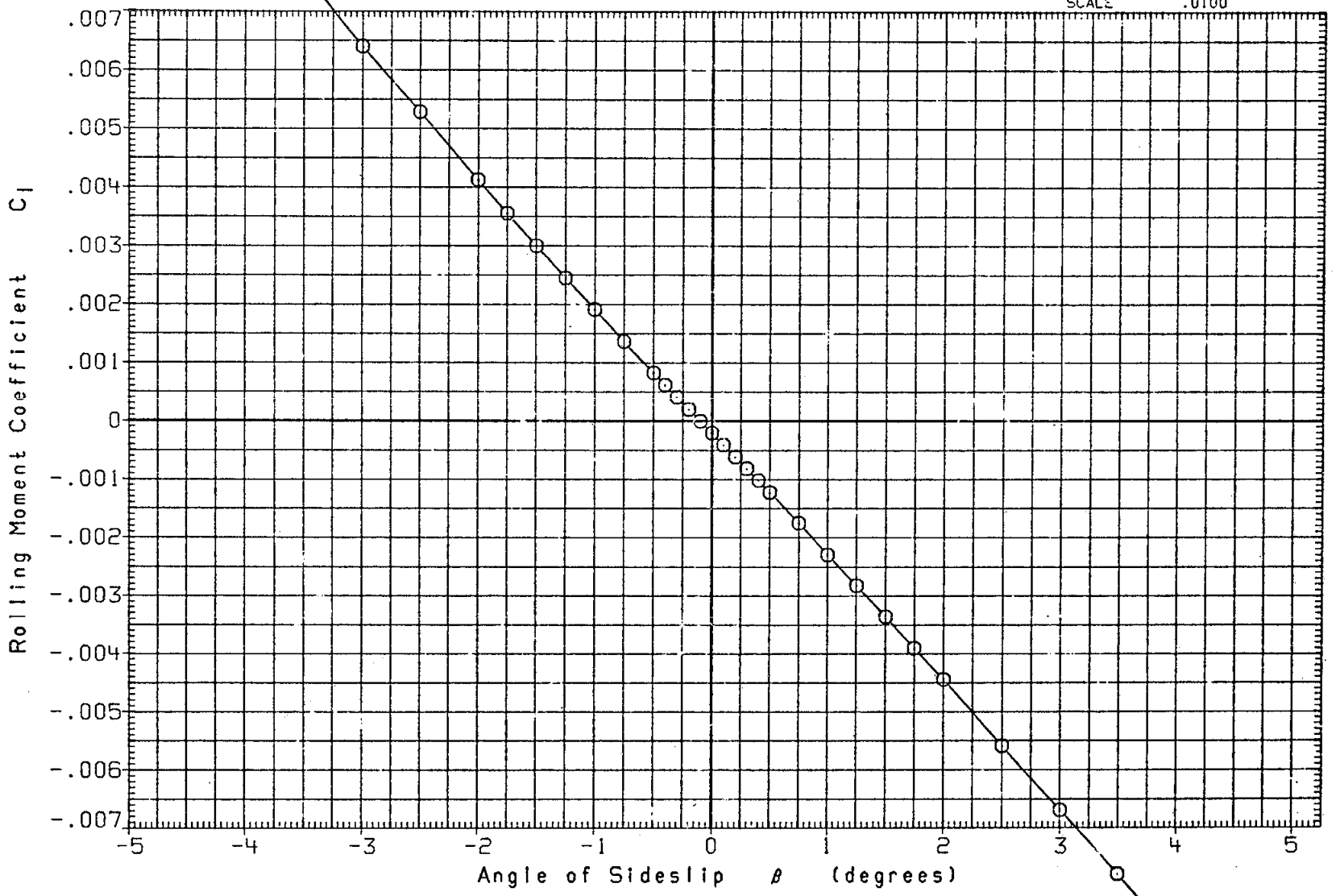


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(J) ALPHA = 37.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3023	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	37.500	INCRSE	CONTNU	2.000	6.000
RT3024	□	DATA NOT AVAILABLE	37.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

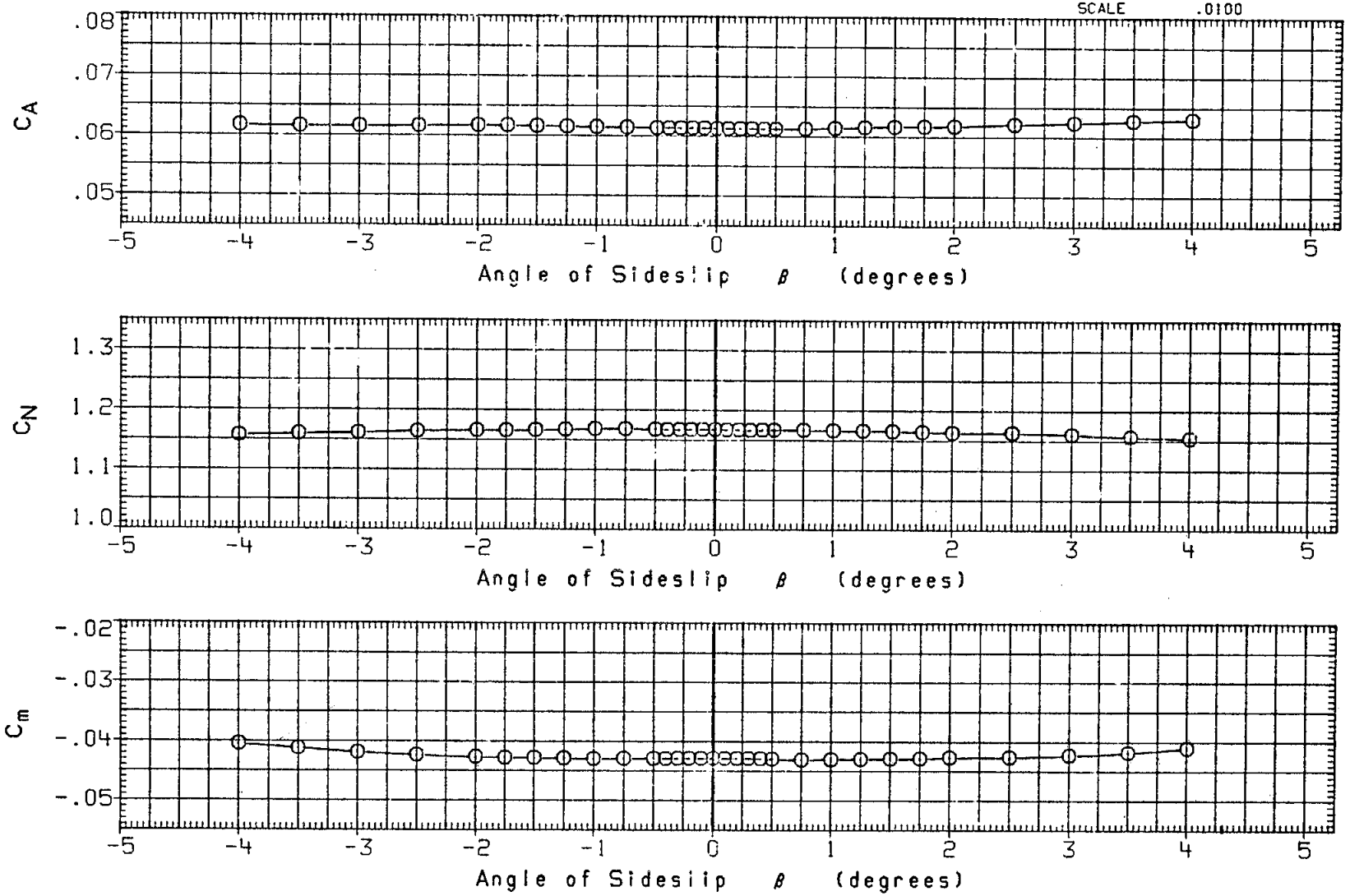


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(J) ALPHA = 37.5 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 2.02 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3023	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	37.500	INCRSE	CONTNU	2.000	6.000
RT3024	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	37.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

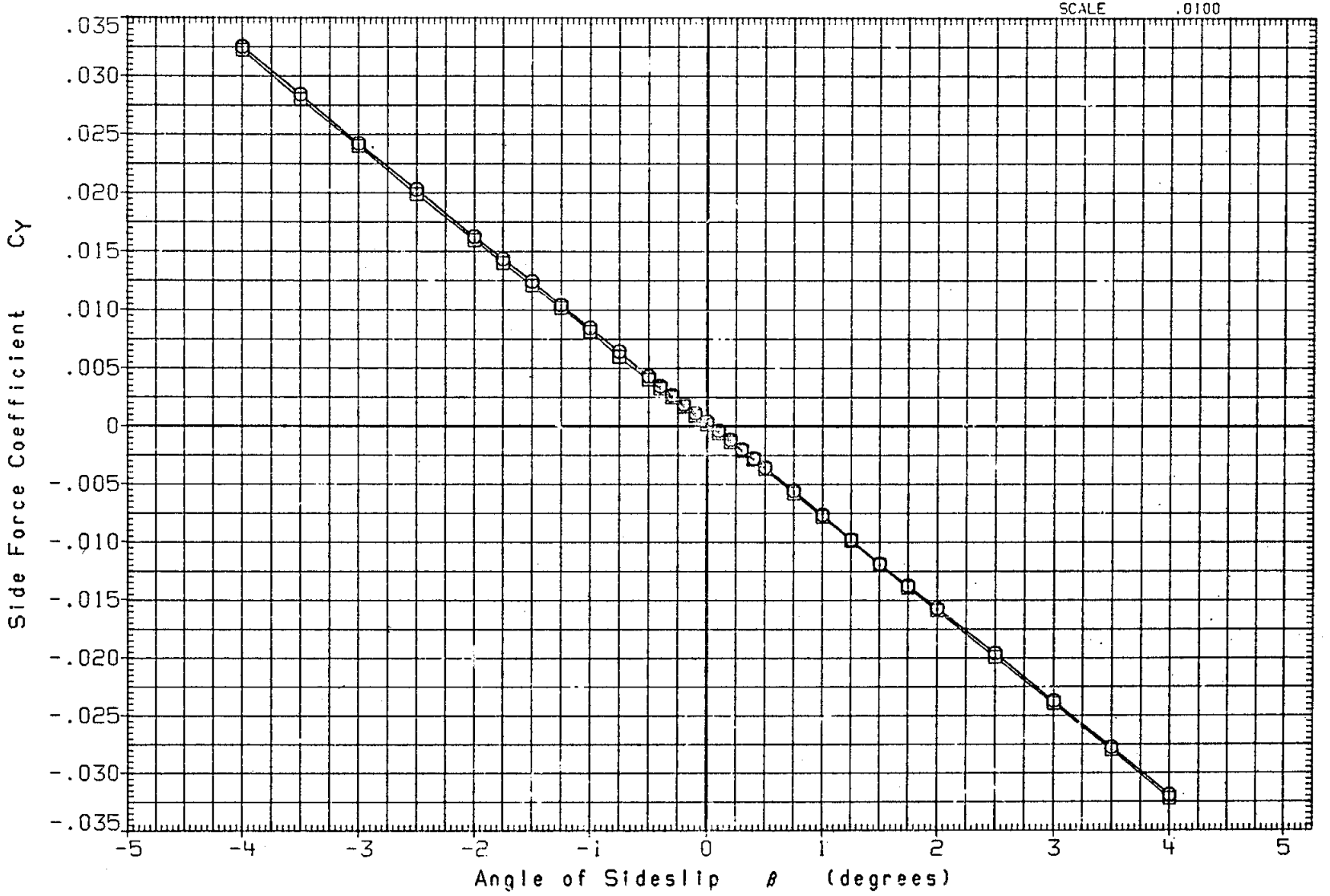


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(J) ALPHA = 37.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.39 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3023	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	37.500	INCRSE	CONTNU	2.000	6.000
RT3024	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	37.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2630.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

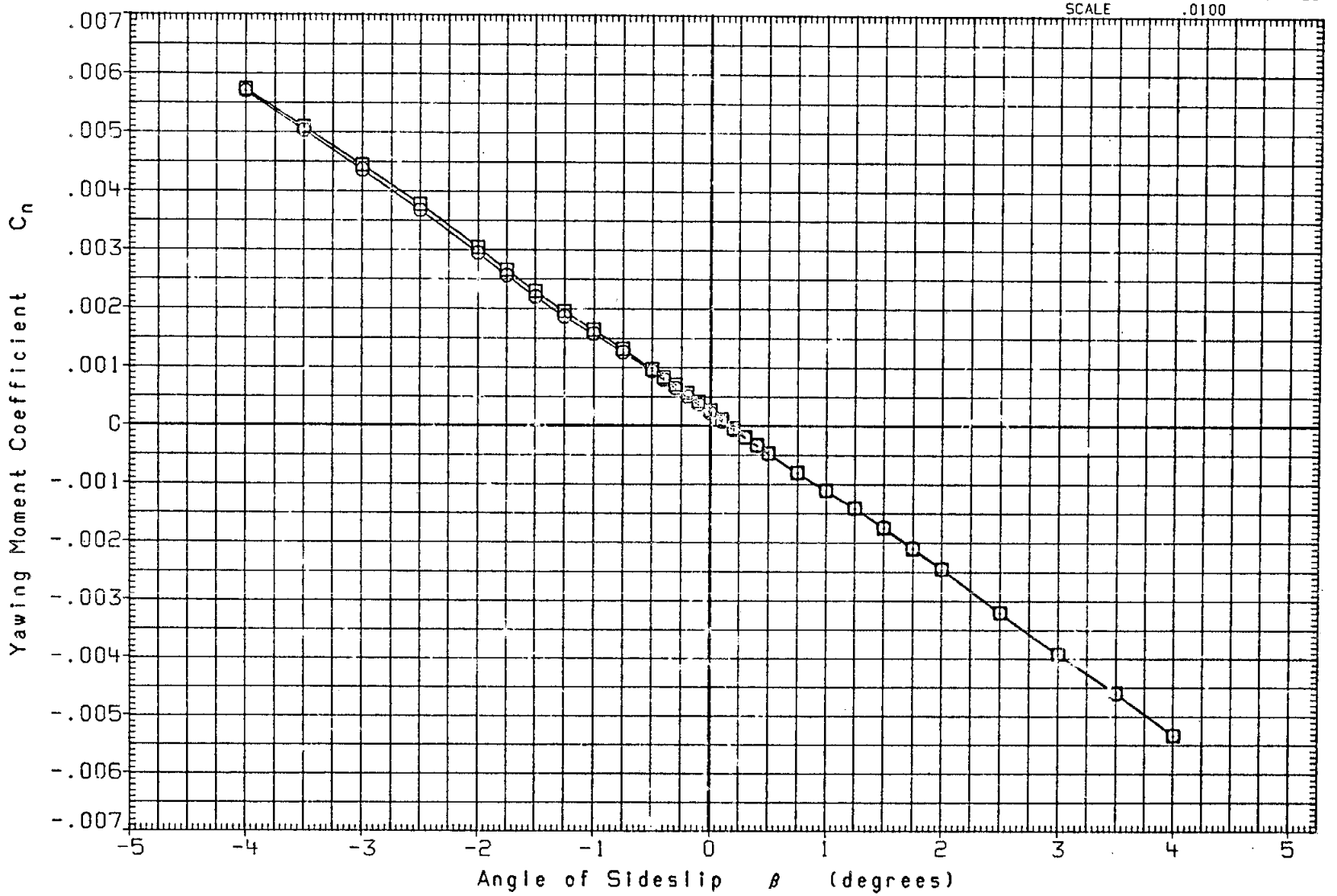


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(J) ALPHA = 37.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.39 DATE 02 MAR 81

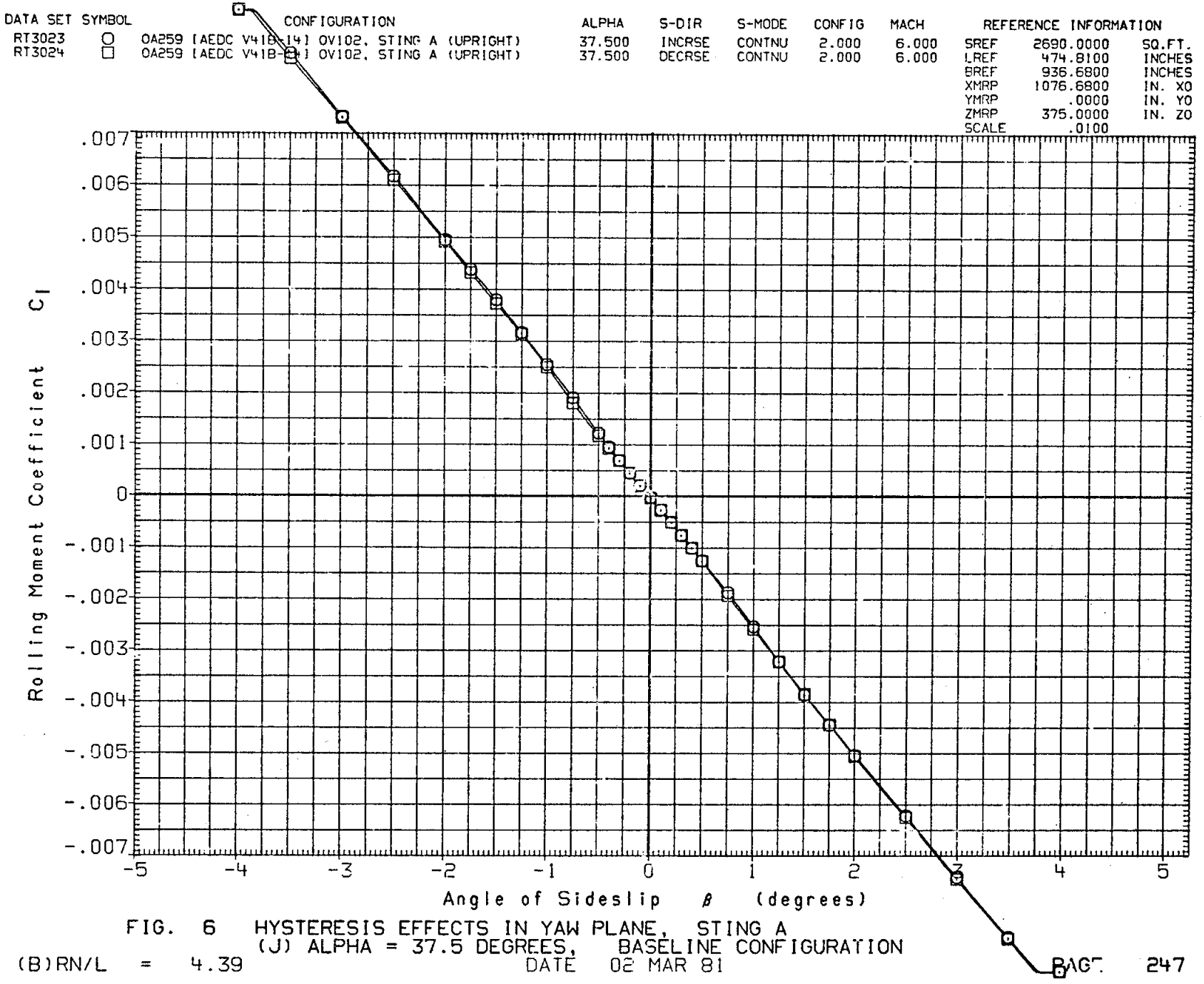


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(J) ALPHA = 37.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.39 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3023	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	37.500	INCRSE	CONTNU	2.000	6.000
RT3024	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	37.500	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

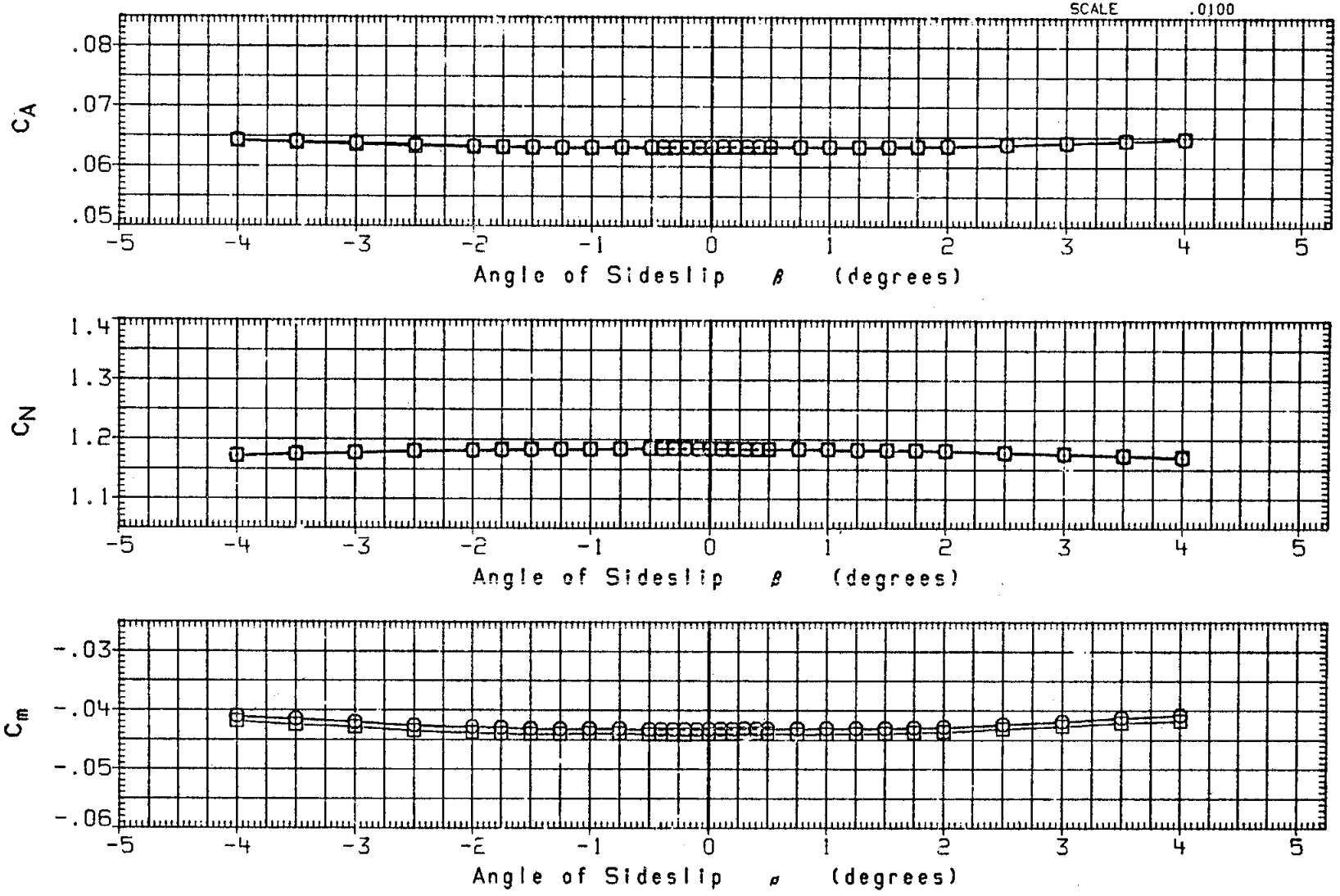


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(J) ALPHA = 37.5 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.39 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3025	○	0A259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	40.000	INCRSE	CONTNU	2.000	6.000
RT3026	□	DATA NOT AVAILABLE	40.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

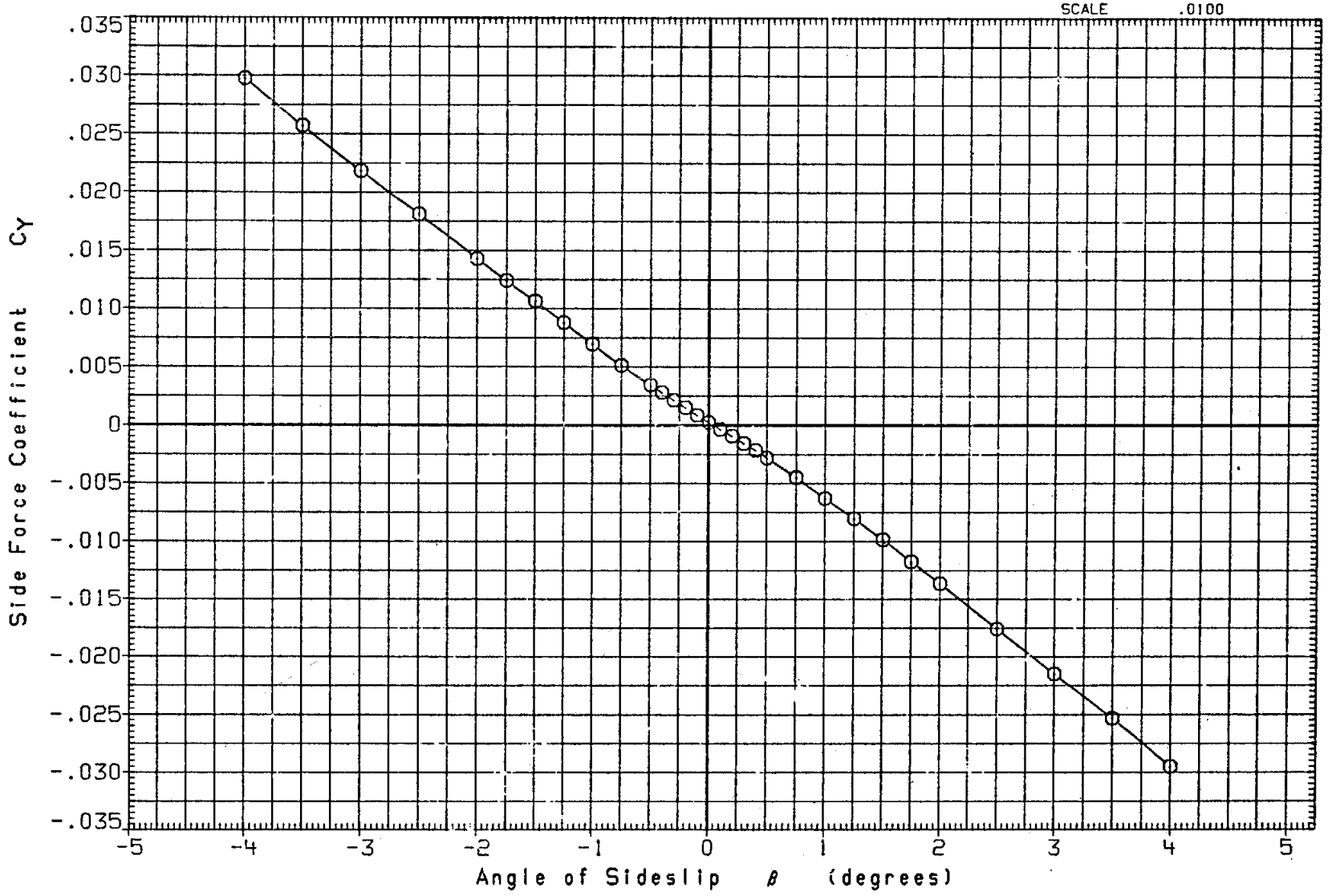


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(K) ALPHA = 40.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 1.99 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3025	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	40.000	INCRSE	CONTNU	2.000	6.000
RT3026	□	DATA NOT AVAILABLE	40.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

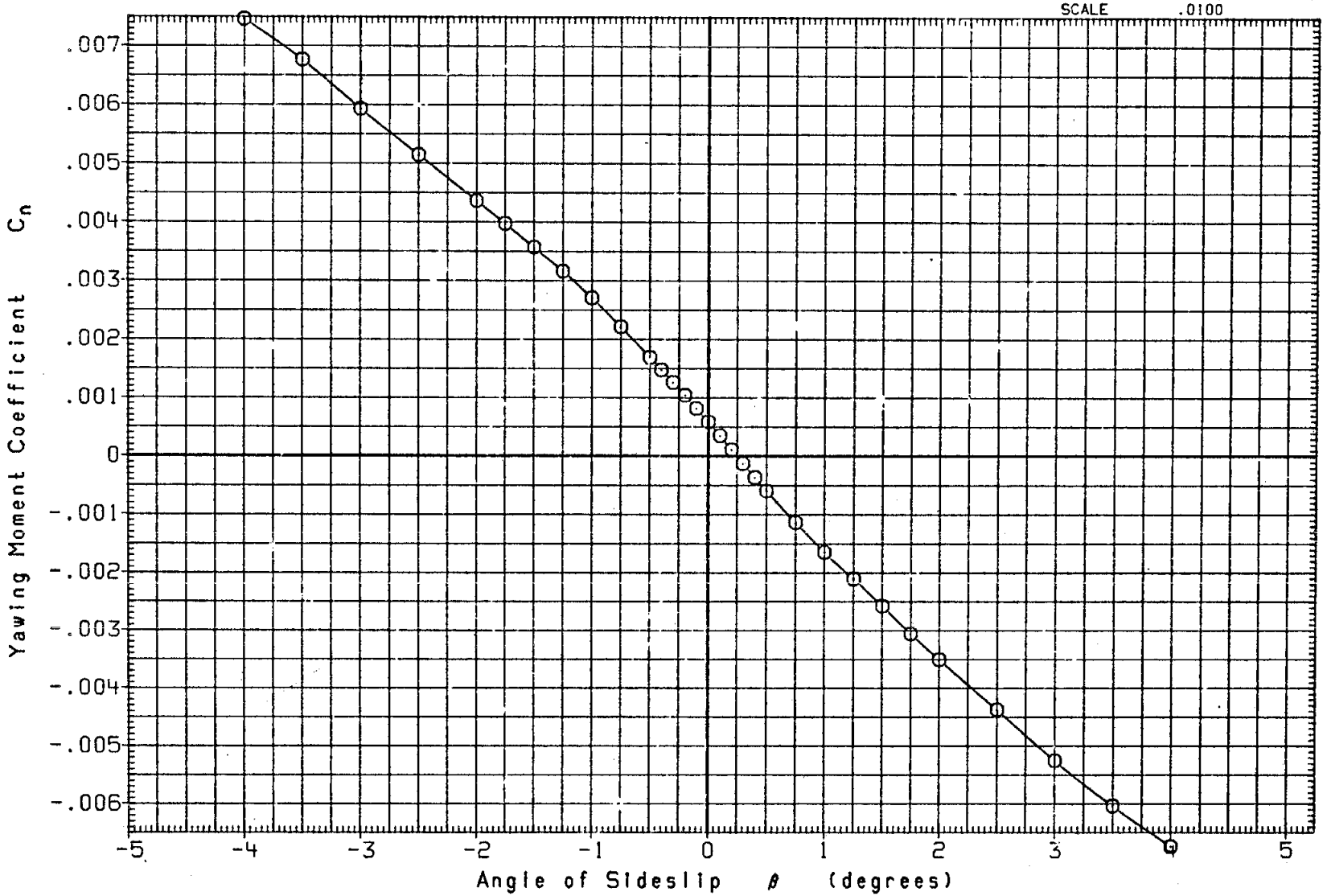


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(K) ALPHA = 40.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 1.99 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3025	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	40.000	INCRSE	CONTNU	2.000	6.000
RT3026	□	DATA NOT AVAILABLE	40.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

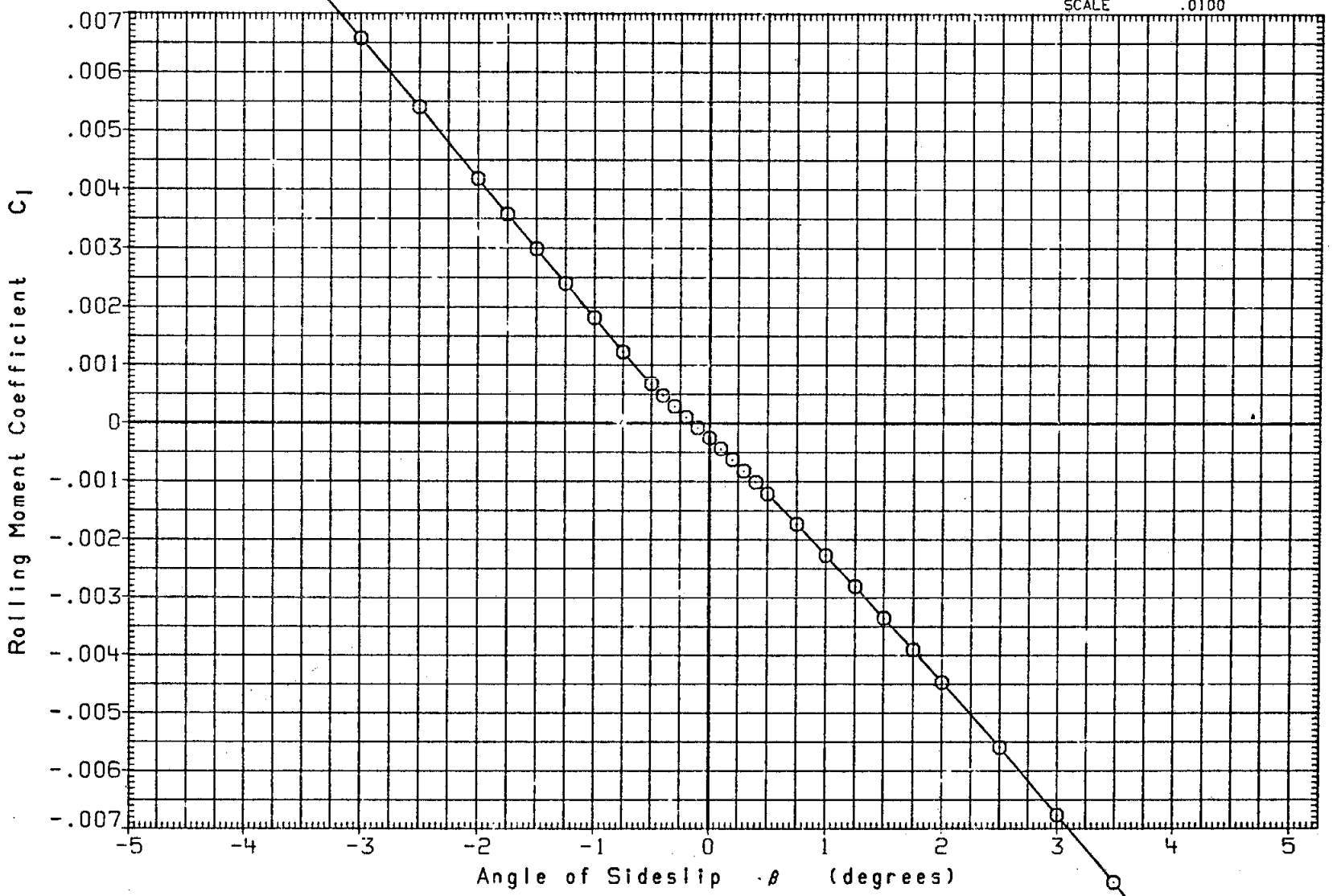


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(K) ALPHA = 40.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 1.99 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3025	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	40.000	INCRSE	CONTNU	2.000	6.000
RT3026	□	DATA NOT AVAILABLE	40.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

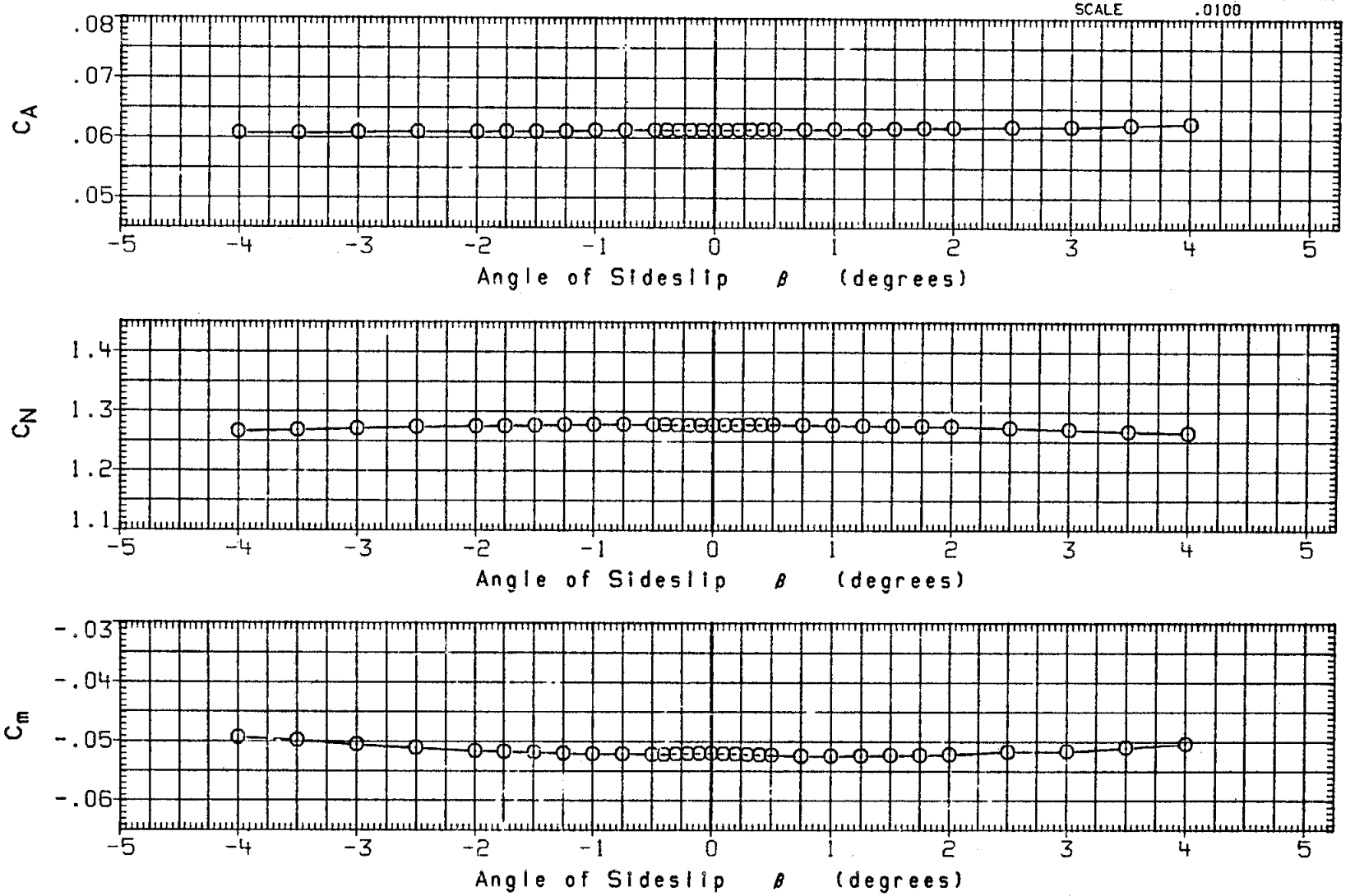


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(K) ALPHA = 40.0 DEGREES, BASELINE CONFIGURATION

(A)RN/L = 1.99 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3025	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	40.000	INCRSE	CONTNU	2.000	6.000
RT3026	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	40.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

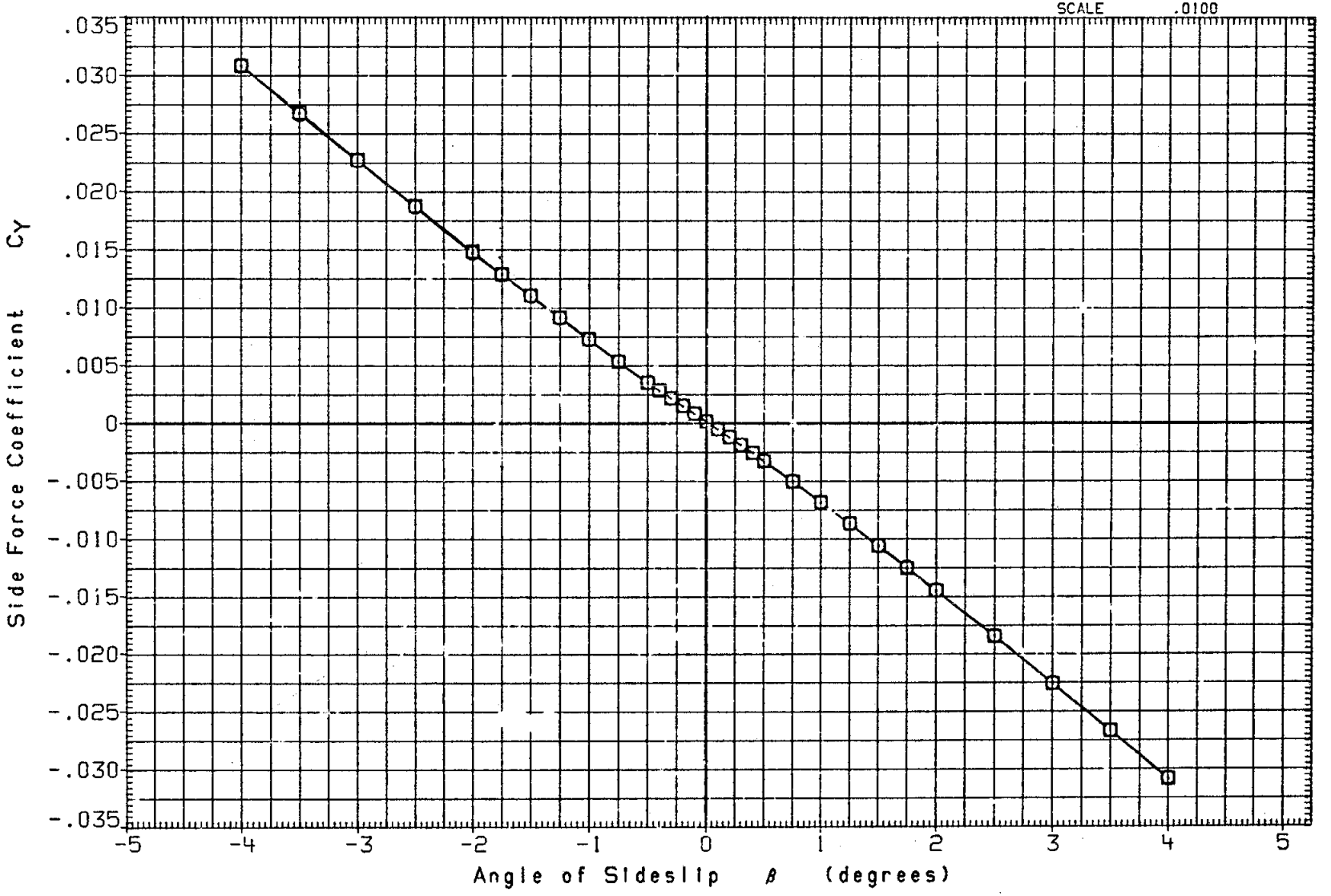


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(K) ALPHA = 40.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.43 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3025	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	40.000	INCRSE	CONTNU	2.000	6.000
RT3026	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	40.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

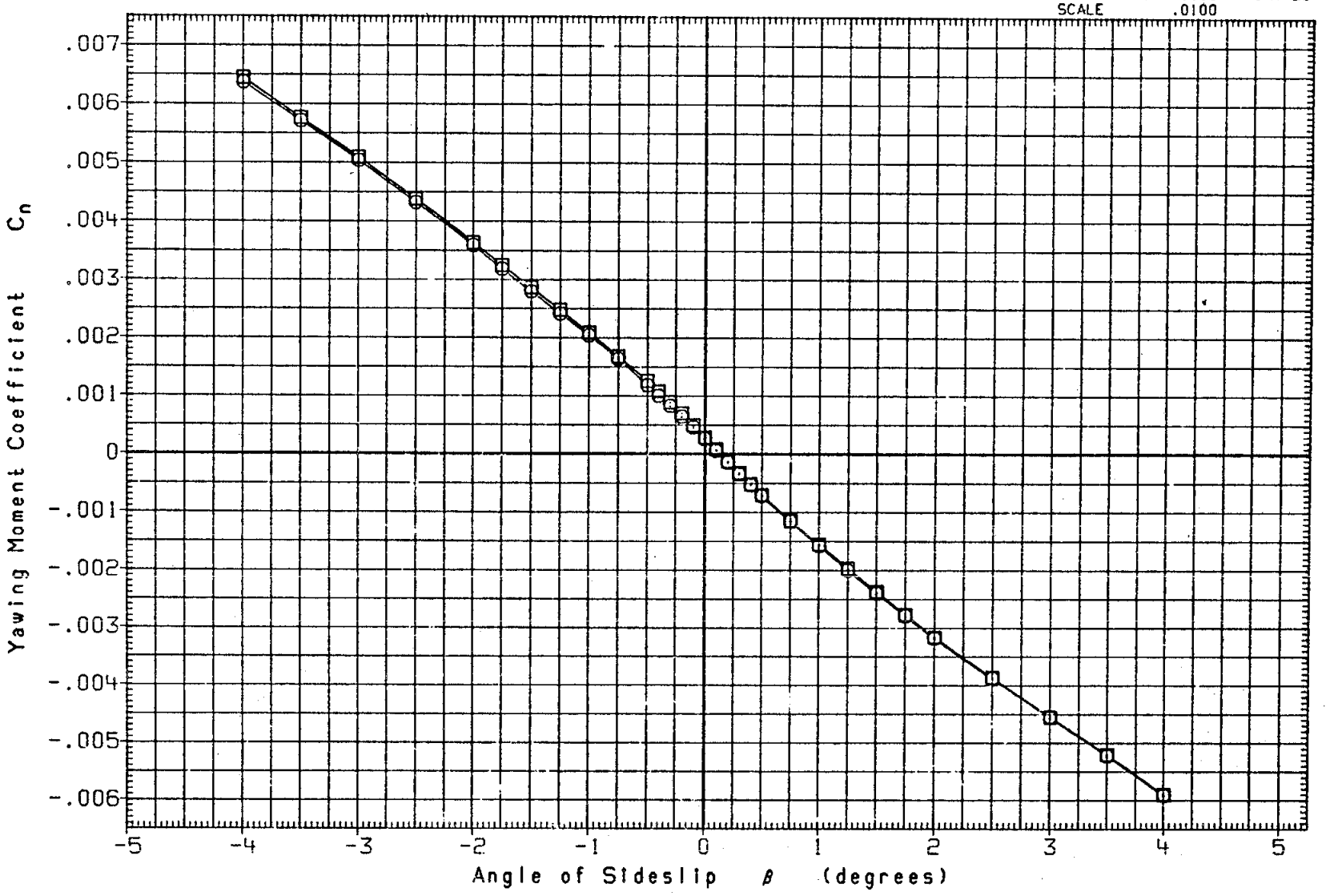


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(K) ALPHA = 40.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.43 DATE 02 MAR 81

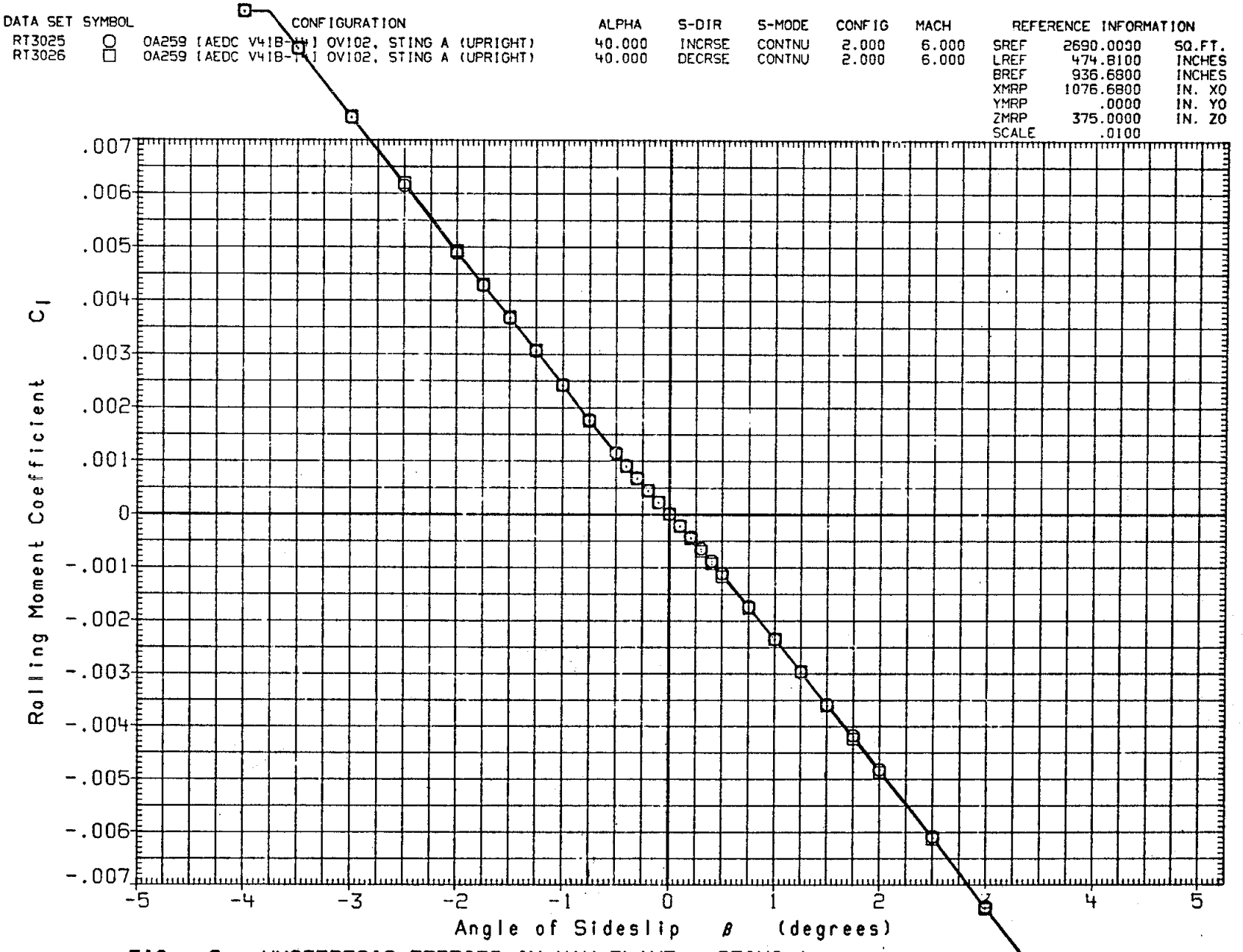


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(K) ALPHA = 40.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.43 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3025	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	40.000	INCRSE	CONTNU	2.000	6.000
RT3026	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	40.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

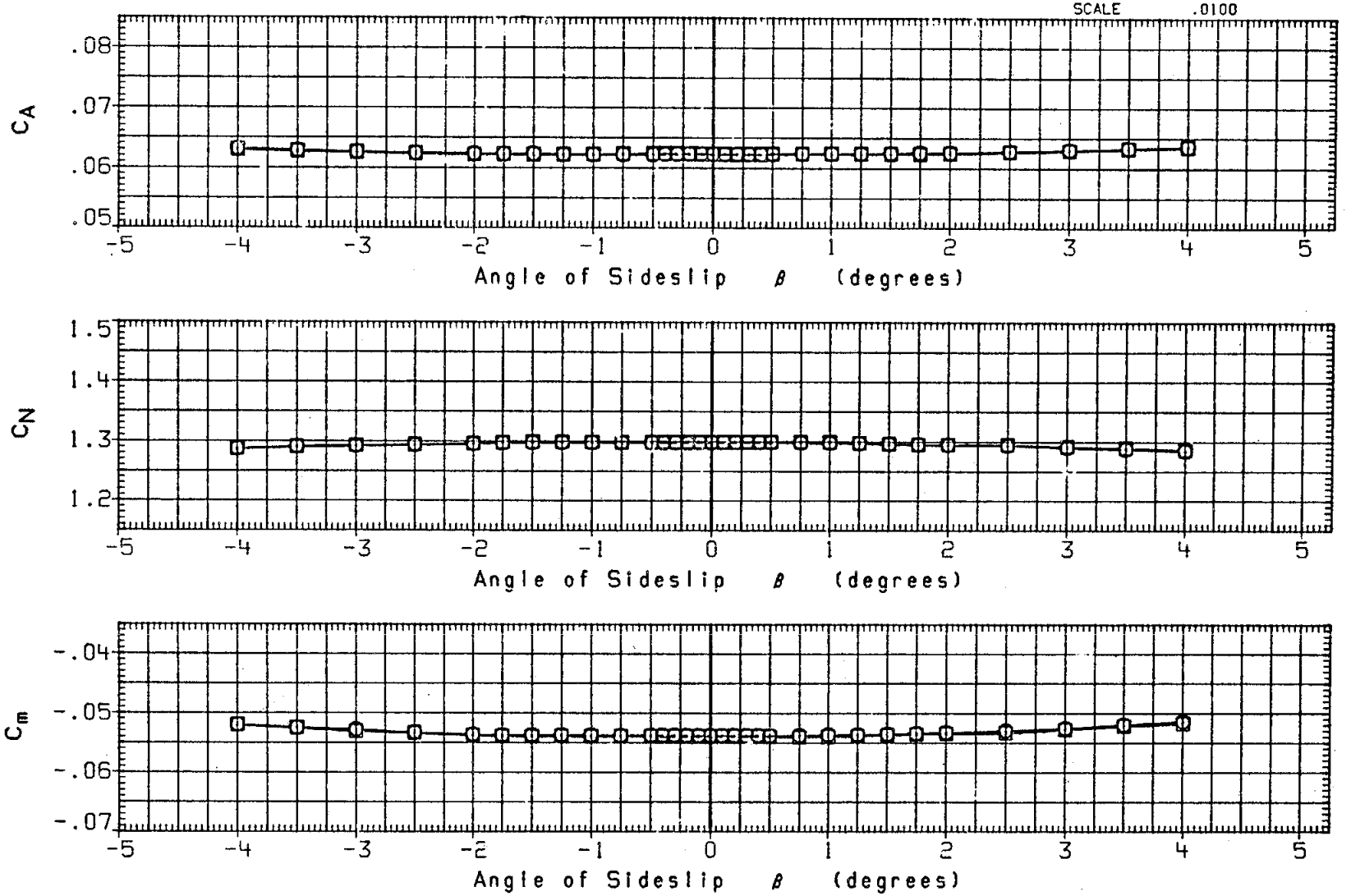


FIG. 6 HYSTERESIS EFFECTS IN YAW PLANE, STING A
(K) ALPHA = 40.0 DEGREES, BASELINE CONFIGURATION

(B)RN/L = 4.43 DATE 02 MAR 81

RT3027 CONFIGURATION 0A259 (AEDC V41B-14) CV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.391	CONFIG	1.000	SPDBRK	87.200
		BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000	PHI	180.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

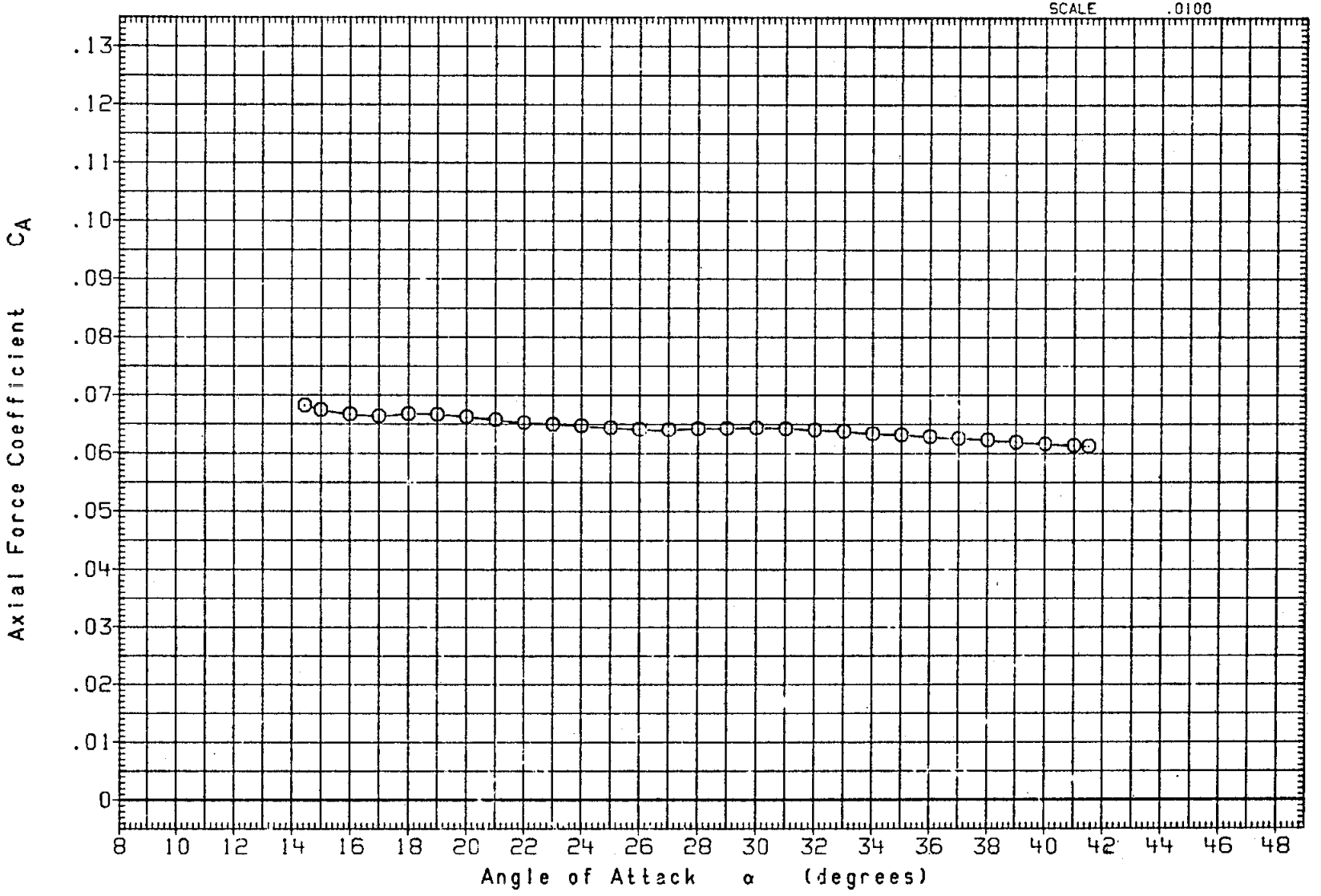


FIG. 7 INVERTED MODEL DATA IN PITCH PLANE, STING A

DATE 02 MAR 81

RT3027 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.391	CONFIG	1.000	SPDBRK	87.200
		BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000	PHI	180.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

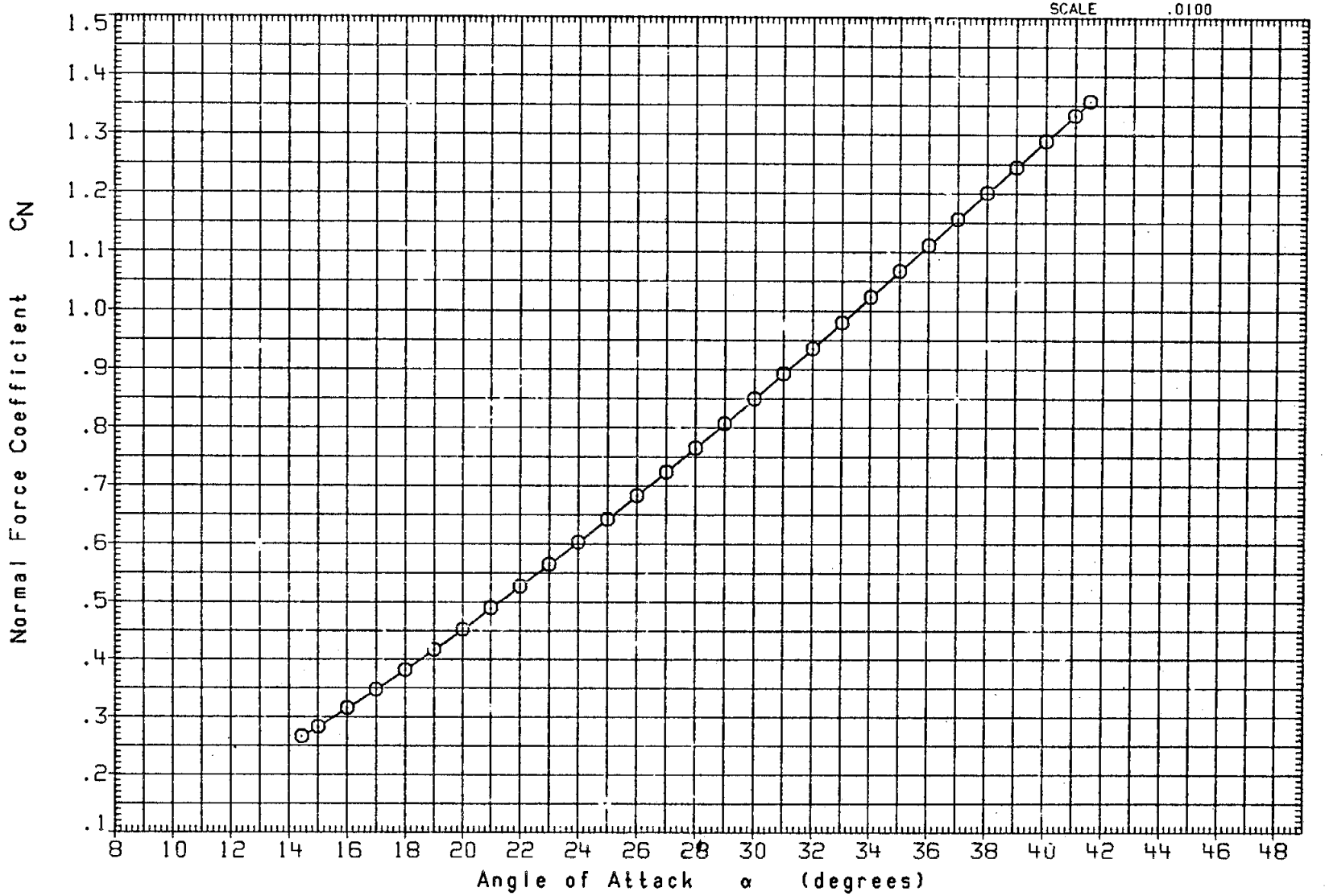


FIG. 7 INVERTED MODEL DATA IN PITCH PLANE, STING A

DATE 02 MAR 81

RT3027 CONFIGURATION 0A259 [AEDC V41B-14] 0'102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.391	CONFIG	1.000	SPDBRK	87.200
		BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000	PHI	180.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

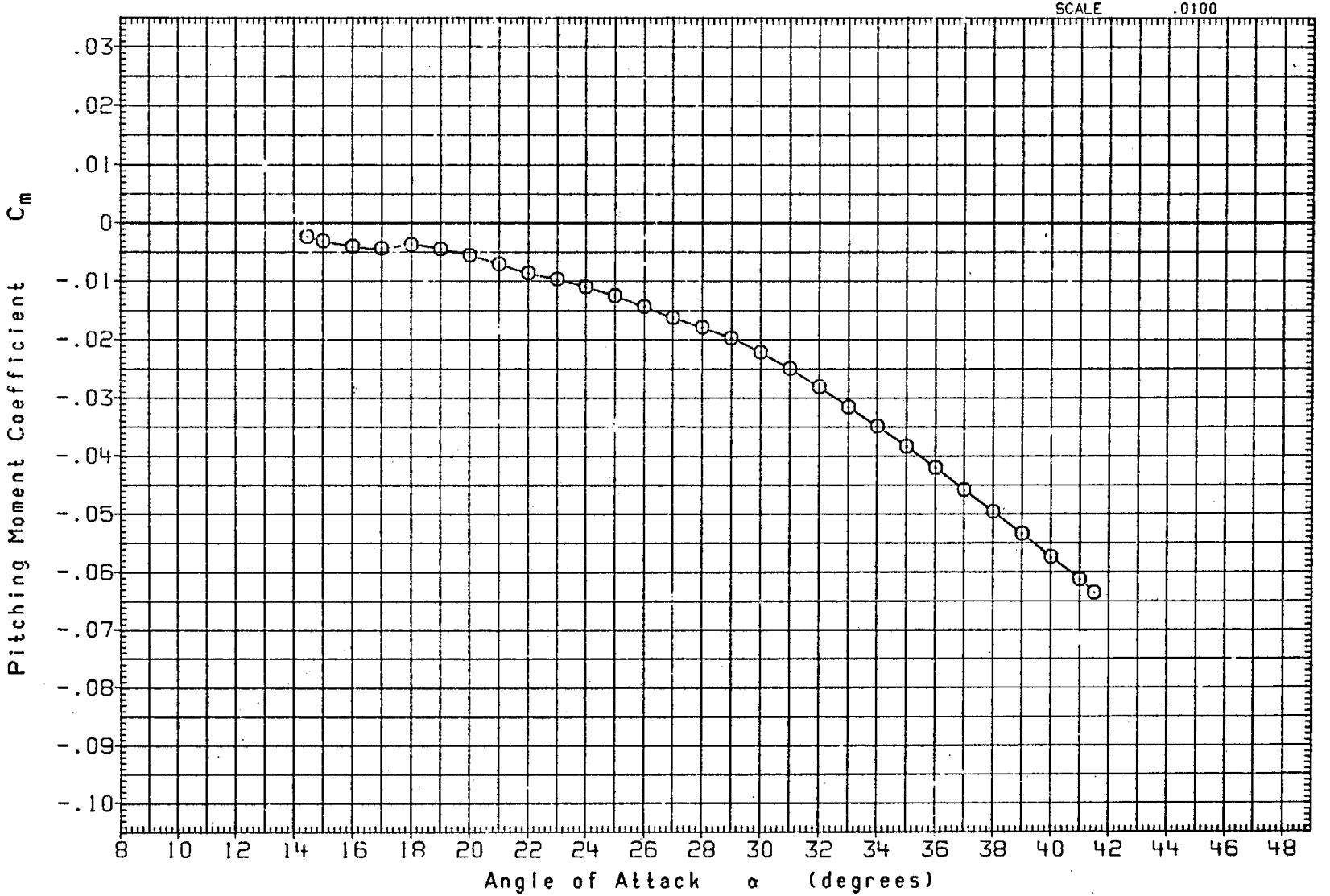


FIG. 7 INVERTED MODEL DATA IN PITCH PLANE, STING A

RT3027 CONFIGURATION OA259 [AEDC V41B-141 OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.391	CONFIG	1.000	SPDBRK	87.200
		BETA	.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000	PHI	180.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

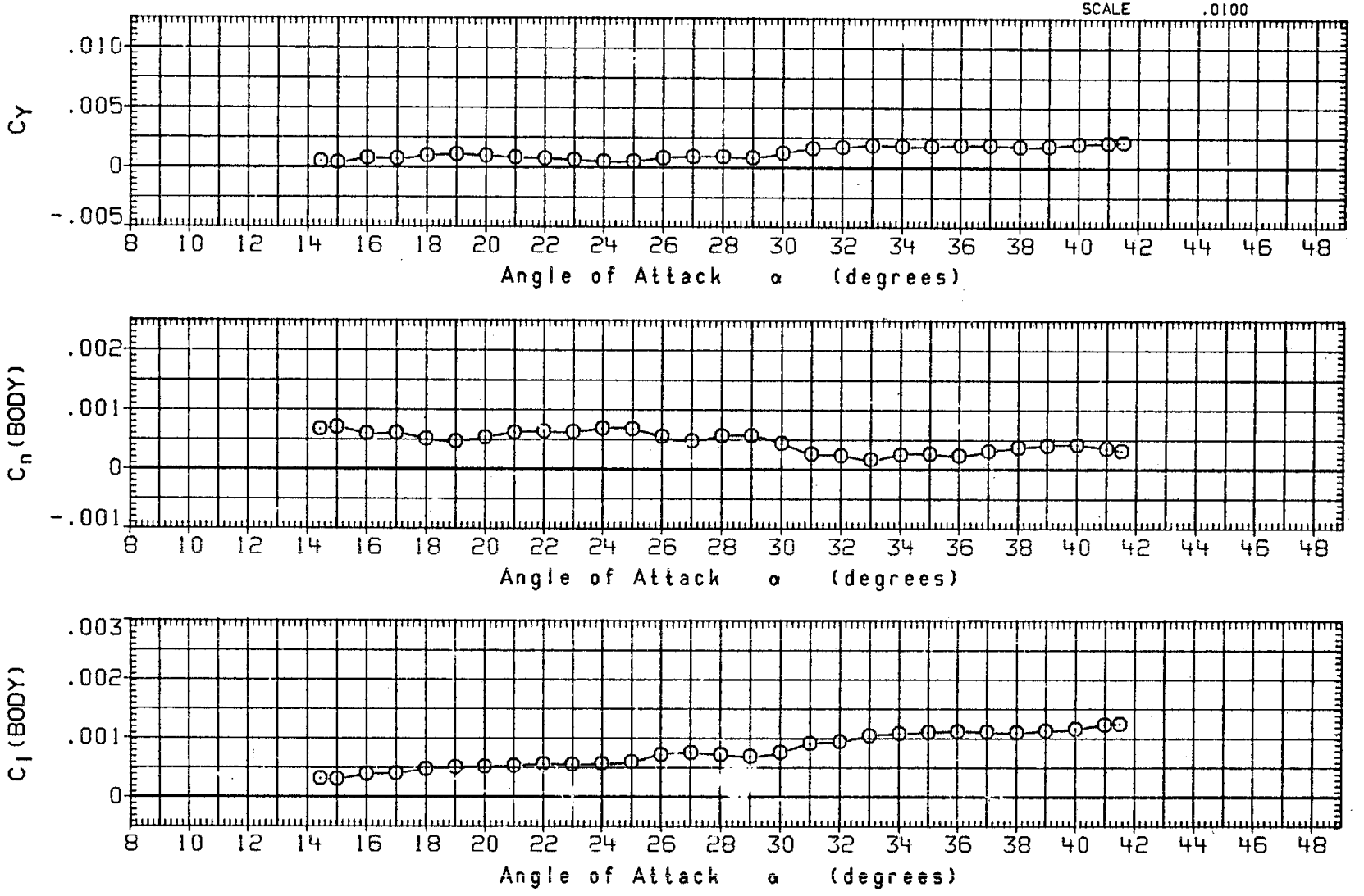


FIG. 7 INVERTED MODEL DATA IN PITCH PLANE, STING A

DATE 02 MAR 81

RT3028 CONFIGURATION OA259 [AEDC V41B-14] CV102, STING A (INVERTED)

SYMBOL	RN/L
O	4.411

PARAMETRIC VALUES

CONFIG	1.000	SPDBRK	87.200
ALPHA	15.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

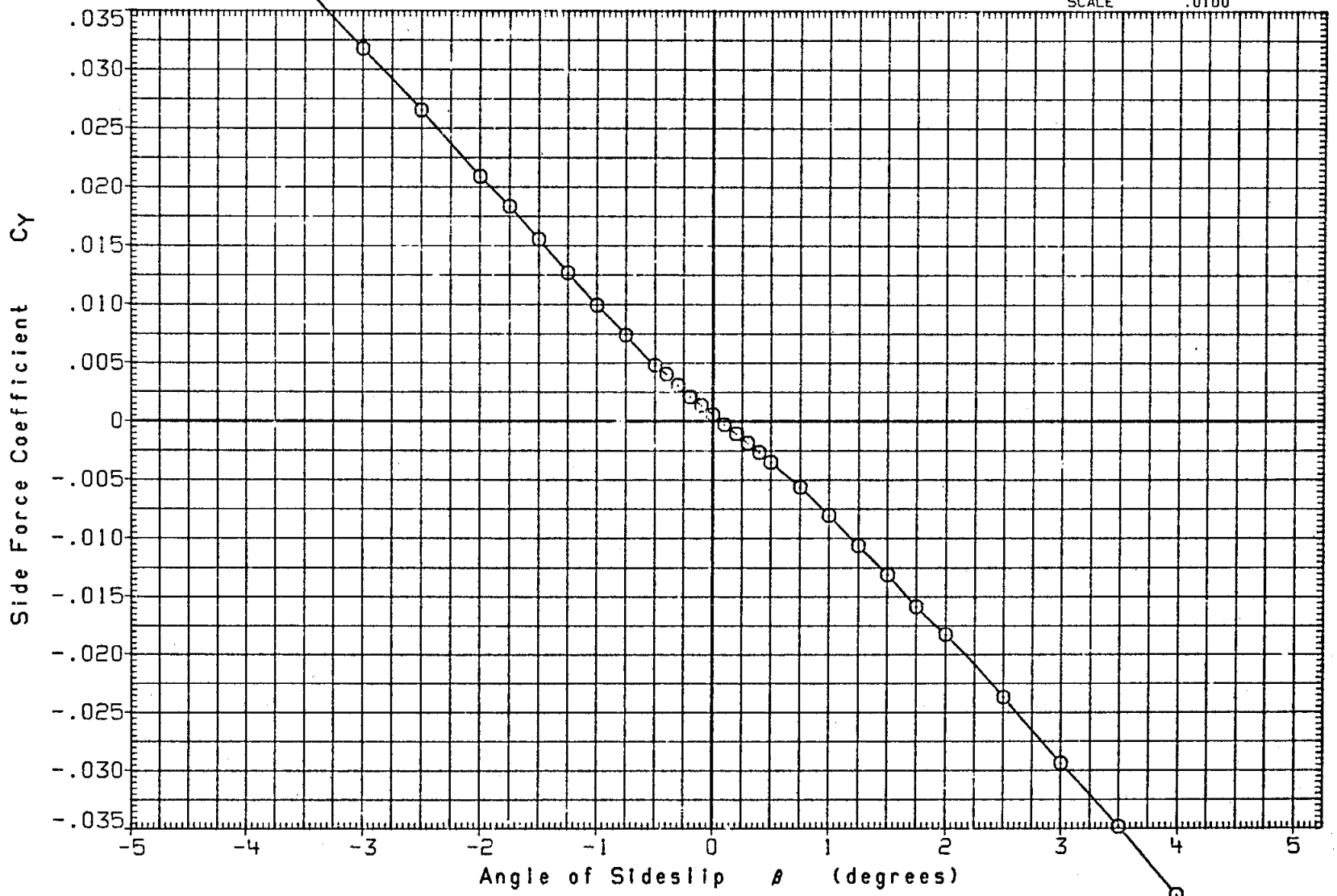


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

RT3028 CONFIGURATION 0A259 [AEDC V41B-14] CV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.411	CONFIG	1.000	SPDBRK	87.200
		ALPHA	15.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

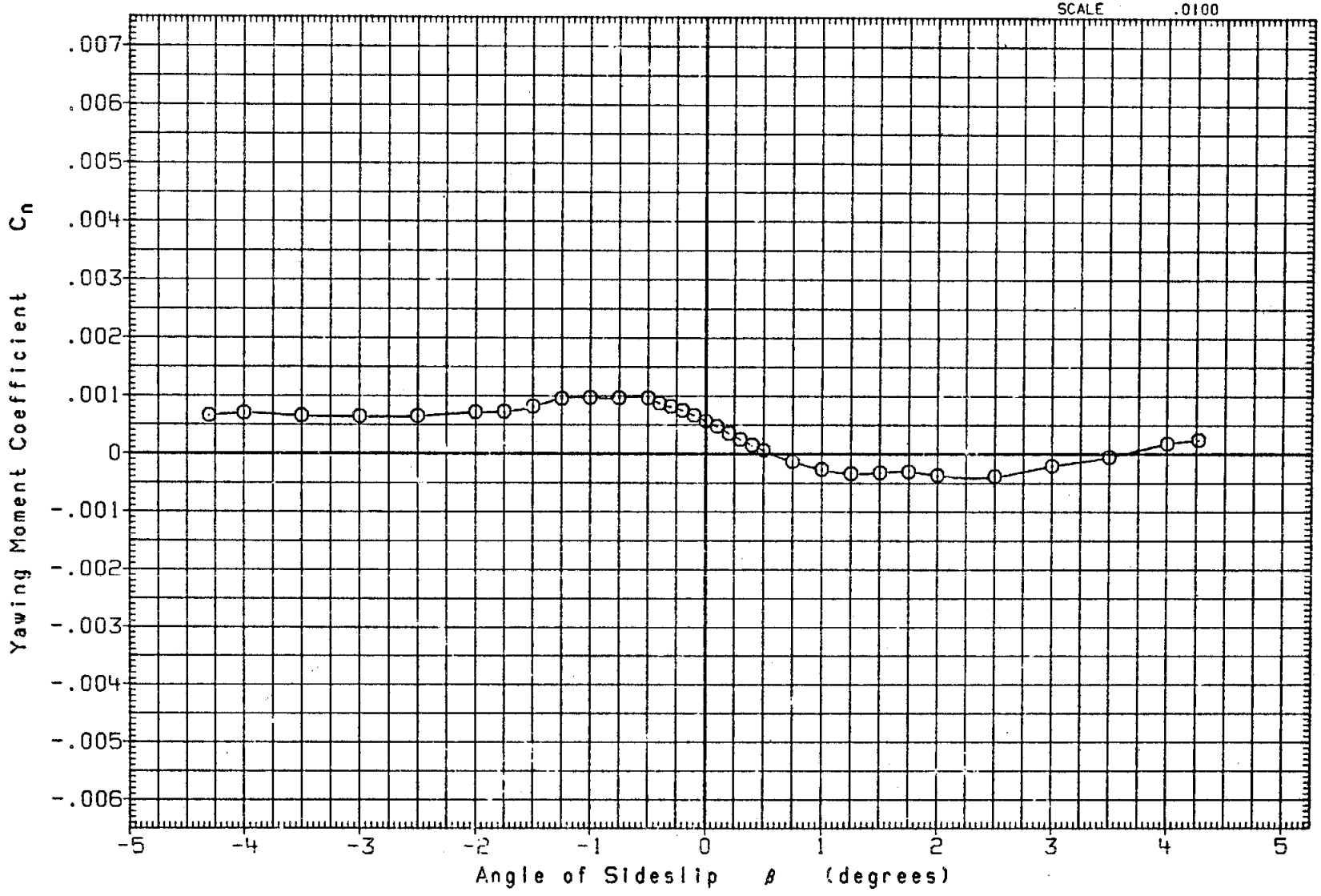


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

RT3028 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.411	CONFIG	1.000	SPDBRK	87.200
		ALPHA	15.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

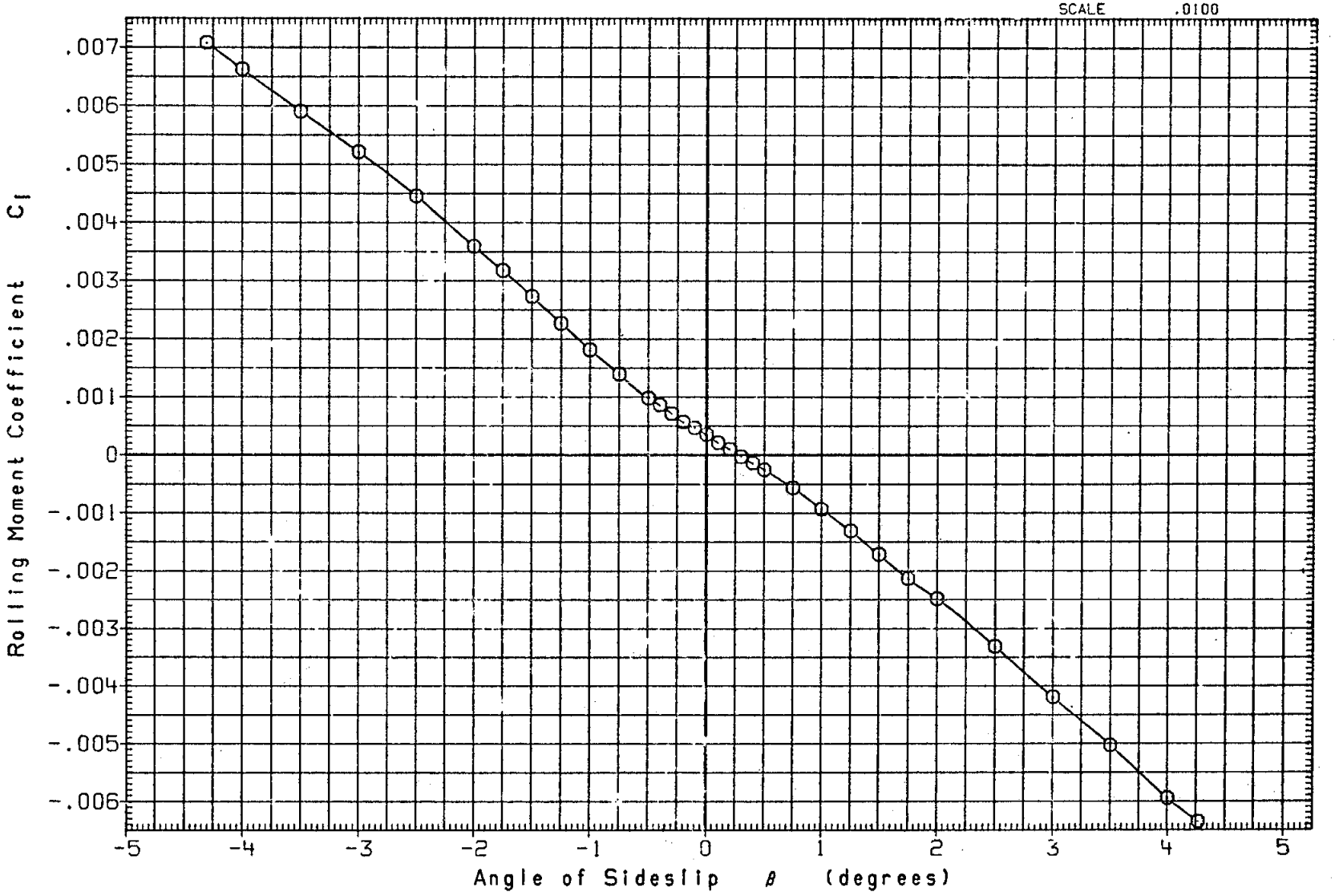


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3028 CONFIGURATION OA259 (AEDC V41B-141 D'102, STING A (INVERTED)

SYMBOL RN/L PARAMETRIC VALUES

O 4.411

CONFIG	1.000	SPDBRK	87.200
ALPHA	15.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

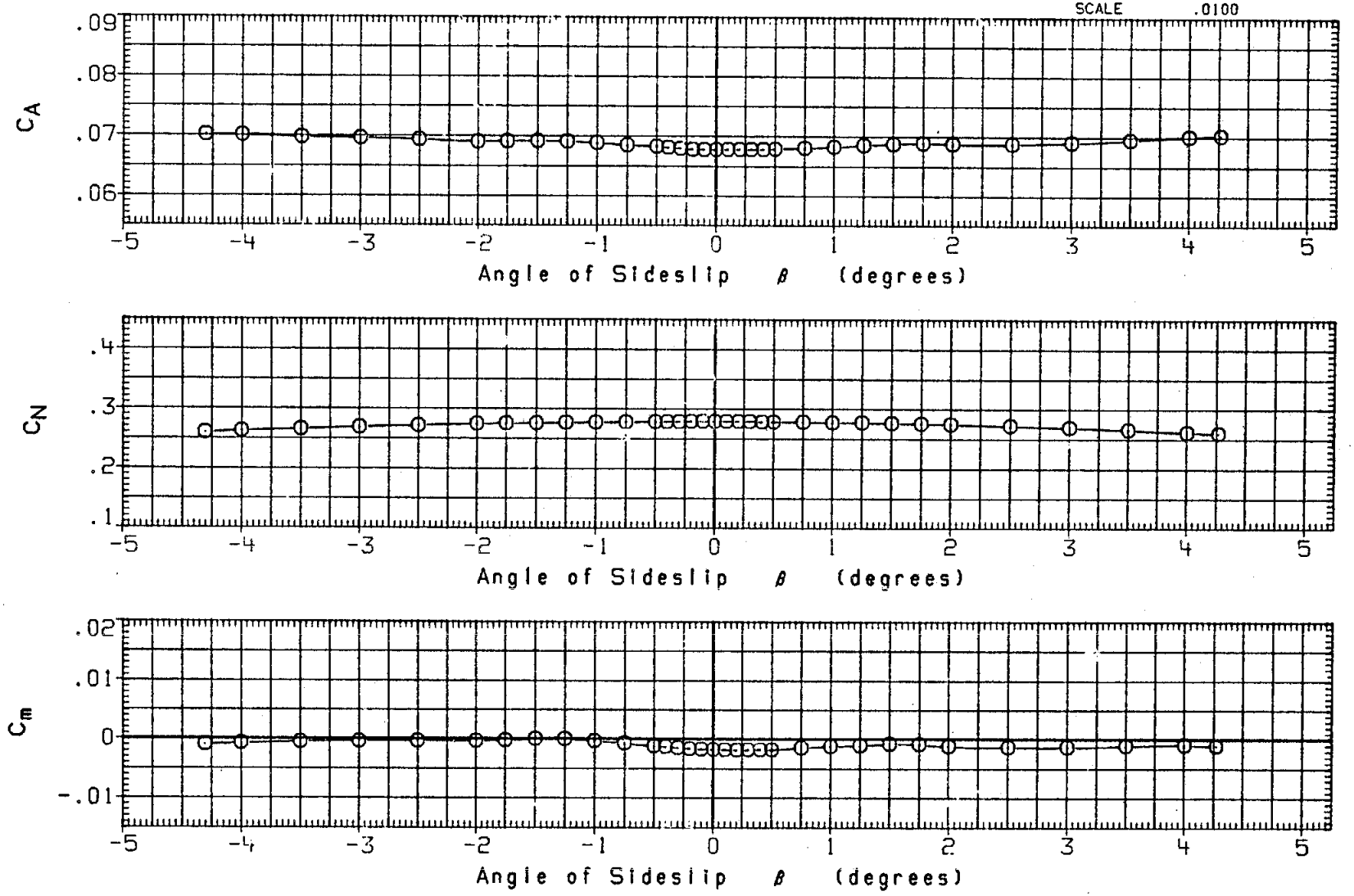


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

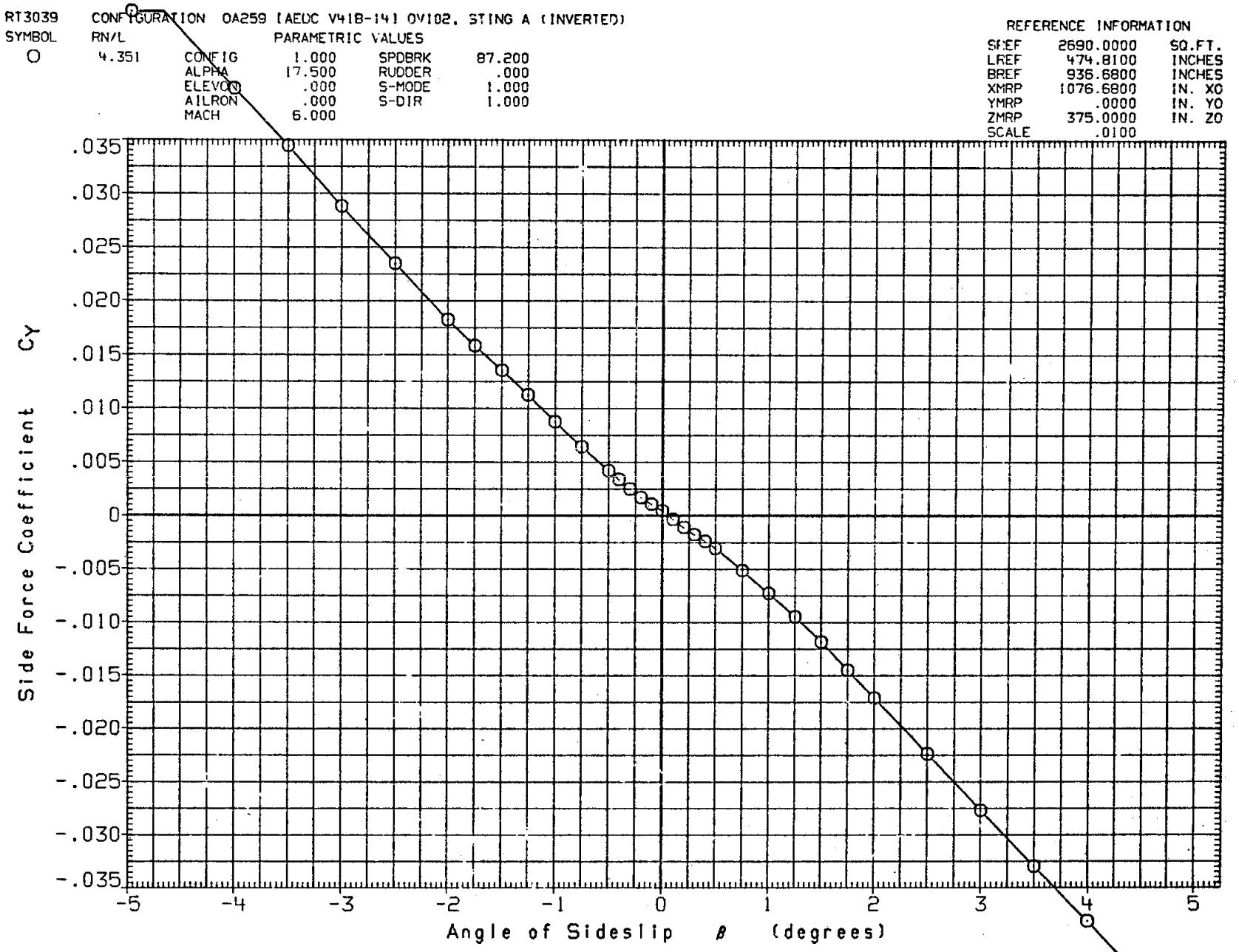


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

RT3039 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.351	CONFIG	1.000	SPDBRK	87.200
		ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

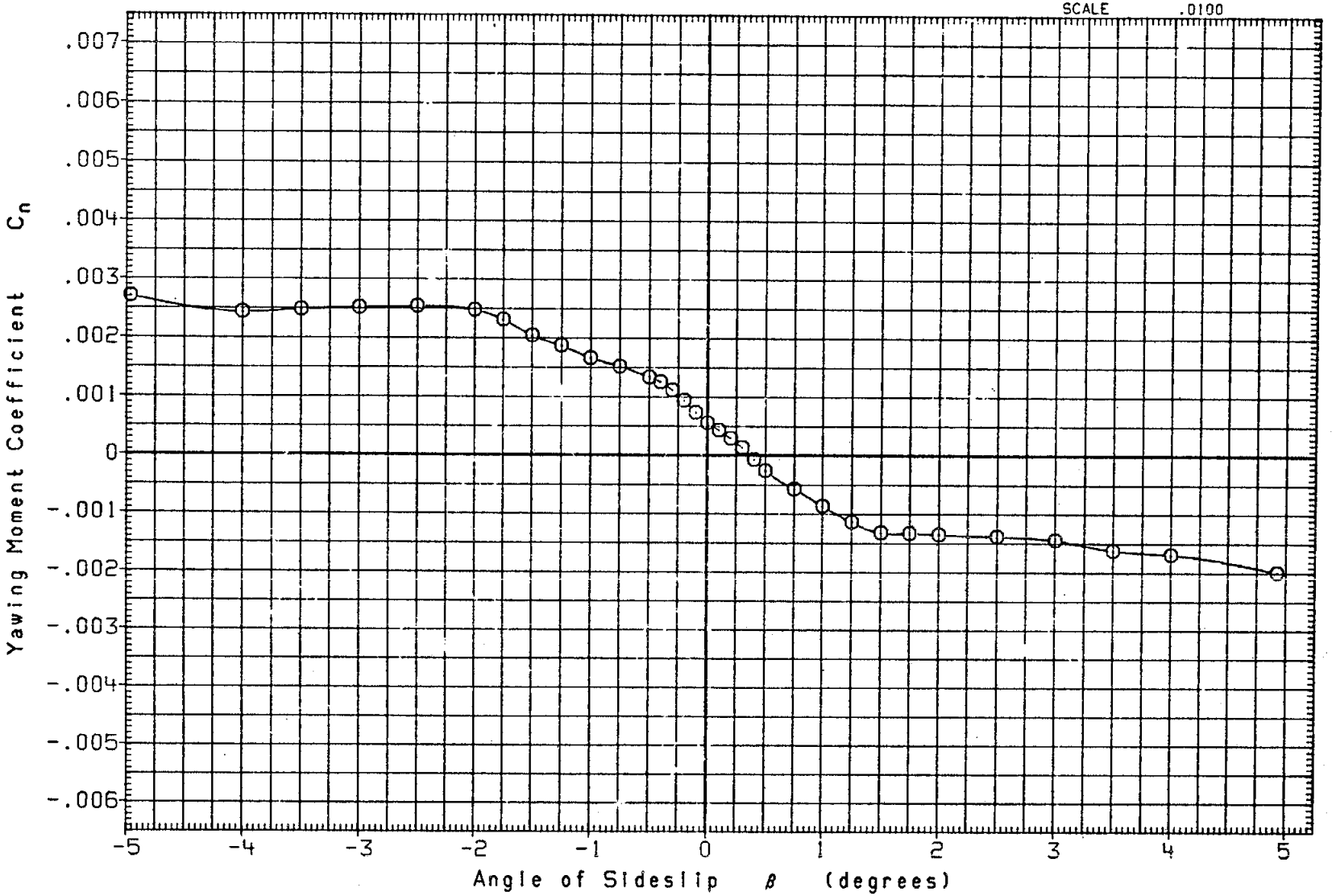


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

RT3039 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.351	CONFIG	1.000	SPDBRK	87.200
		ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

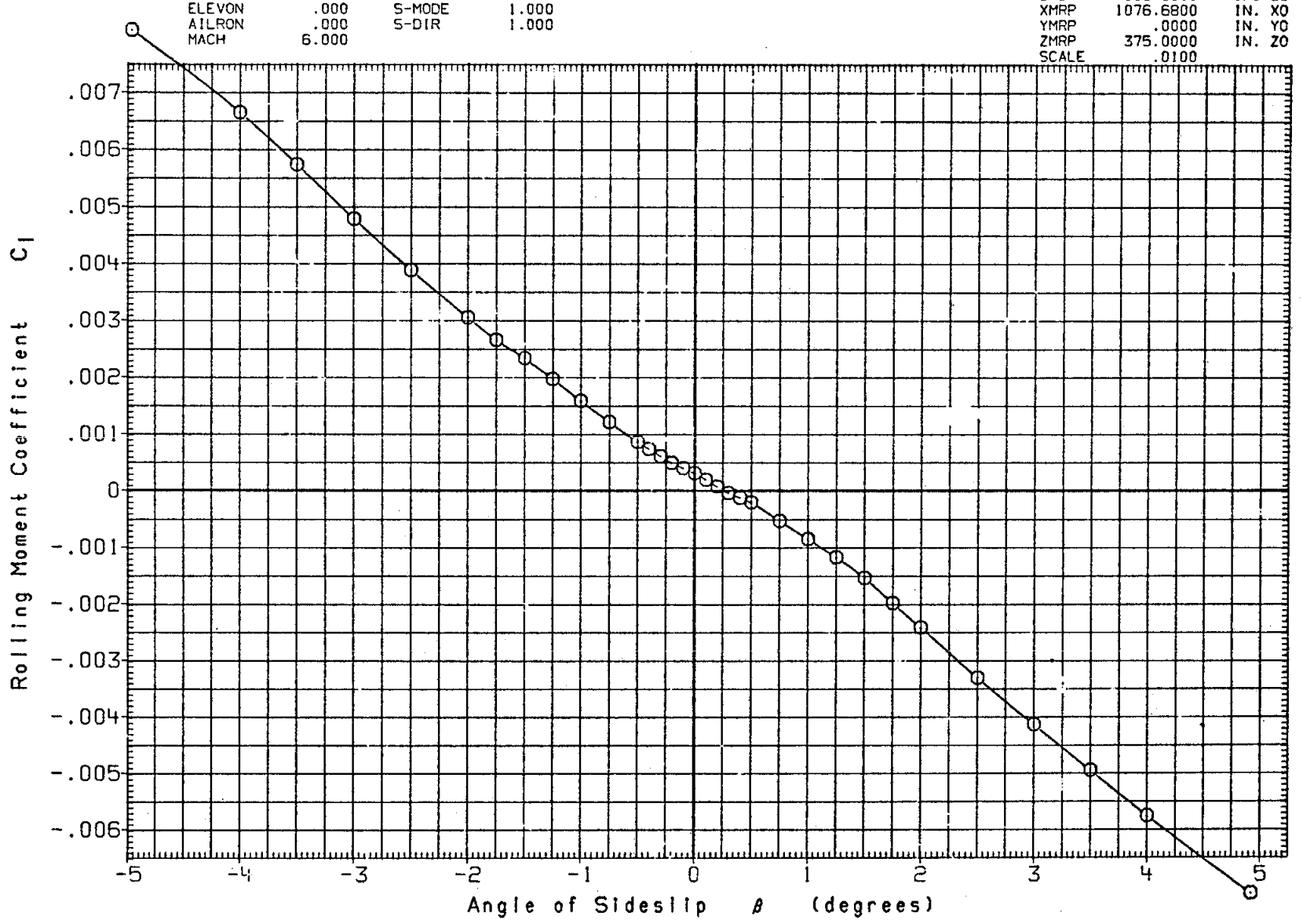


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3039 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.351	CONFIG	1.000	SPDBRK	87.200
		ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

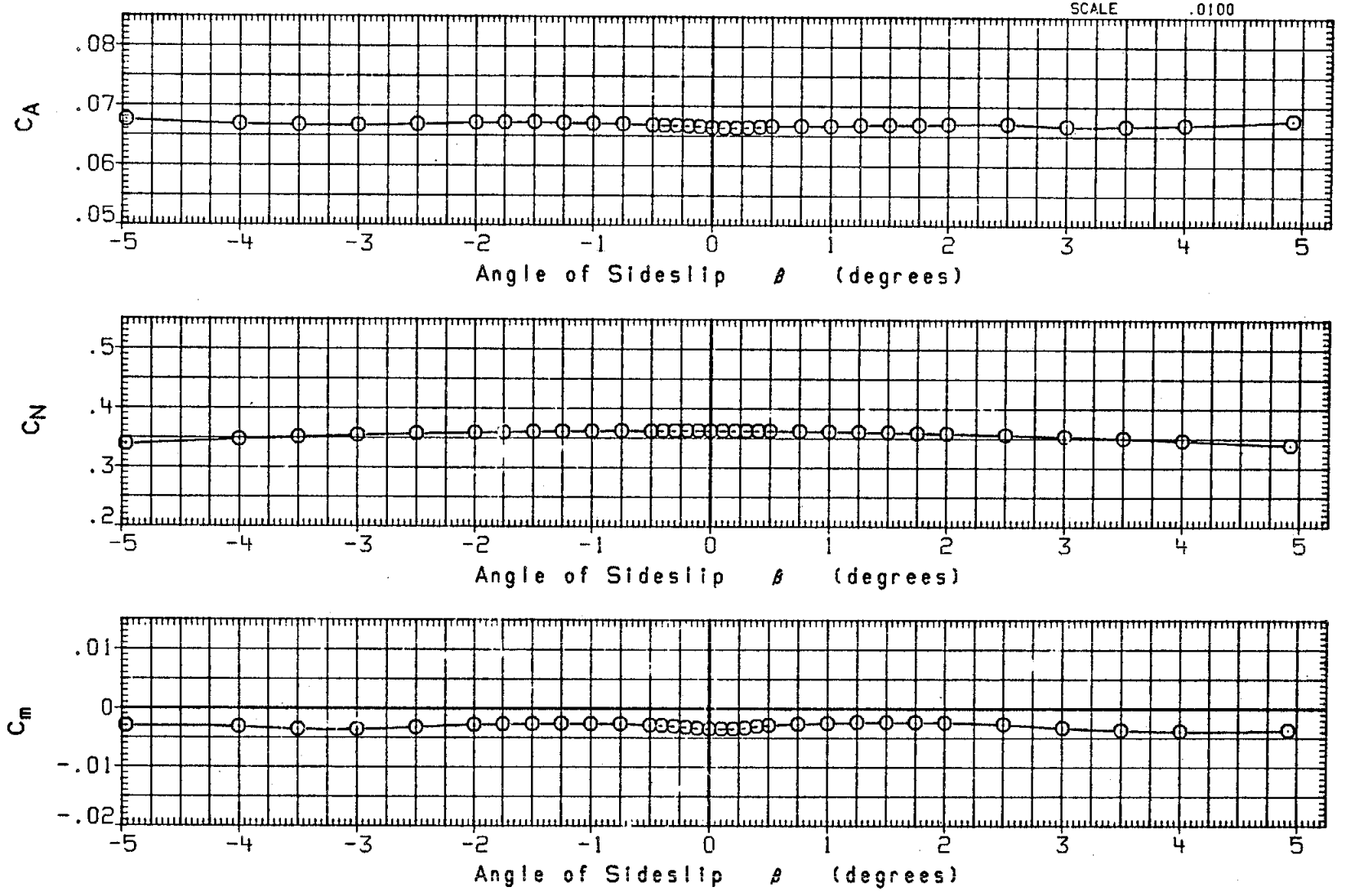


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

RT3029 CONFIGURATION OA259 (AEDC V41B-14) CV102, STING A (INVERTED)

SYMBOL	RN/L
O	4.321

PARAMETRIC VALUES

CONFIG	1.000	SPDBRK	87.200
ALPHA	20.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

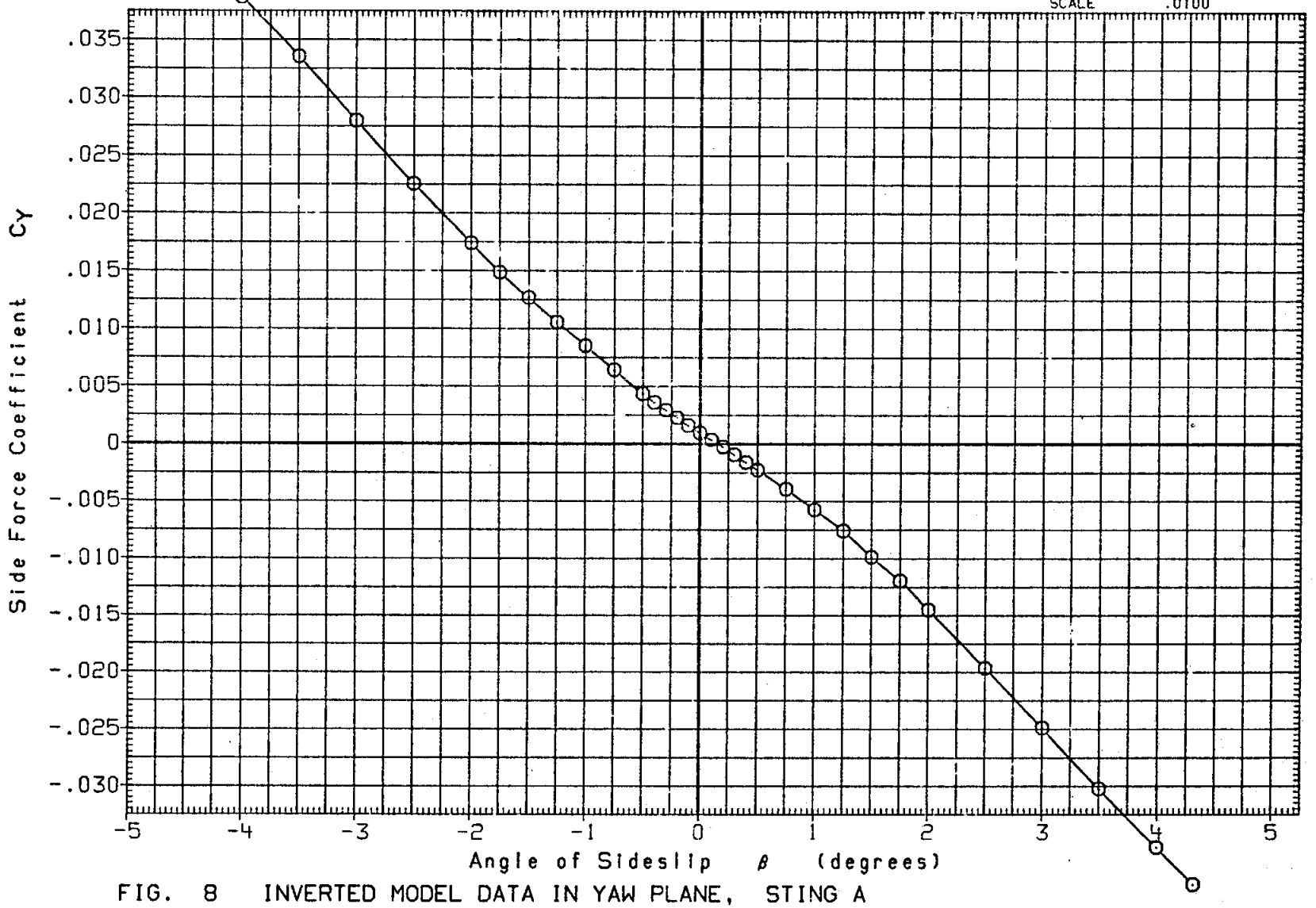


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3029 CONFIGURATION 0A259 (AEDC V41B-141 OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.321	CONFIG	1.000	SPDBRK	87.200
		ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

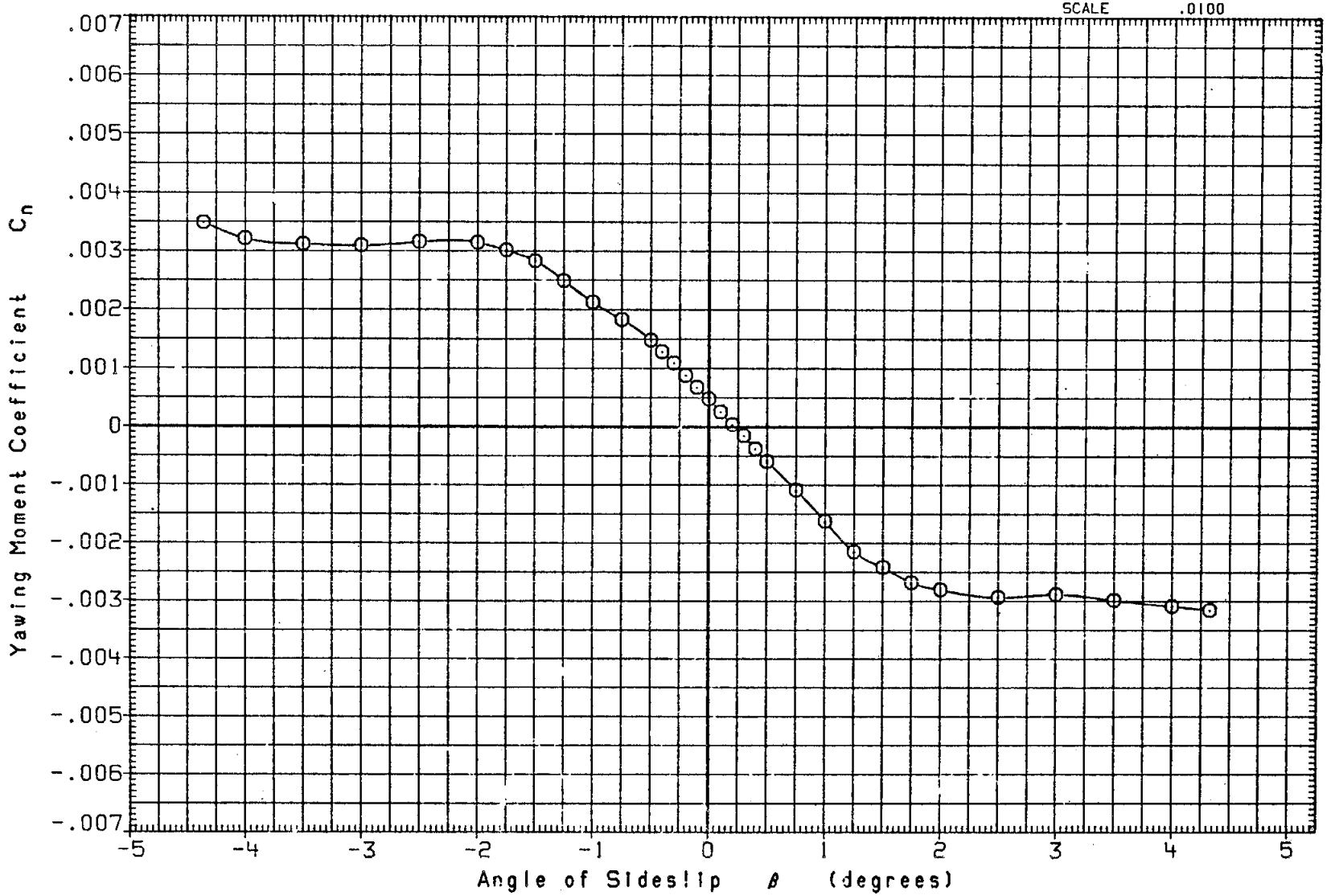


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

RT3029 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.321	CONFIG	1.000	SPDBRK	87.200
		ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

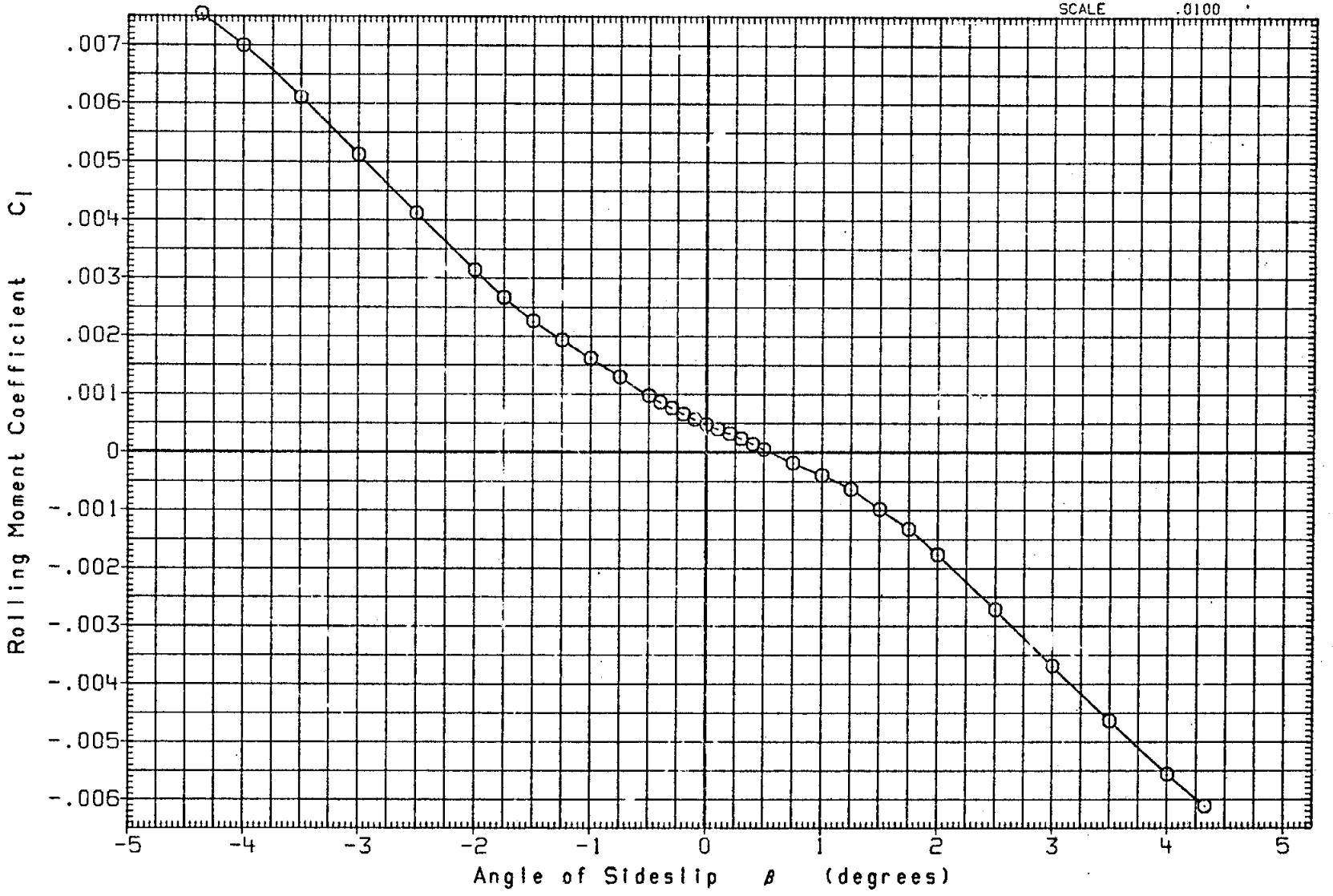


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

RT3029 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.321	CONFIG	1.000	SPDBRK	87.200
		ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

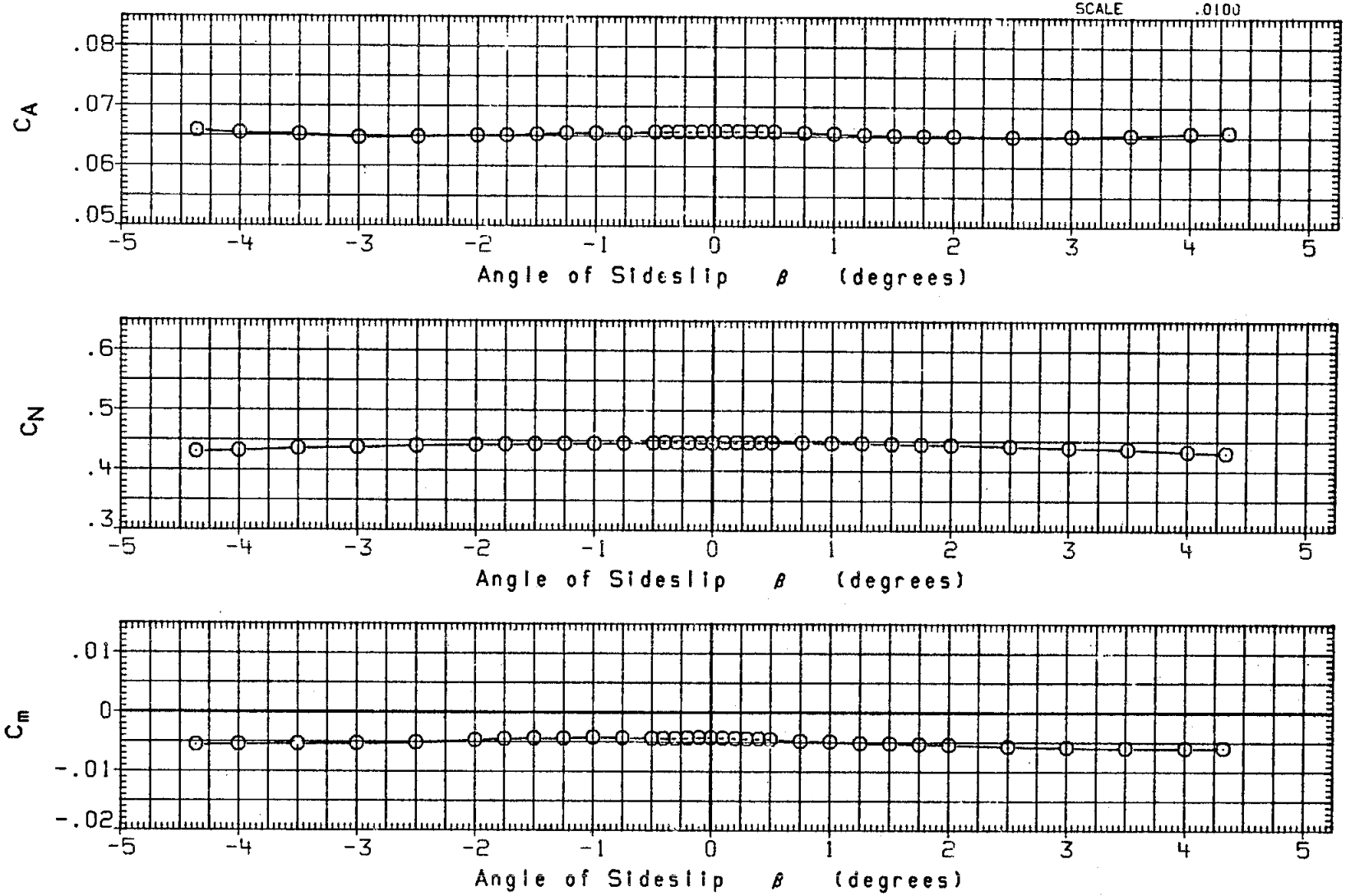


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

RT3030 CONFIGURATION 0A259 (AEDC V41B-14) OV'02, STING A (INVERTED)

SYMBOL	RN/L
O	4.379

PARAMETRIC VALUES

CONFIG	1.000	SPDBRK	87.200
ALPHA	22.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

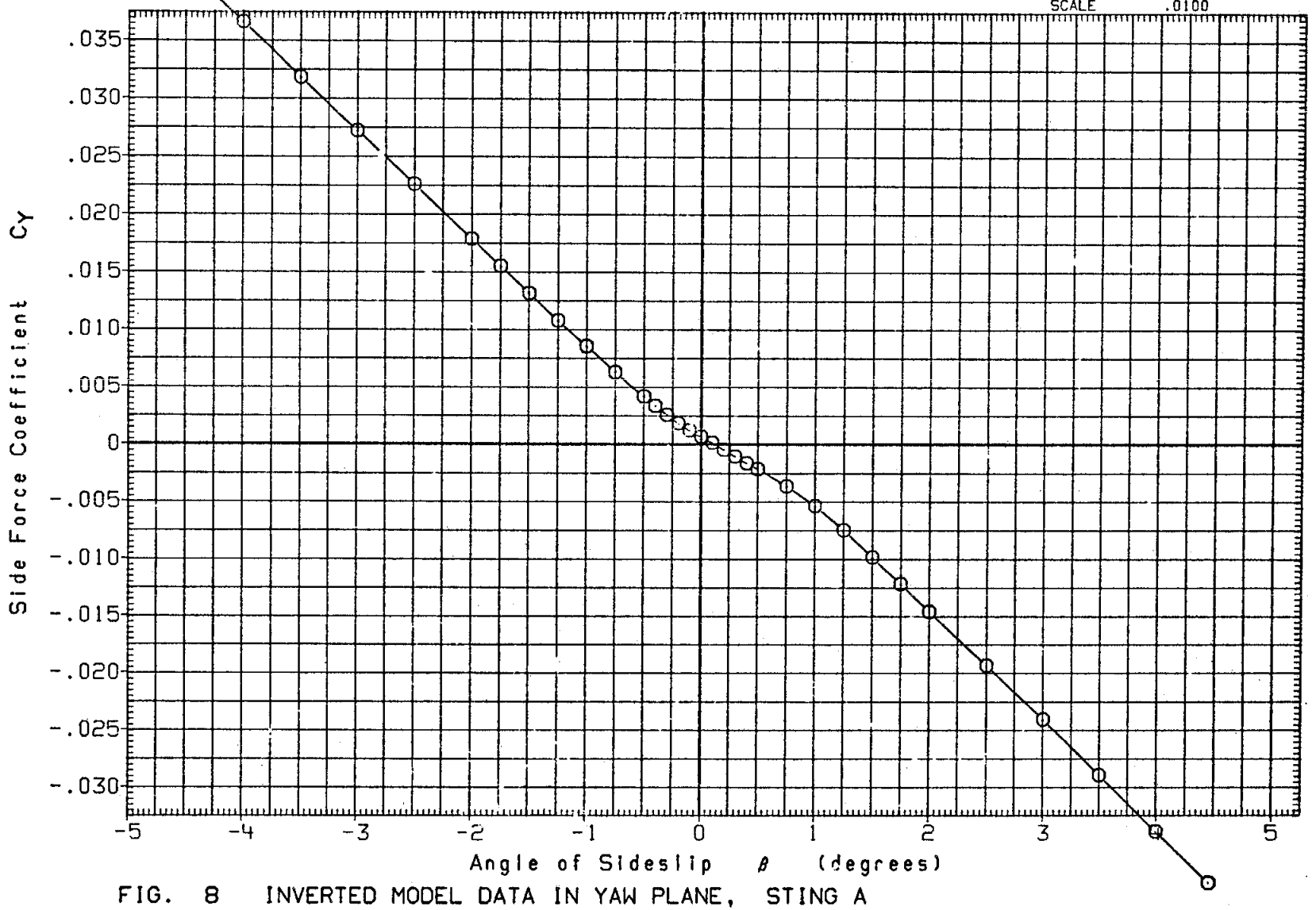


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3030 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.379	CONFIG	1.000	SPDBRK	87.200
		ALPHA	22.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

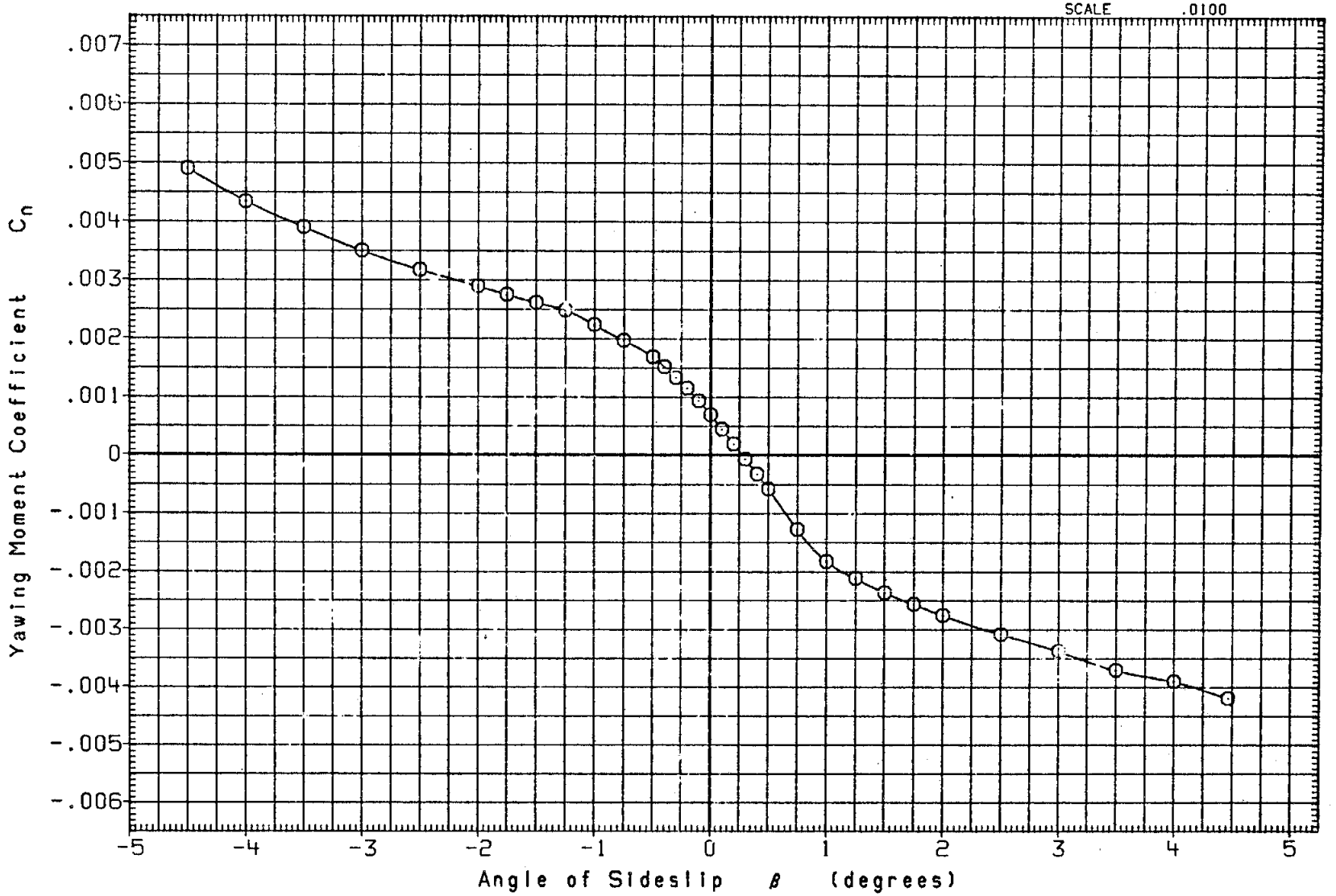


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3030 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (INVERTED)

SYMBOL	RN/L
O	4.379

PARAMETRIC VALUES

CONFIG	1.000	SPDBRK	87.200
ALPHA	22.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

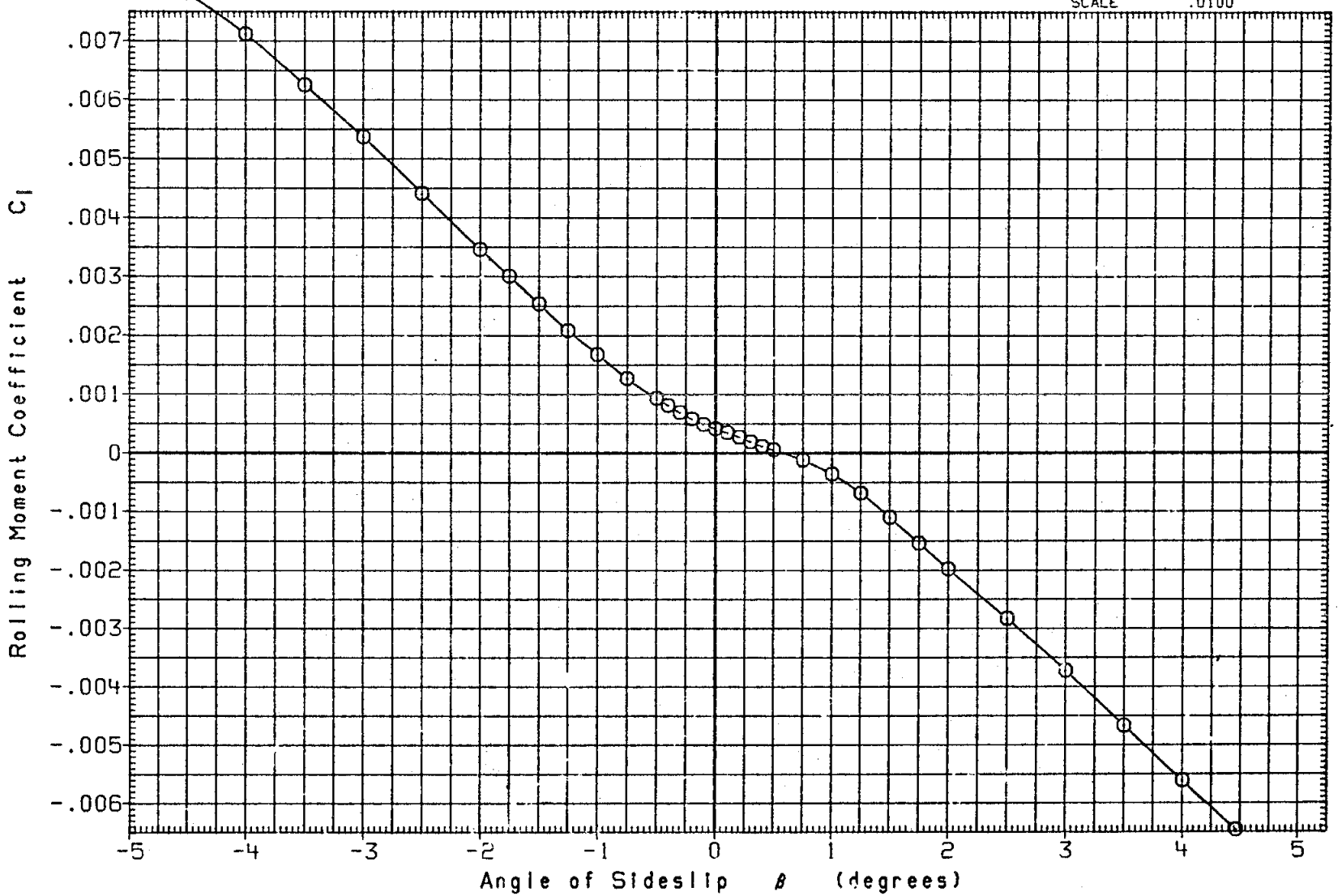


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3030 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.379	CONFIG	1.000	SPDBRK	87.200
		ALPHA	22.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

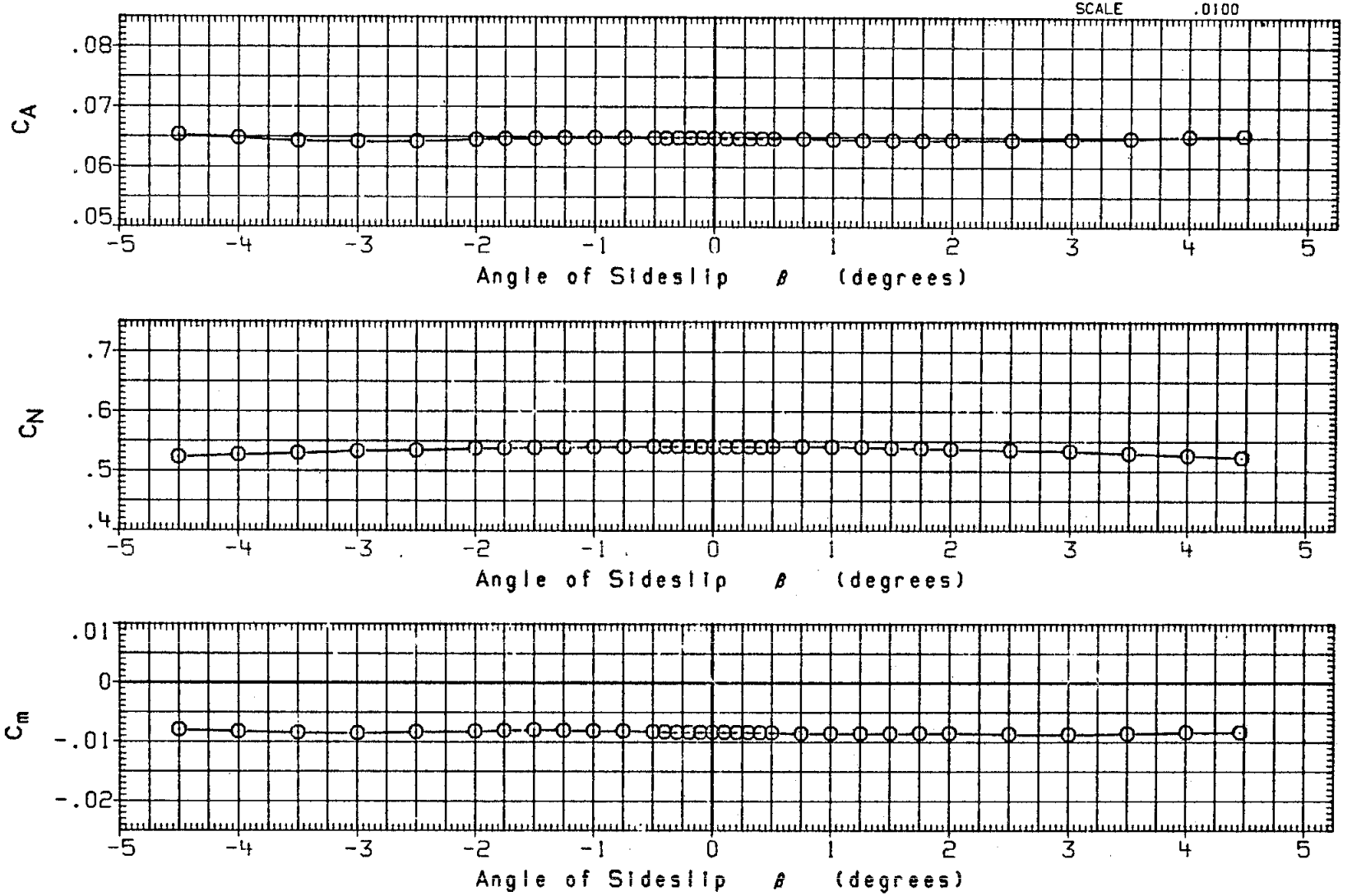


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3031 CONFIGURATION OA259 (AEDC V41B-14) OVI:2, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.394	CONFIG	1.000	SPDBRK	87.200
		ALPHA	25.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

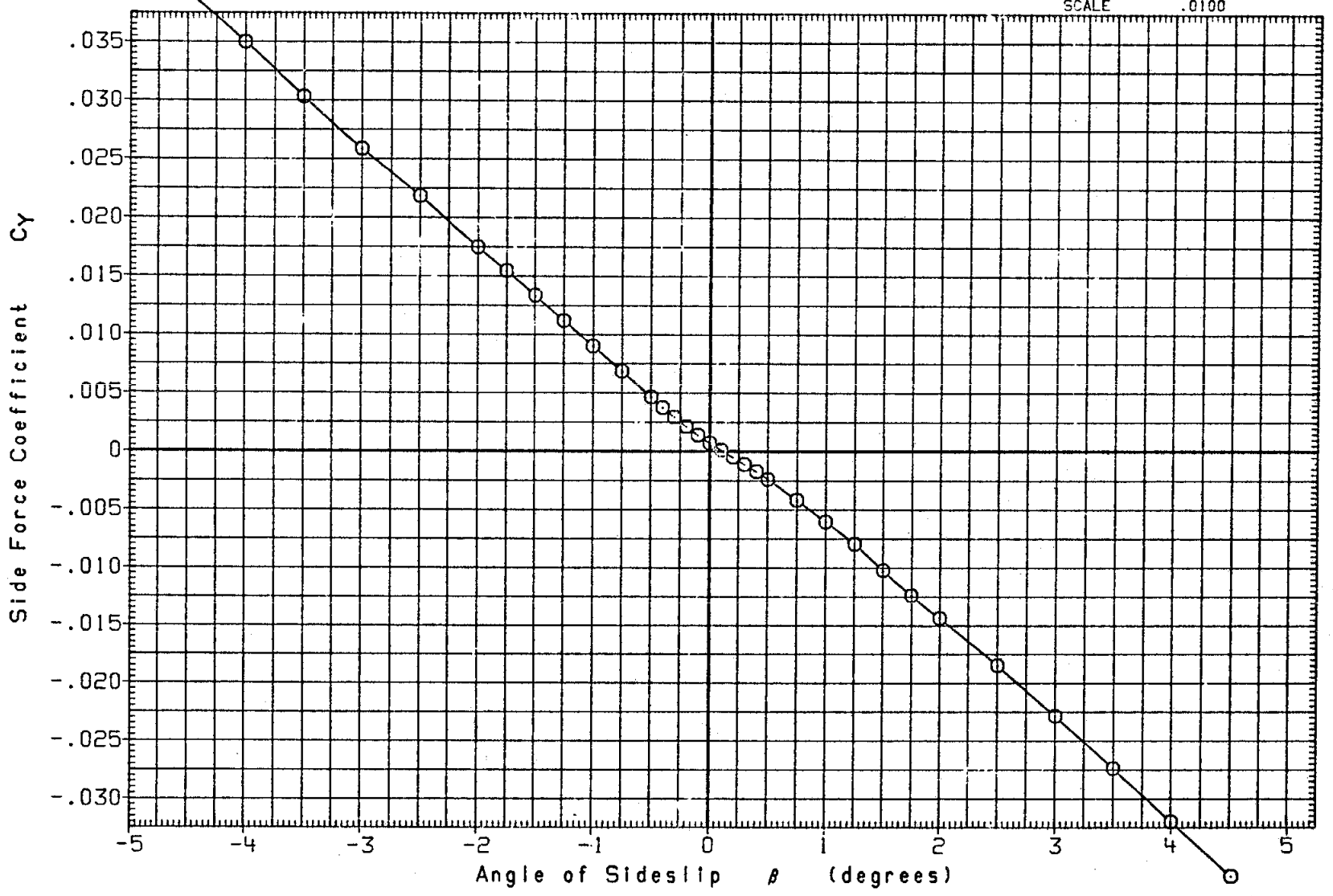


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3031 CONFIGURATION OA259 (AEDC V41B-14' OV102, STING A (INVERTED)

SYMBOL	RN/L
O	4.394

PARAMETRIC VALUES

CONFIG	1.000	SPDBRK	87.200
ALPHA	25.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

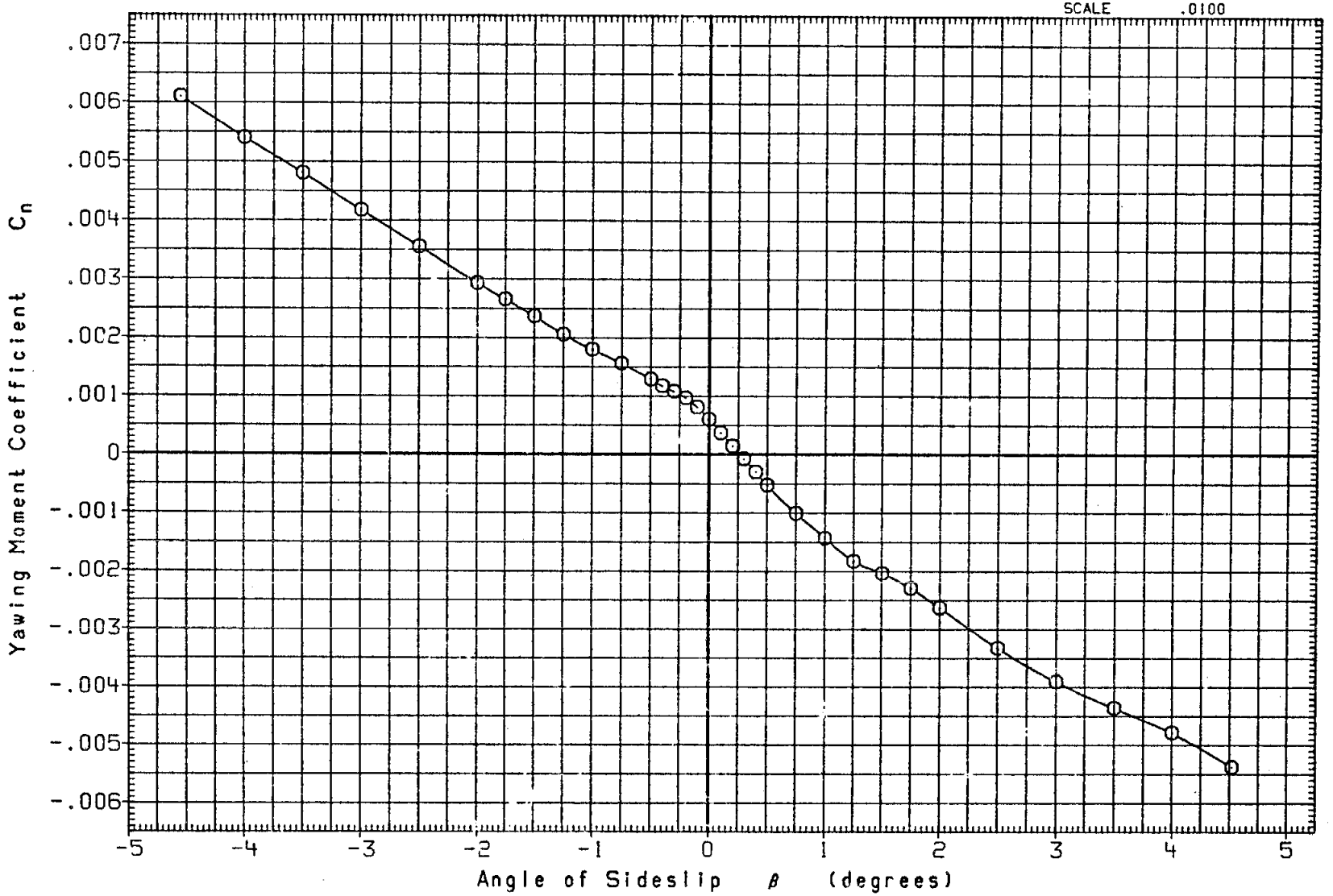


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

RT3031 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.394	CONFIG	1.000	SPDBRK	87.200
		ALPHA	25.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

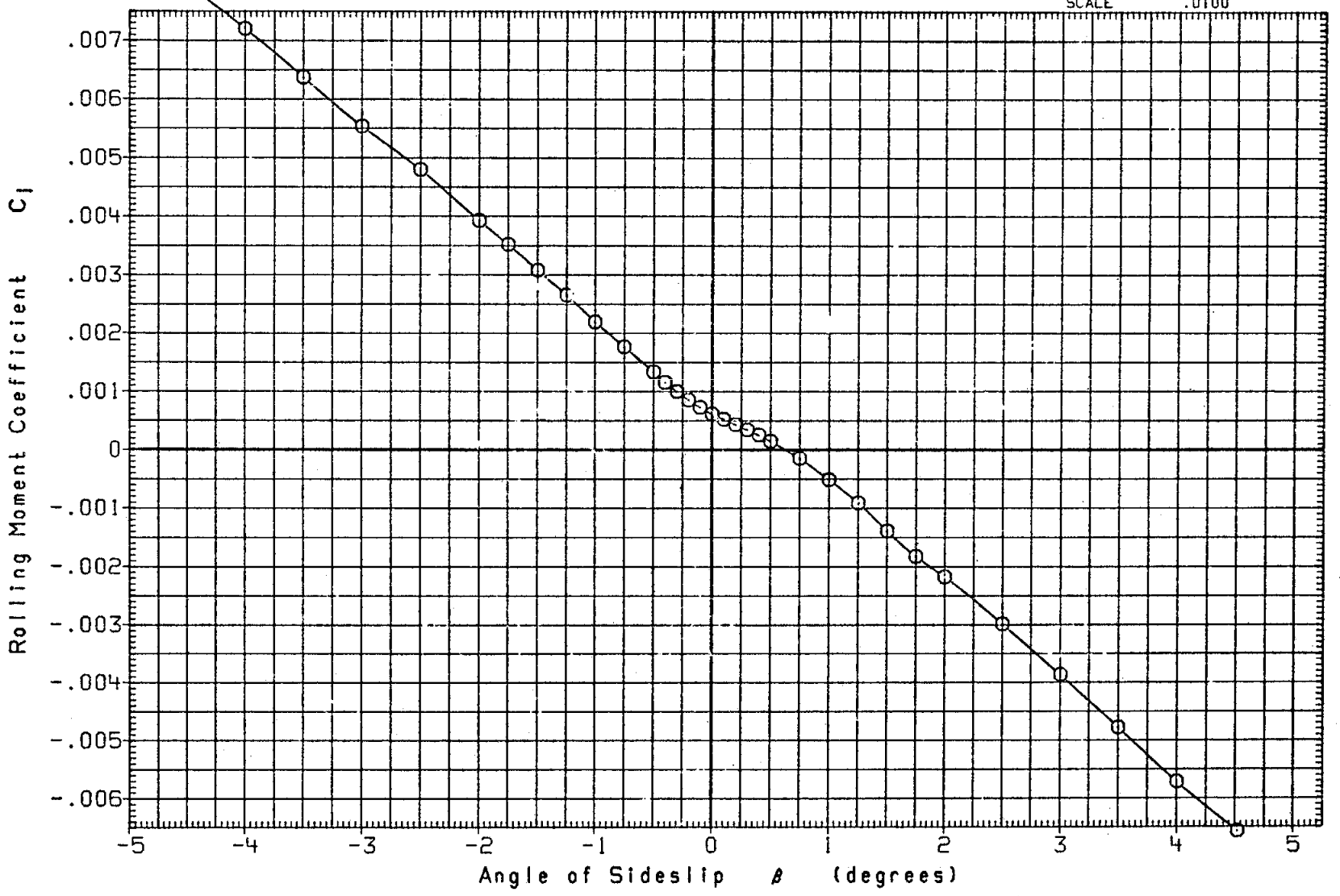


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

RT3031 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.394	CONFIG	1.000	SPDBRK	87.200
		ALPHA	25.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

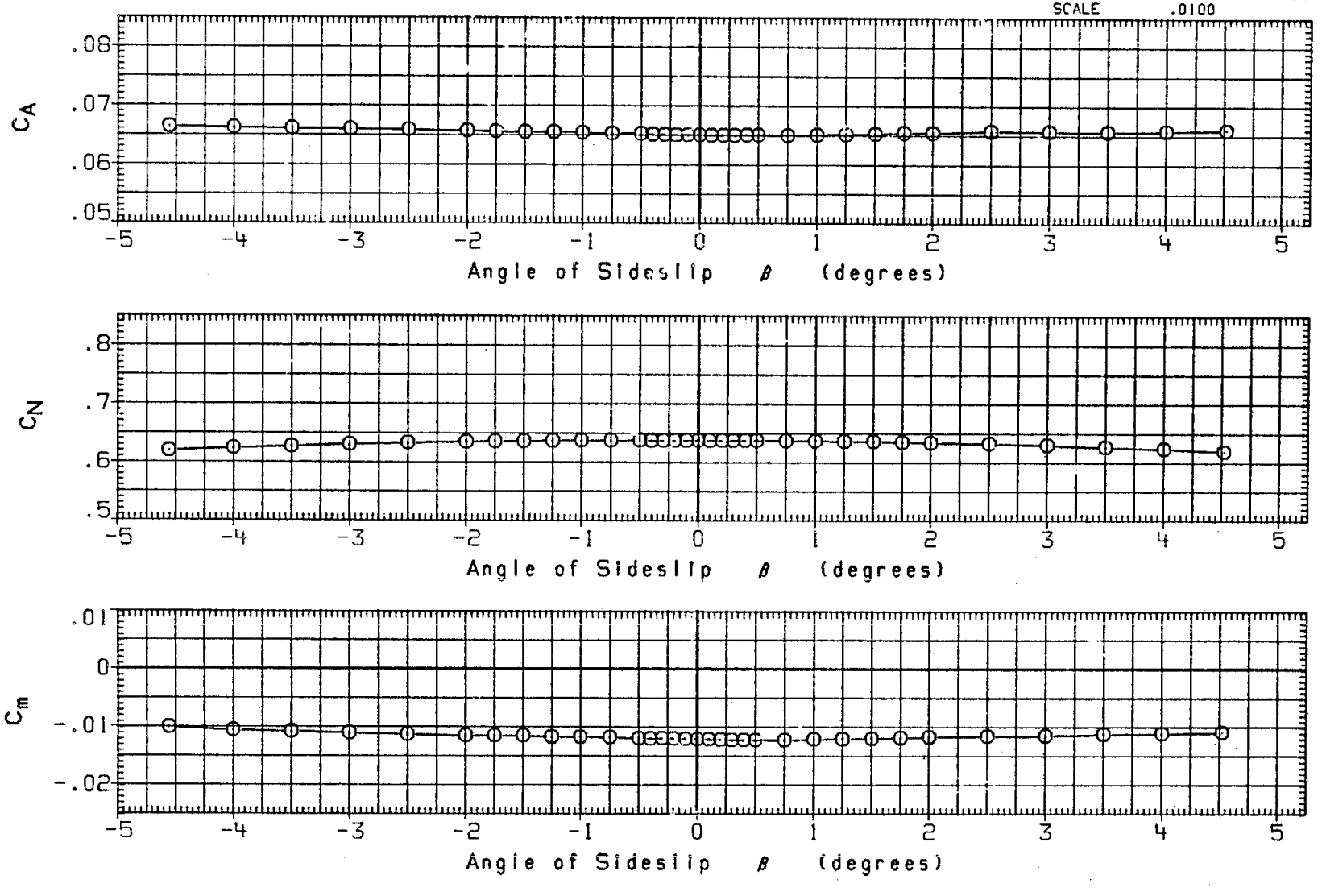


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3032 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.402	CONFIG	1.000	SPDBRK	87.200
		ALPHA	27.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

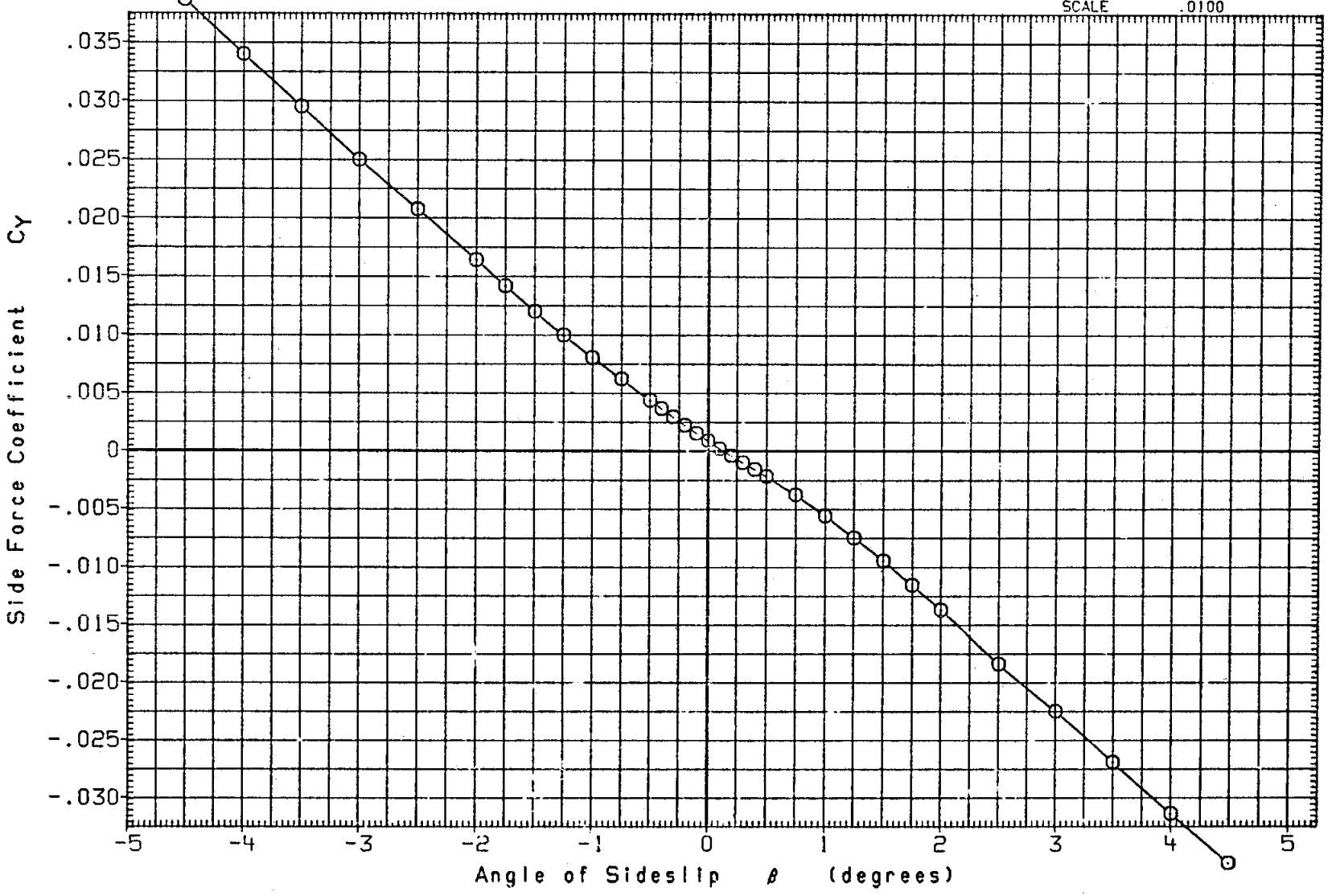


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3032 CONFIGURATION 0A259 (AEDC V41B-141 OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.402	CONFIG	1.000	SPDBRK	87.200
		ALPHA	27.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

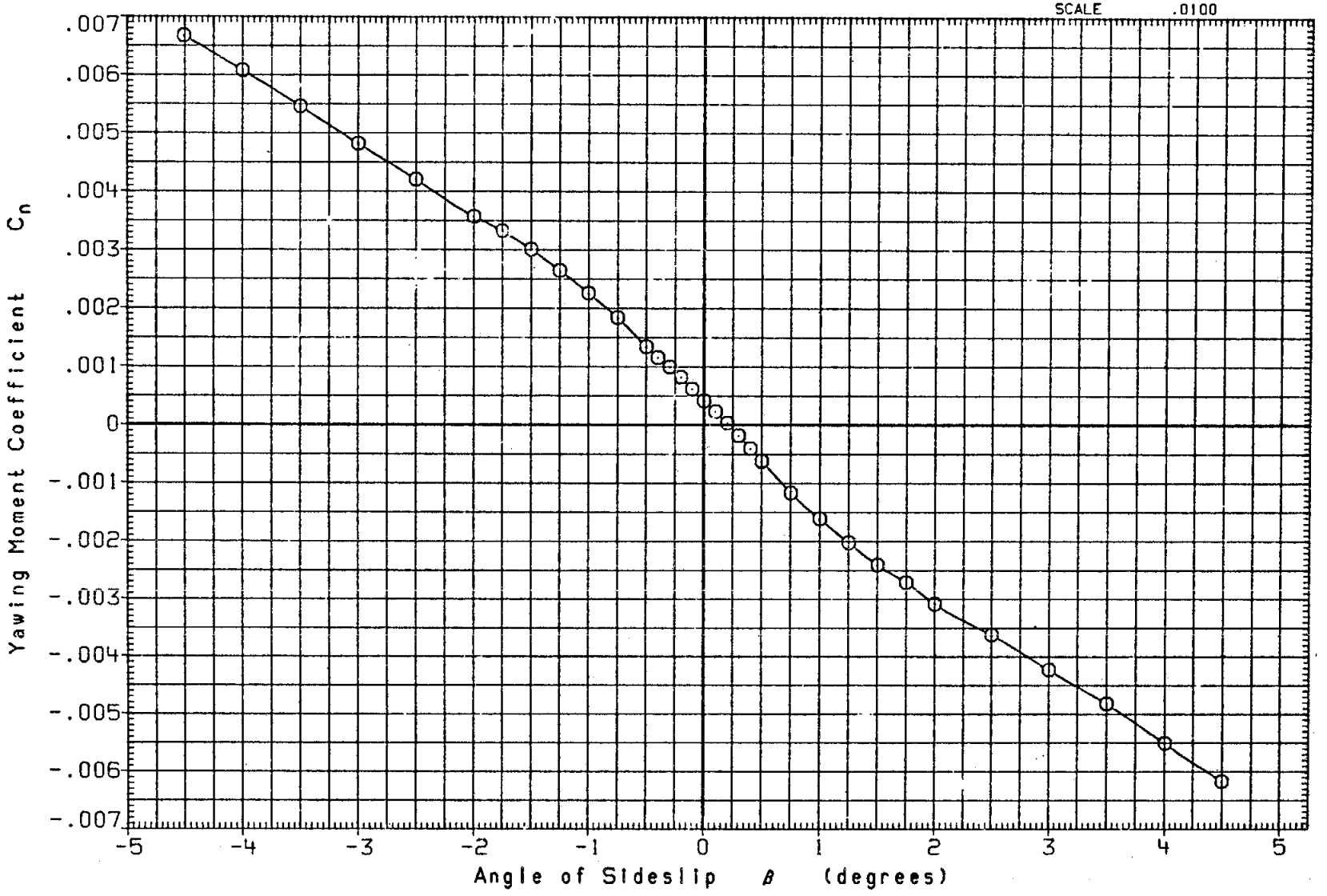


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3032 CONFIGURATION 0A259 [AEDC V41B-14: OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.402	CONFIG	1.000	SPDBRK	87.200
		ALPHA	27.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

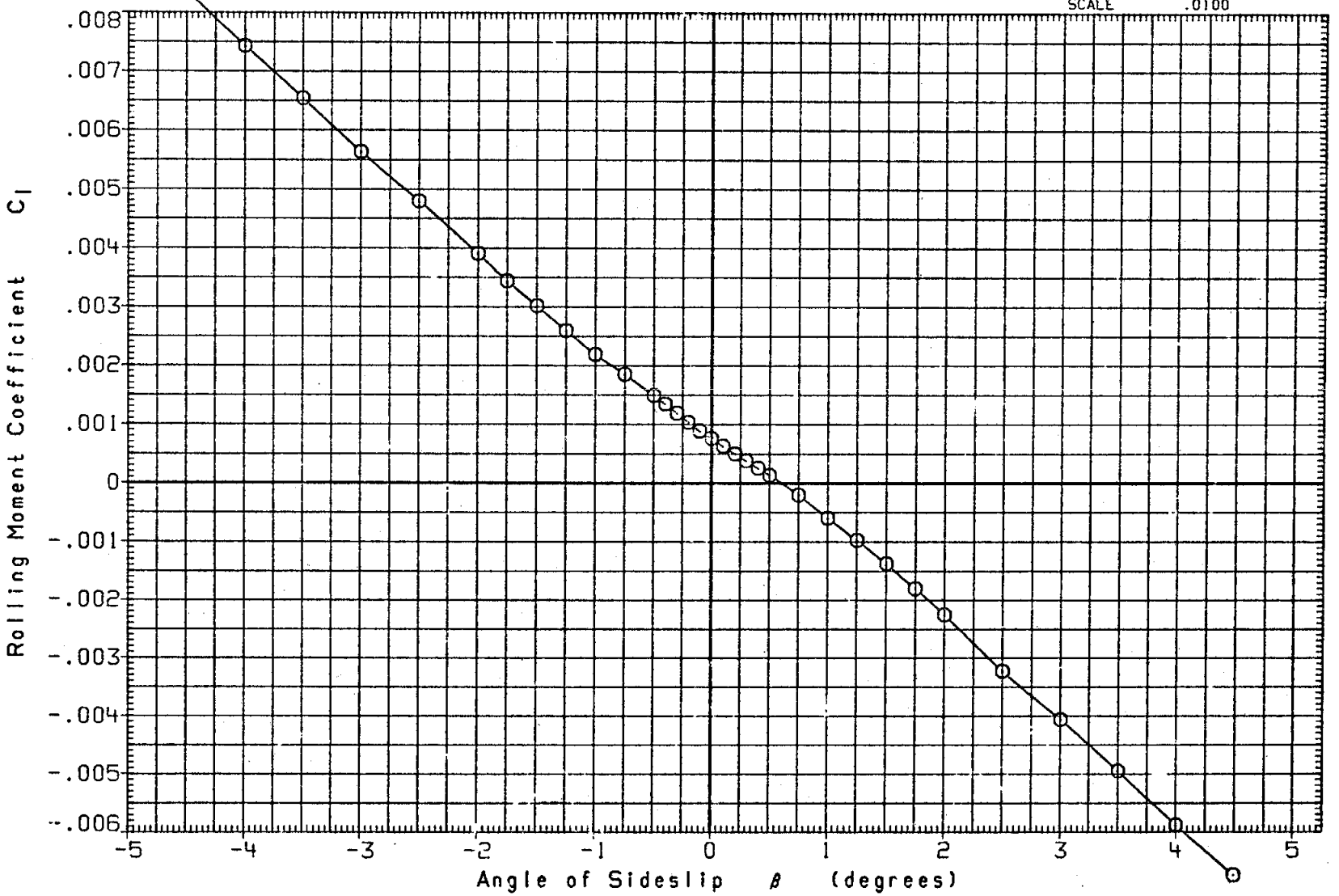


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

RT3032 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.402	CONFIG	1.000	SPDBRK	87.200
		ALPHA	27.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

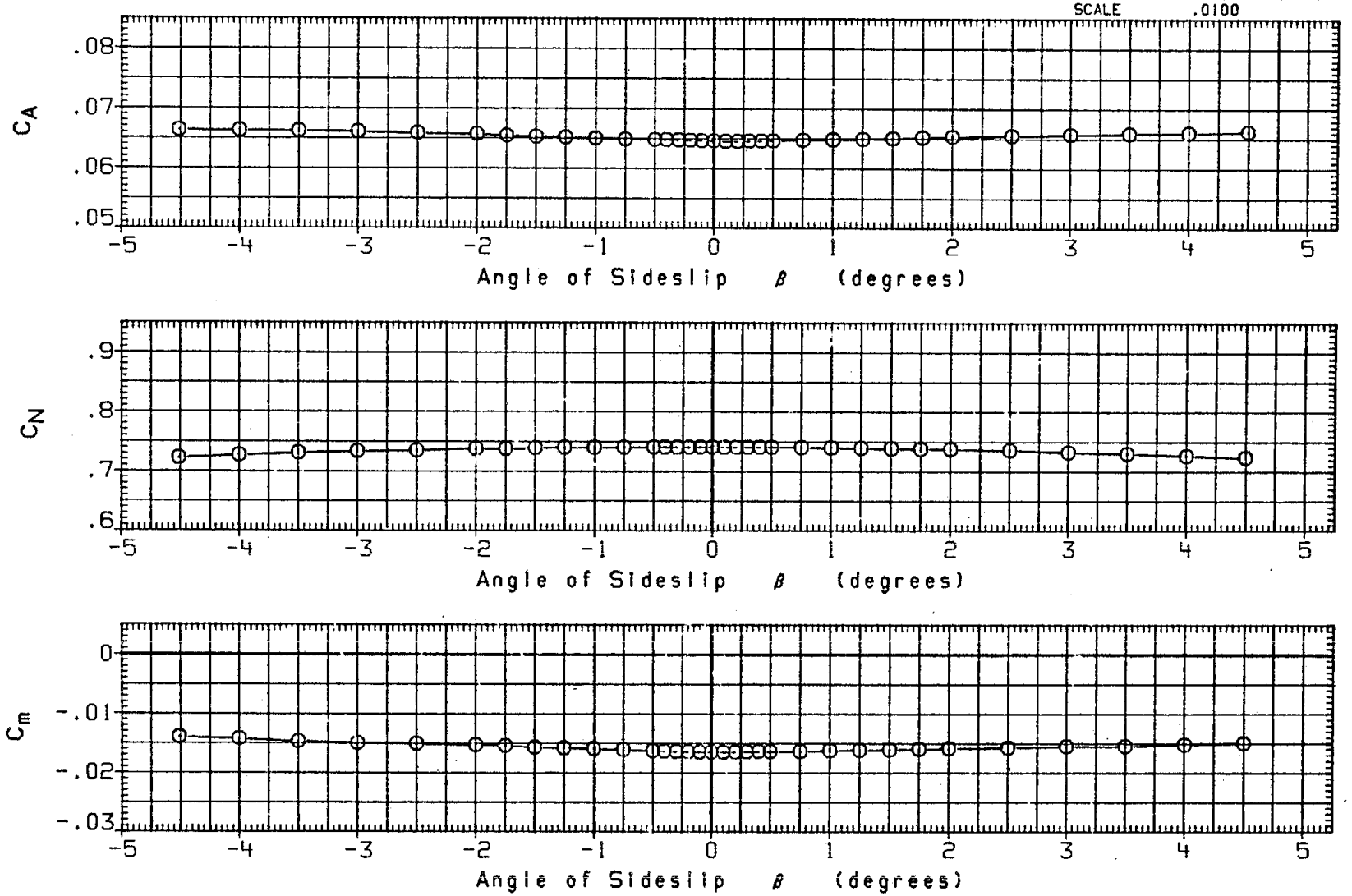


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

RT3033 CONFIGURATION OA259 [AEDC V41B-14] OVIG2, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.384	CONFIG	1.000	SPDBRK	87.200
		ALPHA	30.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

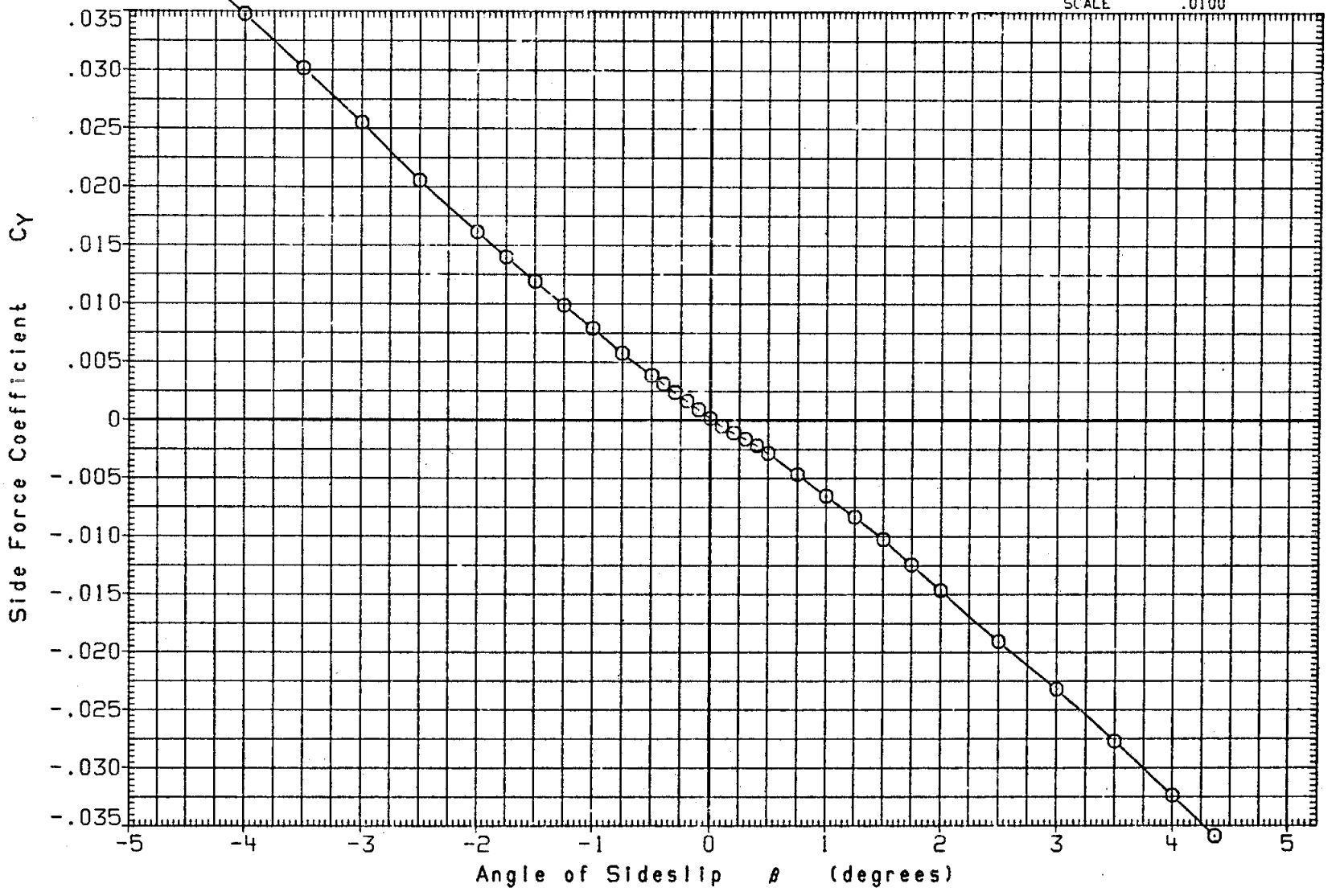


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3033 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (INVERTED)

SYMBOL	RN/L
O	4.384

PARAMETRIC VALUES

CONFIG	1.000	SPDBRK	87.200
ALPHA	30.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

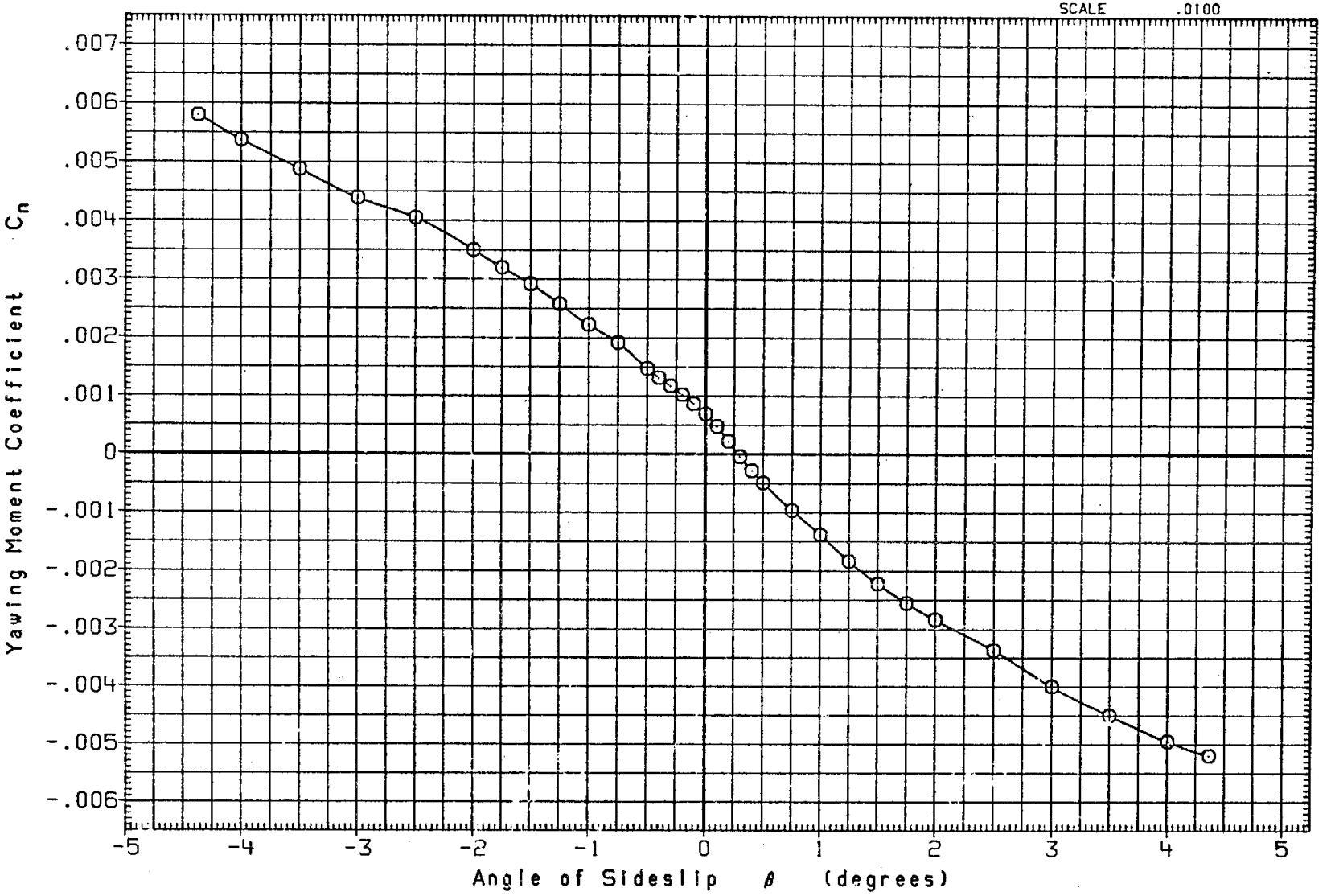


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3033 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (INVERTED)

SYMBOL	RN/L
O	4.384

PARAMETRIC VALUES

CONFIG	1.000	SPDBRK	87.200
ALPHA	30.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

RE CRENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

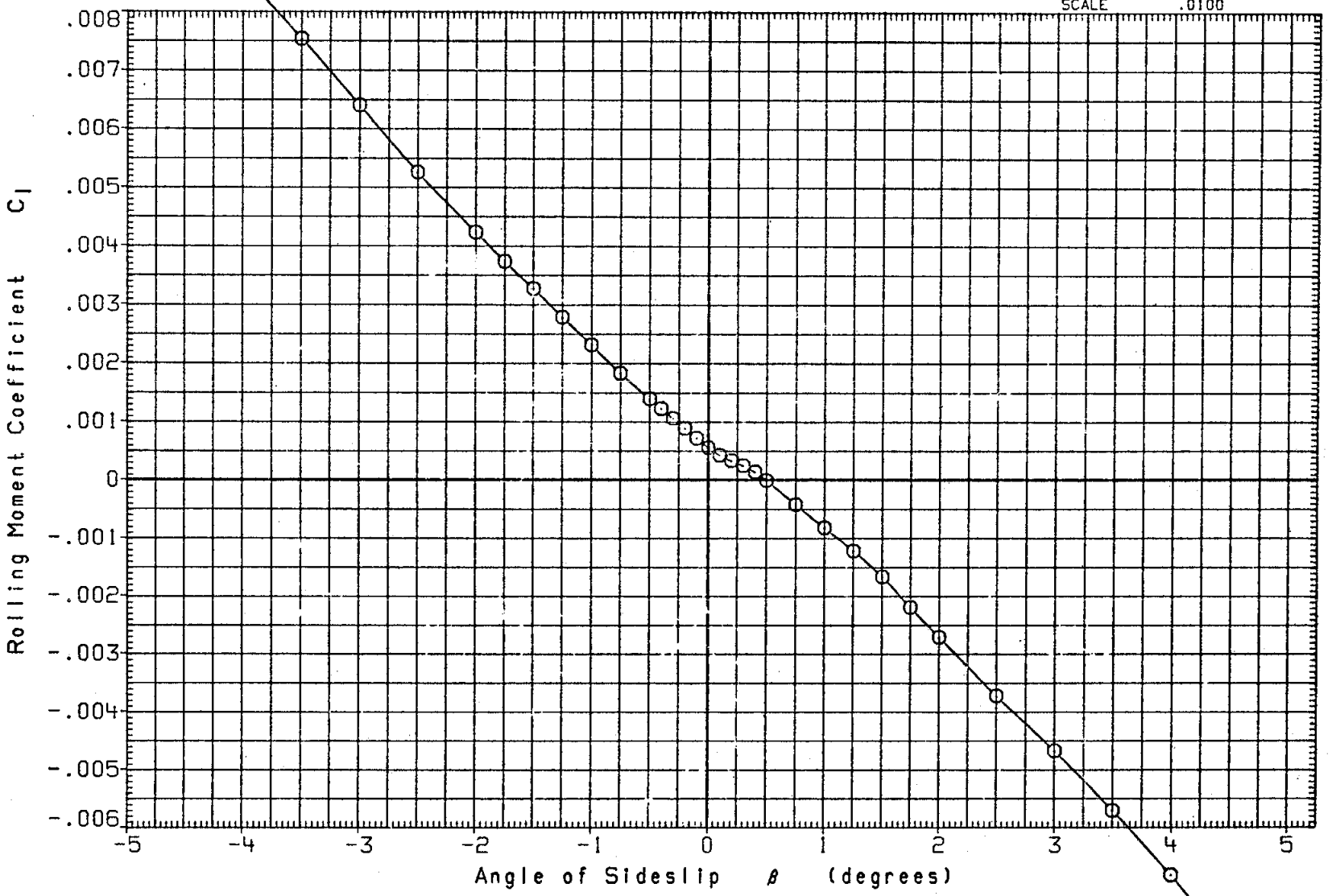


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

RT3033 CONFIGURATION OA259 (AEDC V418-14) OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.384	CONFIG	1.000	SPDBRK	87.200
		ALPHA	30.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

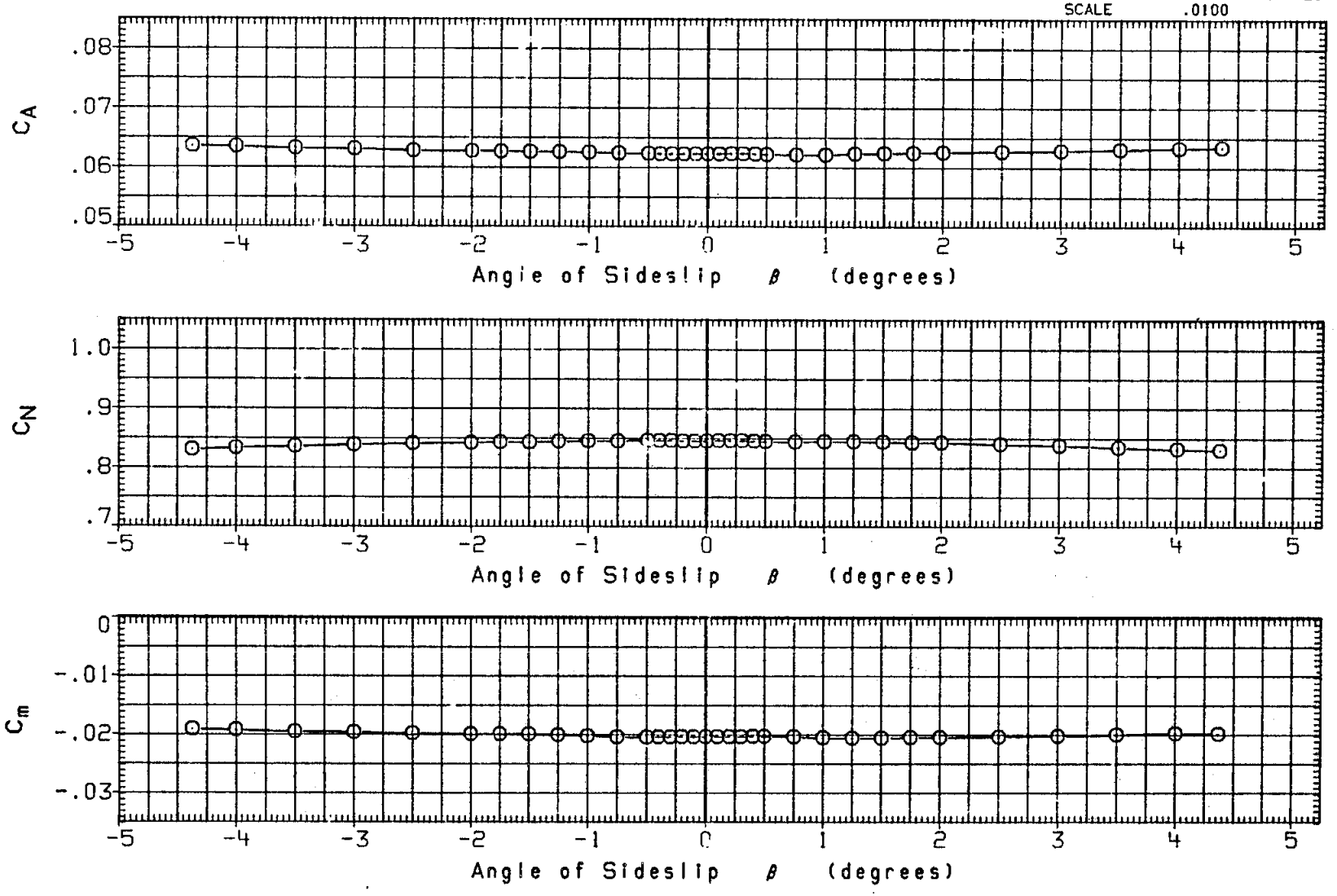


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3034 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.417	CONFIG	1.000	SPDBRK	87.200
		ALPHA	32.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

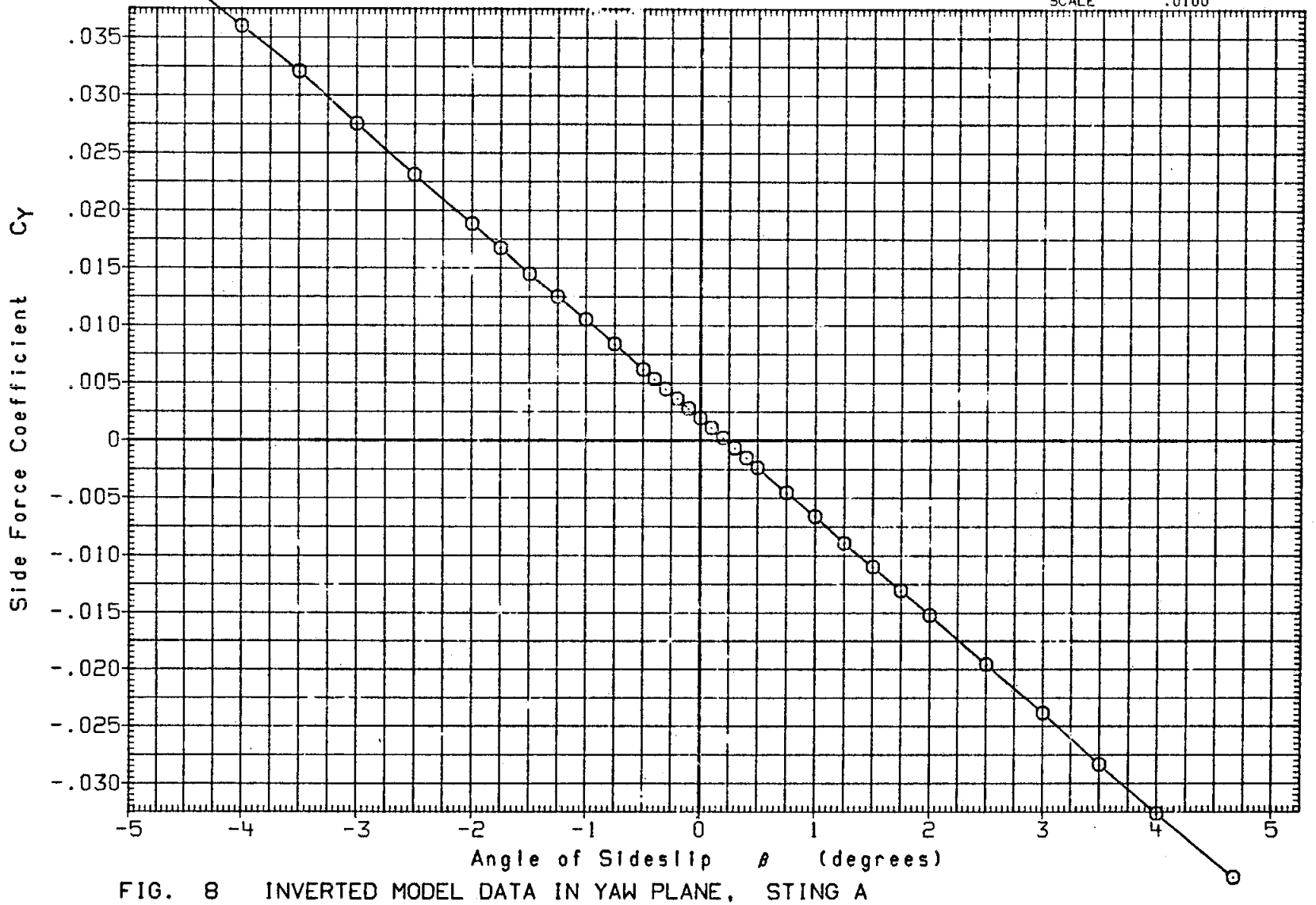


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3034 CONFIGURATION 0A259 [AEDC V41B-141 OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.417	CONFIG	1.000	SPDBRK	87.200
		ALPHA	32.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

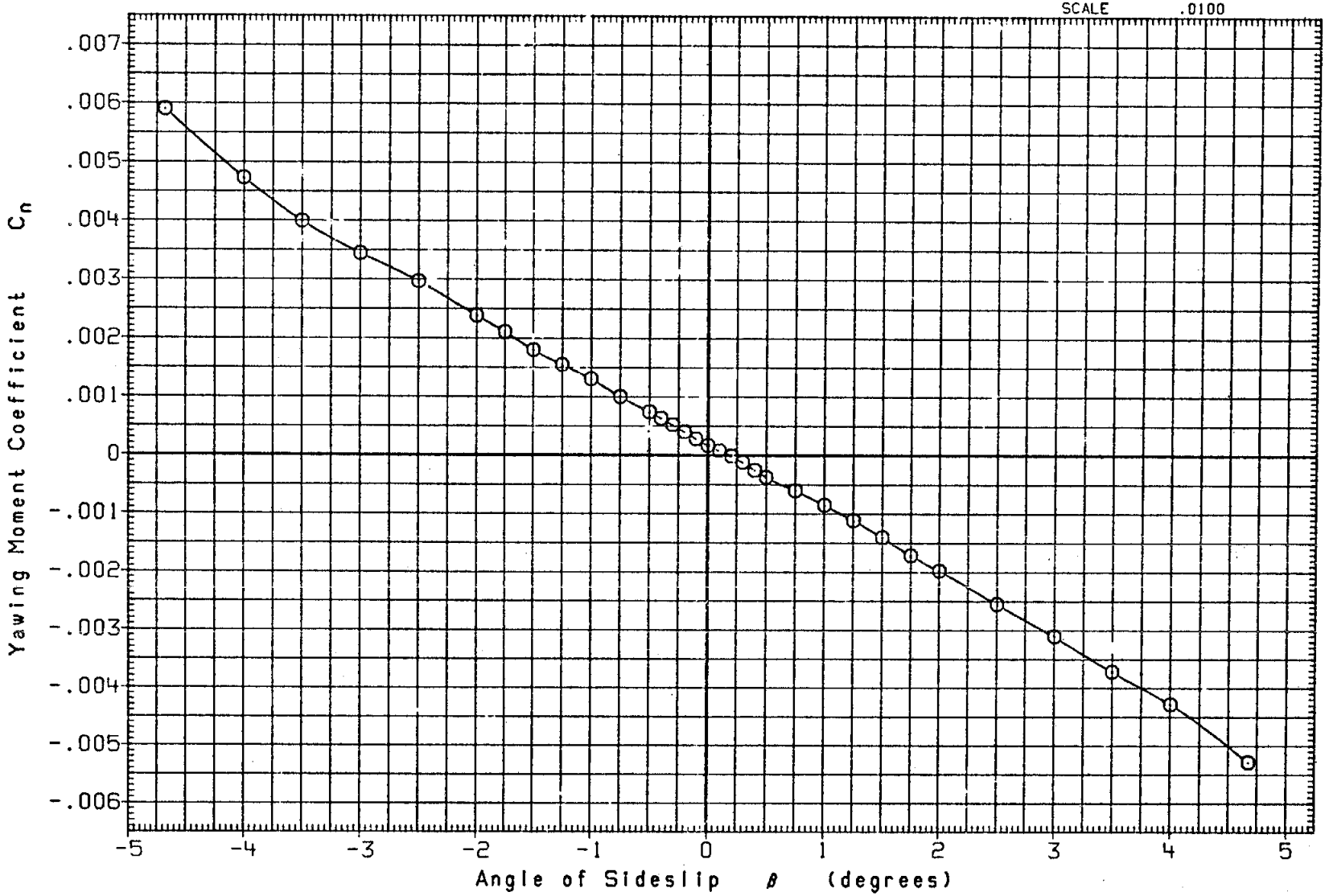


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

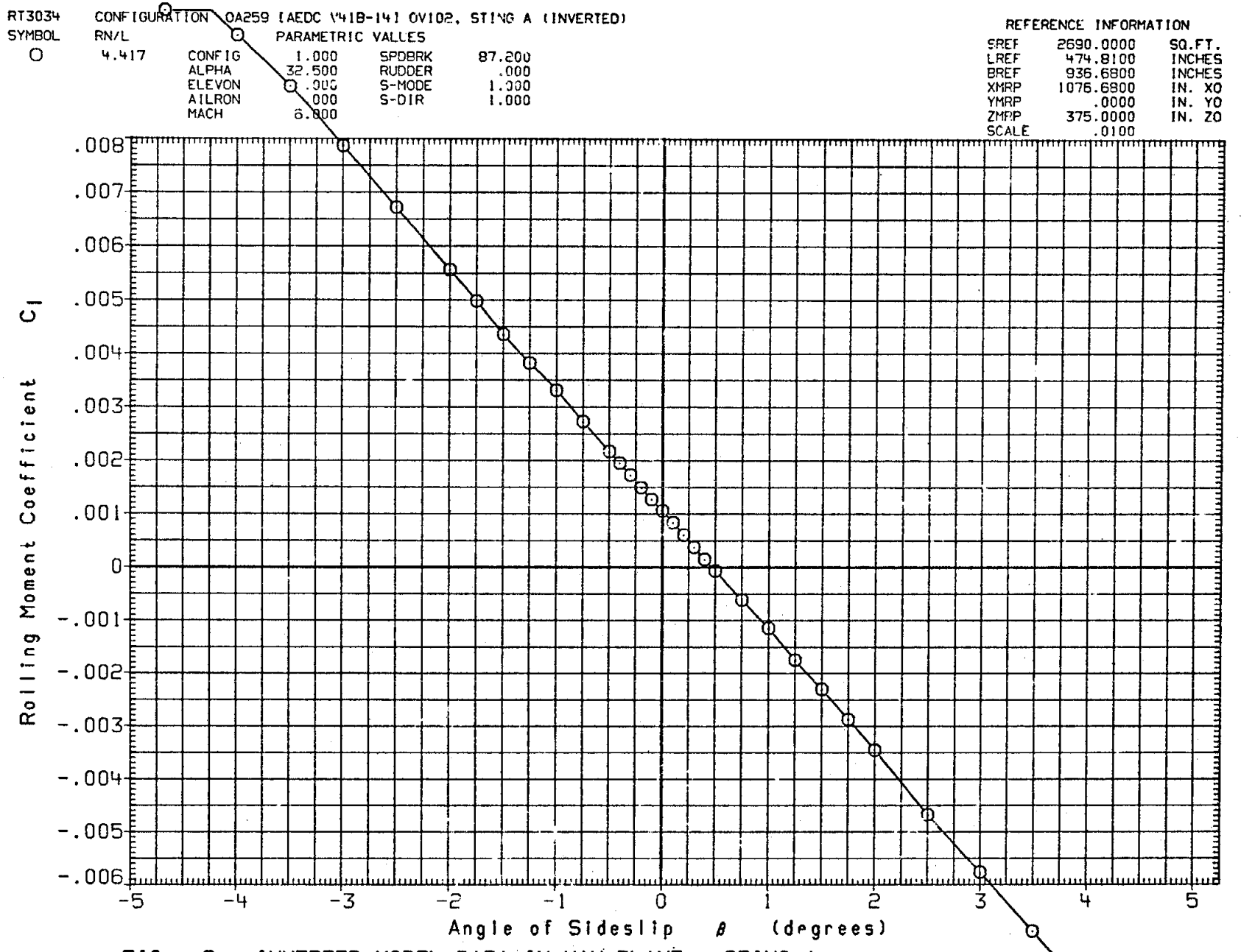


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

RT3034 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.417	CONFIG	1.000	SPDBRK	87.200
		ALPHA	32.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

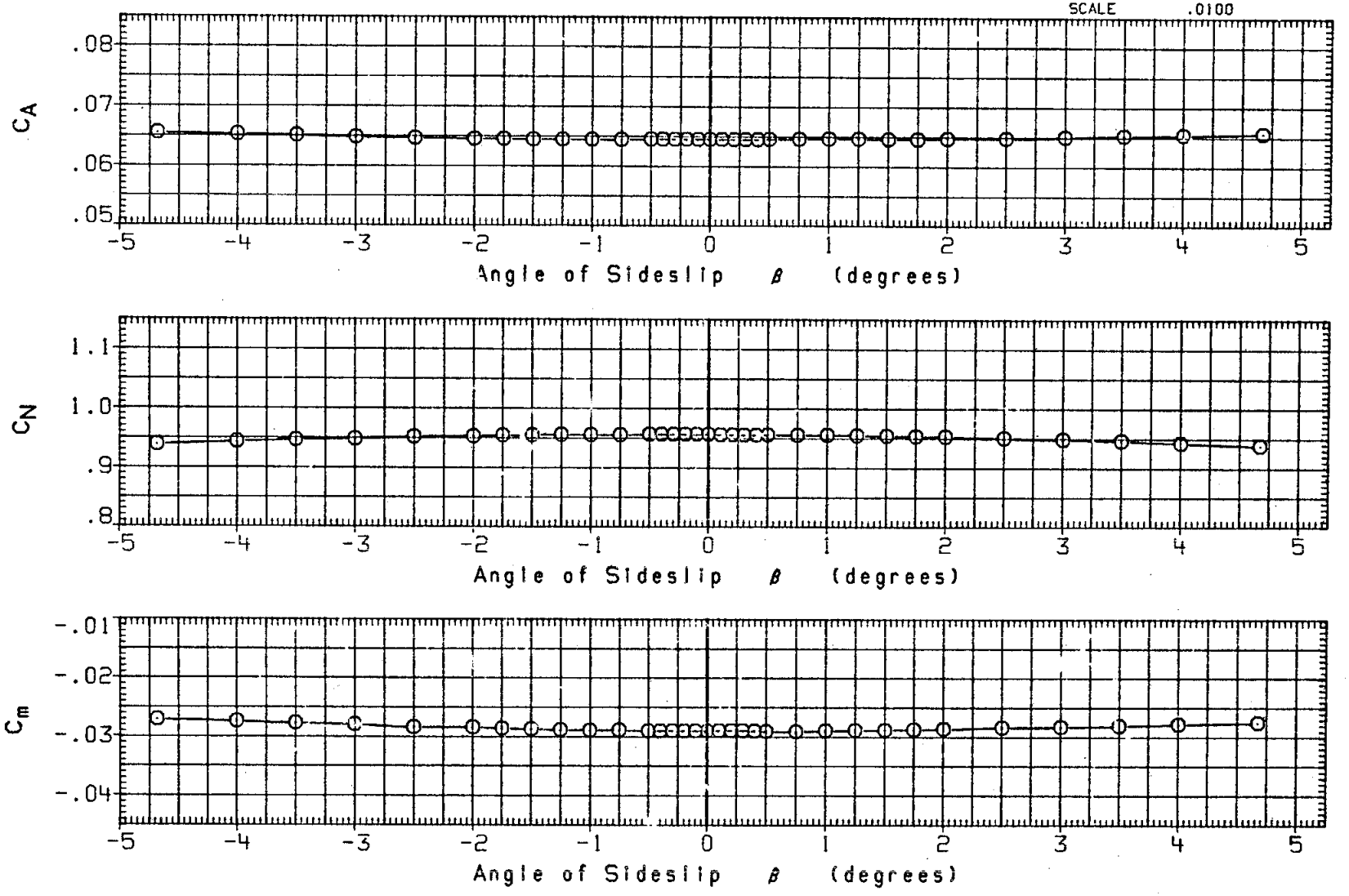


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

RT3035 CONFIGURATION OA259 [AEDC V41B-14] OVIGE, STING A (INVERTED)

SYMBOL	RN/L
O	4.413

PARAMETRIC VALUES

CONFIG	1.000	SPDBRK	87.200
ALPHA	35.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

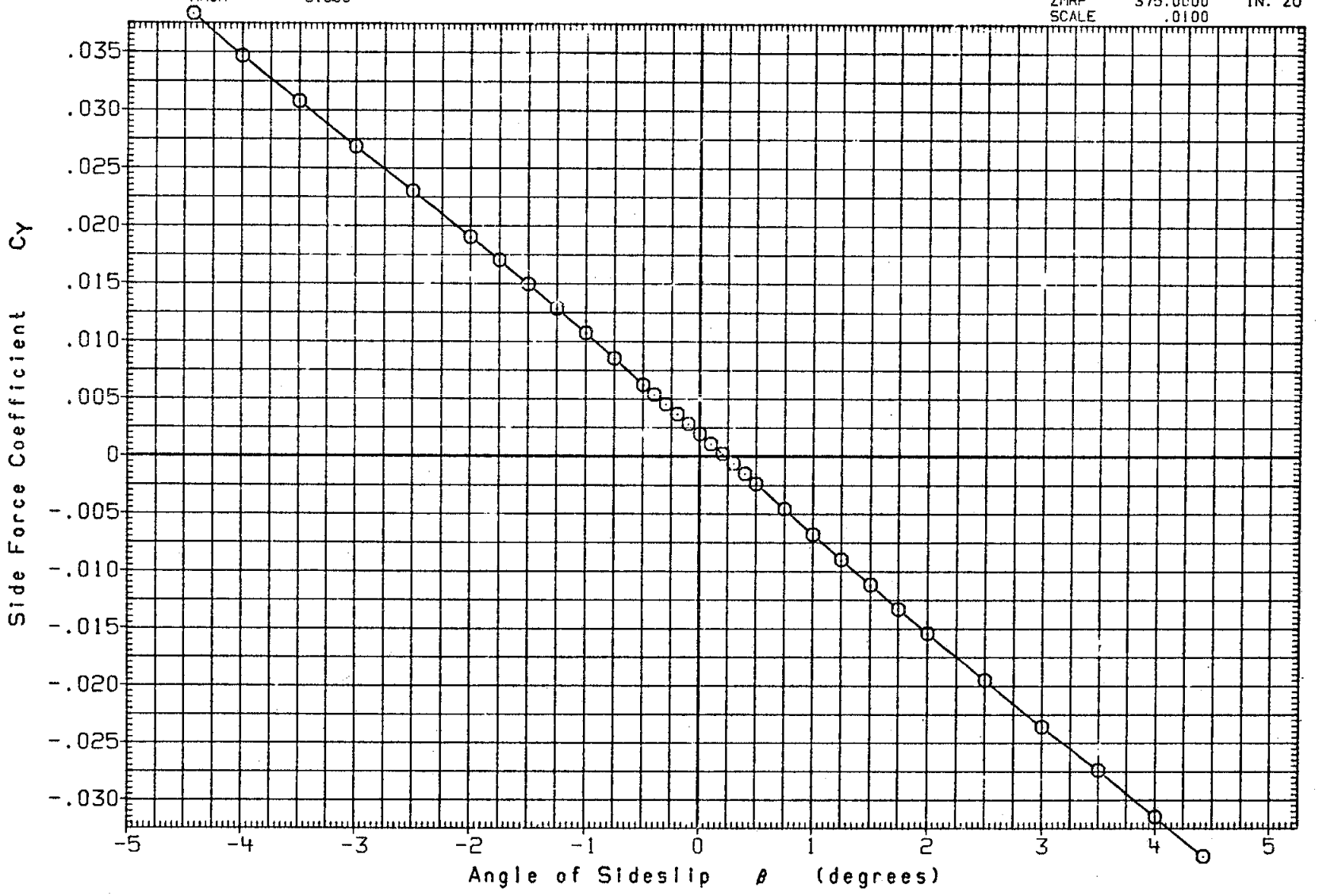


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3035 CONFIGURATION 0A259 [AEDC V41B-14] OV102, STING A (INVERTED)

SYMBOL	RN/L
O	4.413

PARAMETRIC VALUES

CONFIG	1.000	SPDBRK	87.200
ALPHA	35.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

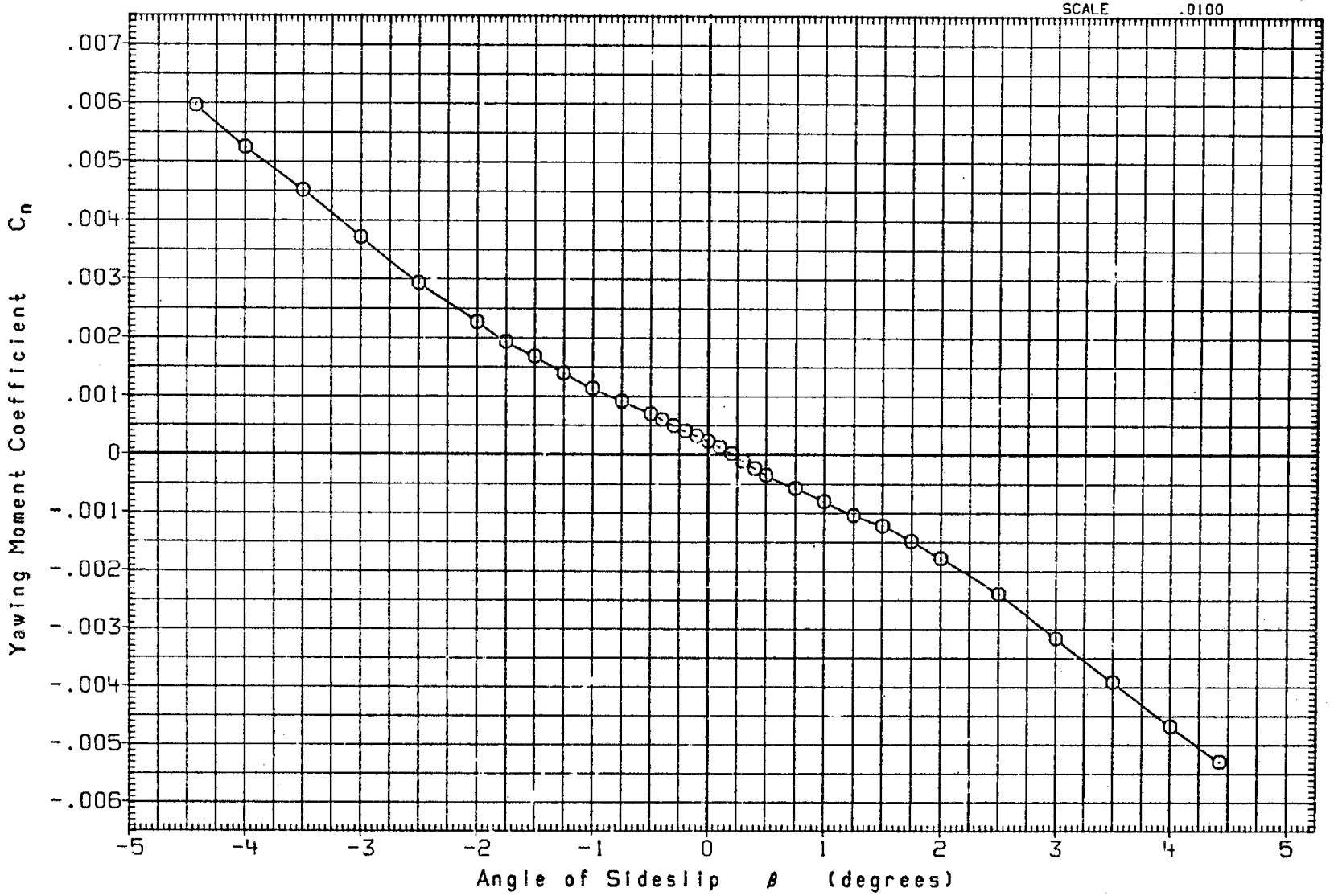


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

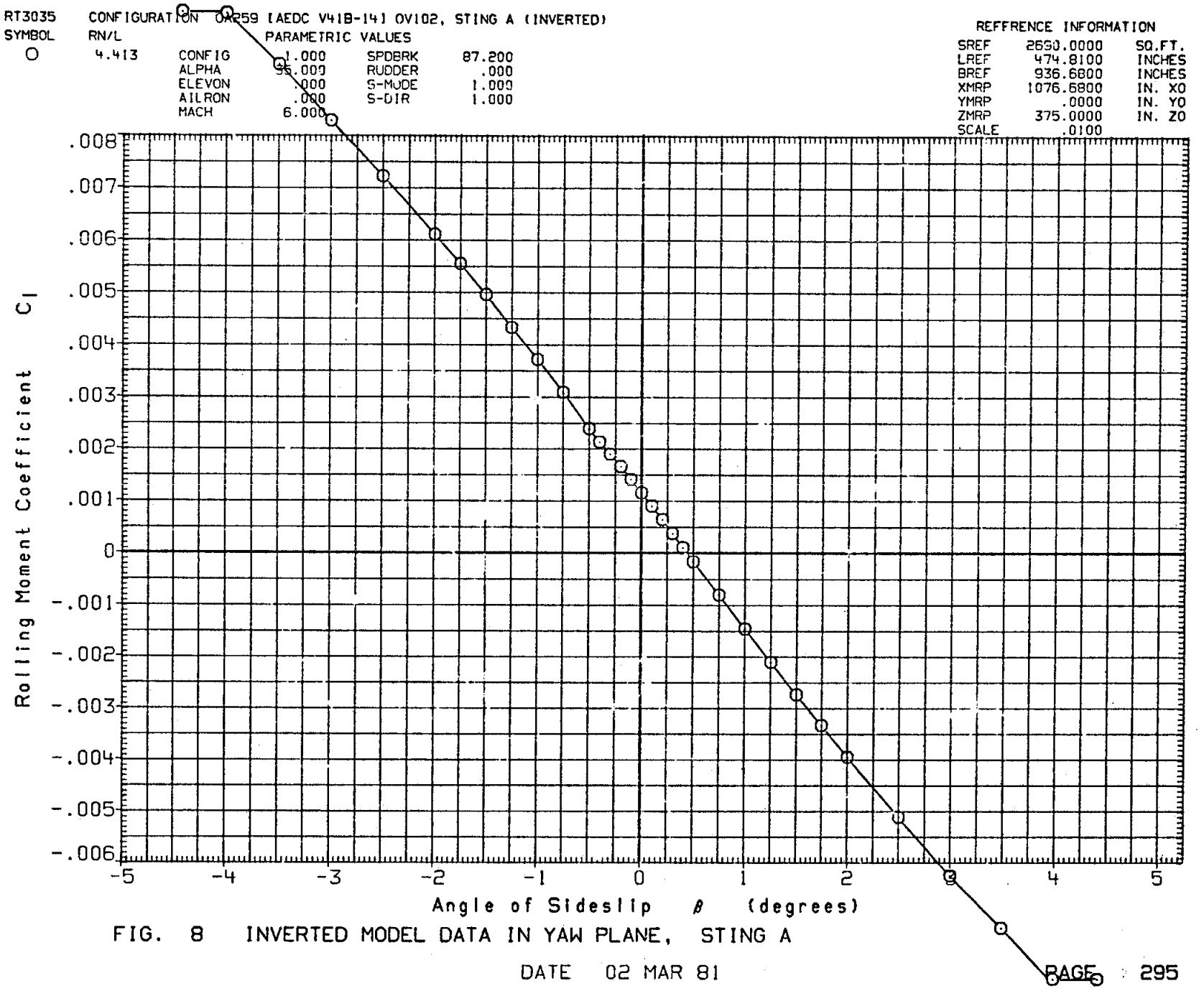


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

RT3035 CONFIGURATION OA259 [AEDC V41B-141 CV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.413	CONFIG	1.000	SPDBRK	87.200
		ALPHA	35.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

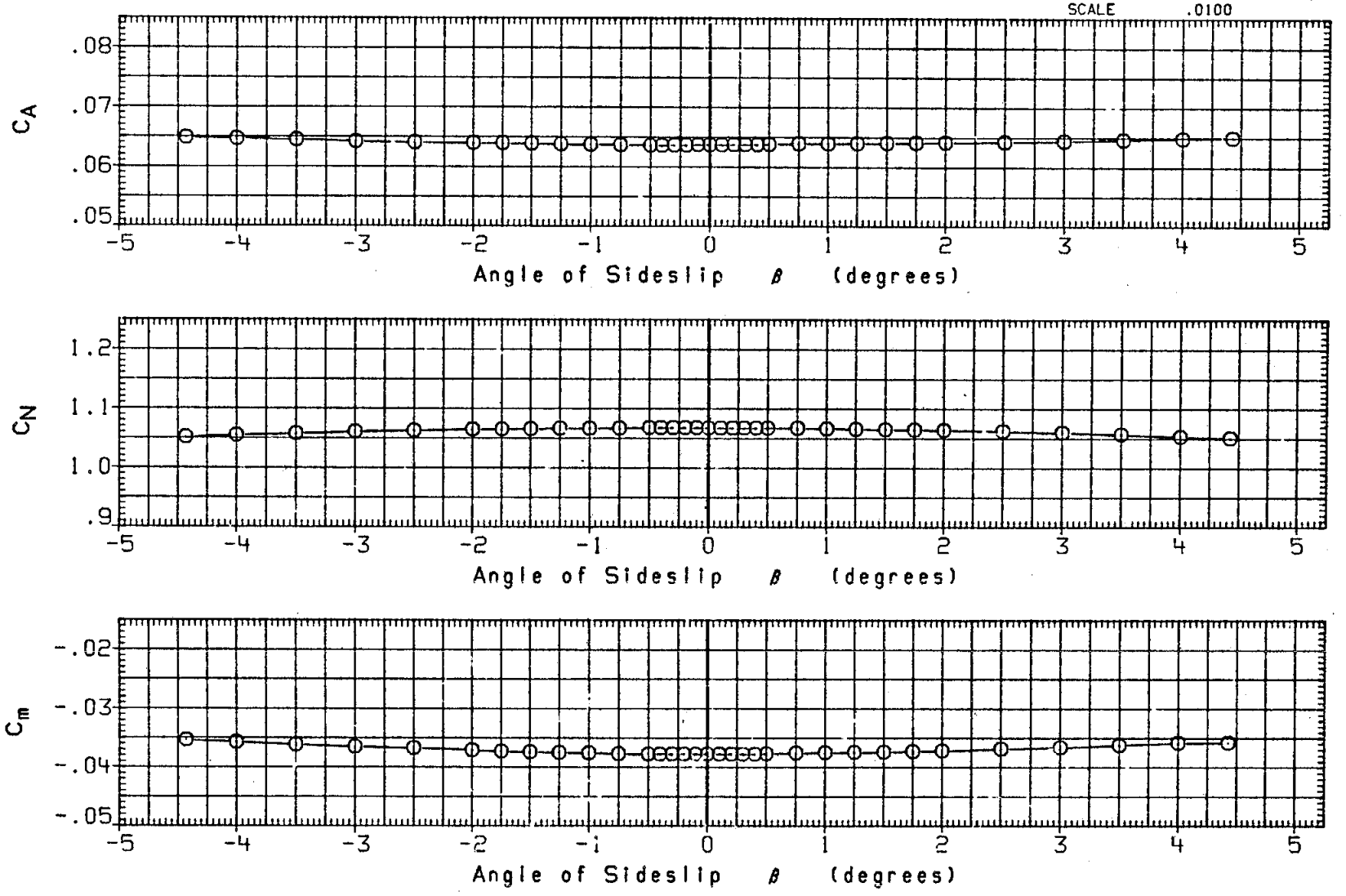


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3036 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING A (INVERTED)

SYMBOL	RN/L
O	4.387

PARAMETRIC VALUES

CONFIG	1.000	SPOBRK	87.200
ALPHA	40.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

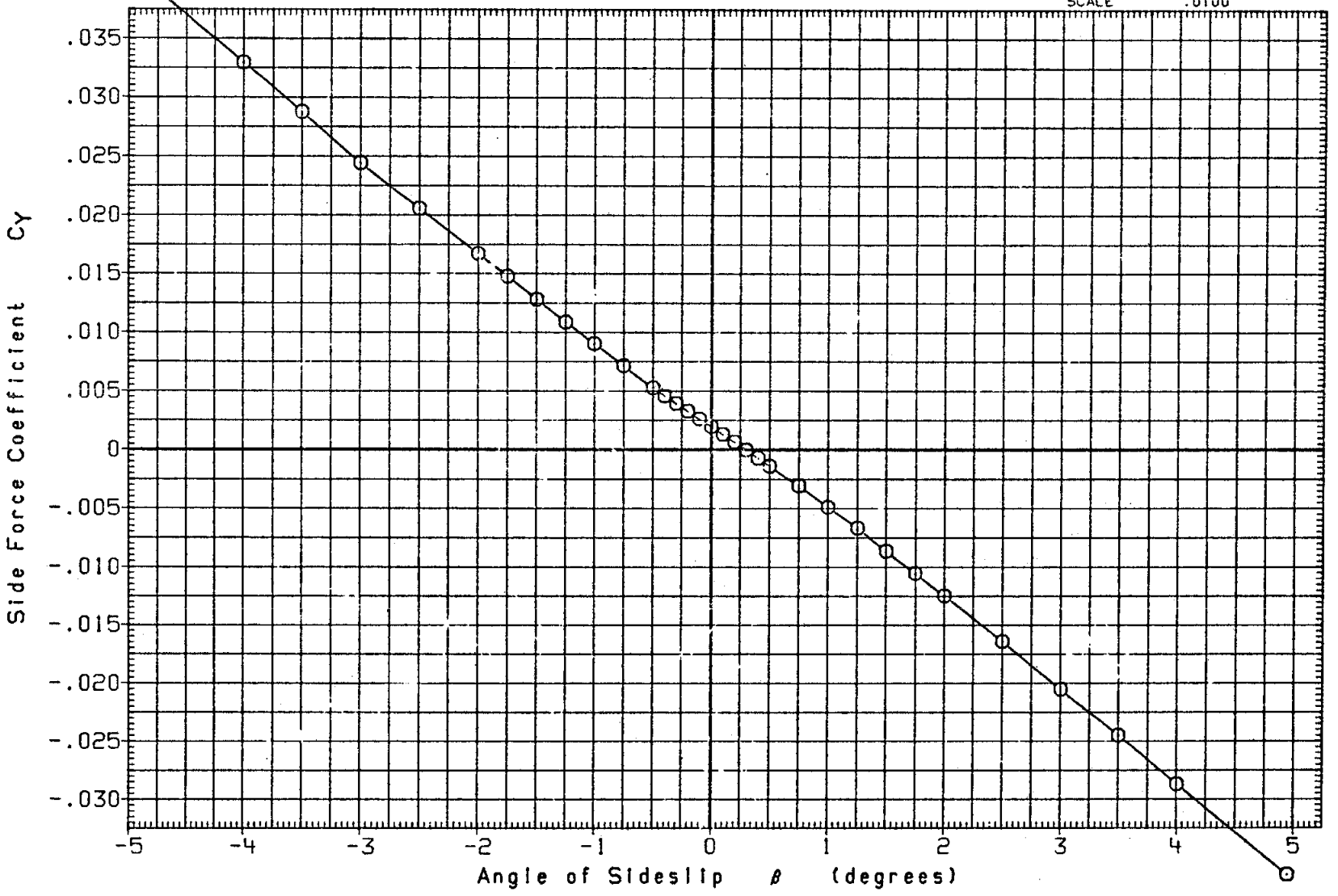


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

RT3036 CONFIGURATION 0A259 [AEDC V41B-14] OV102, STING A (INVERTED)

SYMBOL	RN/L
O	4.387

PARAMETRIC VALUES

CONFIG	1.000	SPDBRK	87.200
ALPHA	40.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	1.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

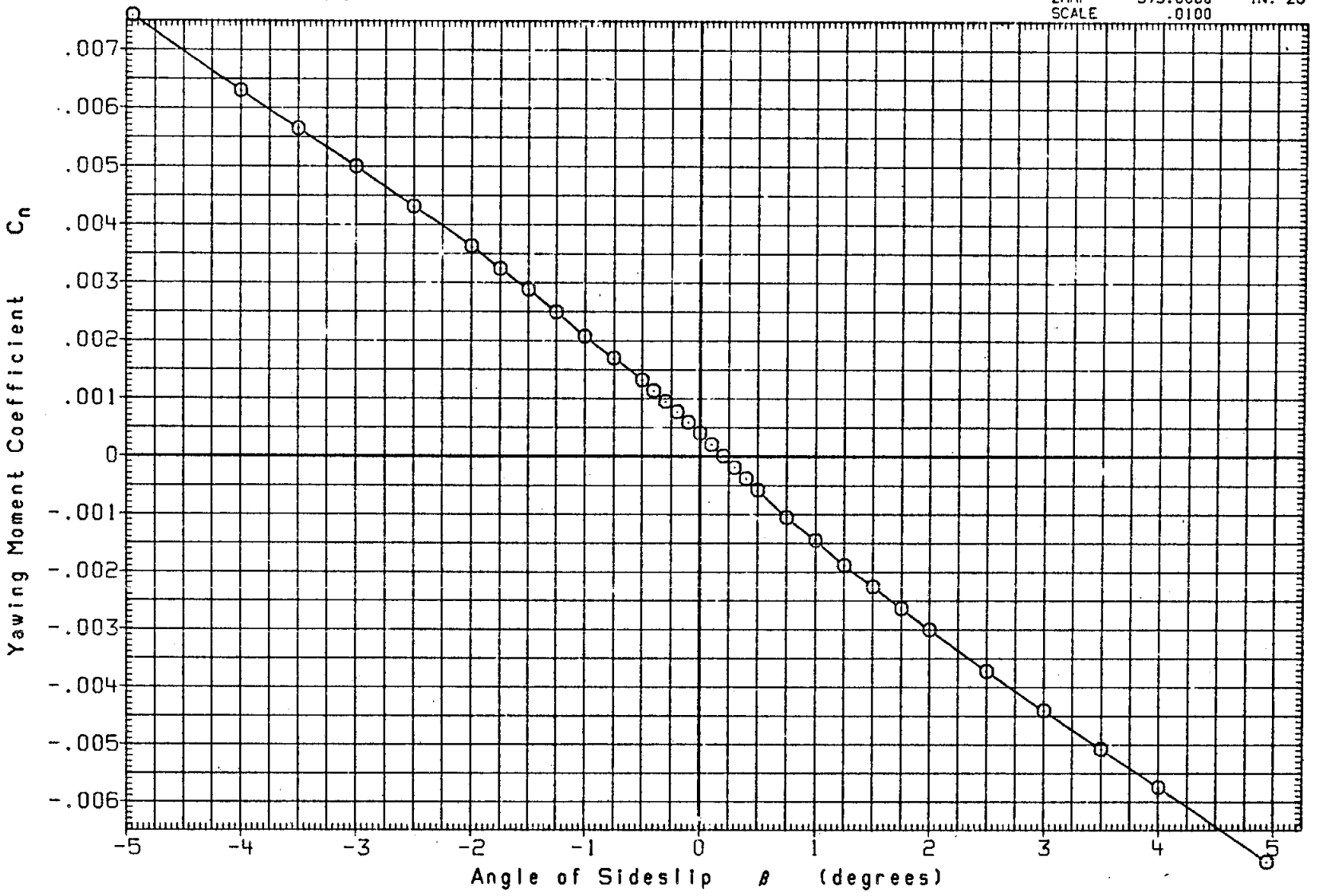


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

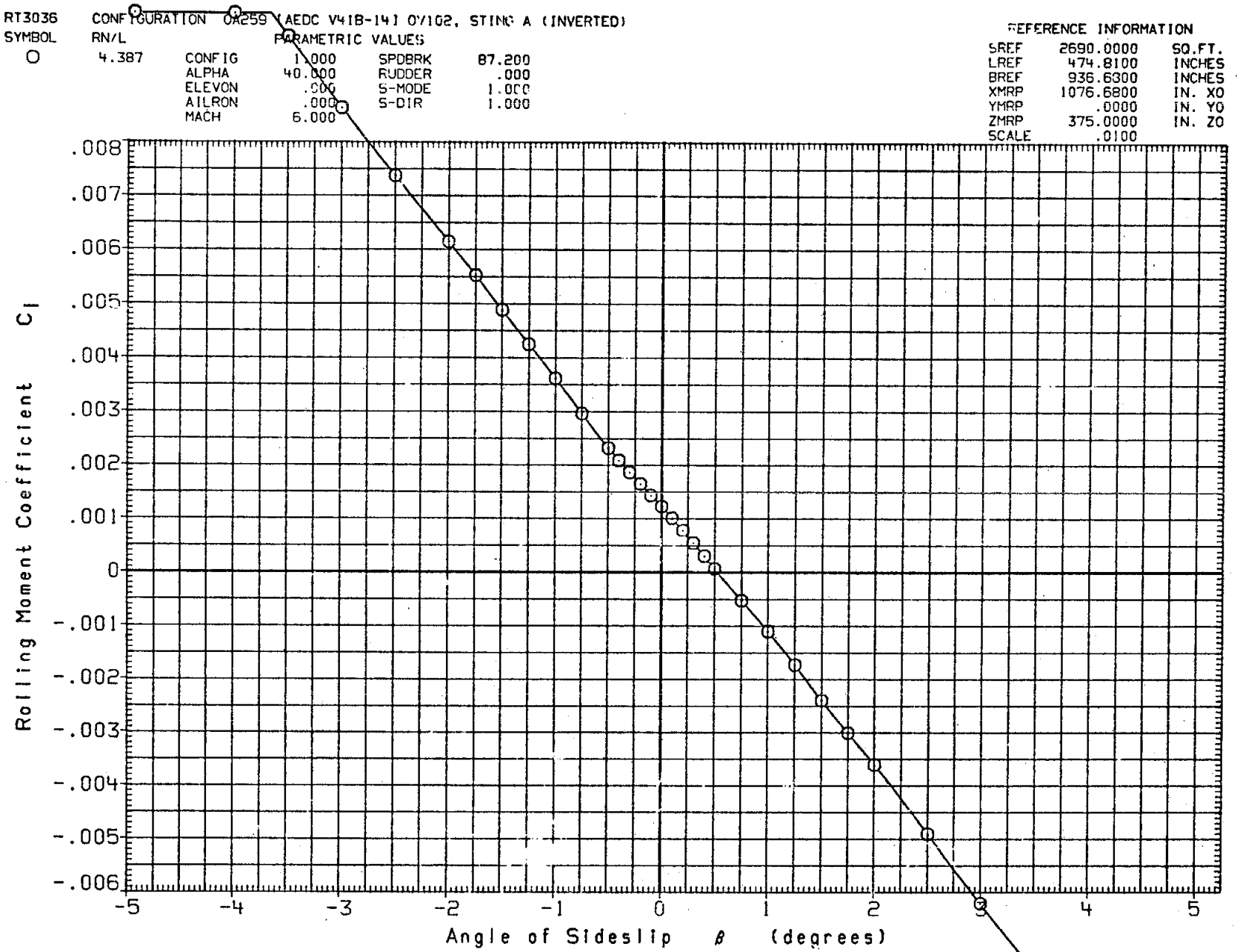


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATE 02 MAR 81

RT3036 CONFIGURATION OA259 (AEDC V41B-14) OV102, STING A (INVERTED)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.387	CONFIG	1.000	SPDBRK	87.200
		ALPHA	40.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

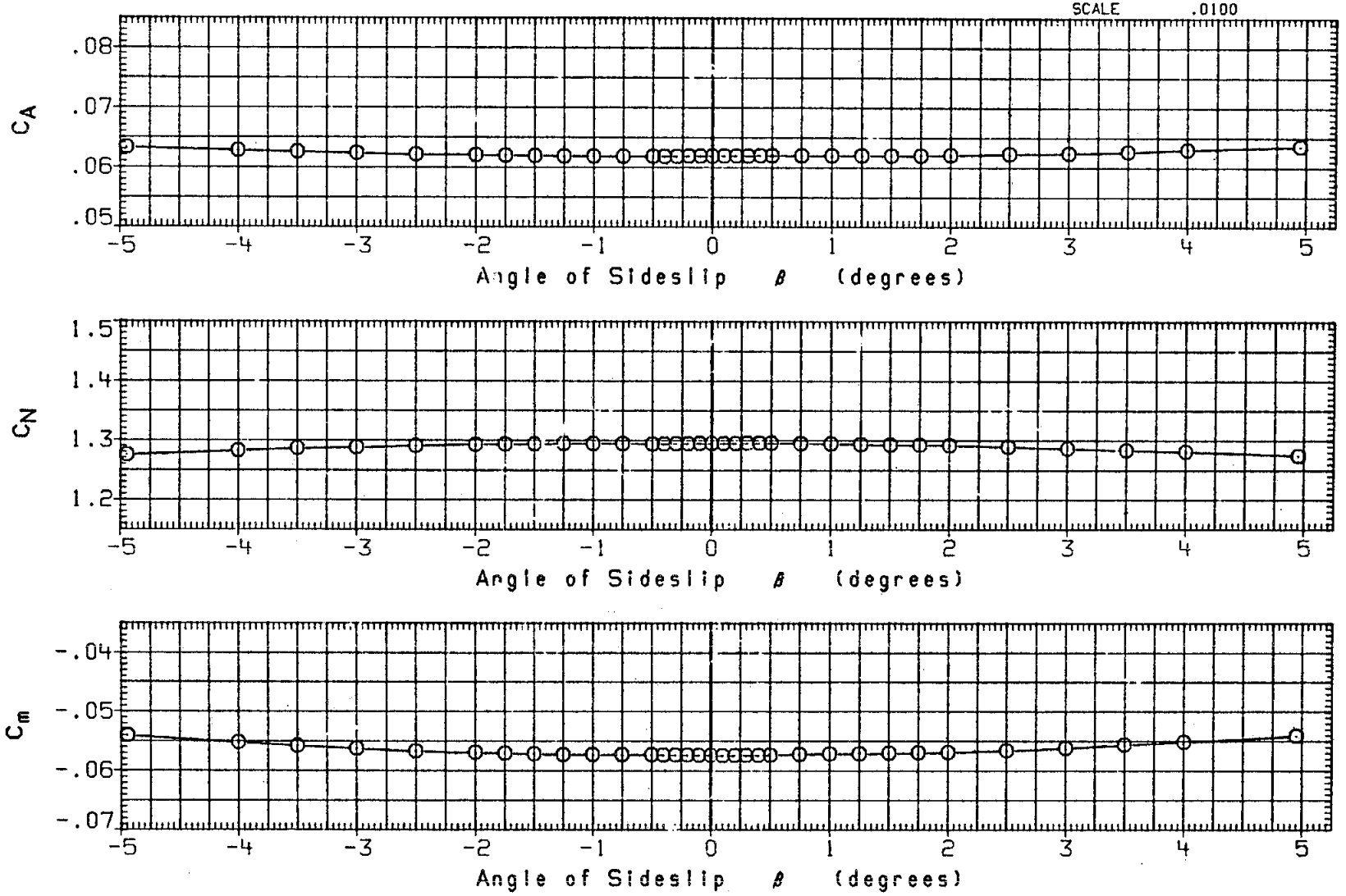


FIG. 8 INVERTED MODEL DATA IN YAW PLANE, STING A

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3037	○	OA259 [AEDC V41B-14] OV102, STING A (COOLED-UPR)	.000	INCRSE	CONTNU	13.000	6.000
RT3038	□	OA259 [AEDC V41B-14] OV102, STING A (COOLED-INV)	.000	DECRSE	CONTNU	14.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

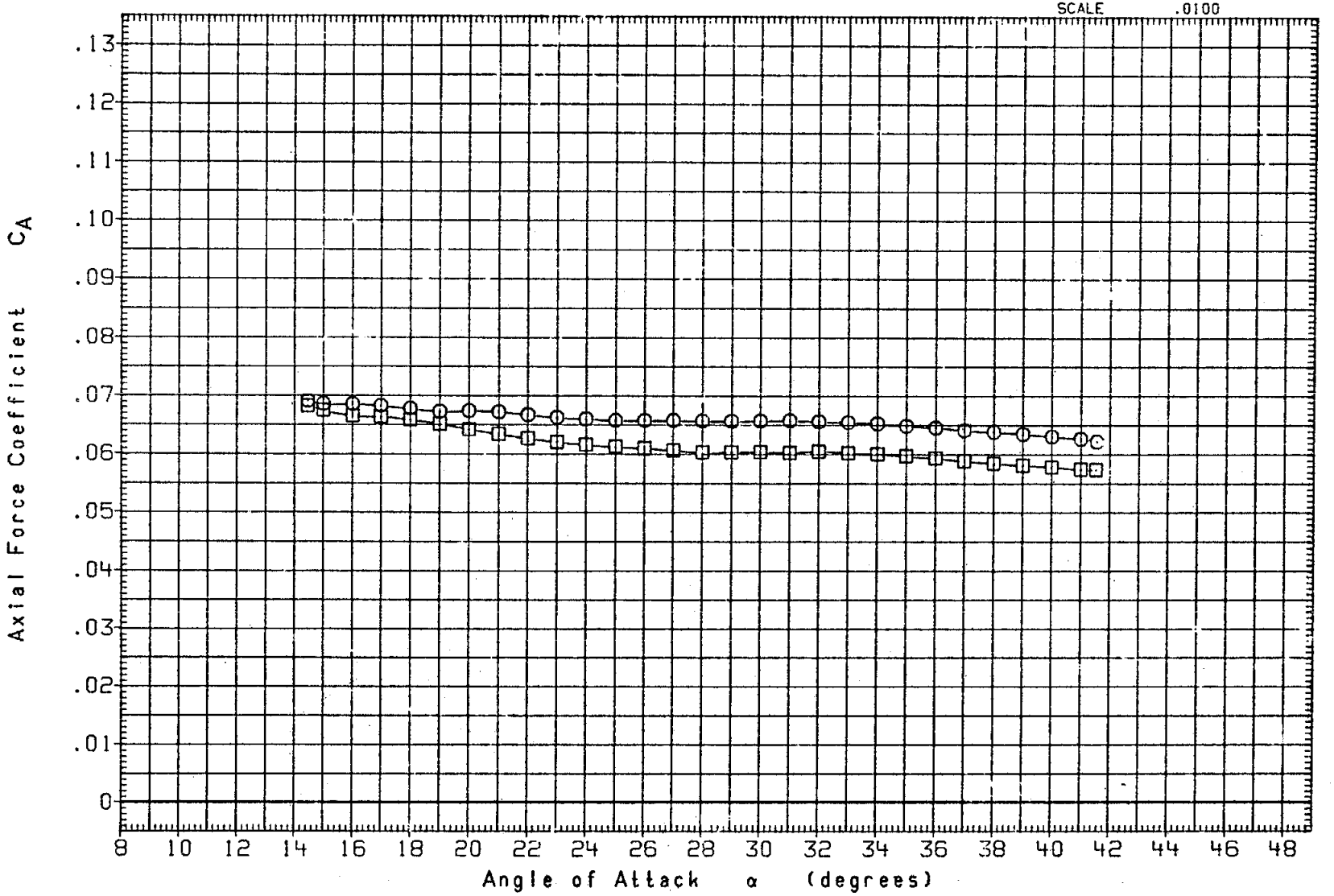


FIG. 9 EFFECT OF MODEL INVERSION ON DATA IN PITCH PLANE, STING A COOLED MODEL

(A)RN/L = 4.37

DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3037	○	OA259 (AEDC V41B-14) OV102, STING A (COOLED-UPR)	.000	INCRSE	CONTNU	13.000	6.000
RT3038	□	OA259 (AEDC V41B-14) OV102, STING A (COOLED-INV)	.000	DECRSE	CONTNU	14.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

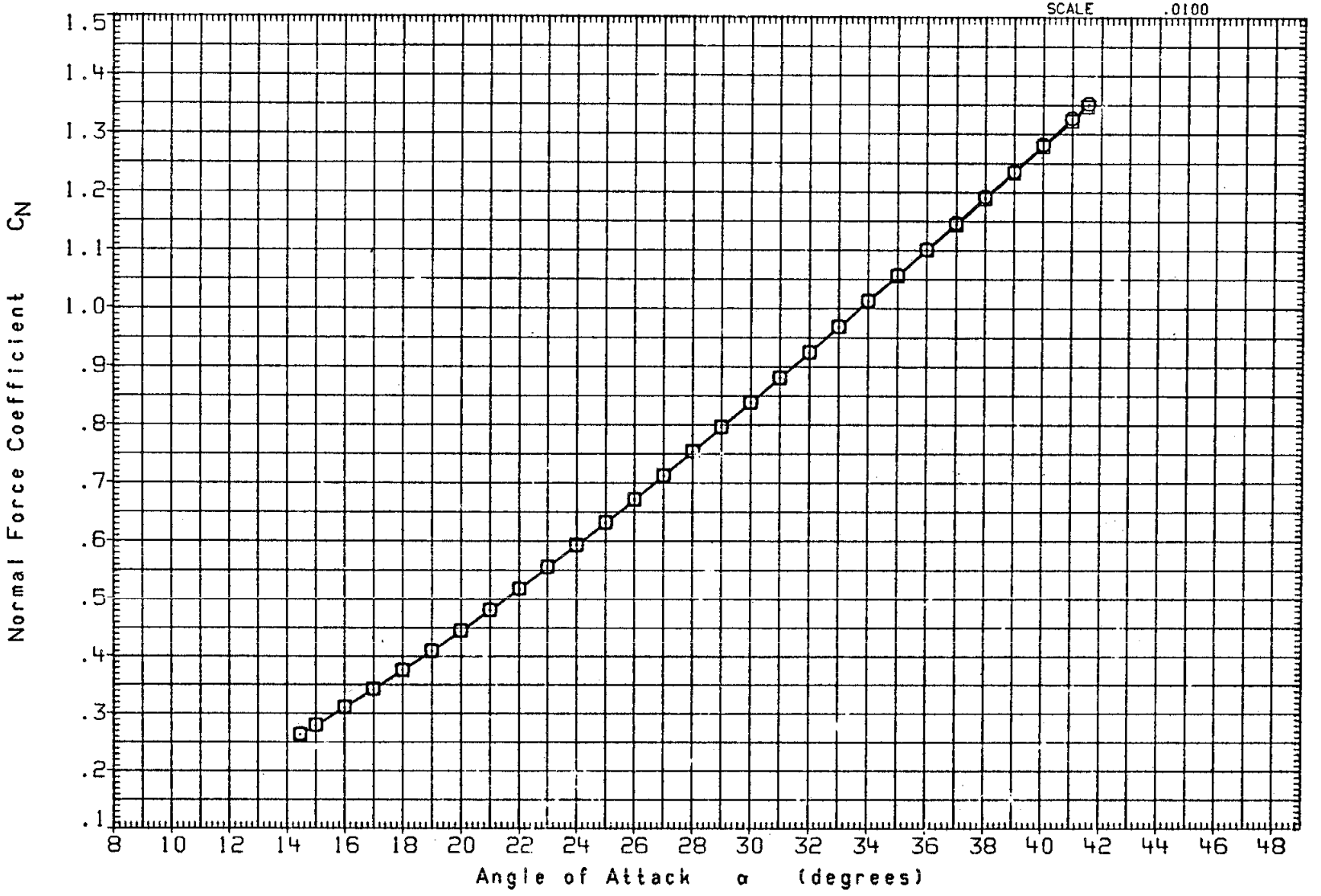


FIG. 9 EFFECT OF MODEL INVERSION ON DATA IN PITCH PLANE, STING A COOLED MODEL

(A)RN/L = 4.37 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3037	○	OA259 (AEDC V41B-14) OV102, STING A (COOLED-UPR)	.000	INCRSE	CONTNU	13.000	6.000
RT3038	□	OA259 (AEDC V41B-14) OV102, STING A (COOLED-INV)	.000	DECRSE	CONTNU	14.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

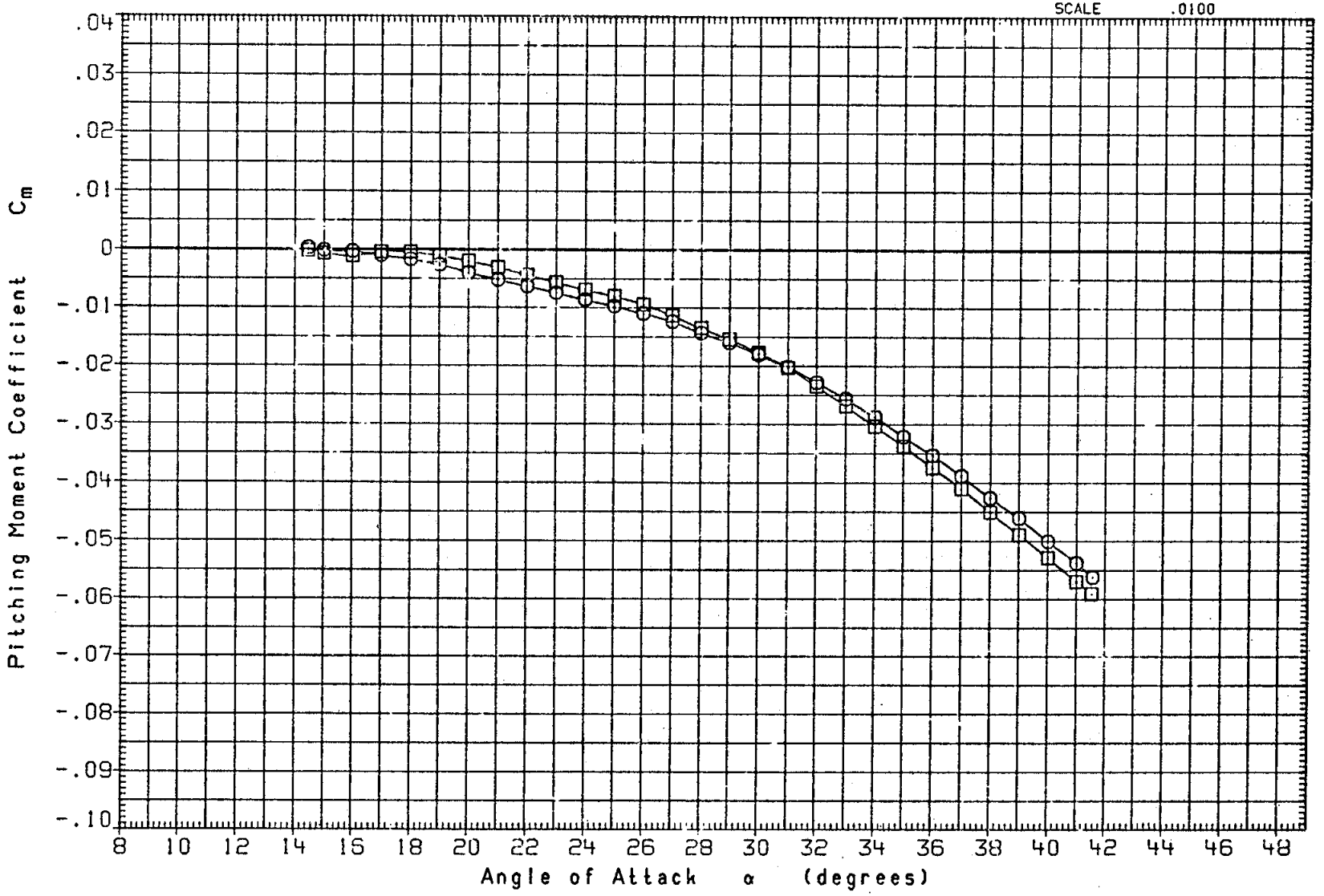


FIG. 9 EFFECT OF MODEL INVERSION ON DATA IN PITCH PLANE, STING A COOLED MODEL

(A)RN/L = 4.37

DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3037	○	OA259 [AEDC V41B-14] OV102, STING A (COOLED-UPR)	.000	INCRSE	CONTNU	13.000	6.000
RT3038	□	OA259 [AEDC V41B-14] OV102, STING A (COOLED-INV)	.000	DECRSE	CONTNU	14.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

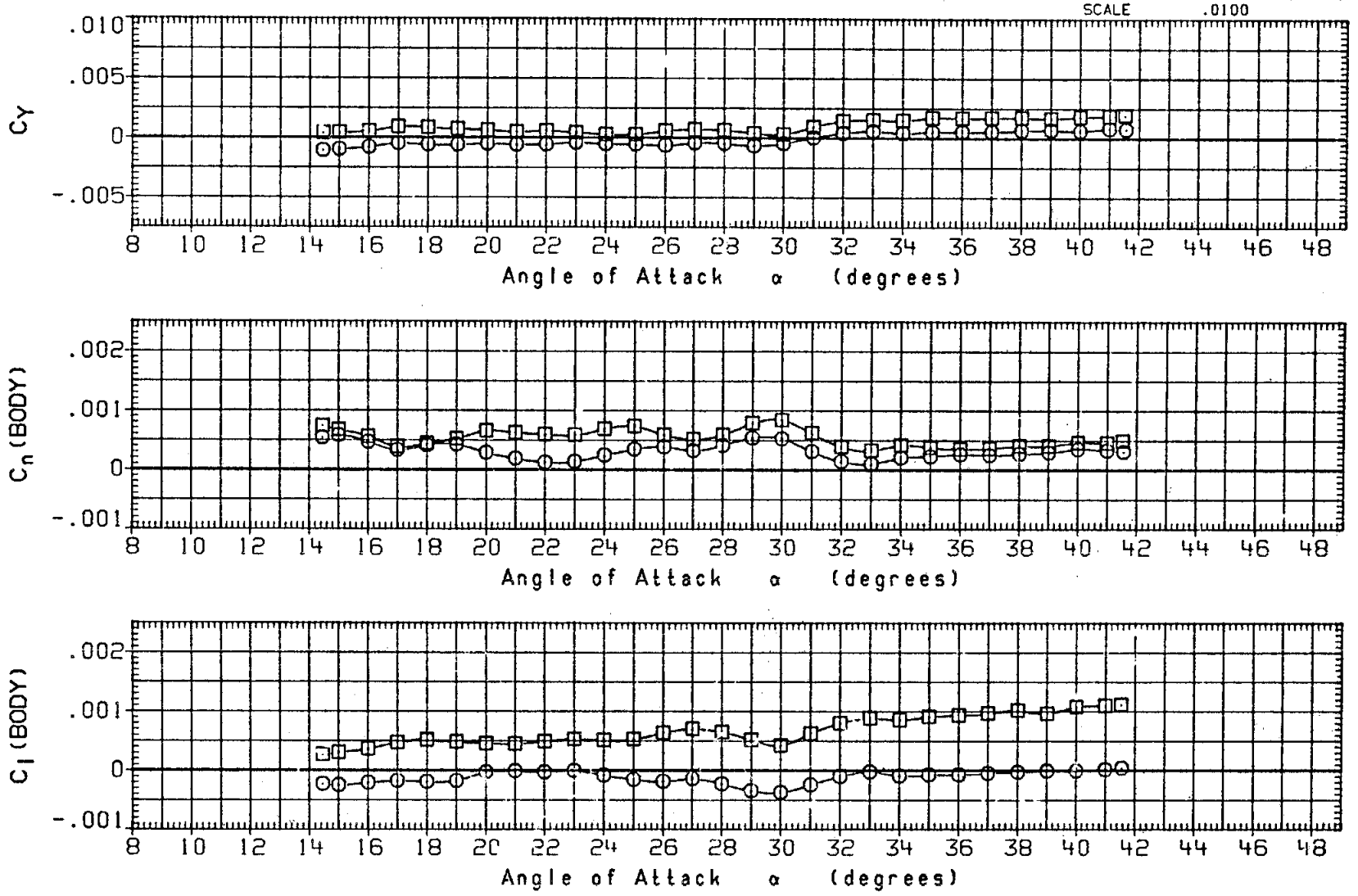


FIG. 9 EFFECT OF MODEL INVERSION ON DATA IN PITCH PLANE, STING A COOLED MODEL

(A)RN/L = 4.37

DATE 02 MAR 81

RT3066 CONFIGURATION OA259 [AEDC V41B-14] OV102, STING B (COOLED-UPR)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	2.025	CONFIG	15.000	SPDBRK	87.200
		ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

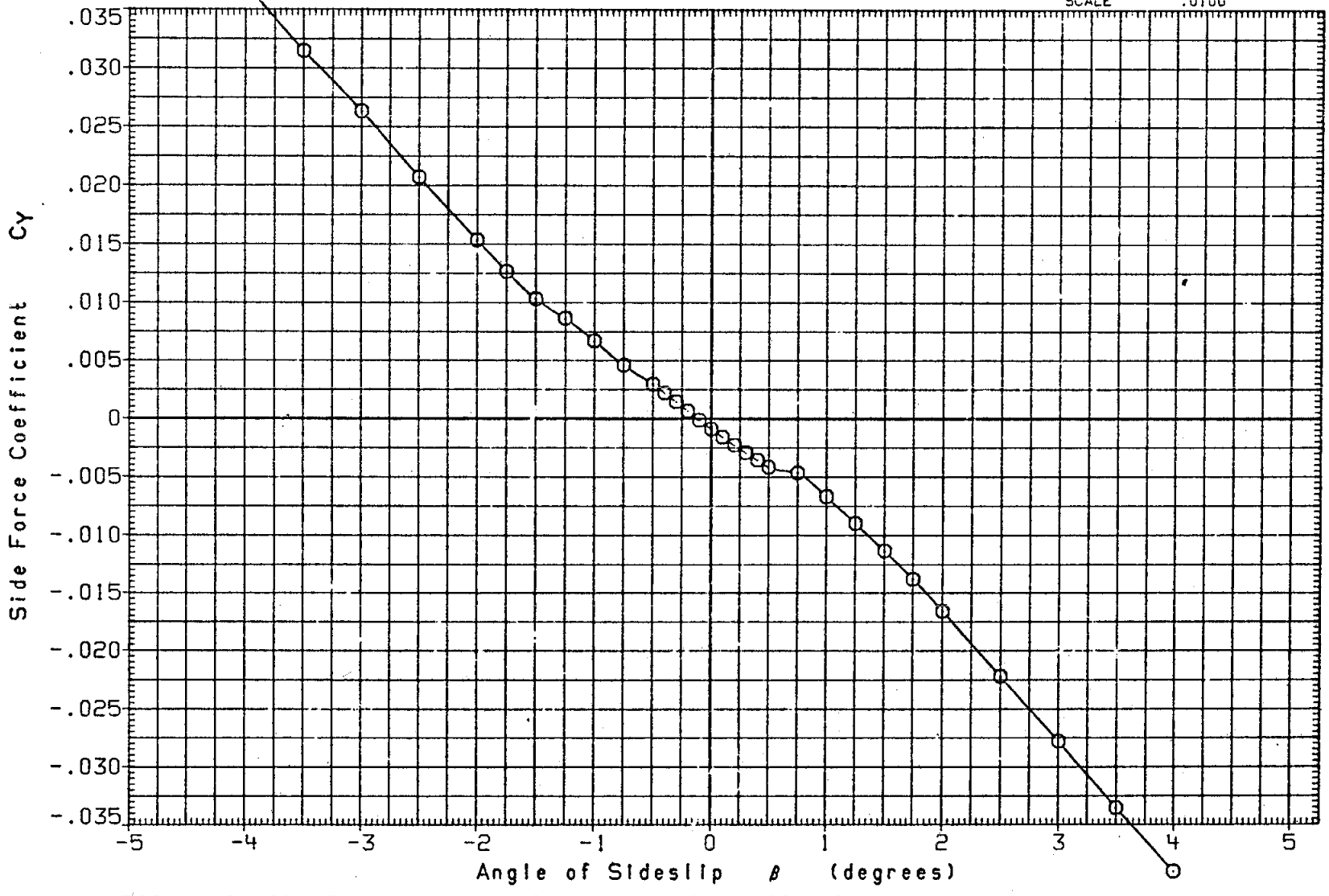


FIG. 10 COOLED MODEL DATA IN YAW PLANE, STING B

RT3066 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING B (COOLED-UPR)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	2.025	CONFIG	15.000	SPDBRK	87.200
		ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

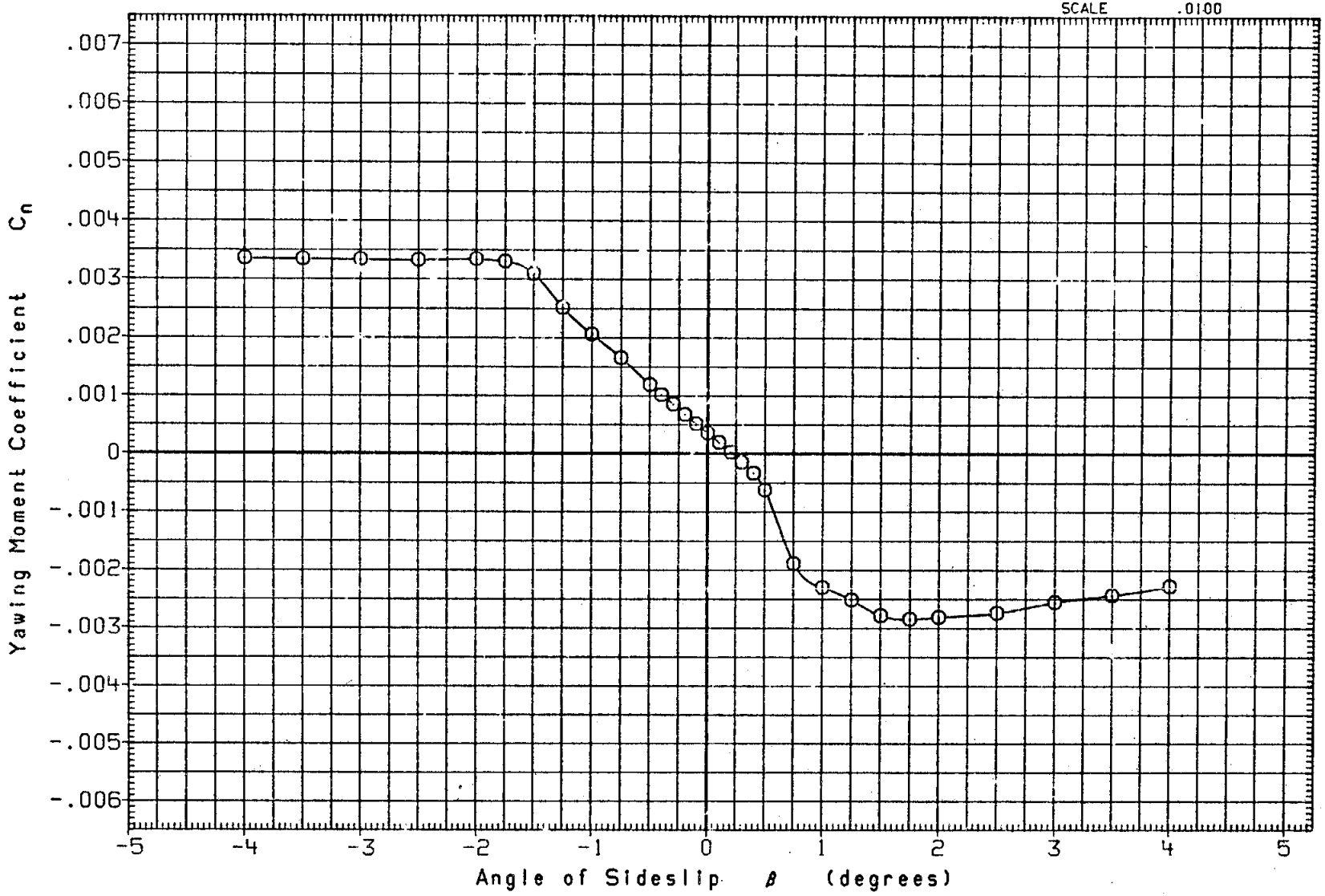


FIG. 10 COOLED MODEL DATA IN YAW PLANE, STING B

RT3066 CONFIGURATION OA259 (AEDC V41B-14) GV102, STING B (COOLED-UPR)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	2.025	CONFIG	15.000	SPDBRK	87.200
		ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

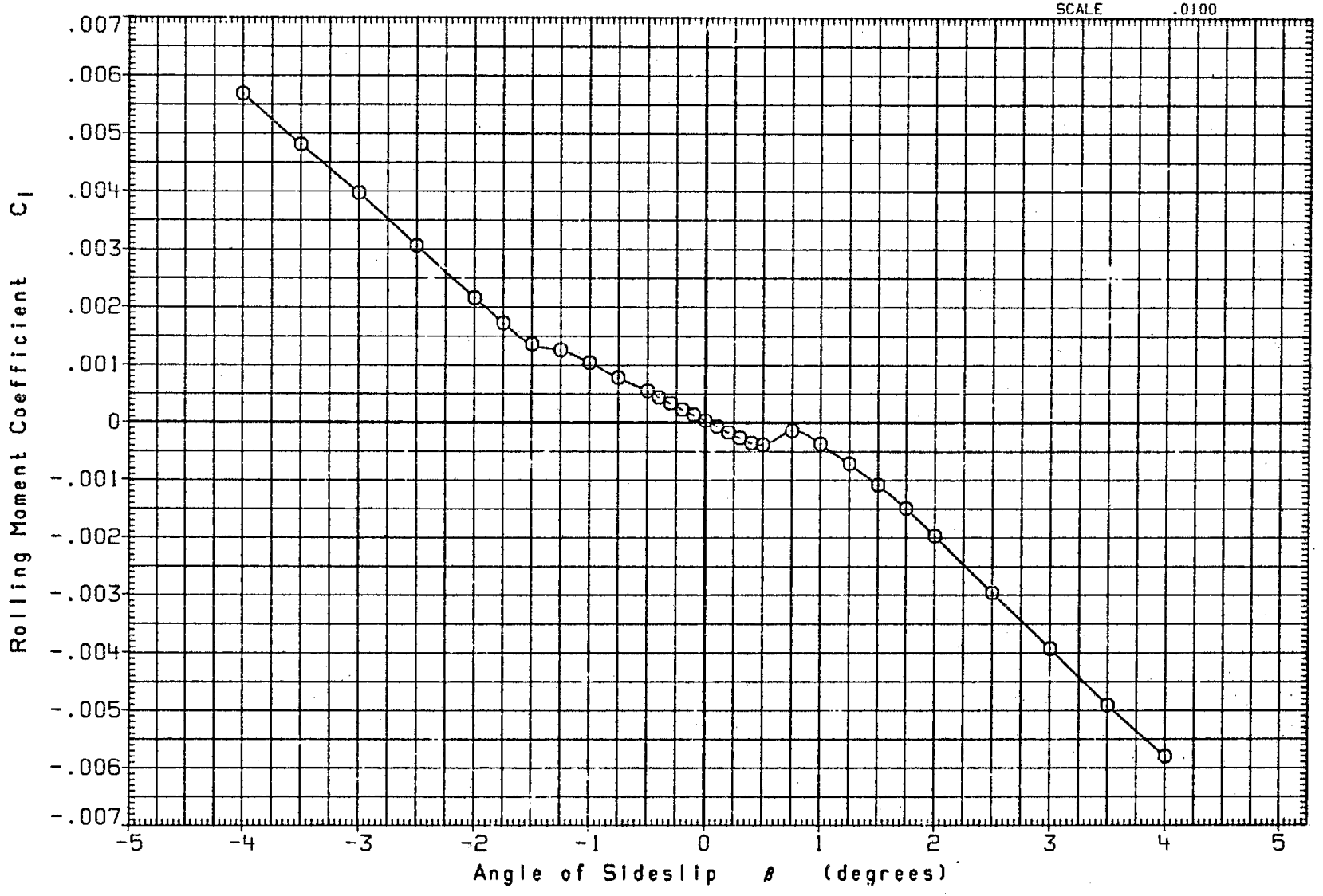


FIG. 10 COOLED MODEL DATA IN YAW PLANE, STING B

RT3066 CONFIGURATION OA259 (AEDC V41B-141 OV102, STING B (COOLED-UPR)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	2.025	CONFIG	15.000	SPDBRK	87.200
		ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

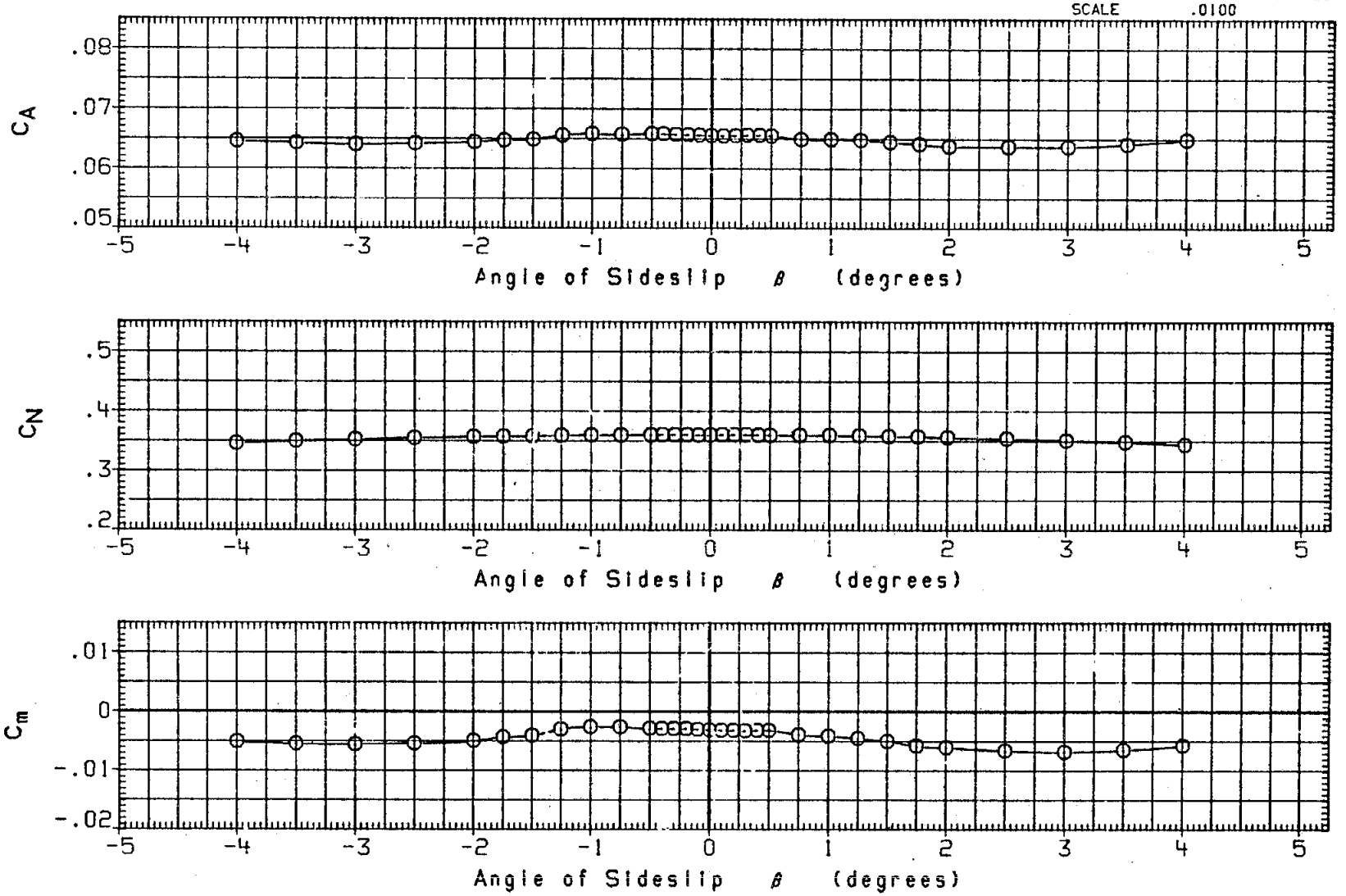


FIG. 10 COOLED MODEL DATA IN YAW PLANE, STING B

DATE 02 MAR 81

RT3067 CONFIGURATION OA259 [AEDC V41B-14] OV102. STING B (COOLED-UPR)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.373	CONFIG	15.000	SPDBRK	87.200
		ALPHA	25.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

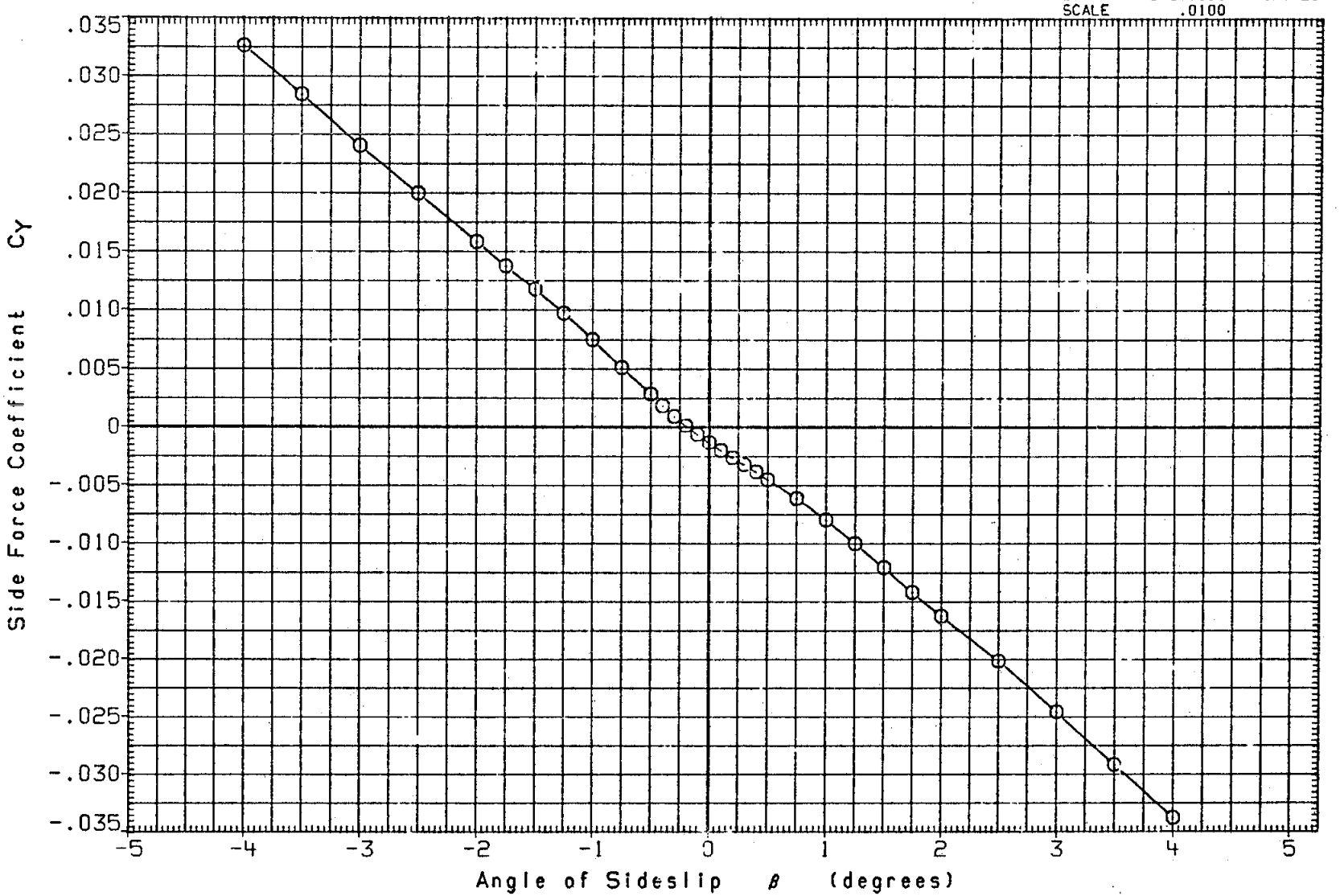


FIG. 10 COOLED MODEL DATA IN YAW PLANE, STING B

RT3067 CONFIGURATION 0A259 [AEDC V41B-14] OV102, STING B (COOLED-UPR)

SYMBOL	RN/L
O	4.373

PARAMETRIC VALUES

CONFIG	15.000	SPDBRK	87.200
ALPHA	25.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

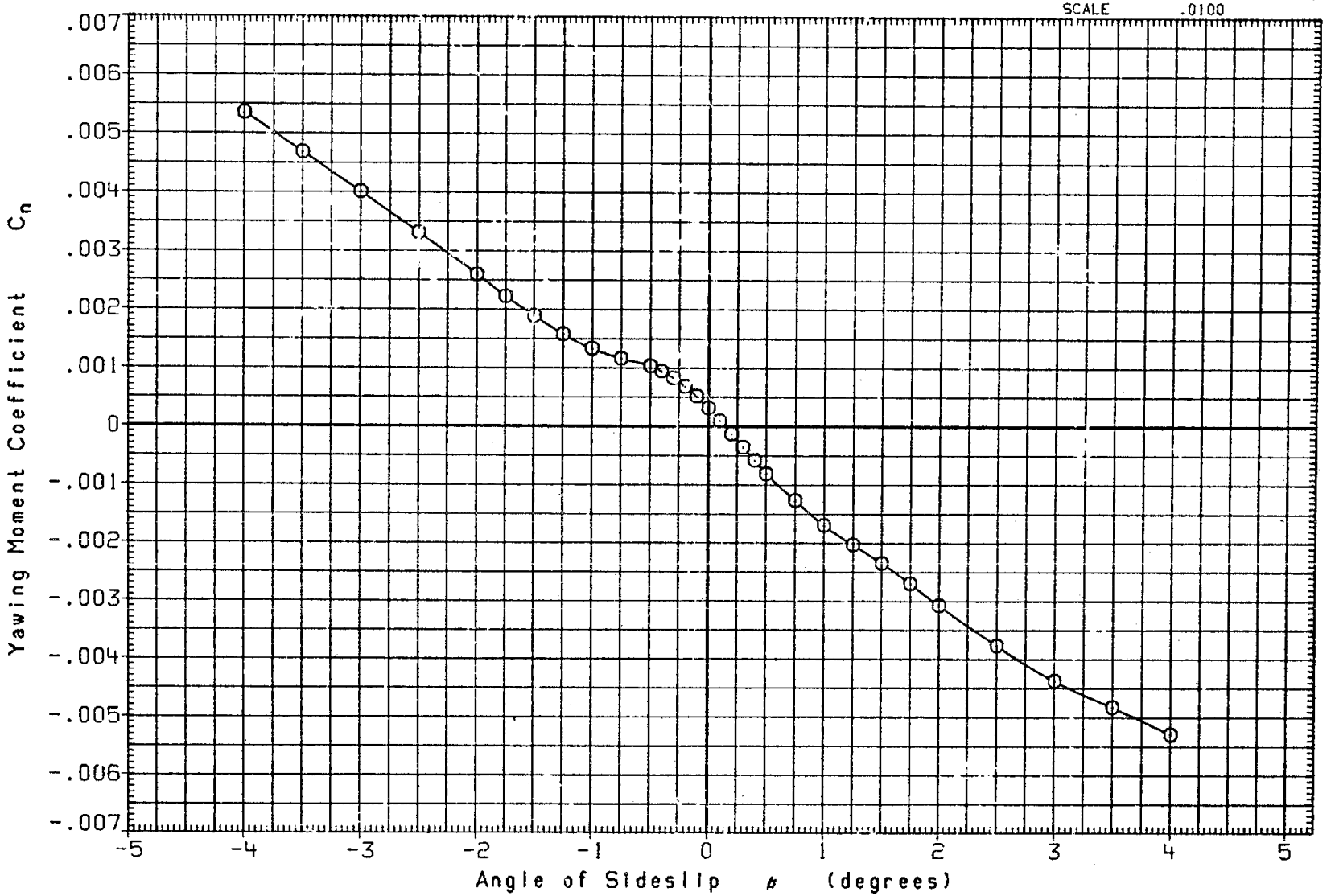


FIG. 10 COOLED MODEL DATA IN YAW PLANE, STING B

RT3067 CONFIGURATION 0A259 (AEDC V41B-14) OV102, STING B (COOLED-UPR)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.373	CONFIG	15.000	SPDBRK	87.200
		ALPHA	25.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

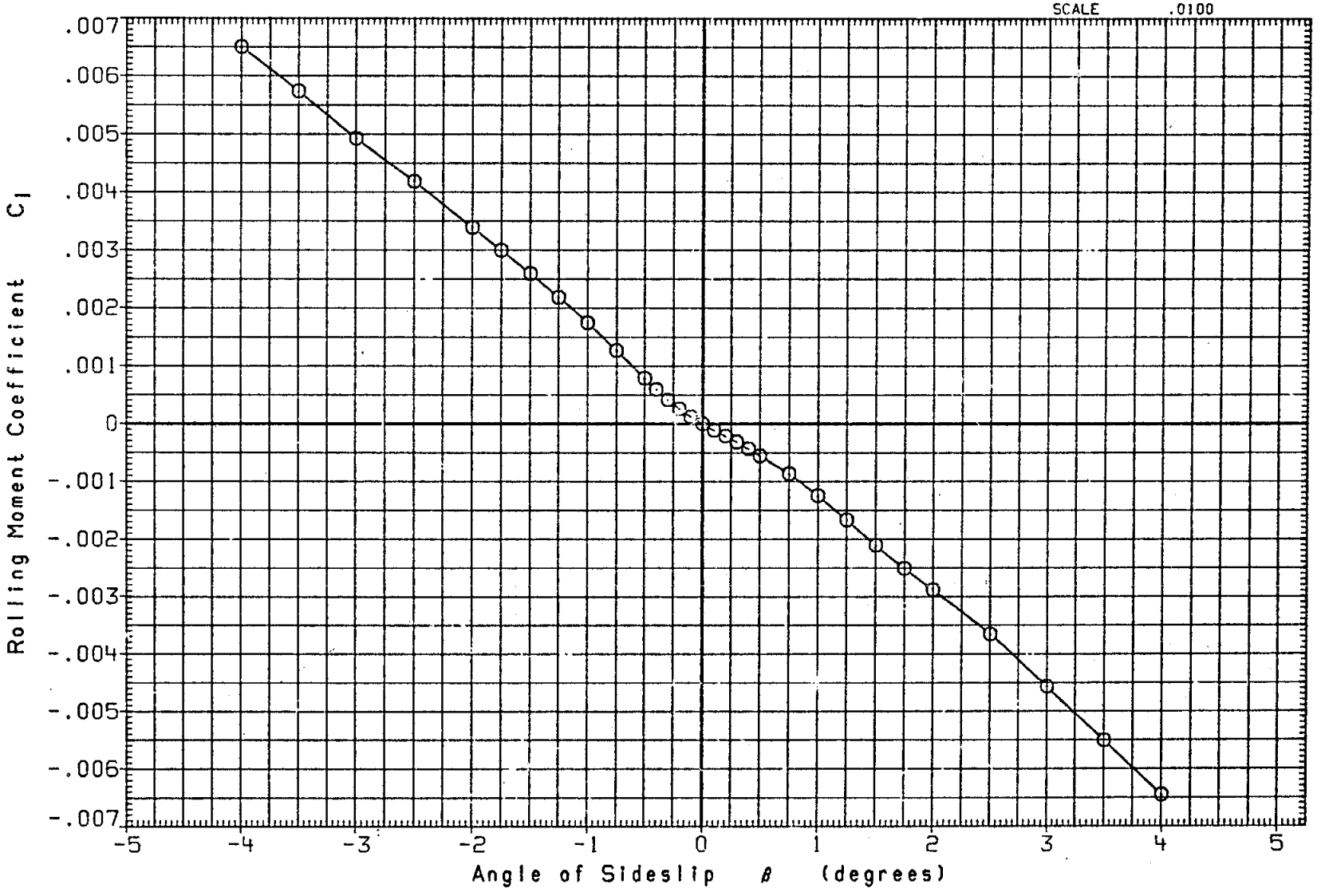


FIG. 10 COOLED MODEL DATA IN YAW PLANE, STING B

DATE 02 MAR 81

RT3067 CONFIGURATION OA259 (AEDC V41B-141 OV102, STING B (COOLED-UPR)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.373	CONFIG	15.000	SPDBRK	87.200
		ALPHA	25.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

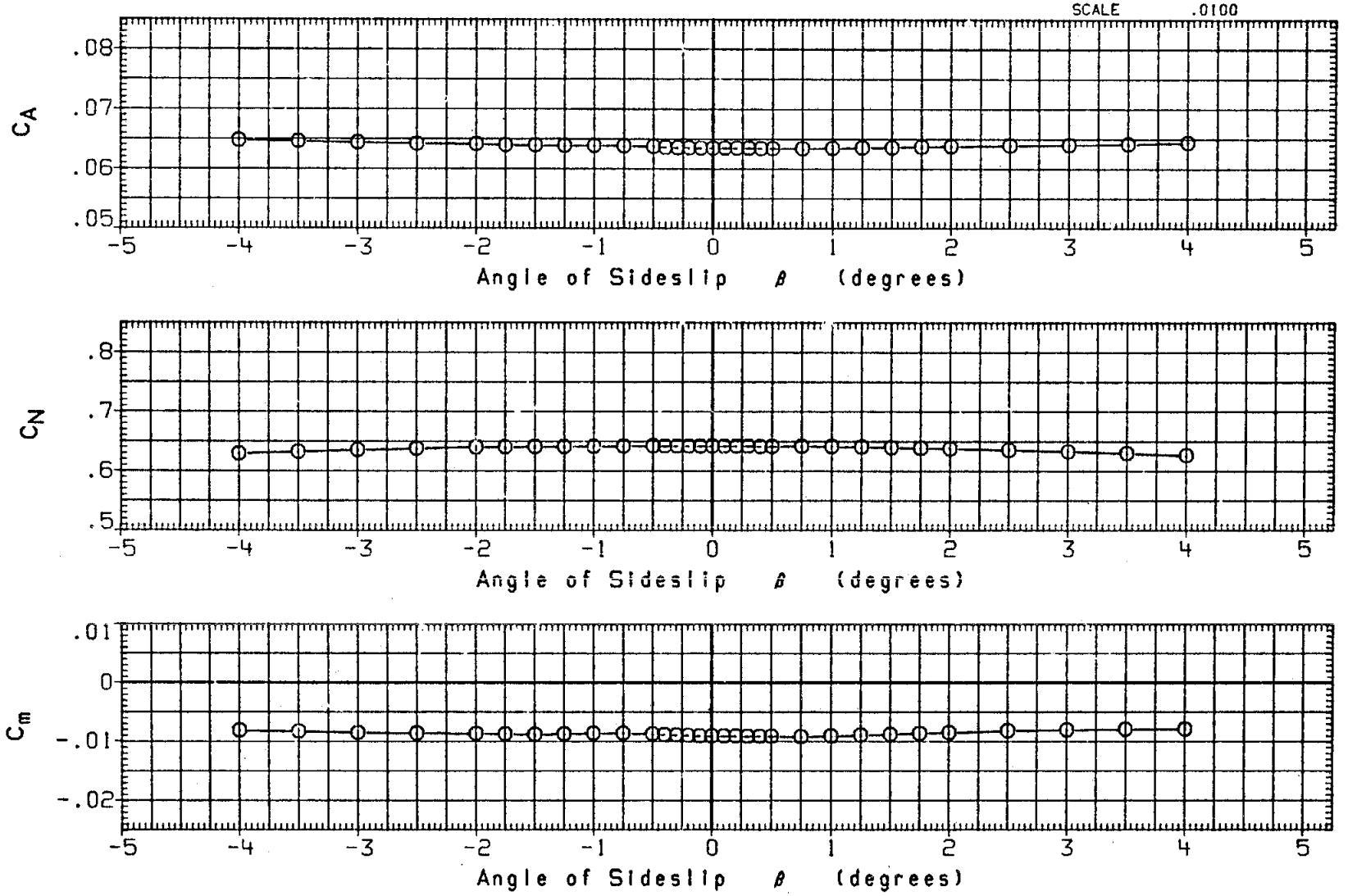


FIG. 10 COOLED MODEL DATA IN YAW PLANE, STING B

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3068	○	OA259 [AEDC V41B-14] STG. B,(S.T. DR FLD)(COOL)	.000	DECRSE	CONTNU	16.000	6.000
RT3069	□	OA259 [AEDC V41B-14] STING B,(S.T. DR FLD)	.000	DECRSE	CONTNU	17.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

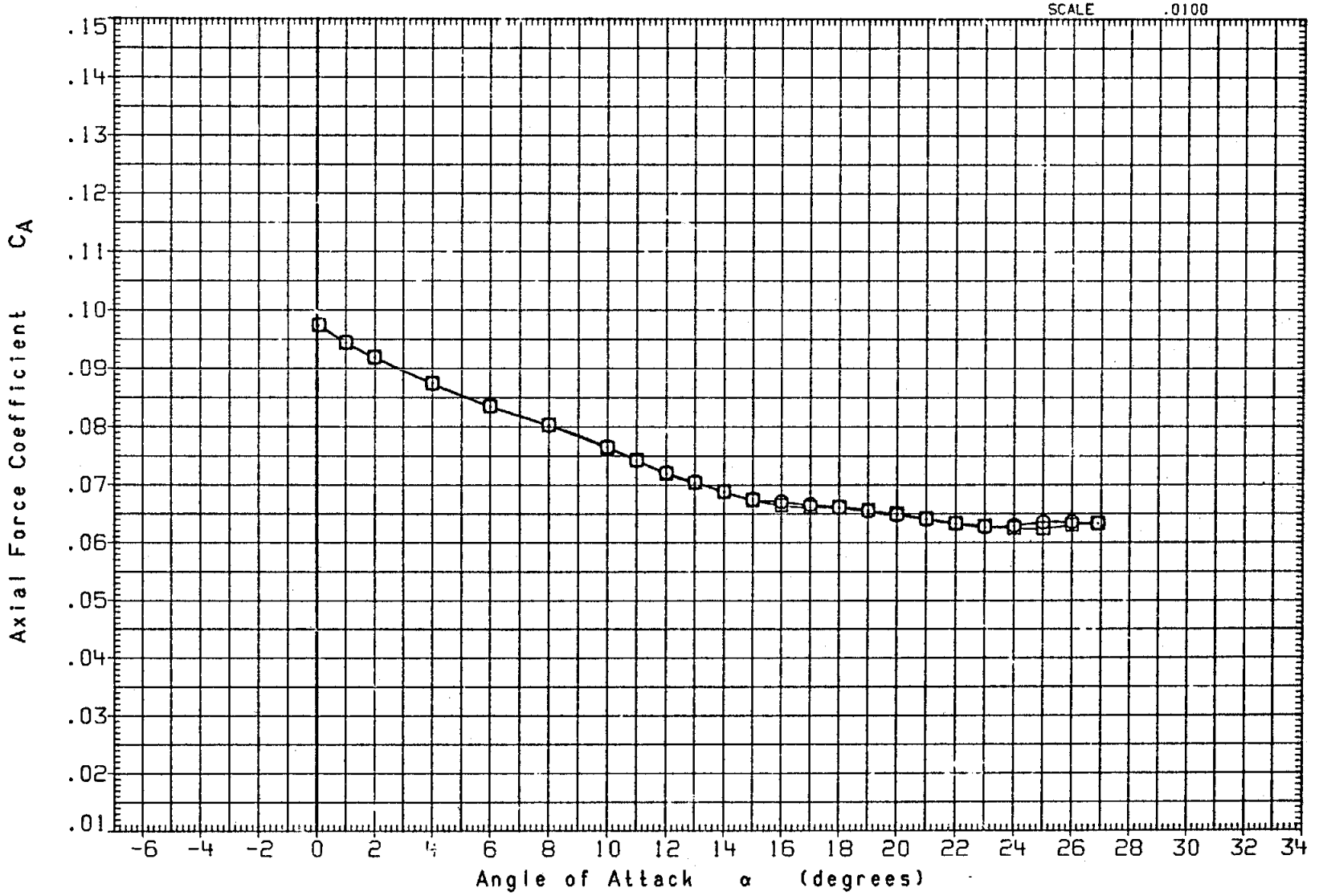


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
MODEL HEATING EFFECTS

(A)RN/L = 4.39 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3068	○	OA259 (AEDC V41B-14) STG. B,(S.T. DR FLD)(COOL)	.000	DECRSE	CONTNU	16.000	6.000
RT3069	□	OA259 (AEDC V41B-14) STING B,(S.T. DR FLD)	.000	DECRSE	CONTNU	17.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

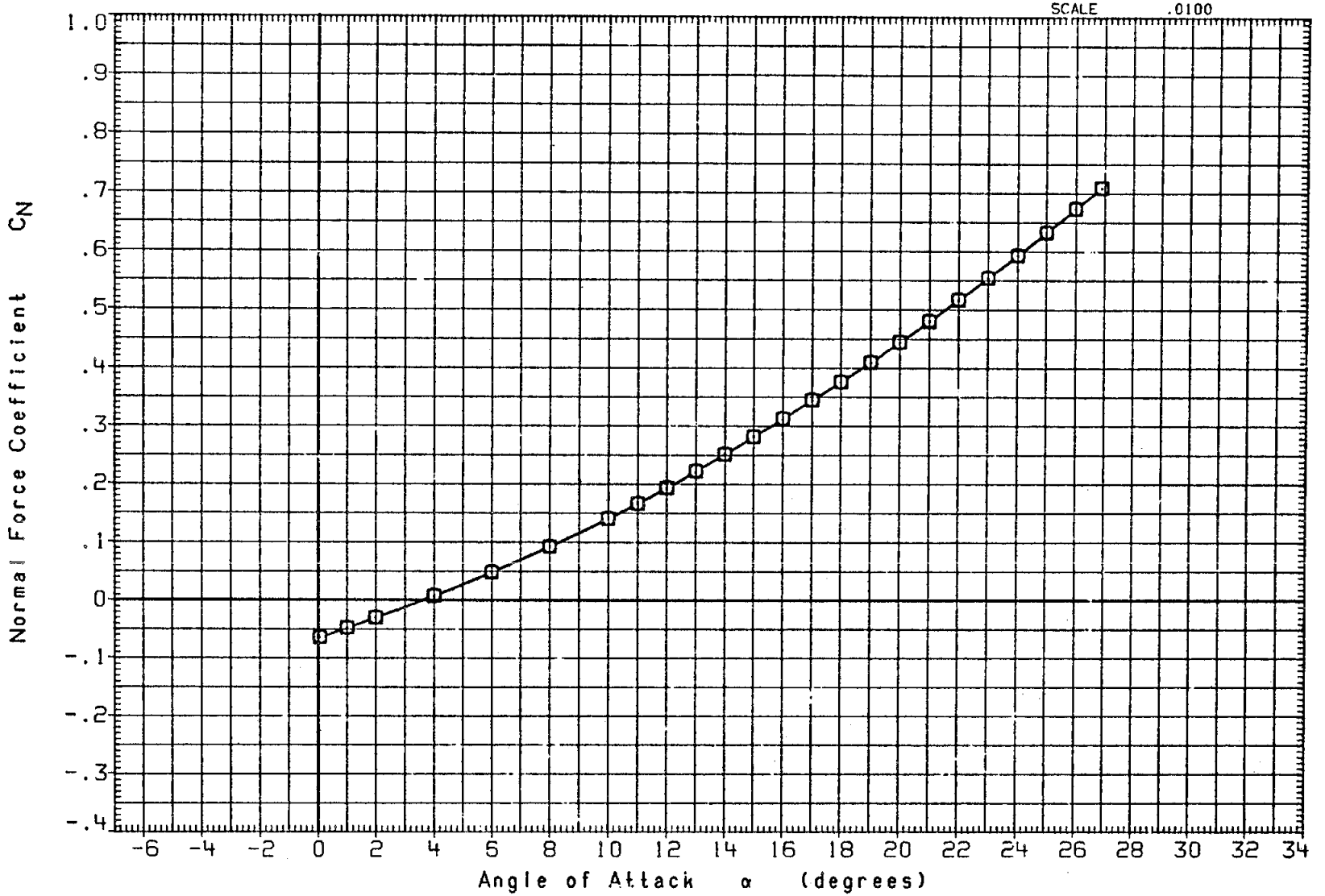


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
MODEL HEATING EFFECTS

(A)RN/L = 4.39 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3068	○	OA259 (AEDC V41B-14) STG. B,(S.T. DR FLD)(COOL)	.000	DECRSE	CONTNU	16.000	6.000
RT3069	□	OA259 (AEDC V41B-14) STING B,(S.T. DR FLD)	.000	DECRSE	CONTNU	17.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

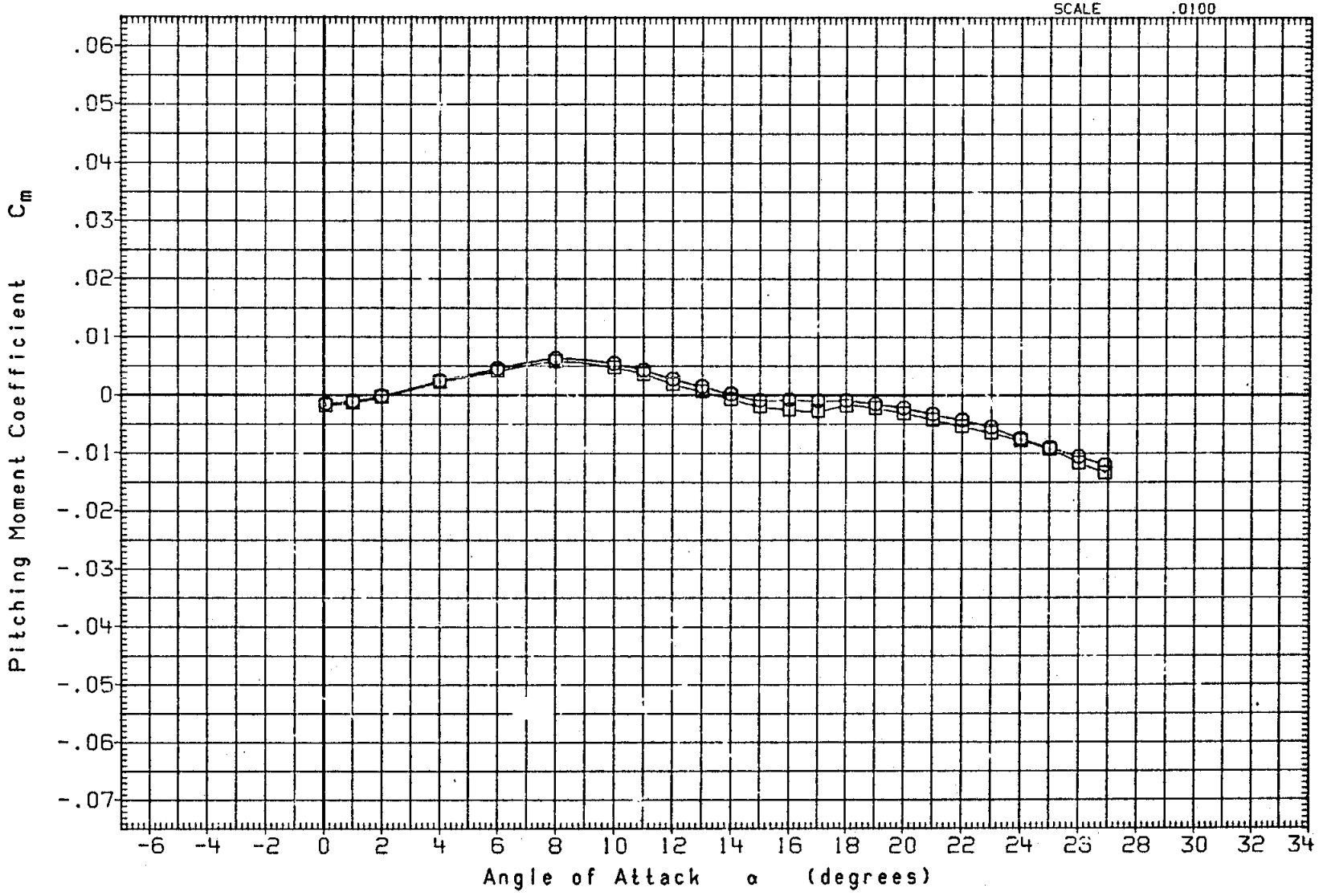


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
MODEL HEATING EFFECTS

(A)RN/L = 4.39 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3068	○	OA259 (AEDC V41B-14) STG. B,(S.T. DR FLD)(COOL)	.000	DECRSE	CONTNU	16.000	6.000
RT3069	□	OA259 (AEDC V41B-14) STING B,(S.T. DR FLD)	.000	DECRSE	CONTNU	17.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

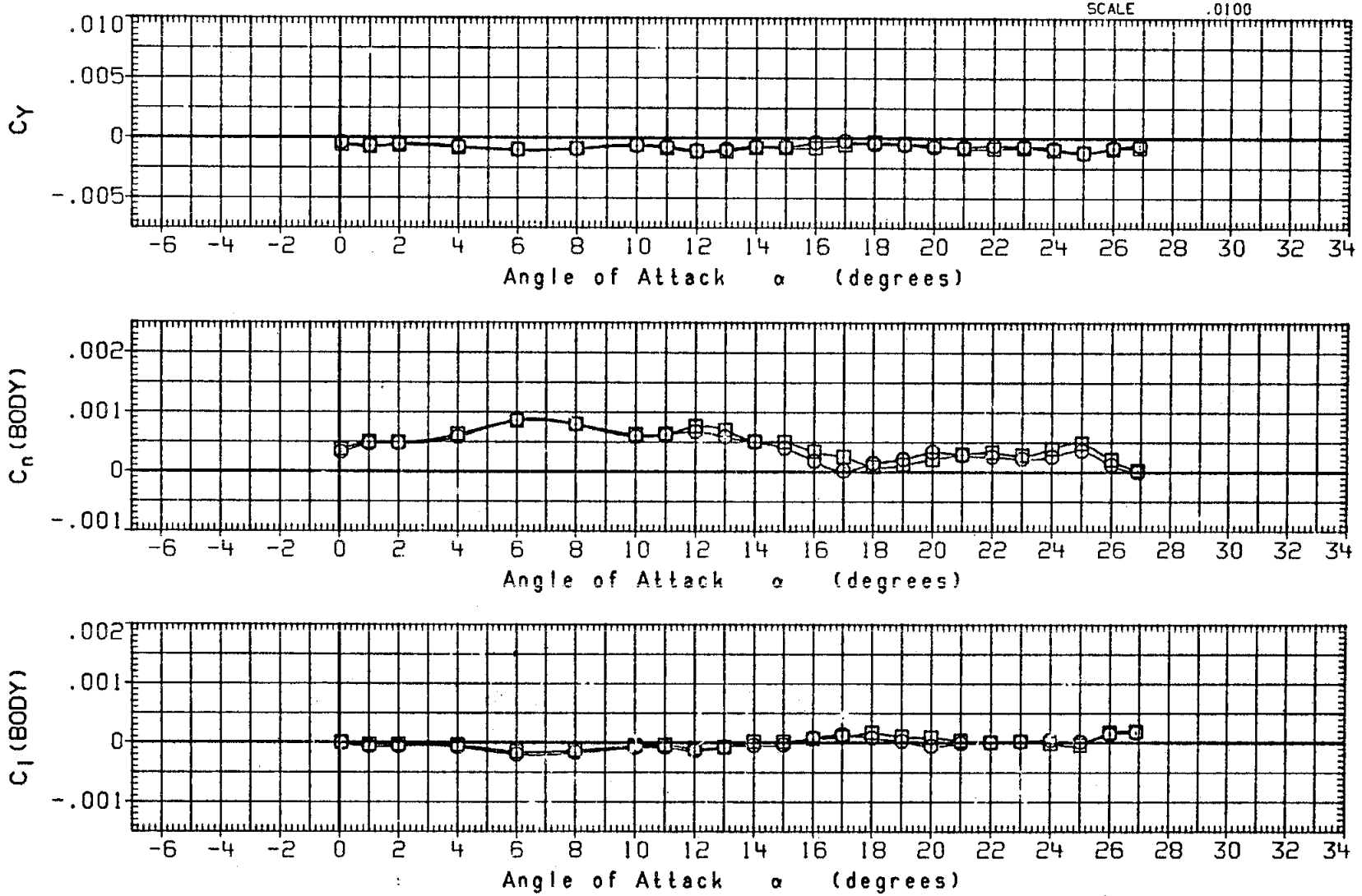


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
MODEL HEATING EFFECTS

(A)RN/L = 4.39 DATE 02 MAR 81

RT3070 CONFIGURATION OA259 [AEDC V41B-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.395	CONFIG	17.000	SPDBRK	87.200
		ALPHA	15.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	5.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

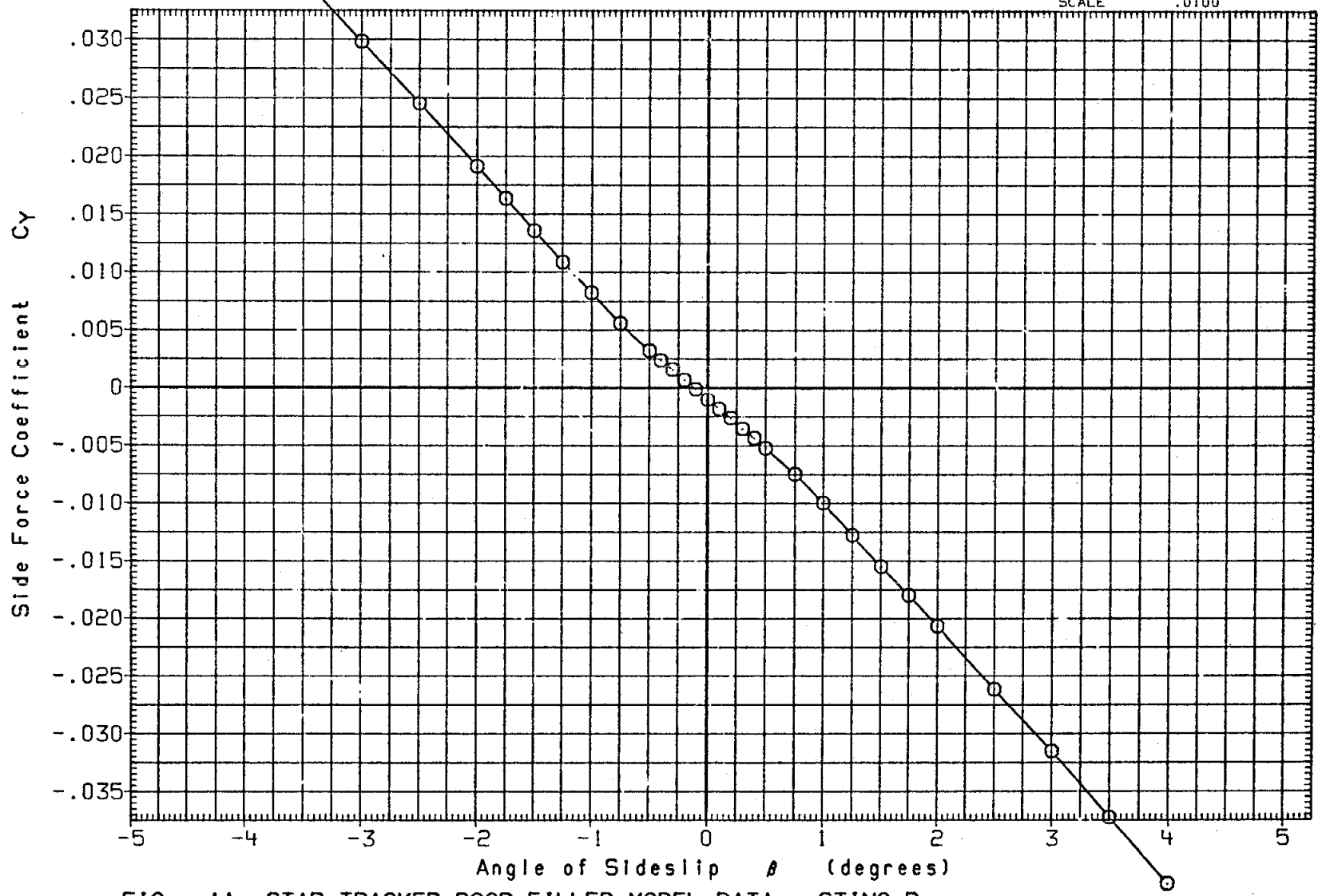


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(A) ALPHA = 15.0,

RT3070 CONFIGURATION OA259 (AEDC V41B-14) STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.395	CONFIG	17.000	SPDBRK	87.200
		ALPHA	15.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

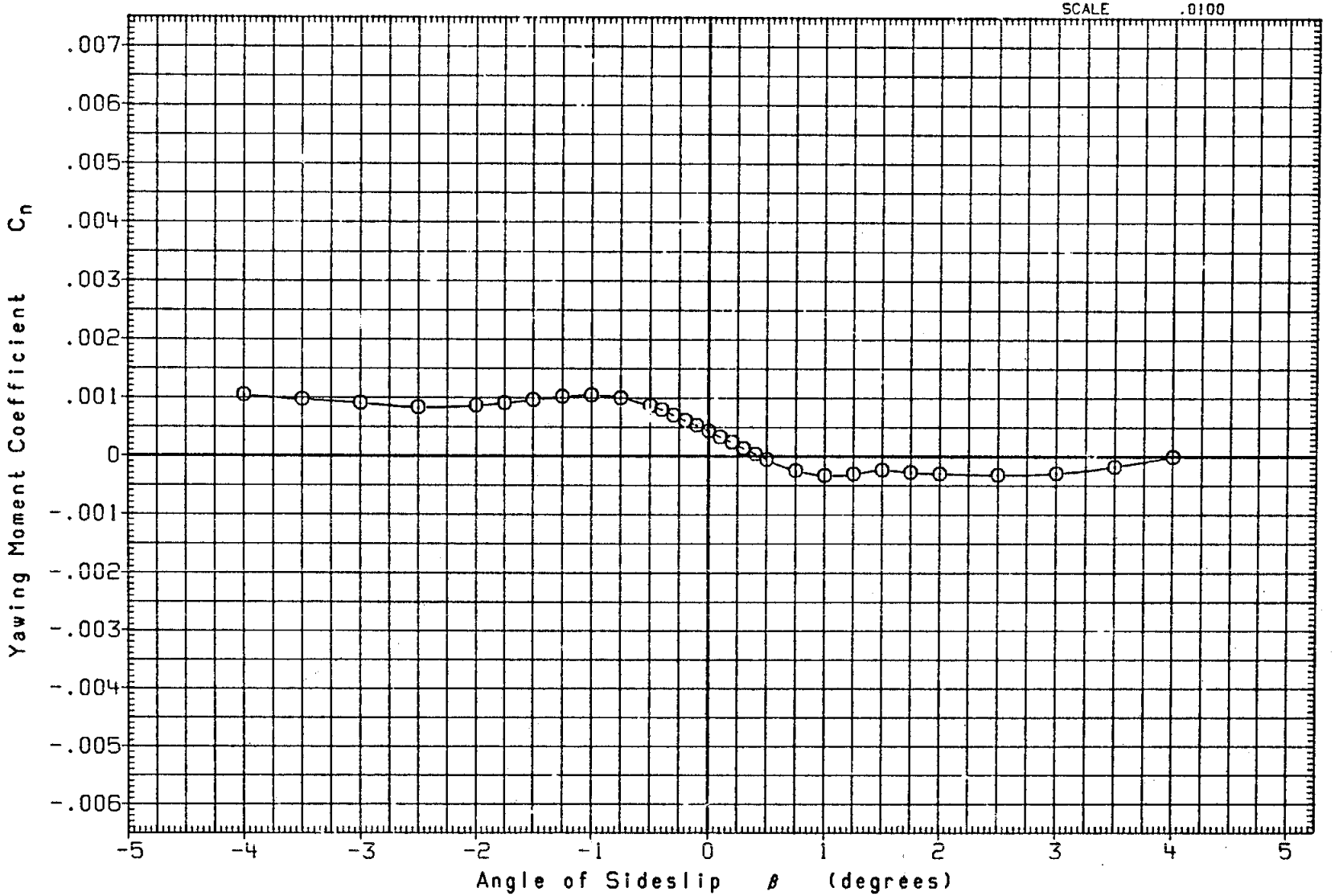


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(A) ALPHA = 15.0,

DAT 02 MAR 81

RT3070 CONFIGURATION OA259 [AEDC V41B-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.395	CONFIG	17.000	SPDBRK	87.200
		ALPHA	15.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

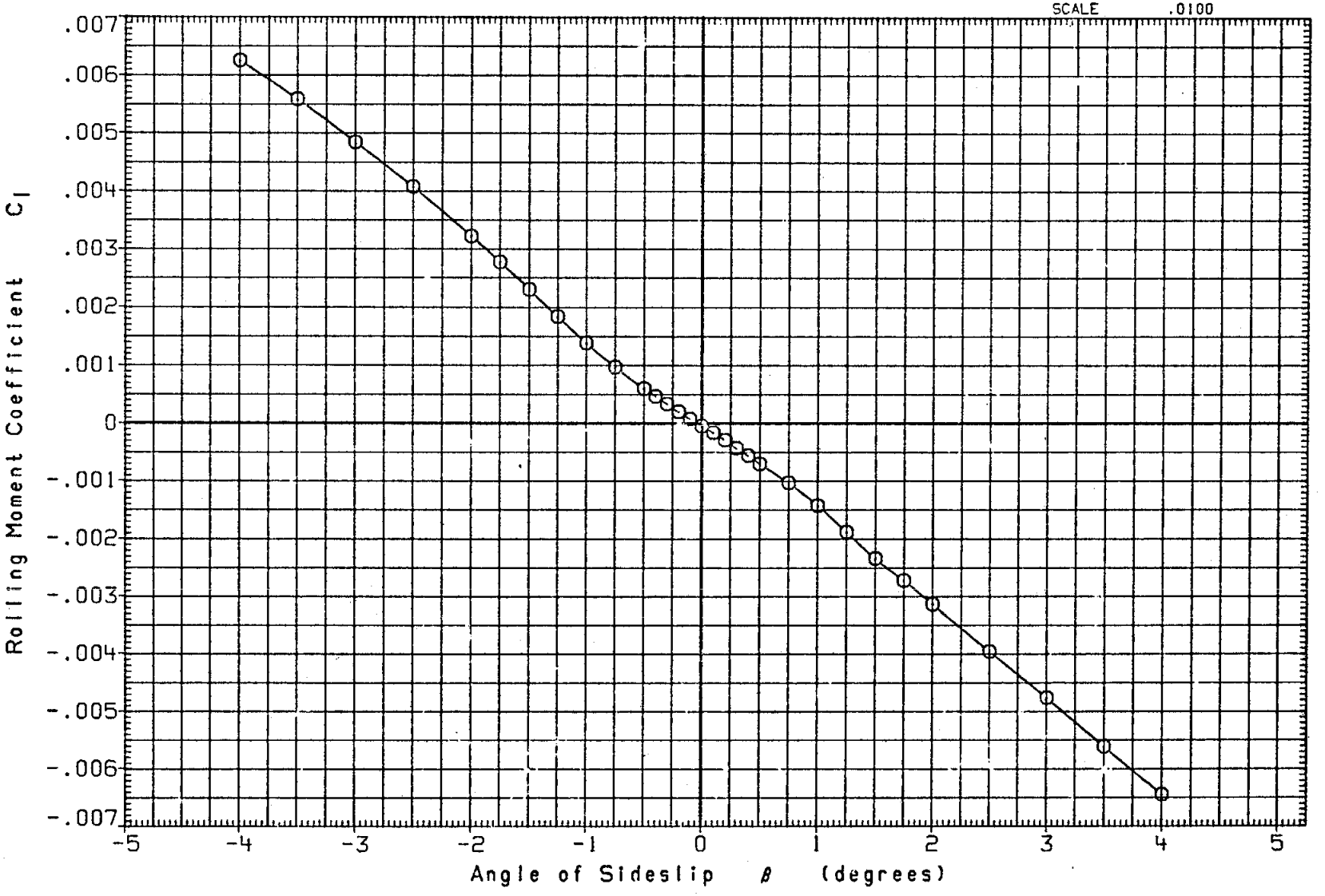


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(A) ALPHA = 15.0,

RT3070 CONFIGURATION OA259 [AEDC V41B-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.395	CONFIG	17.000	SPDBRK	87.200
		ALPHA	15.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

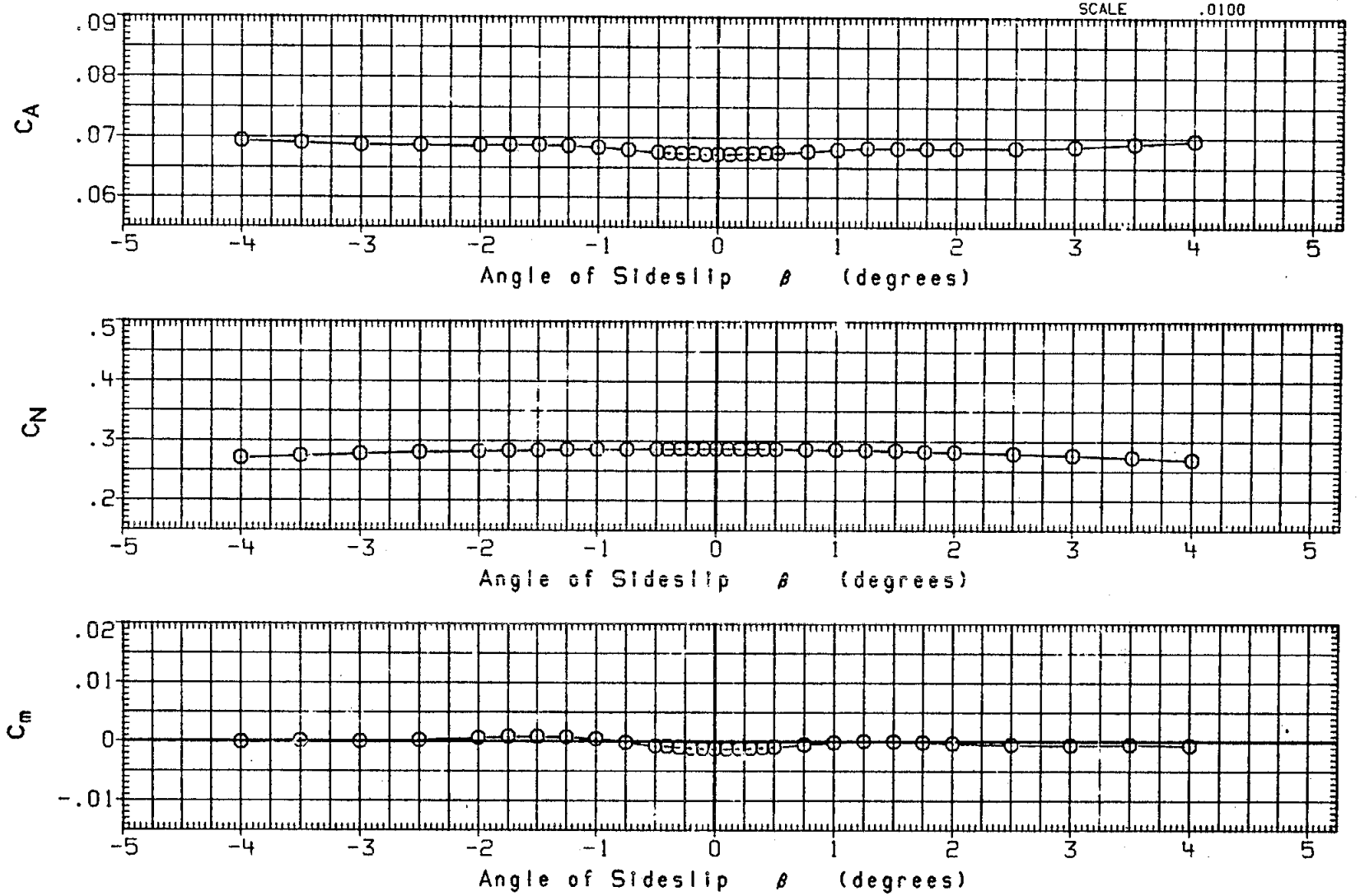


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(A) ALPHA = 15.0,

DATE 02 MAR 81

RT3071 CONFIGURATION OA259 [AEDC V41B-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L
O	4.389

PARAMETRIC VALUES

CONFIG	17.000	SPDBRK	87.200
ALPHA	15.000	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	5.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

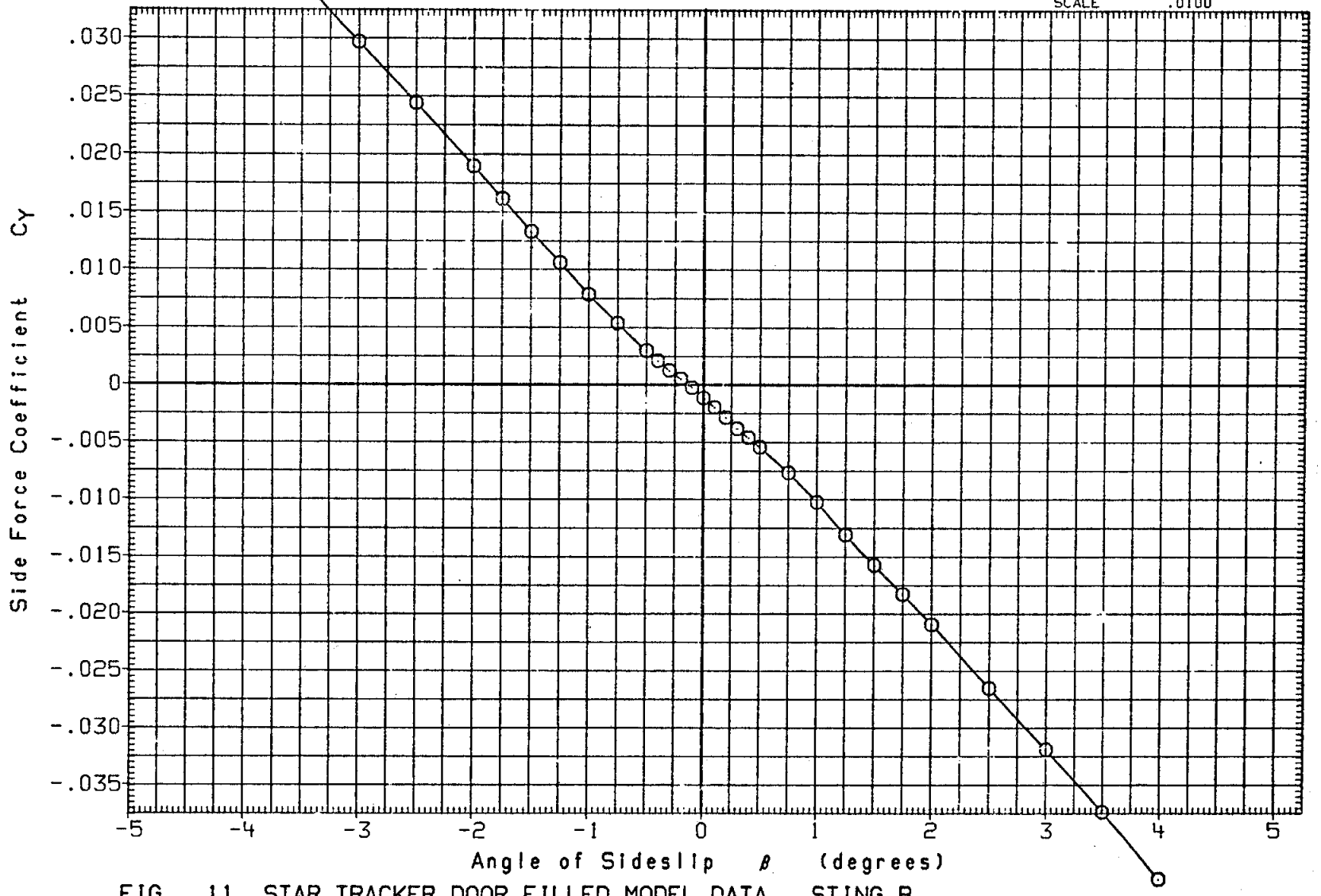


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(A) ALPHA = 15.0,

RT3071 CONFIGURATION OA259 [AEDC V41B-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.389	CONFIG	17.000	SPDBRK	87.200
		ALPHA	15.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

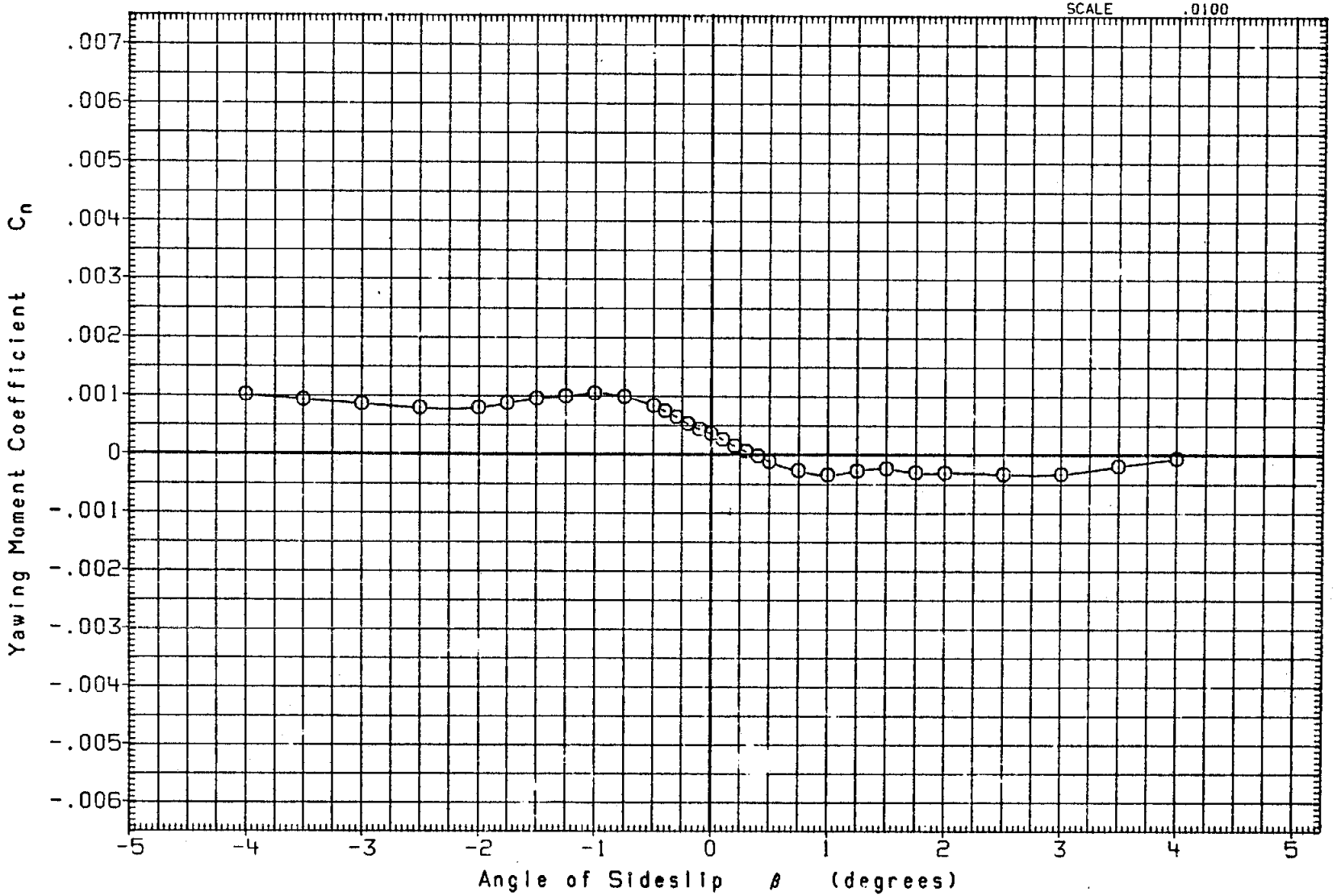


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(A) ALPHA = 15.0,

DATE 02 MAR 81

RT3071 CONFIGURATION OA259 (AEDC V41B-14) STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.389	CONFIG	17.000	SPDBRK	87.200
		ALPHA	15.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

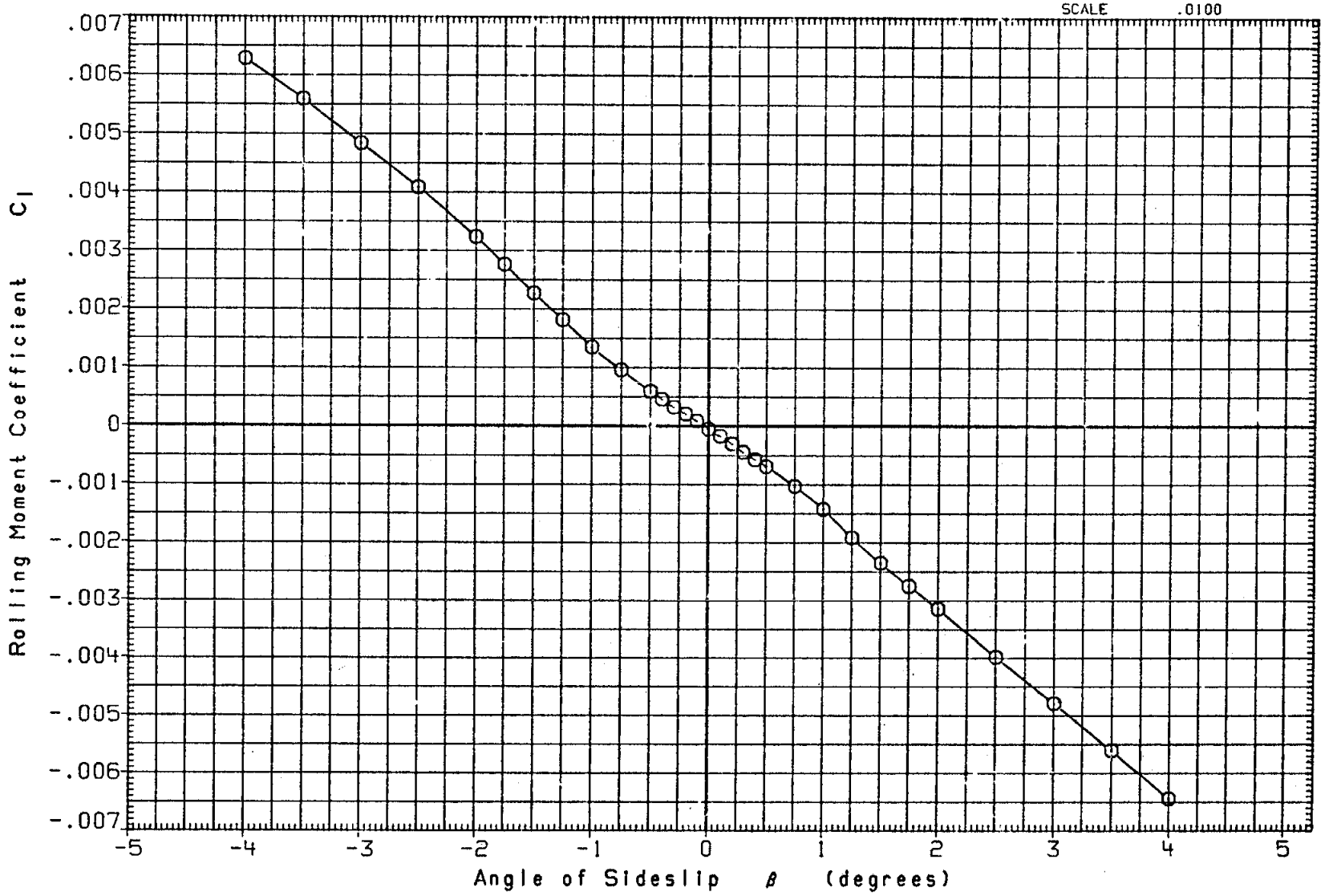


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(A) ALPHA = 15.0,

RT3071 CONFIGURATION OA259 [AEDC V41B-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.389	CONFIG	17.000	SPDBRK	87.200
		ALPHA	15.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

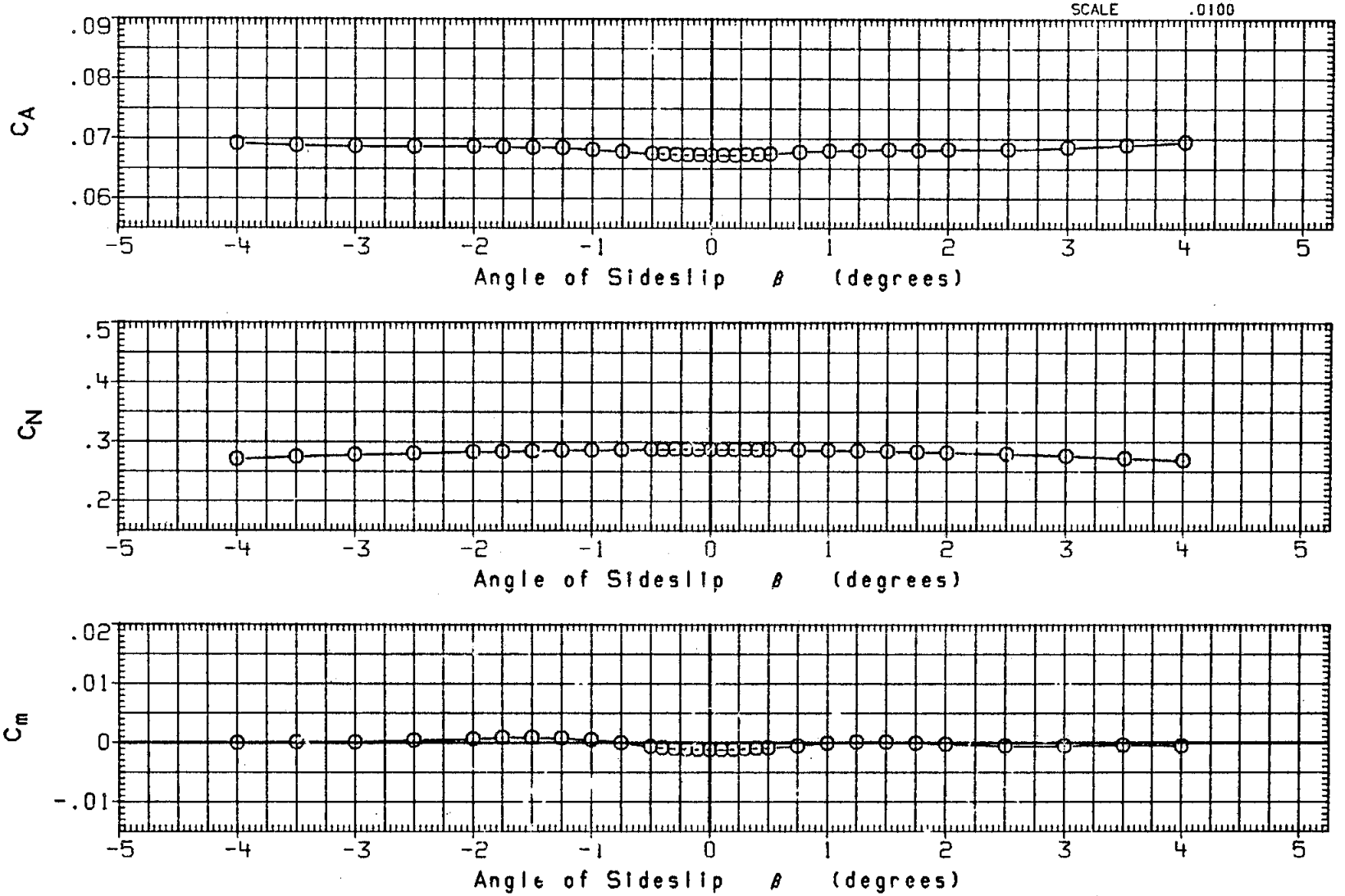


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(A) ALPHA = 15.0,

DATE 02 MAR 81

RT3072 CONFIGURATION OA259 [AEDC V41B-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.350	CONFIG	17.000	SPDBRK	87.200
		ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

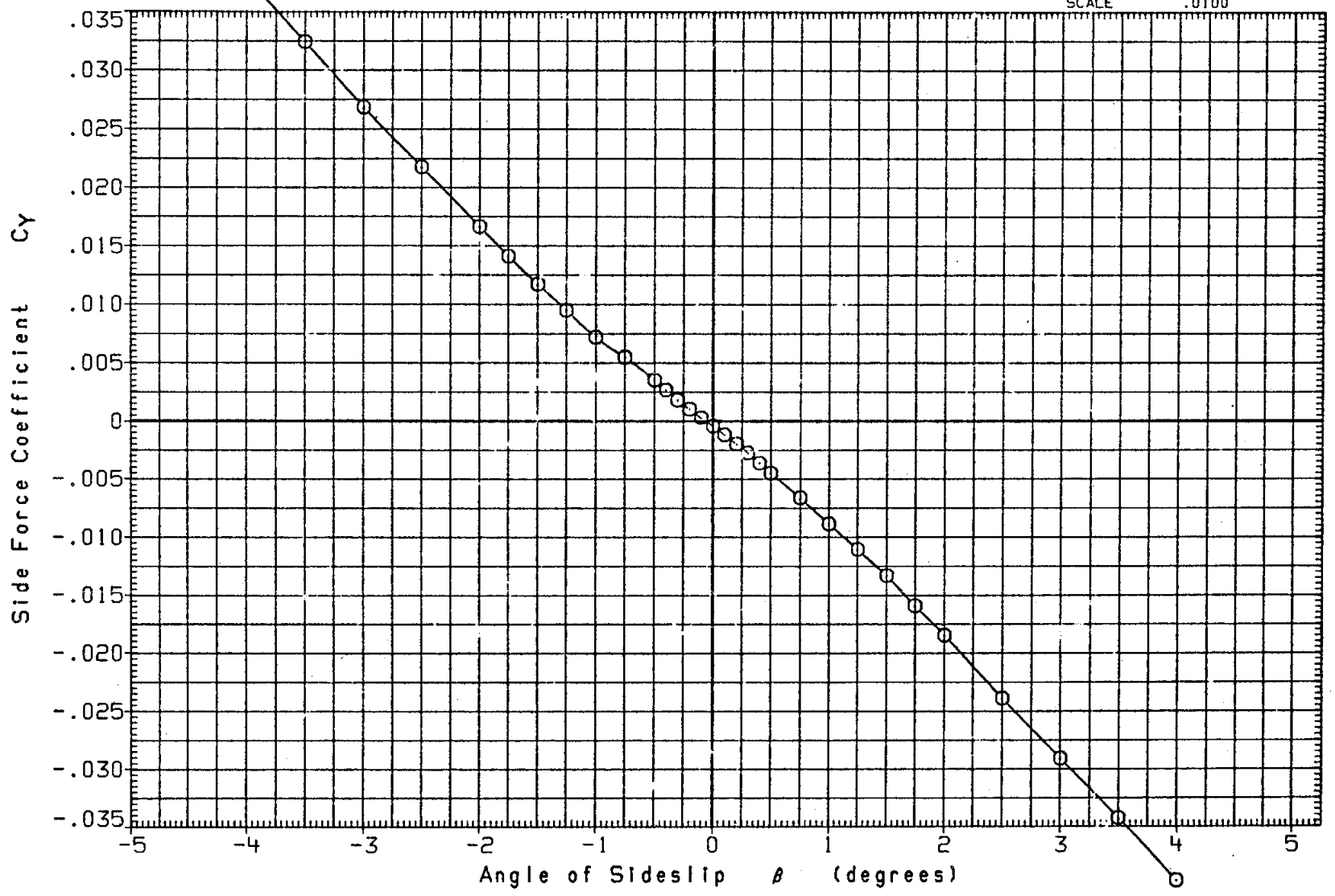


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(B) ALPHA = 17.5,

DATE 02 MAR 81

RT3072 CONFIGURATION 0A259 (AEDC V41B-14) STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.350	CONFIG	17.000	SPDBRK	87.200
		ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

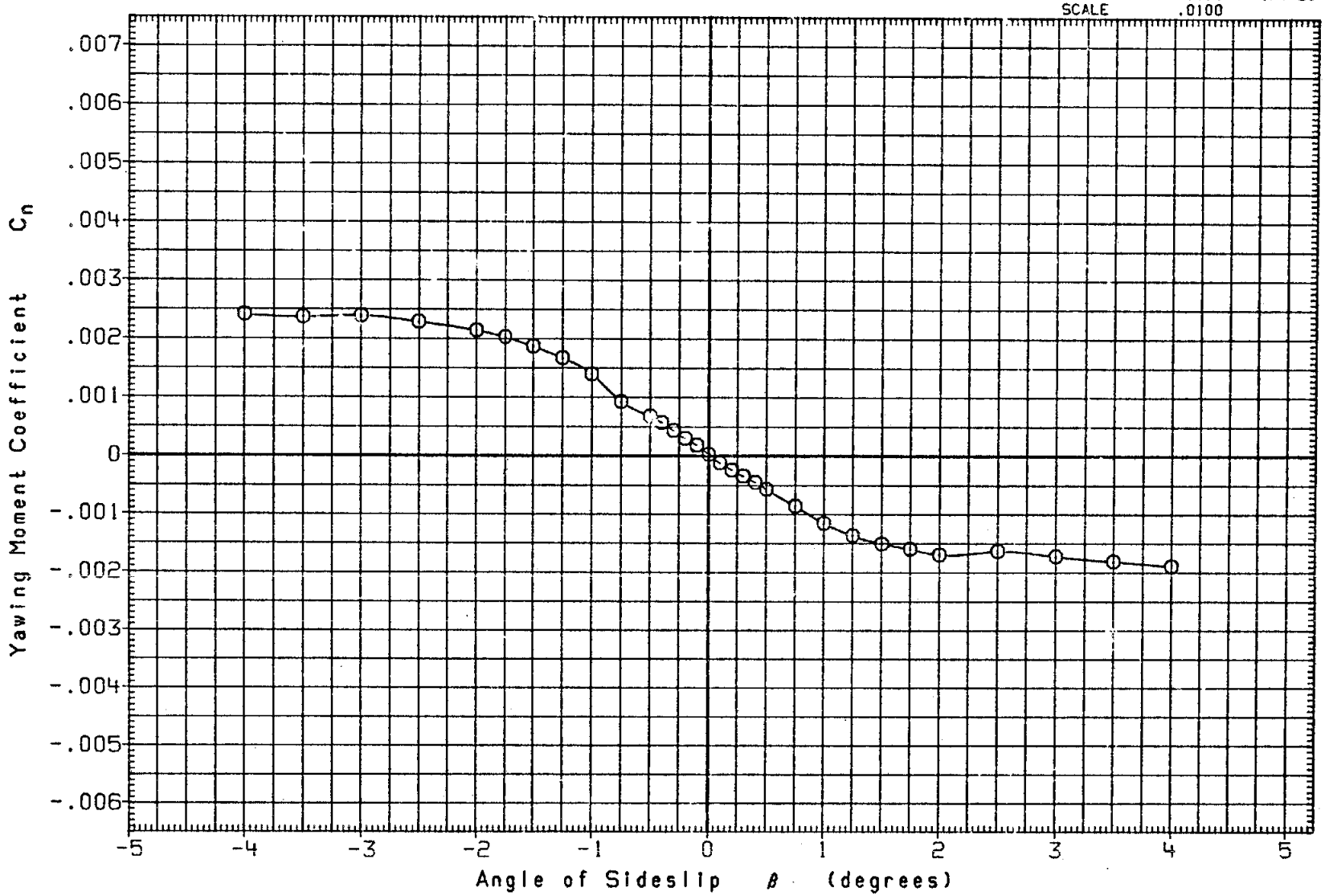


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(B) ALPHA = 17.5,

DATE 02 MAR 81

RT3072 CONFIGURATION 0A259 [AEDC V41B-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.350	CONFIG	17.000	SPDBRK	87.200
		ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

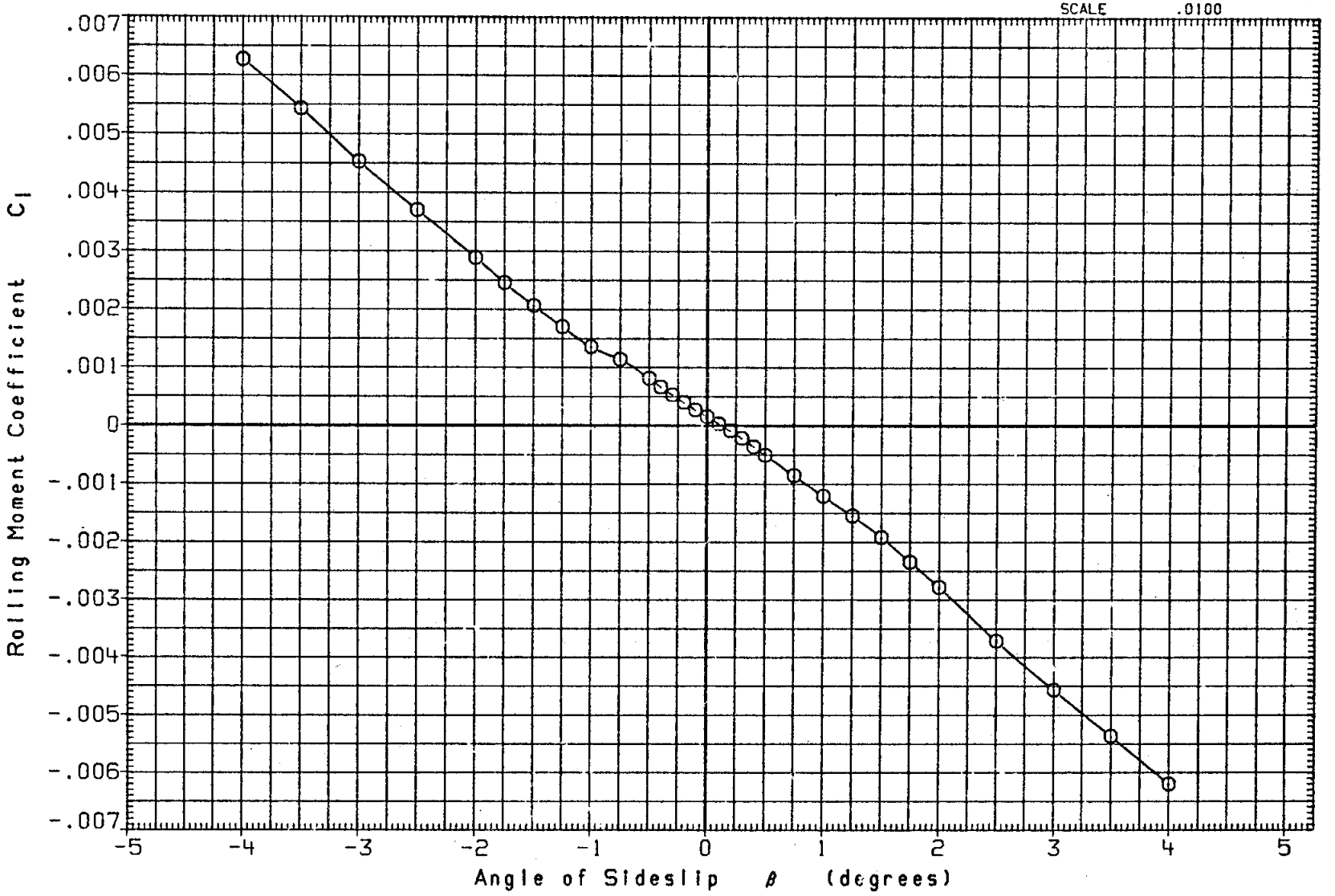


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(B) ALPHA = 17.5,

DATE 02 MAR 81

RT3072 CONFIGURATION 0A259 (AEDC V41B-14) STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.350	CONFIG	17.000	SPDBRK	87.200
		ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

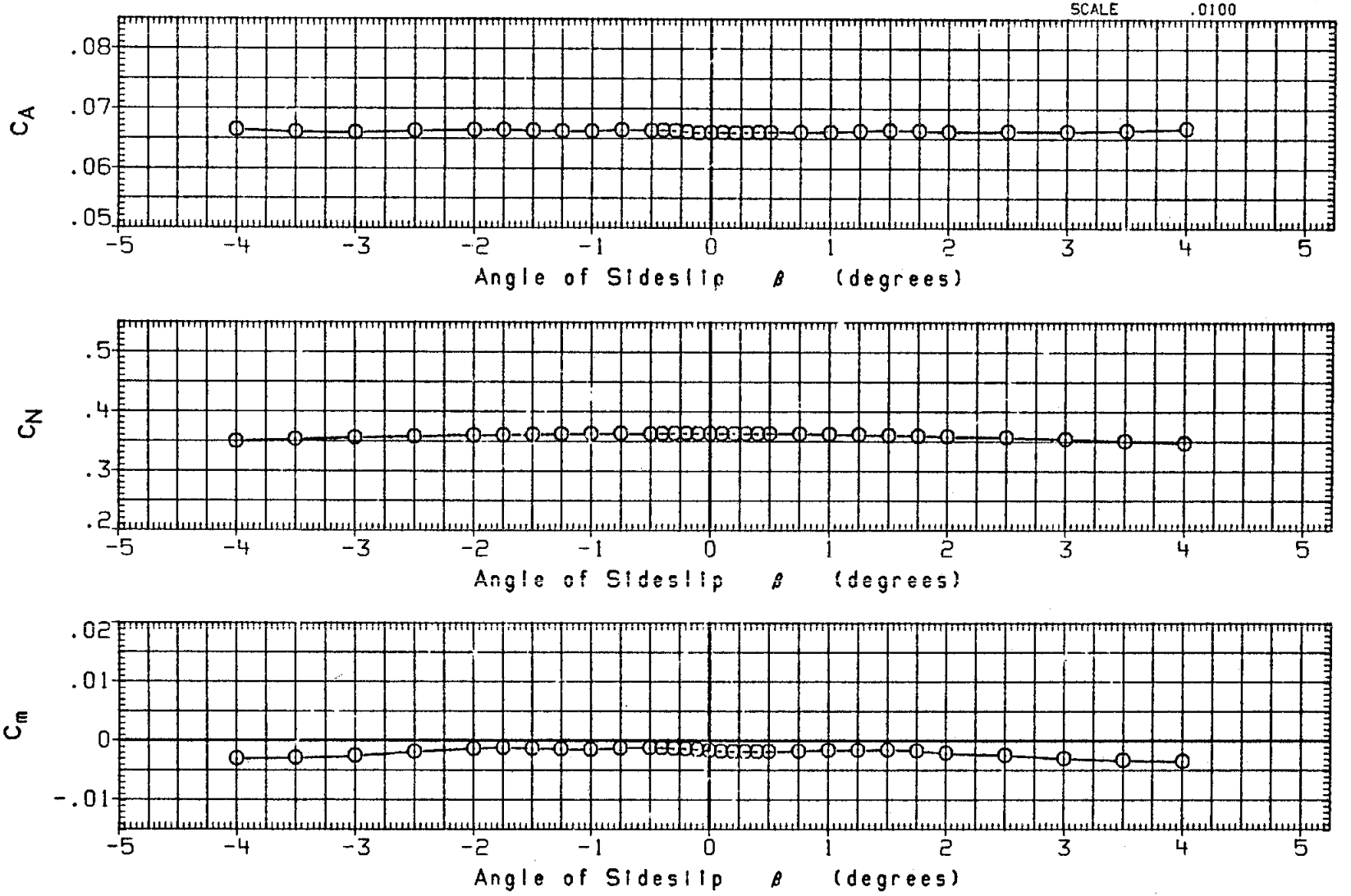


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(B) ALPHA = 17.5,

DATE 02 MAR 81

RT3073 CONFIGURATION OA259 [AEDC V41B-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.368	CONFIG	17.000	SPDBRK	87.200
		ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

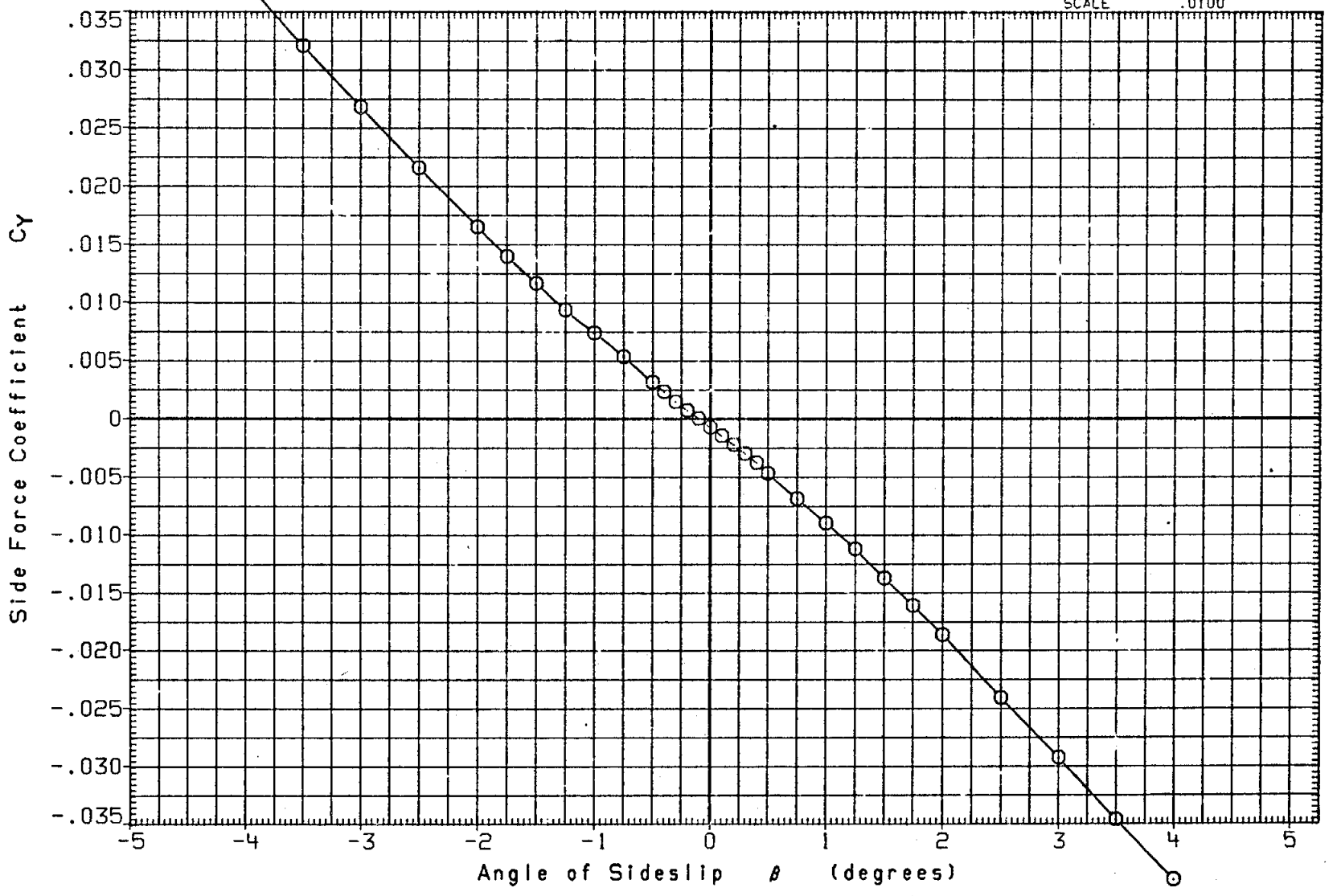


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(B) ALPHA = 17.5,

DATE 02 MAR 81

RT3073 CONFIGURATION 0A259 [AEDC V41B-141 STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.368	CONFIG	17.000	SPDBRK	87.200
		ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

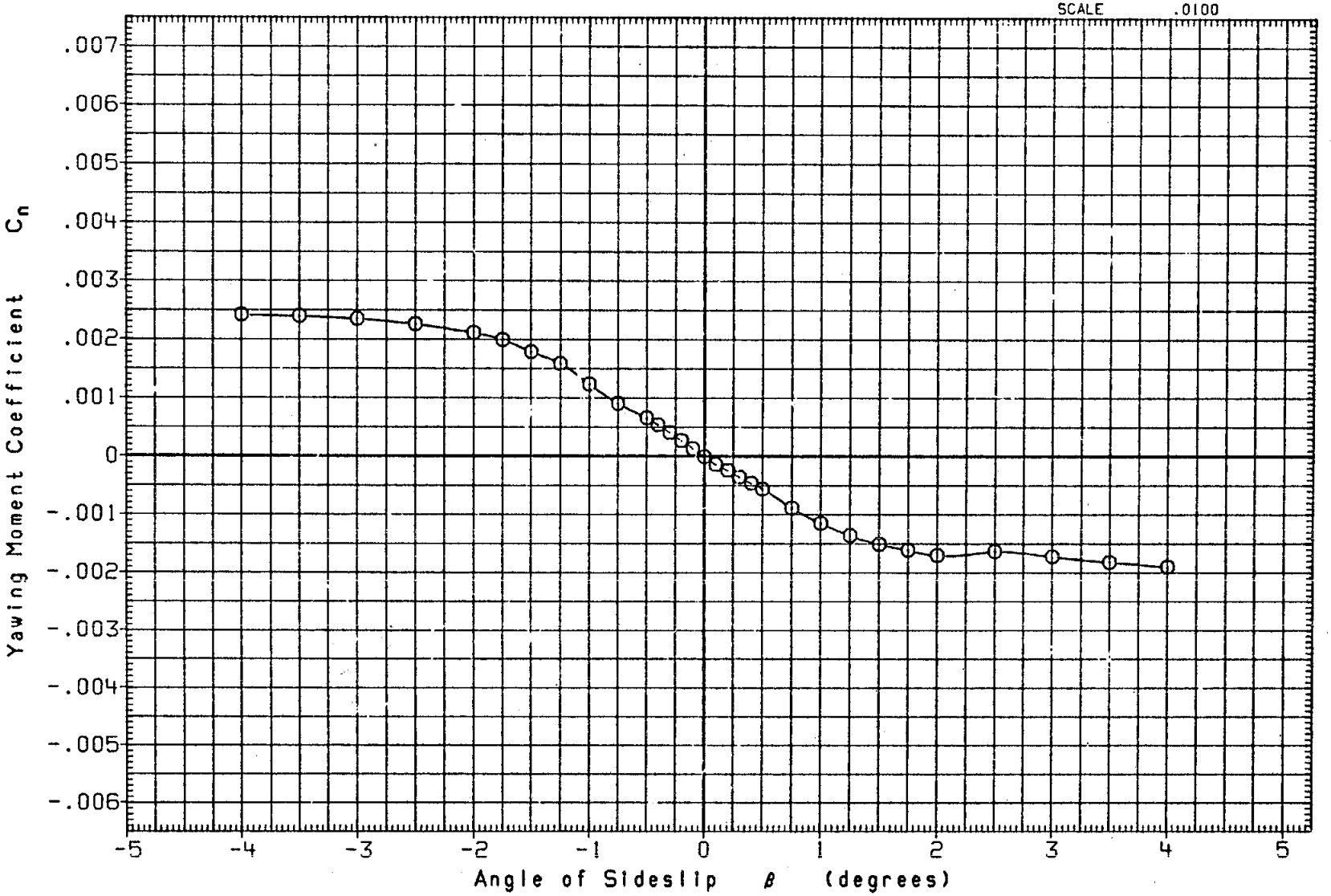


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(B) ALPHA = 17.5,

DATE 02 MAR 81

RT3073 CONFIGURATION OA259 [AEDC V41B-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.368	CONFIG	17.000	SPDBRK	87.200
		ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

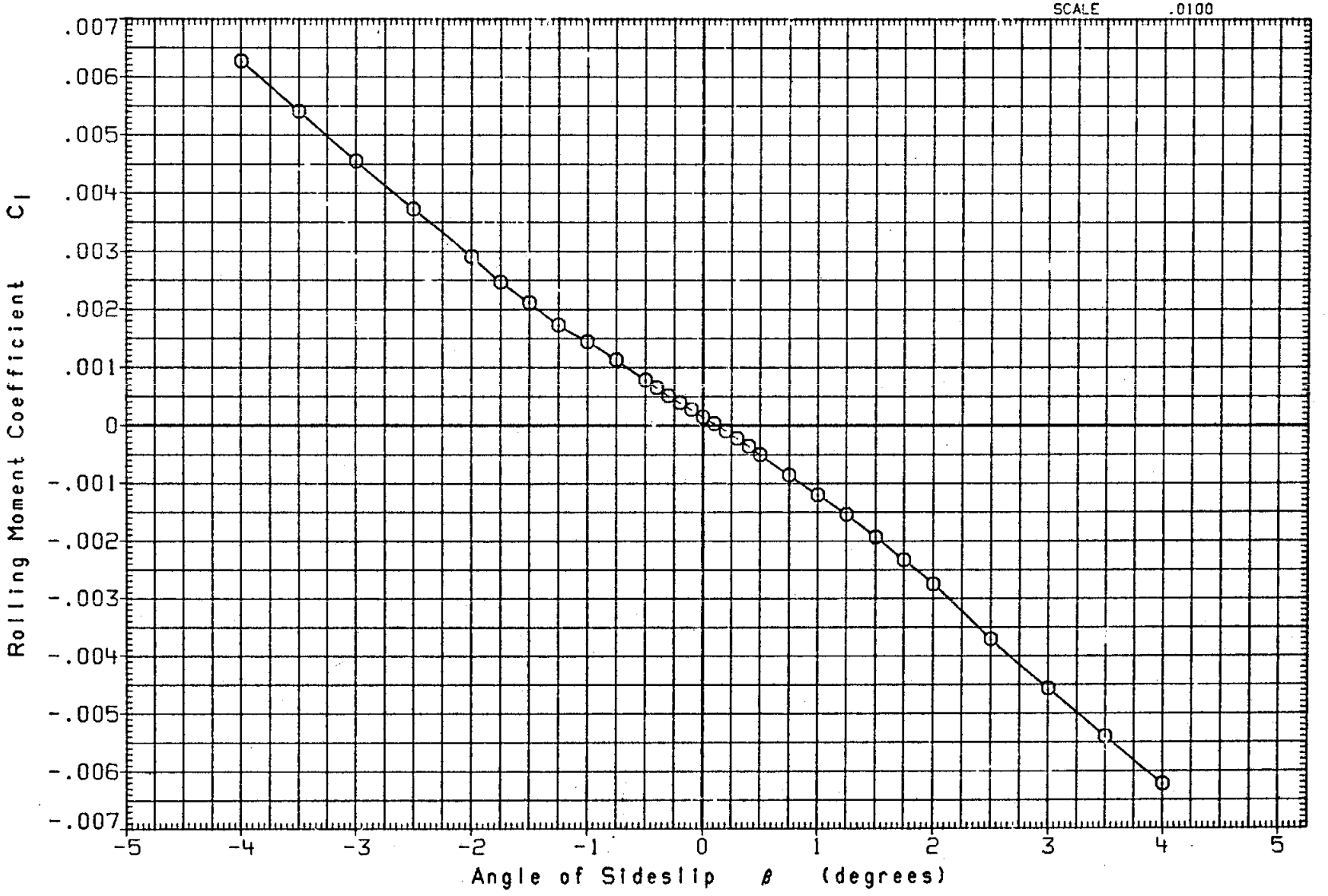


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(B) ALPHA = 17.5,

DATE 02 MAR 81

RT3073 CONFIGURATION OA259 [AEDC V41B-141 STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.368	CONFIG	17.000	SPDBRK	87.200
		ALPHA	17.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

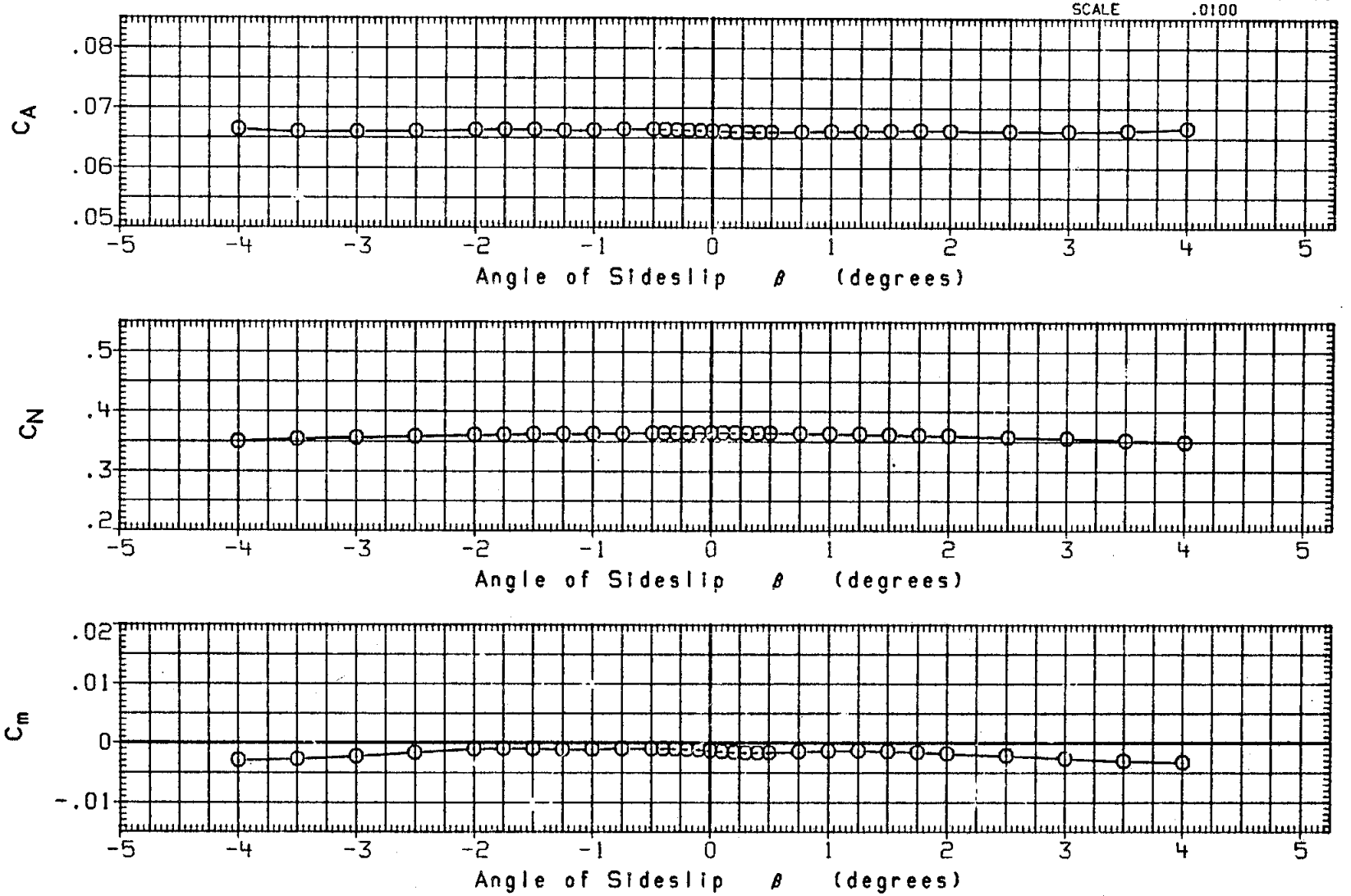


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(B) ALPHA = 17.5,

DATE 02 MAR 81

RT3074 CONFIGURATION OA259 (AEDC V41B-14) STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.366	CONFIG	17.000	SPDBRK	87.200
		ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

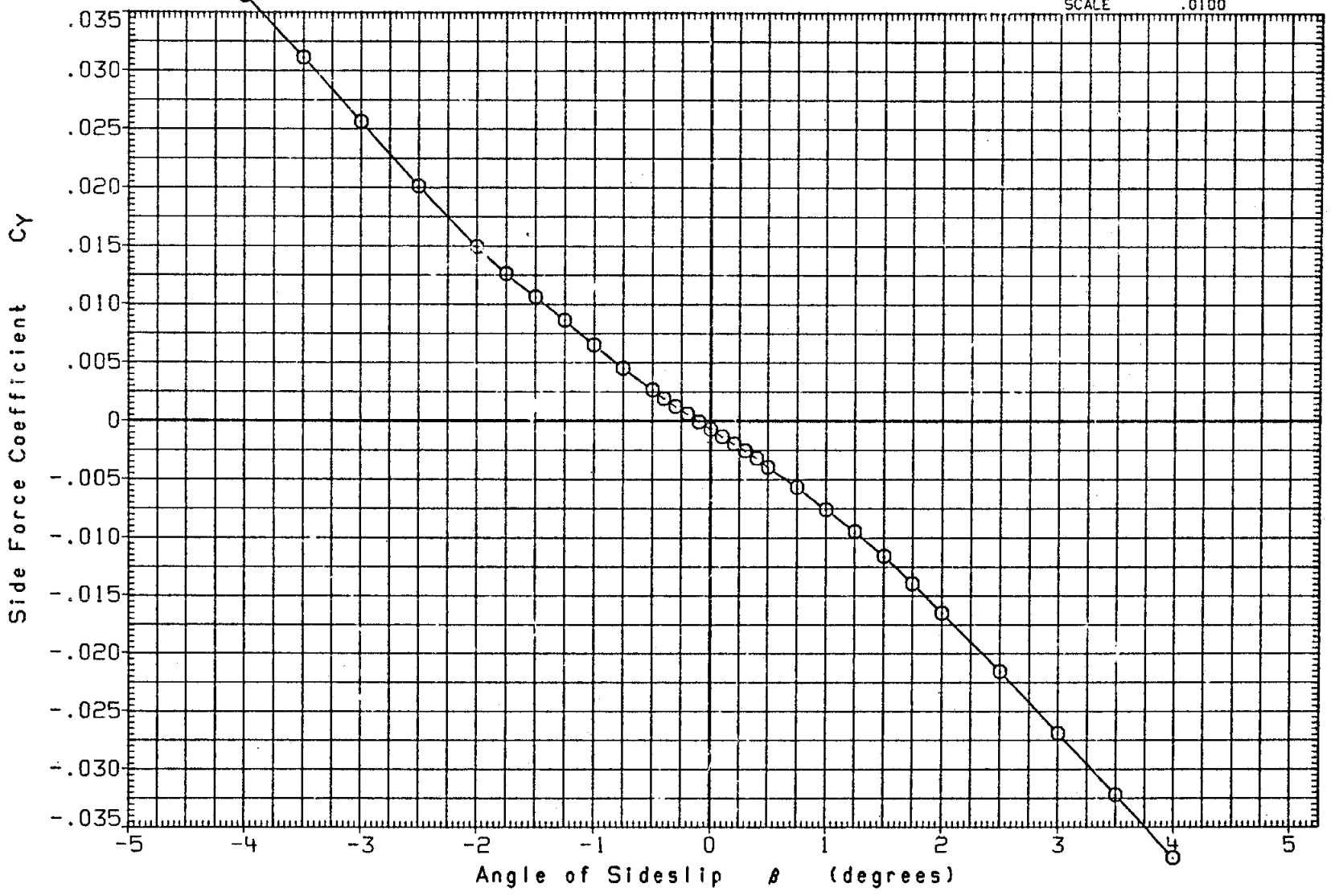


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(C) ALPHA = 20.0,

DATE 02 MAR 81

RT3074 CONFIGURATION OA259 (AEDC V41B-14) STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.366	CONFIG	17.000	SPDBRK	87.200
		ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

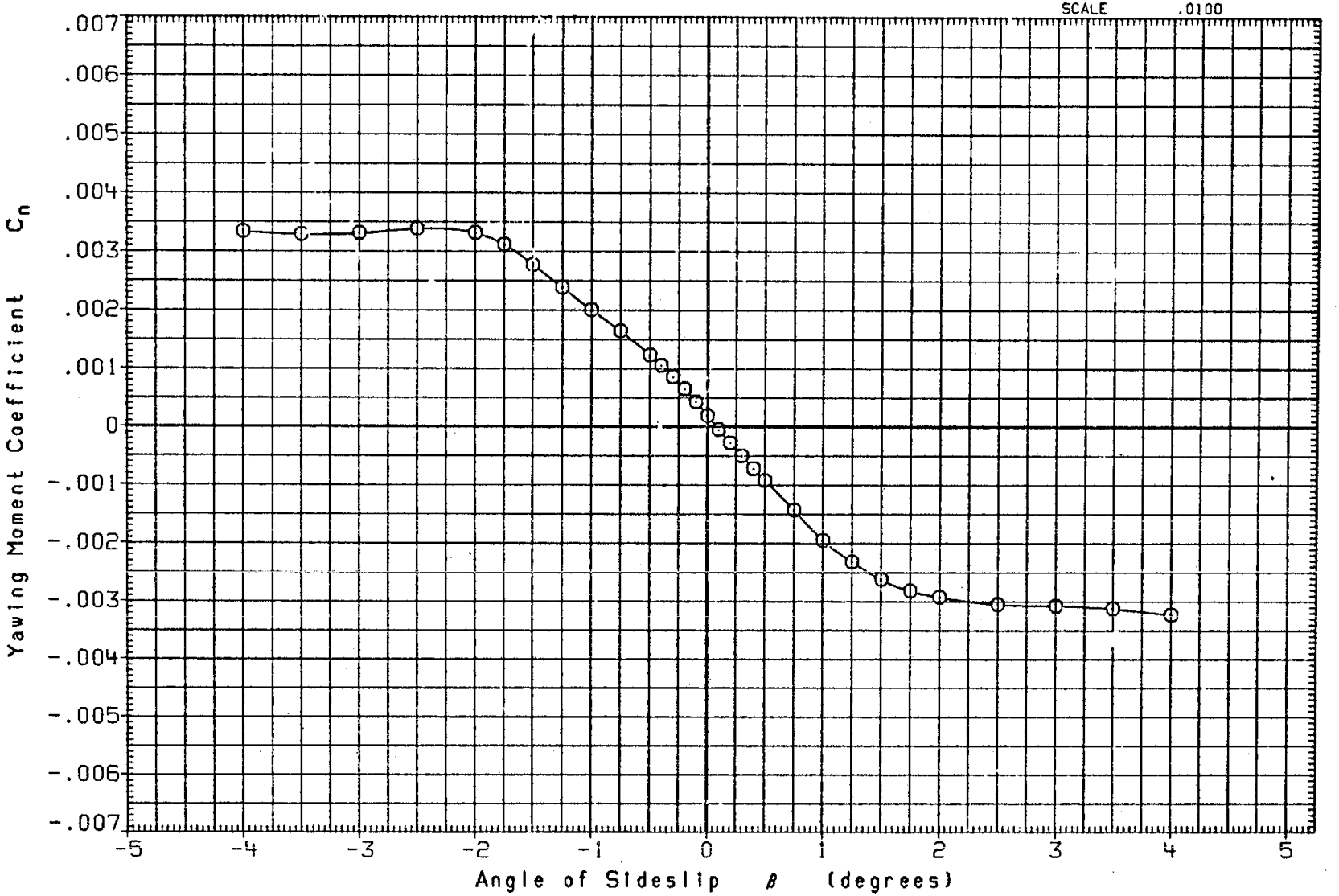


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(C) ALPHA = 20.0,

DATE 02 MAR 81

RT3074 CONFIGURATION OA259 (AEDC V41B-14) STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.366	CONFIG	17.000	SPDBRK	87.200
		ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

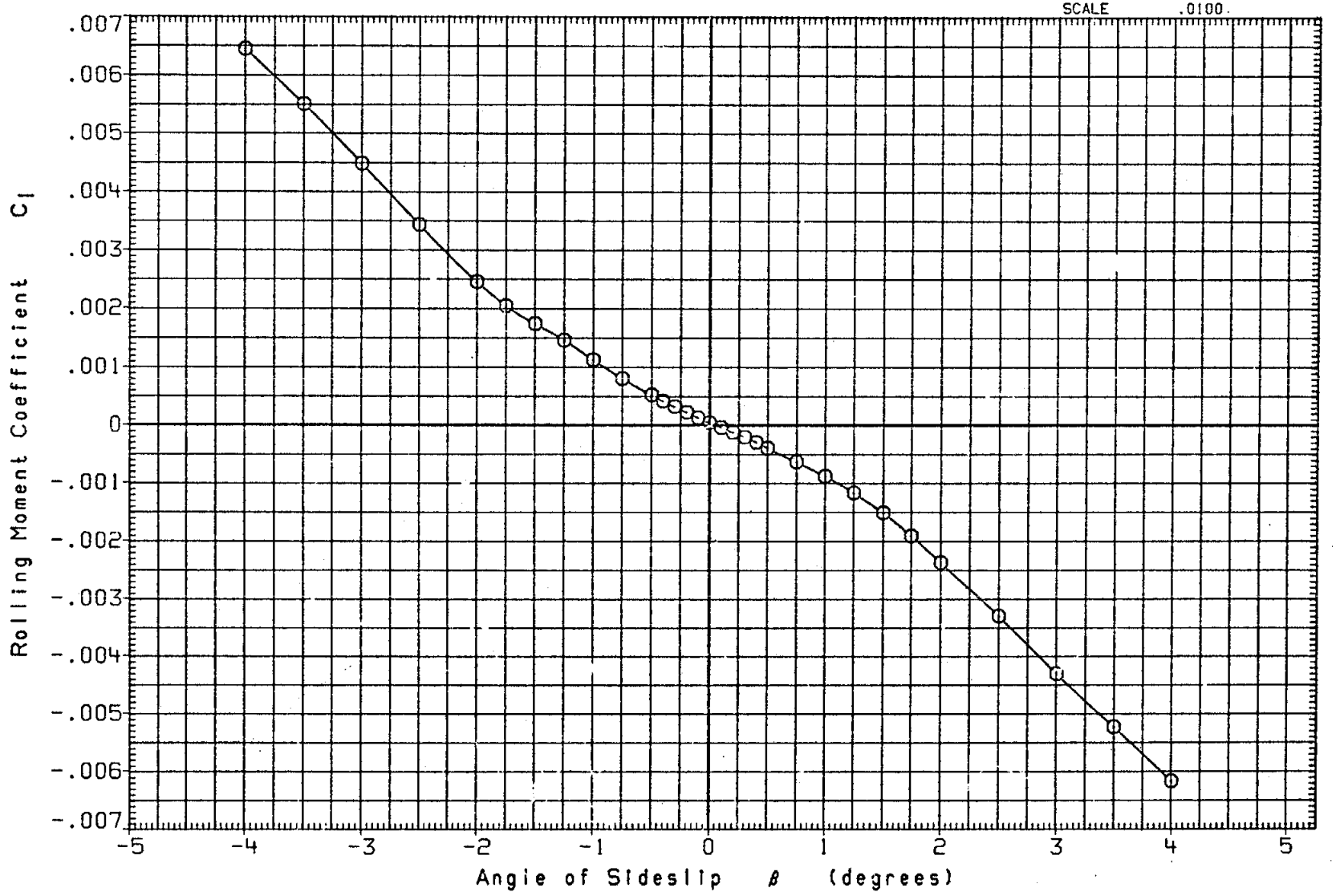


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(C) ALPHA = 20.0,

DATE 02 MAR 81

RT3074 CONFIGURATION OA259 [AEDC V41B-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.366	CONFIG	17.000	SPDBRK	87.200
		ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	1.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

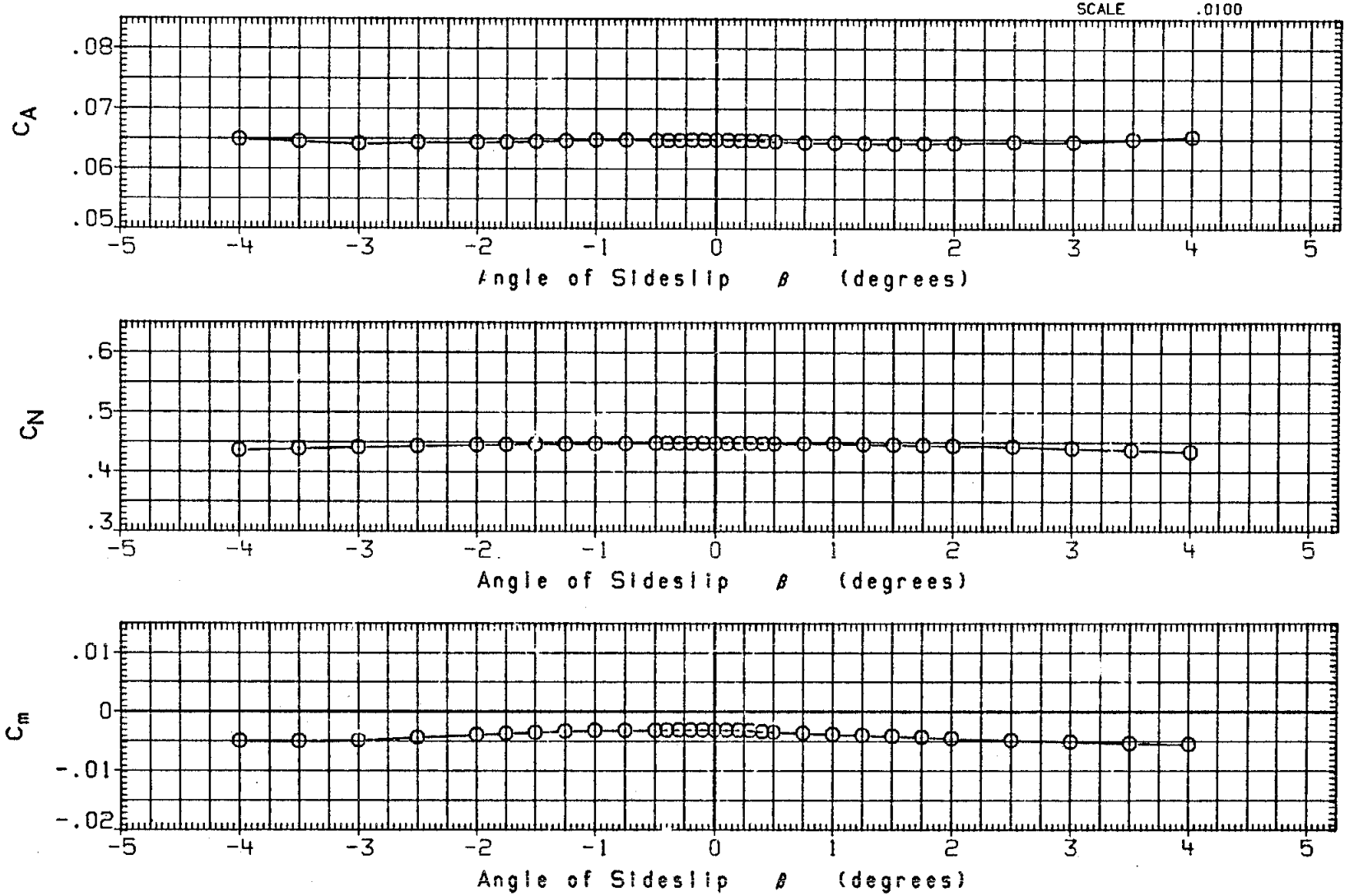


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(C) ALPHA = 20.0,

DATE 02 MAR 81

RT3075 CONFIGURATION OA259 (AEDC V41B-14) STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.351	CONFIG	17.000	SPDBRK	87.200
		ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

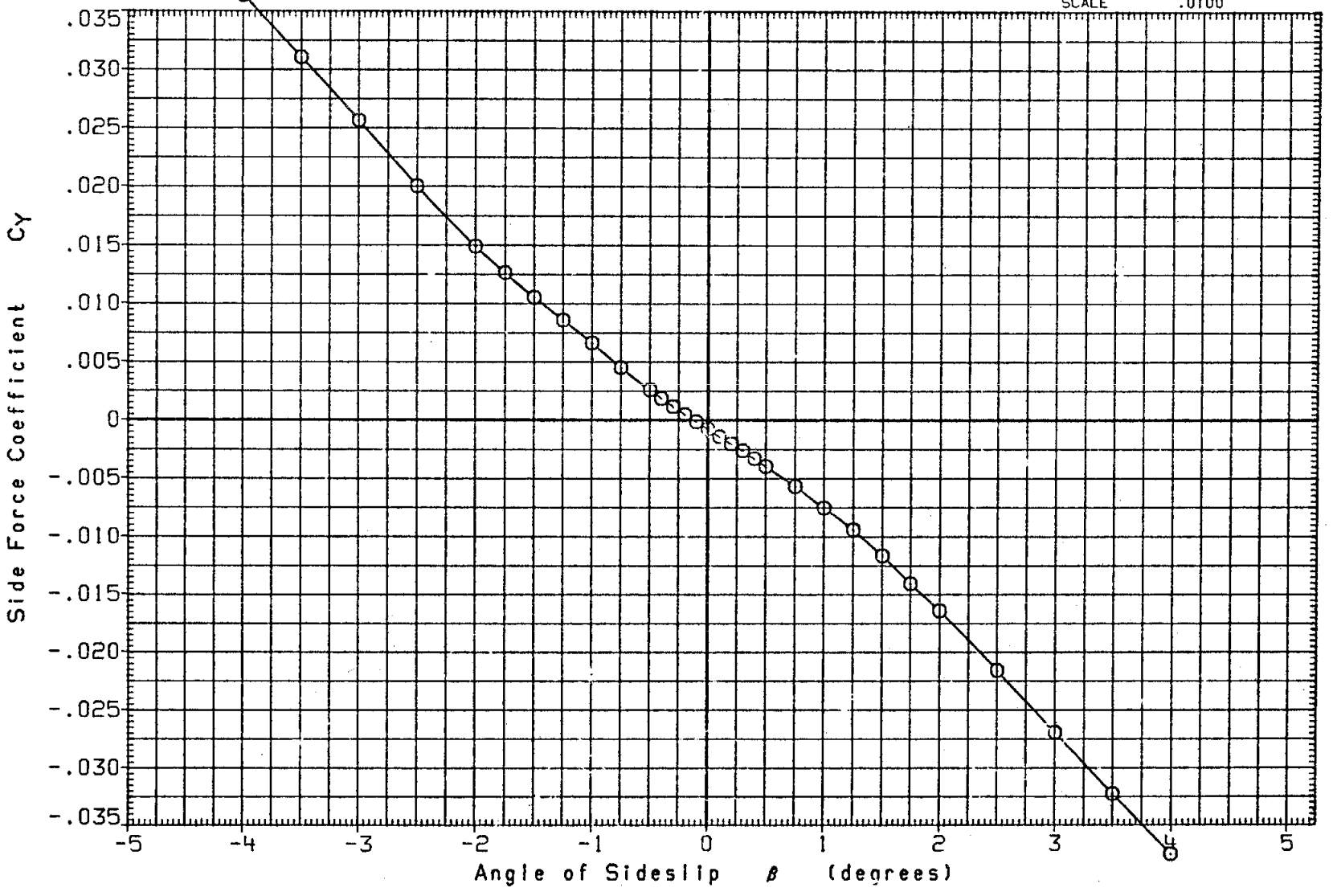


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(C) ALPHA = 20.0,

DATE 02 MAR 81

RT3075 CONFIGURATION OA259 [AEDC V41B-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.351	CONFIG	17.000	SPDBRK	87.200
		ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

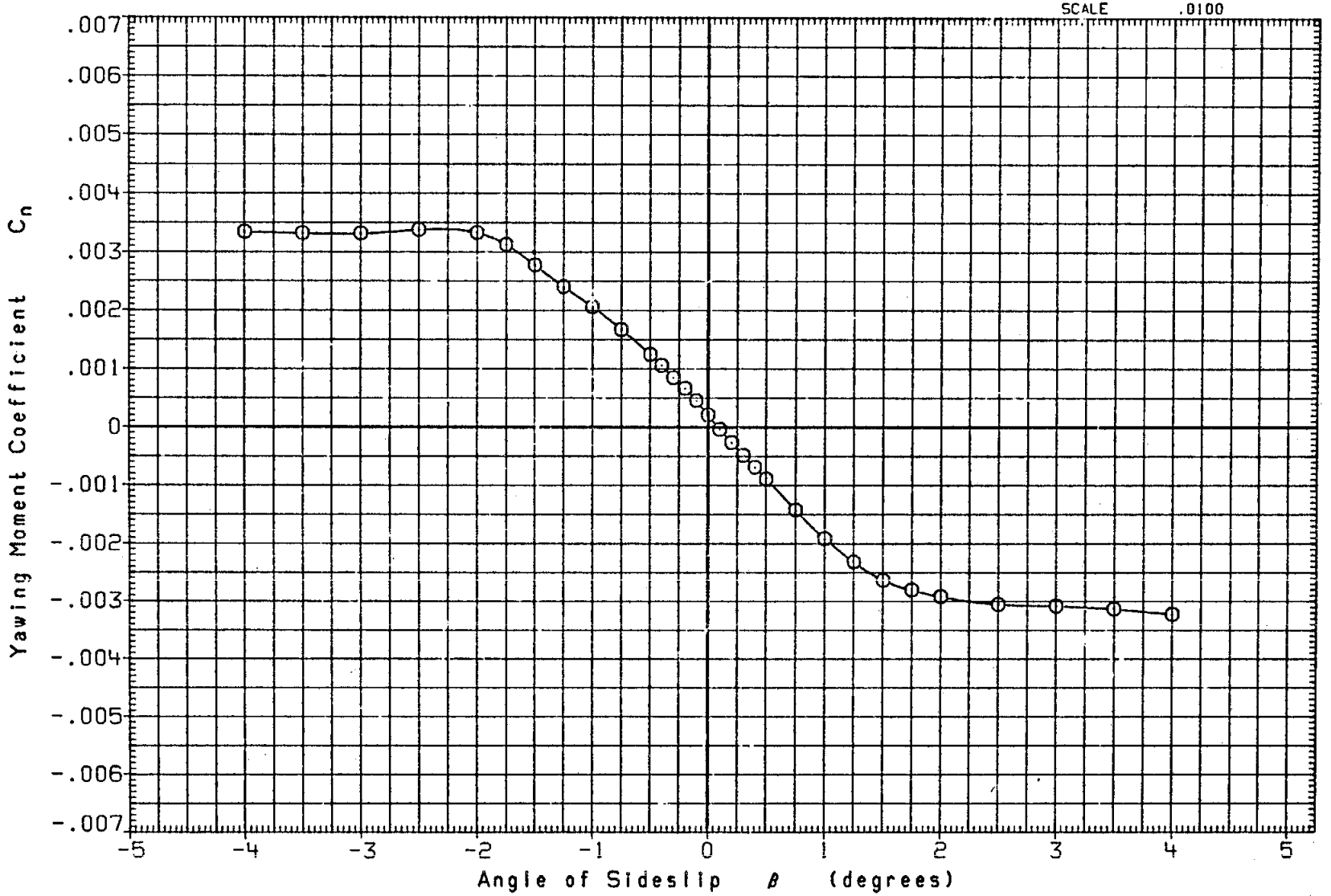


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(C) ALPHA = 20.0,

DATE 02 MAR 81

RT3075 CONFIGURATION OA259 (AEDC V41B-14) STING 3,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.351	CONFIG	17.000	SPDBRK	87.200
		ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

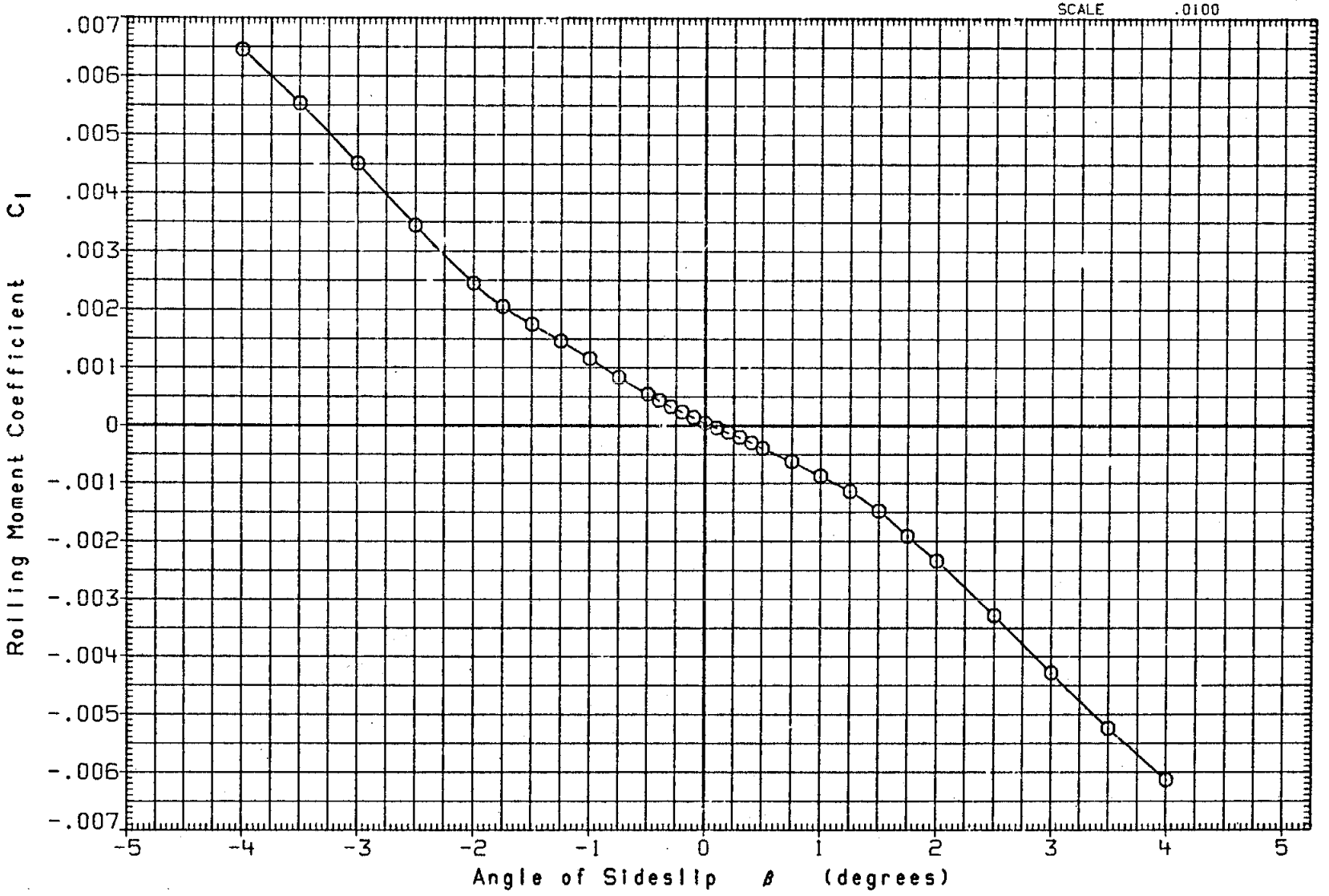


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(C) ALPHA = 20.0,

RT3075 CONFIGURATION OA259 [AEDC V41B-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.351	CONFIG	17.000	SPDBRK	87.200
		ALPHA	20.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

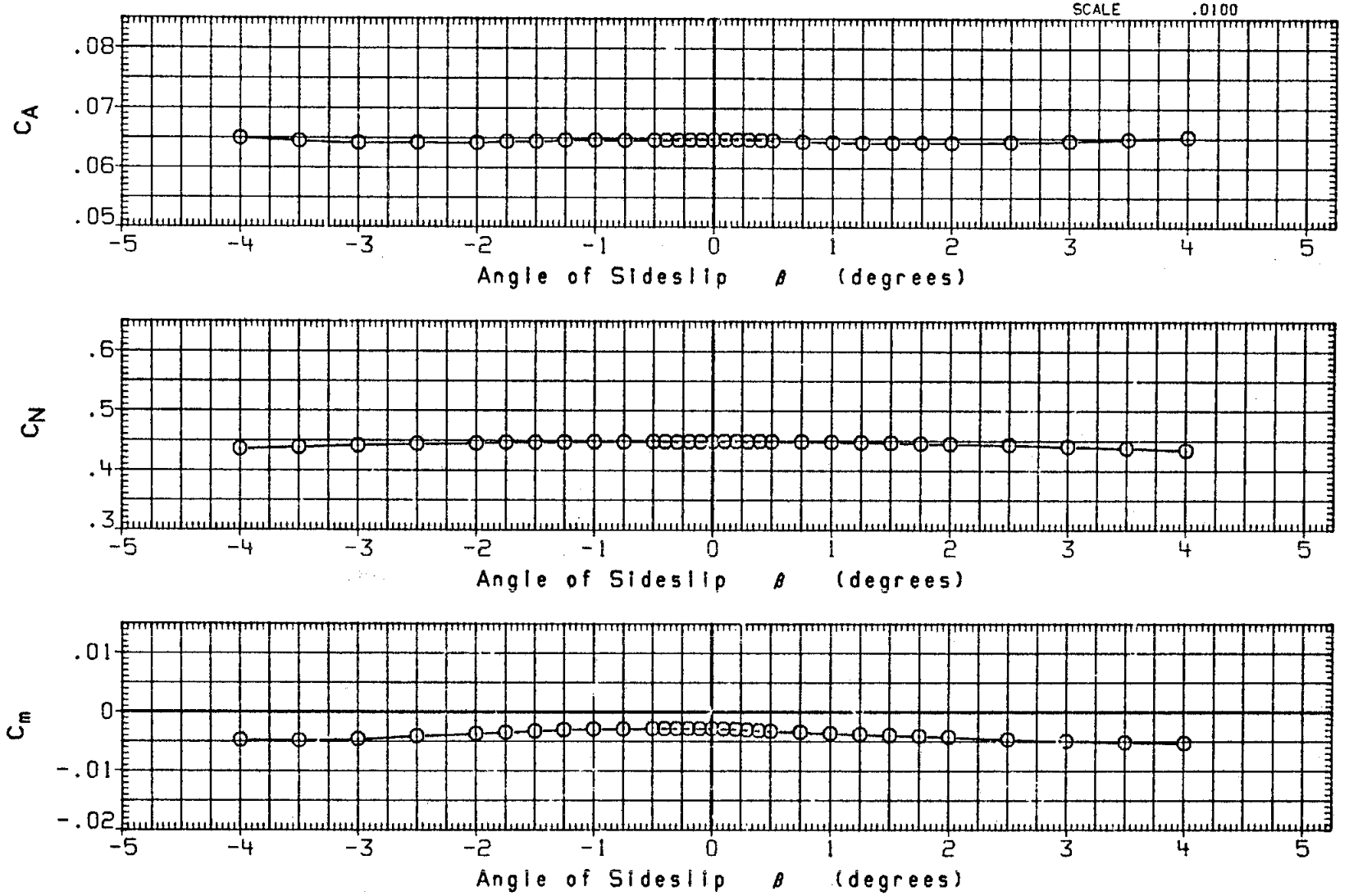


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(C) ALPHA = 20.0,

DATE 02 MAR 81

RT3076 CONFIGURATION 0A259 [AEDC V41B-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.396	CONFIG	17.000	SPDBRK	87.200
		ALPHA	22.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

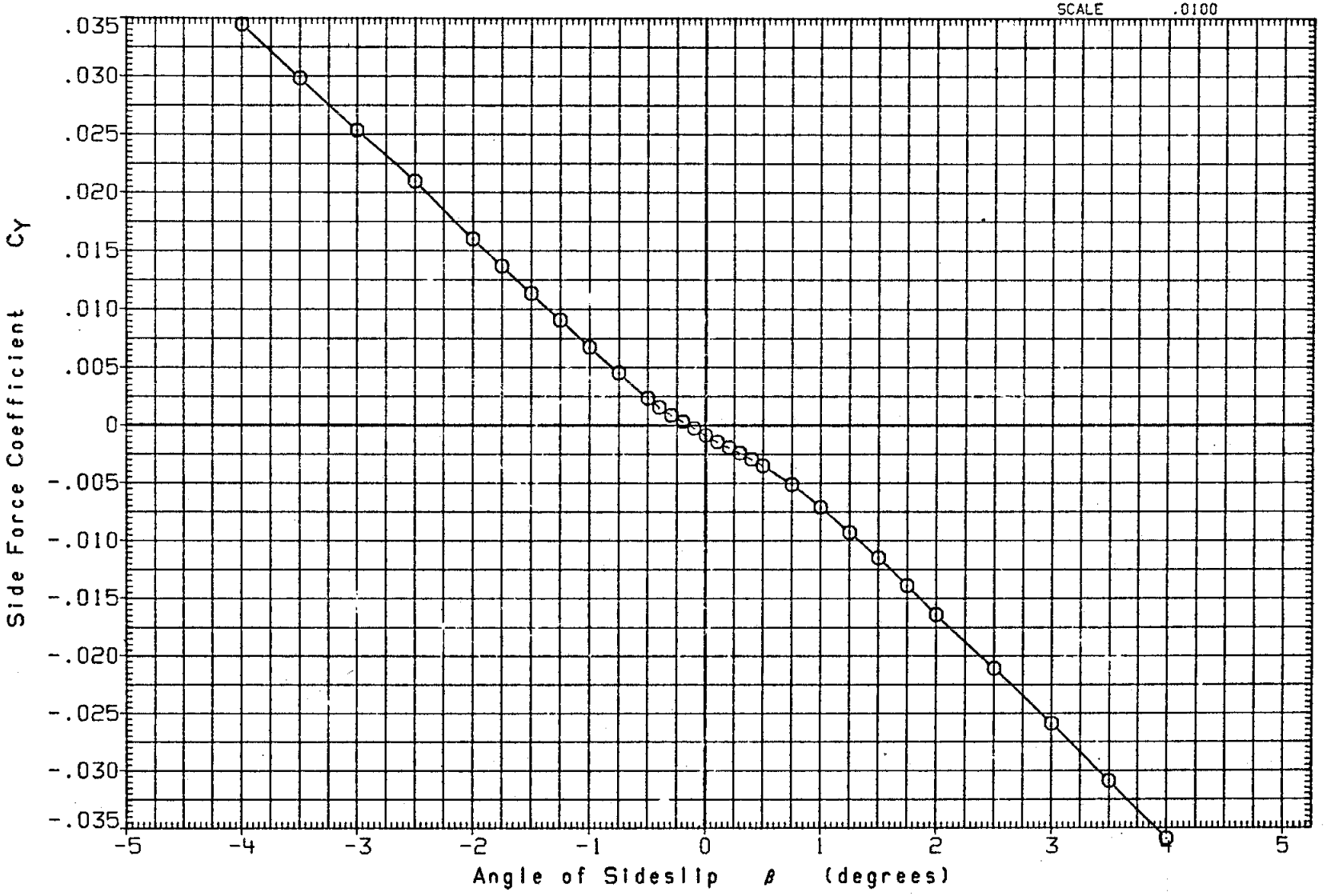


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(D) ALPHA = 22.5,

DATE 02 MAR 81

RT3076 CONFIGURATION 0A259 [AEDC V41B-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.396	CONFIG	17.000	SPDBRK	87.200
		ALPHA	22.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

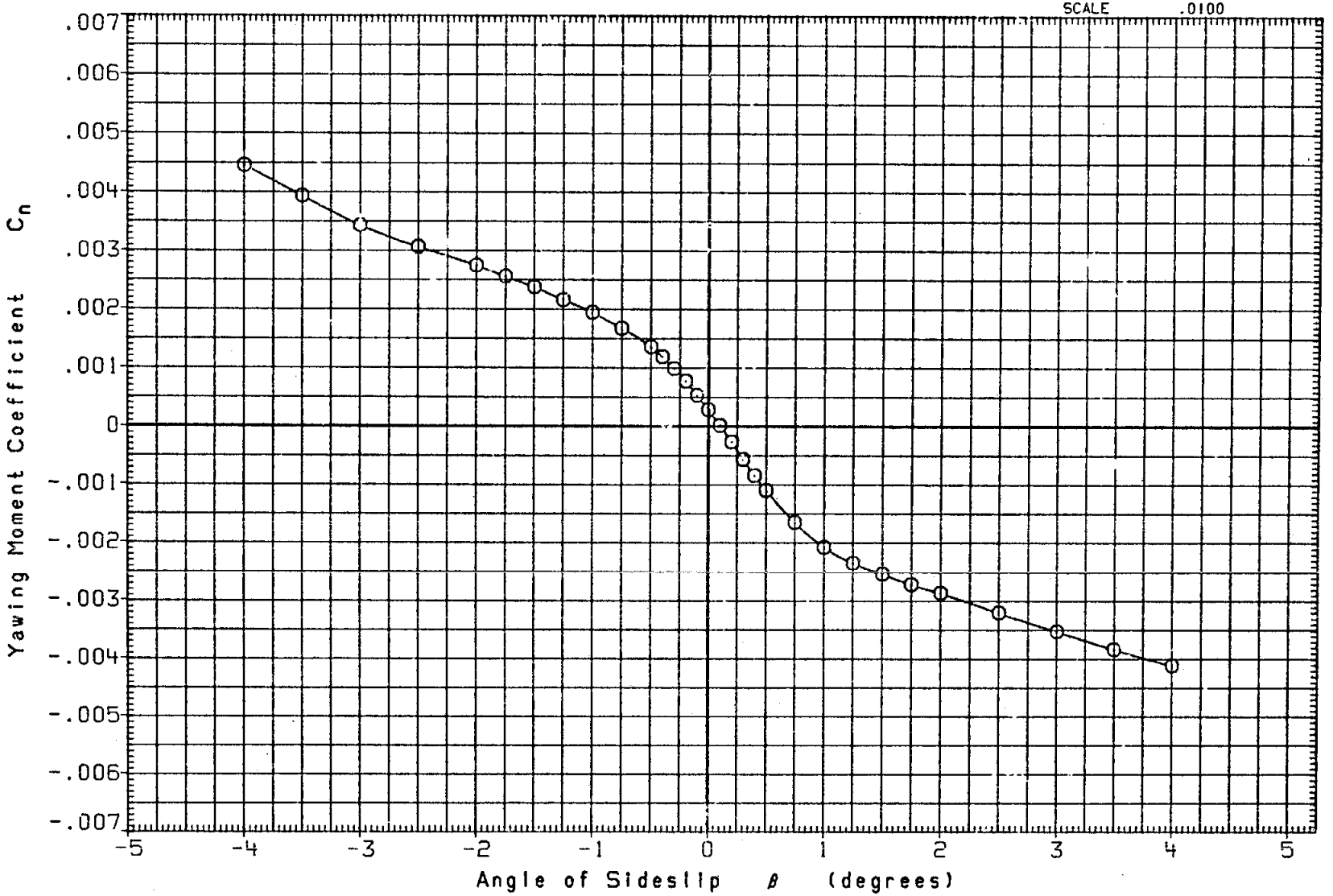


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(D) ALPHA = 22.5,

DATE 02 MAR 81

RT3076 CONFIGURATION 0A259 (AEDC V41B-14) STING B,(S.T. DR FLD)

SYMBOL	RN/L
O	4.396

PARAMETRIC VALUES

CONFIG	17.000	SPDBRK	87.200
ALPHA	22.500	RUDDER	.000
ELEVON	.000	S-MODE	1.000
AILRON	.000	S-DIR	2.000
MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

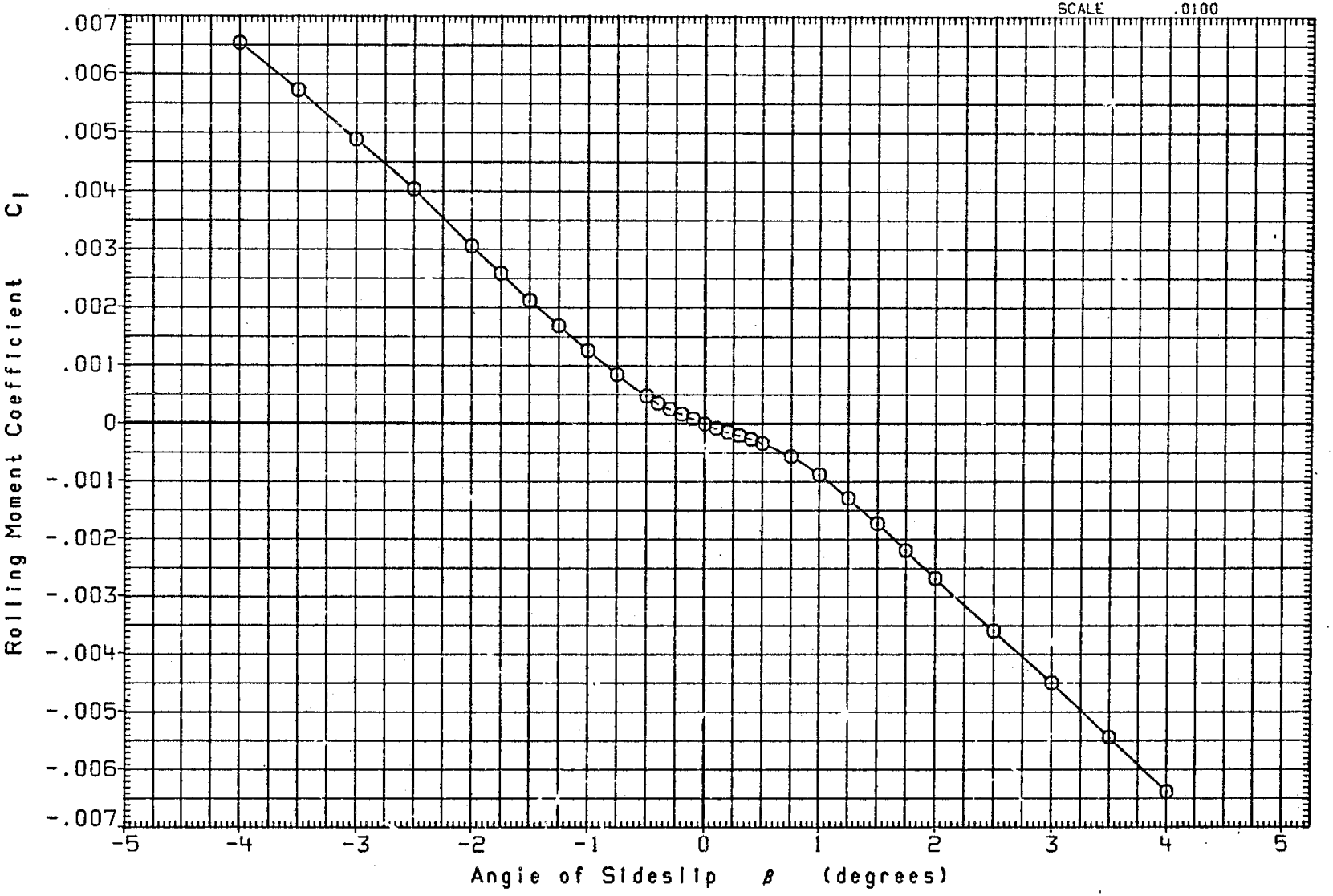


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(D) ALPHA = 22.5,

DATE 02 MAR 81

RT3076 CONFIGURATION 0A259 [AEDC V41B-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.396	CONFIG	17.000	SPDBRK	87.200
		ALPHA	22.500	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

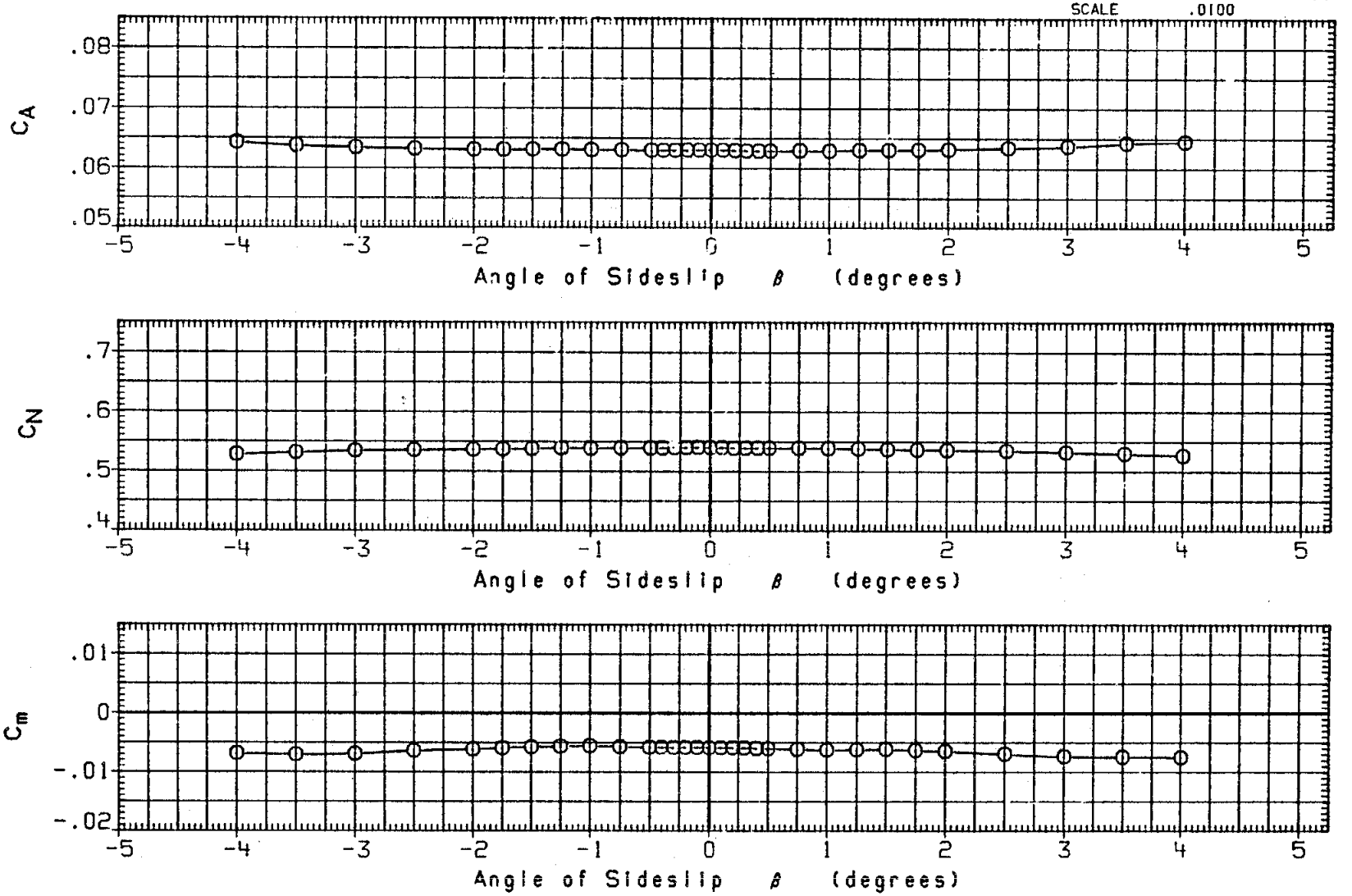


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(D) ALPHA = 22.5,

DATE 02 MAR 81

RT3077 CONFIGURATION 0A259 [AEDC V413-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.406	CONFIG	17.000	SPDBRK	87.200
		ALPHA	25.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

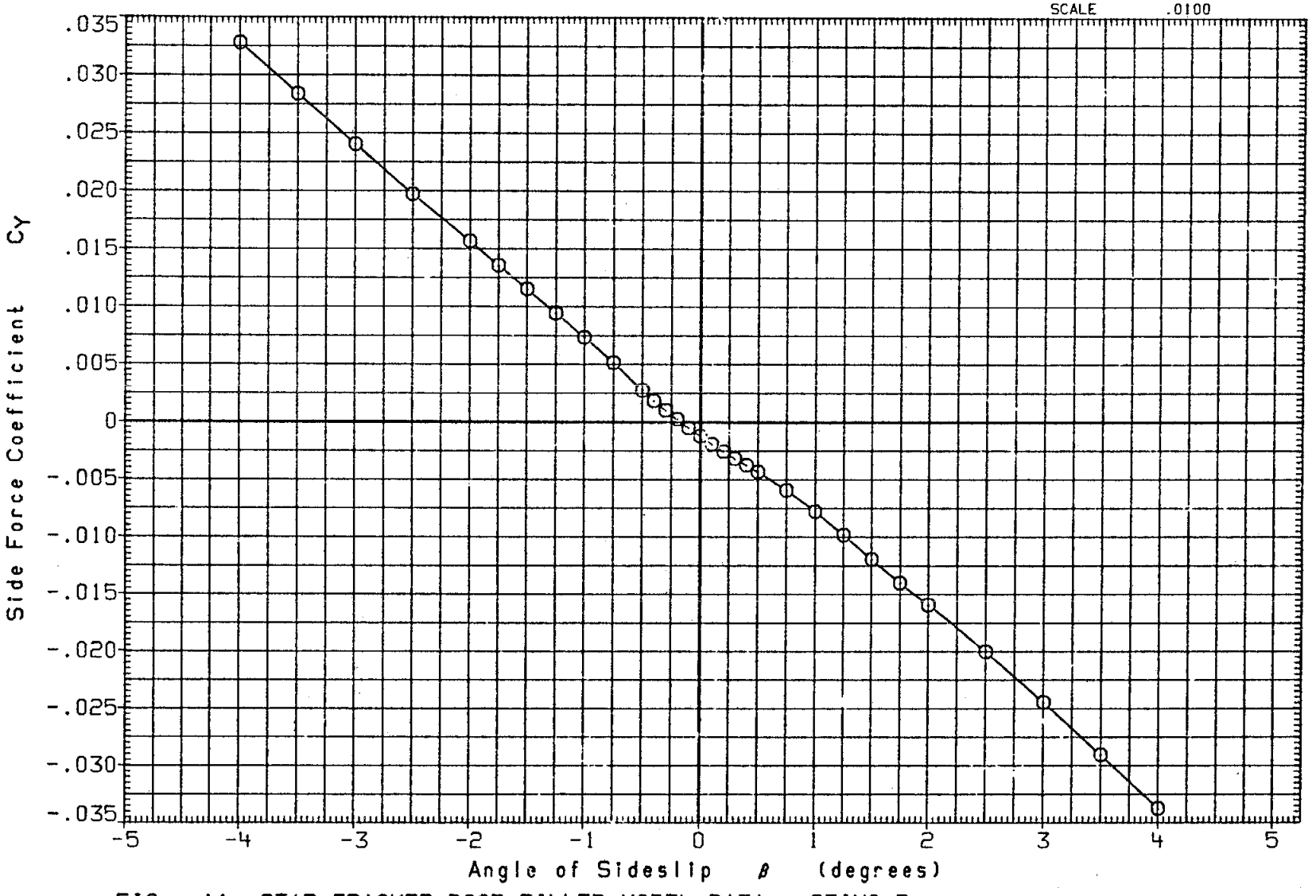


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(E) ALPHA = 25.0,

DATE 02 MAR 81

RT3077 CONFIGURATION OA259 [AEDC V41B-14] STING B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.406	CONFIG	17.000	SPDBRK	87.200
		.ALPHA	25.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

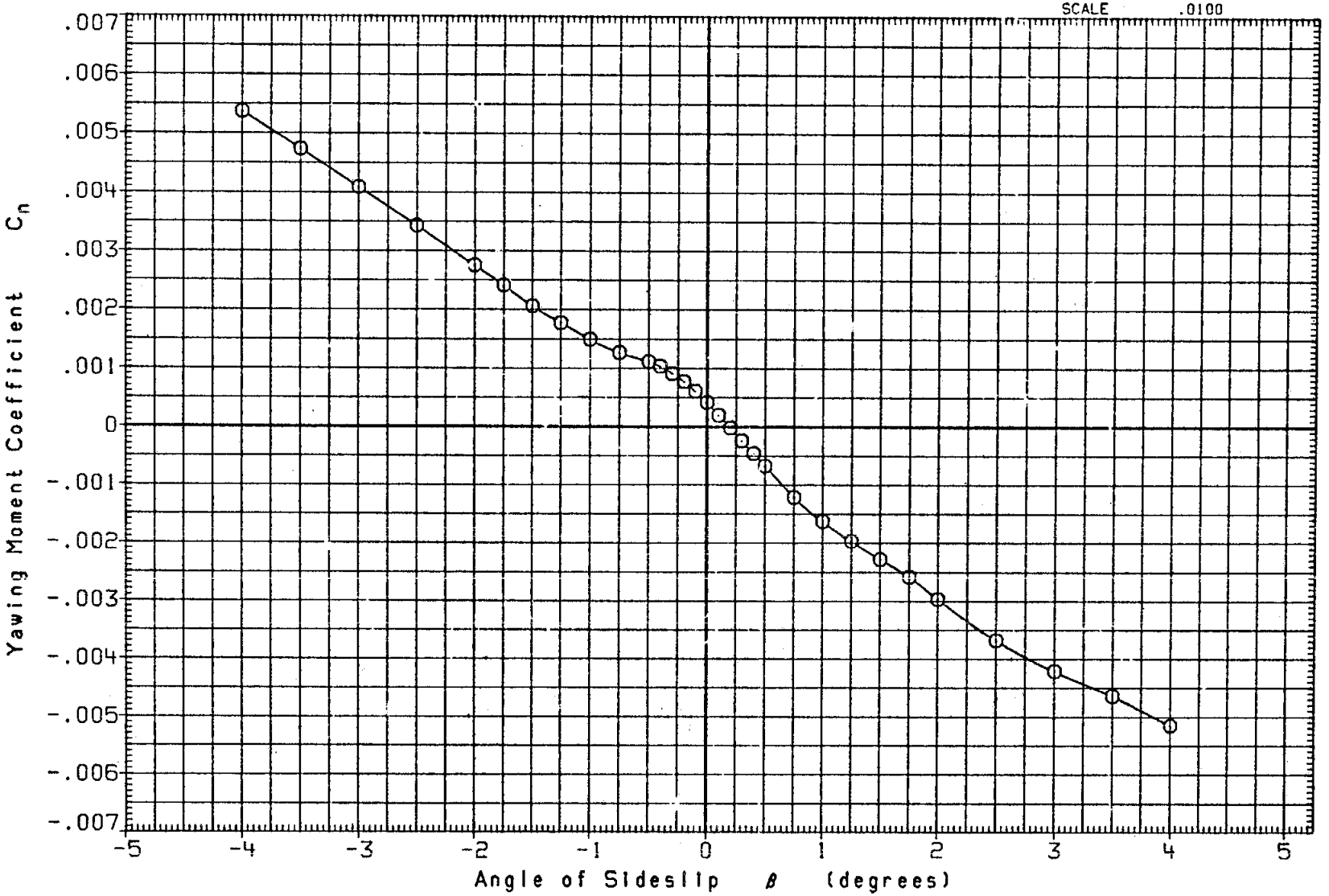


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(E) ALPHA = 25.0,

DATE 02 MAR 81

RT3077 CONFIGURATION 0A259 [AEDC V41B-14] STING B.(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.406	CONFIG	17.000	SPDBRK	87.200
		ALPHA	25.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

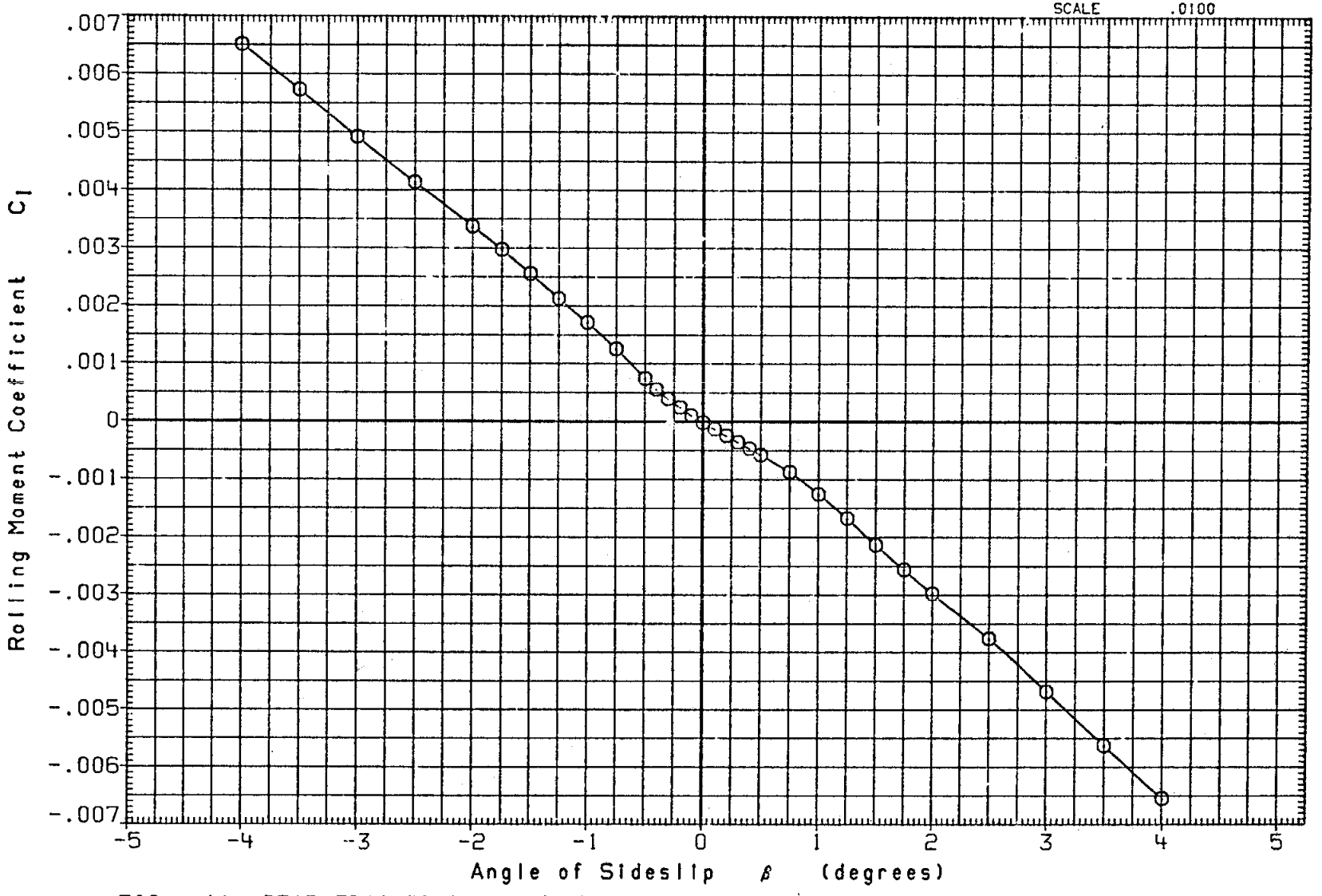


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(E) ALPHA = 25.0,

DATE 02 MAR 81

RT3077 CONFIGURATION 0A259 (AEDC V410-14) ST.NG B,(S.T. DR FLD)

SYMBOL	RN/L	PARAMETRIC VALUES			
O	4.406	CONFIG	17.000	SPDBRK	87.200
		ALPHA	25.000	RUDDER	.000
		ELEVON	.000	S-MODE	1.000
		AILRON	.000	S-DIR	2.000
		MACH	6.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

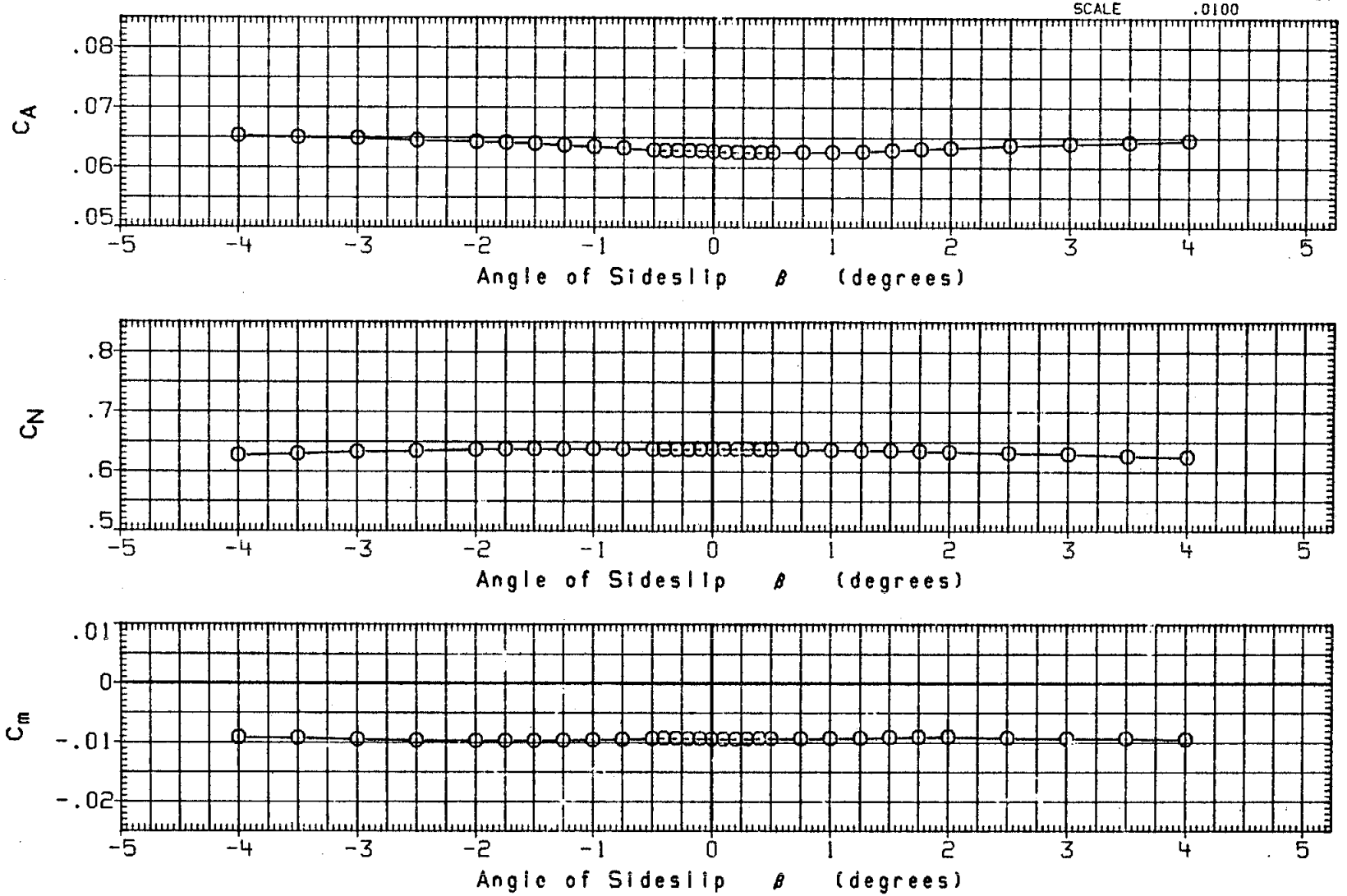


FIG. 11 STAR TRACKER DOOR FILLED MODEL DATA, STING B
(E) ALPHA = 25.0,

DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3001	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	.000	INCRSE	CONTNU	2.000	6.000
RT3101	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

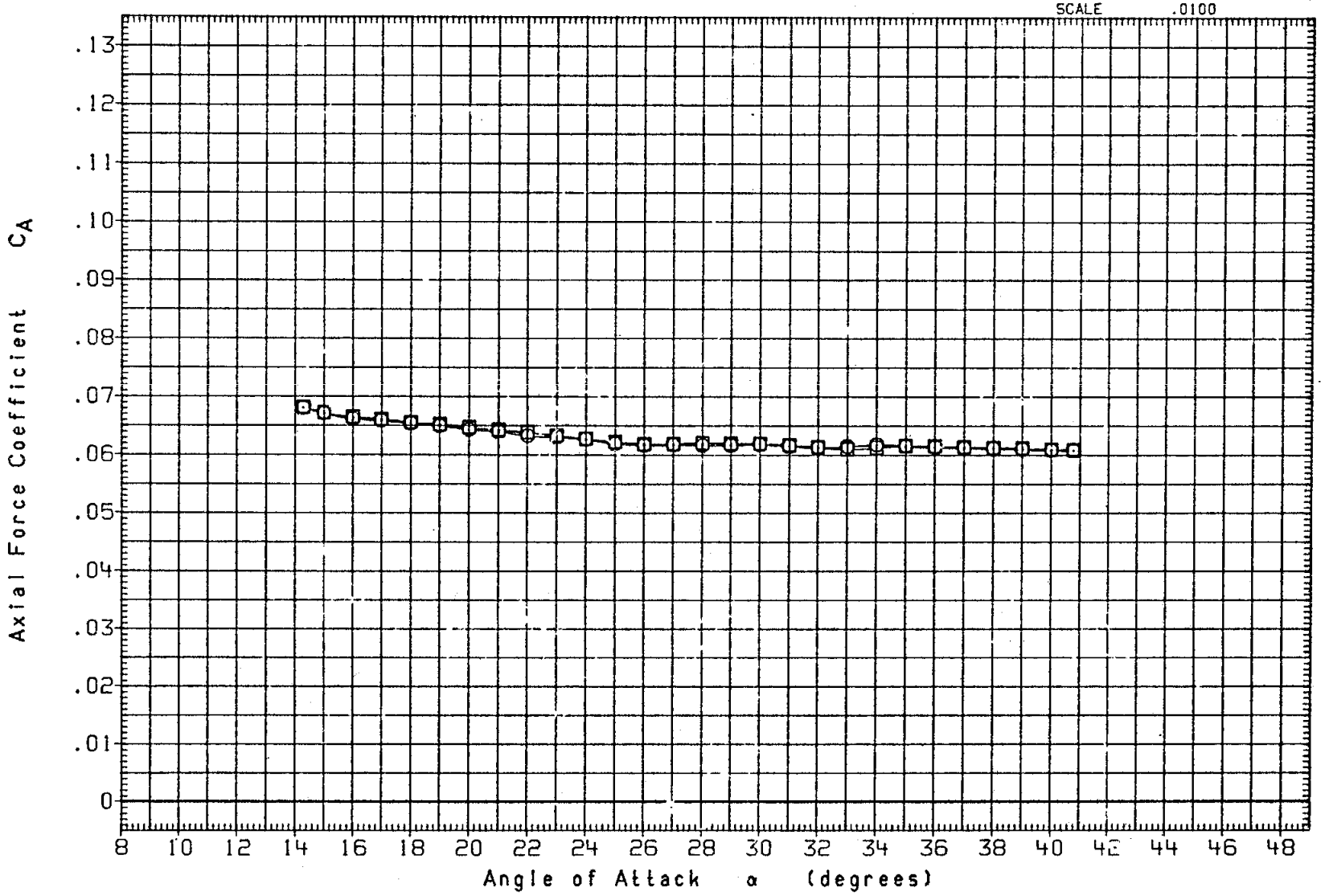


FIG. 12 DATA REPEATABILITY IN PITCH, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 1.99 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3001	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	.000	INCRSE	CONTNU	2.000	6.000
RT3101	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

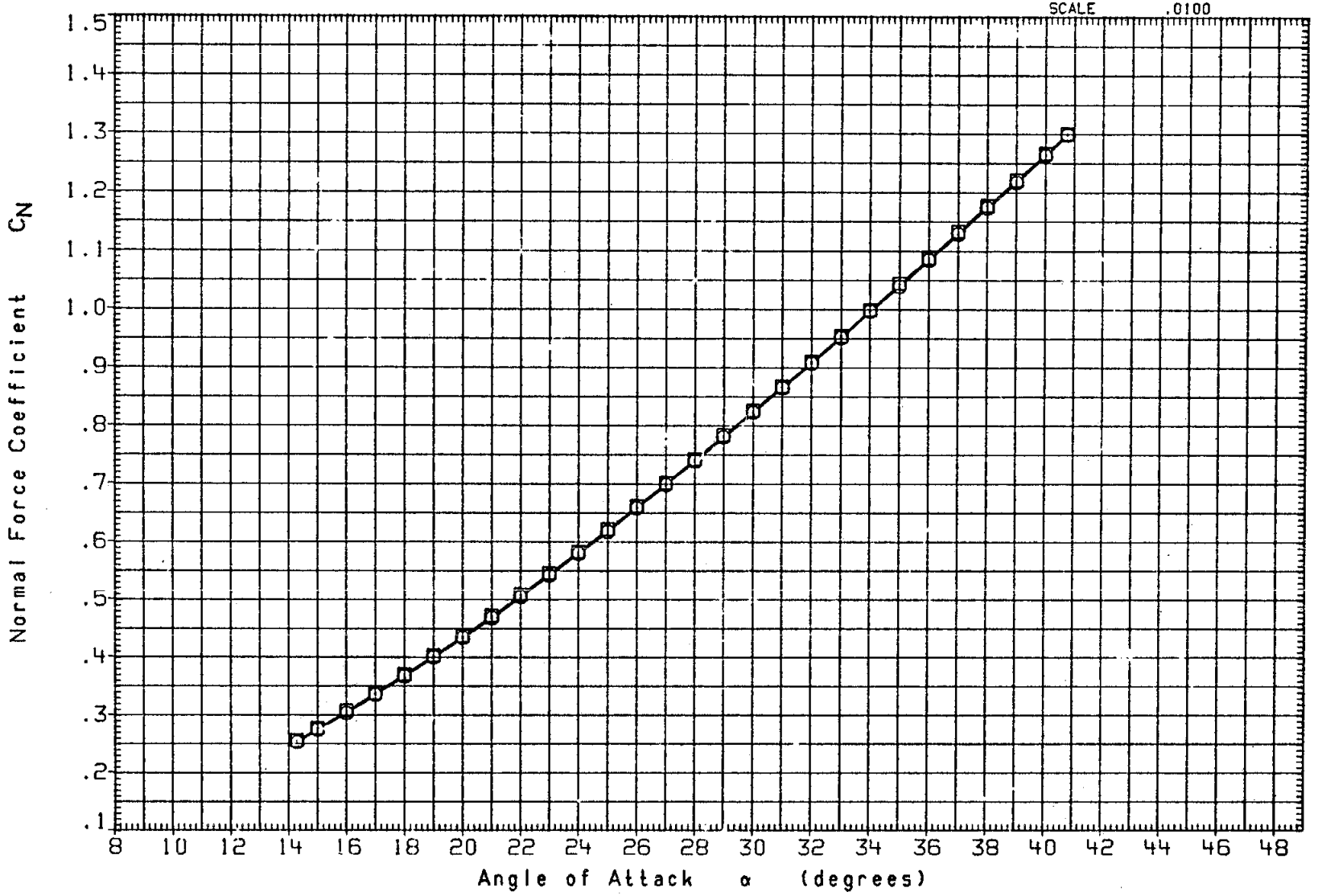


FIG. 12 DATA REPEATABILITY IN PITCH, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 1.99 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3001	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	.000	INCRSE	CONTNU	2.000	6.000
RT3101	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

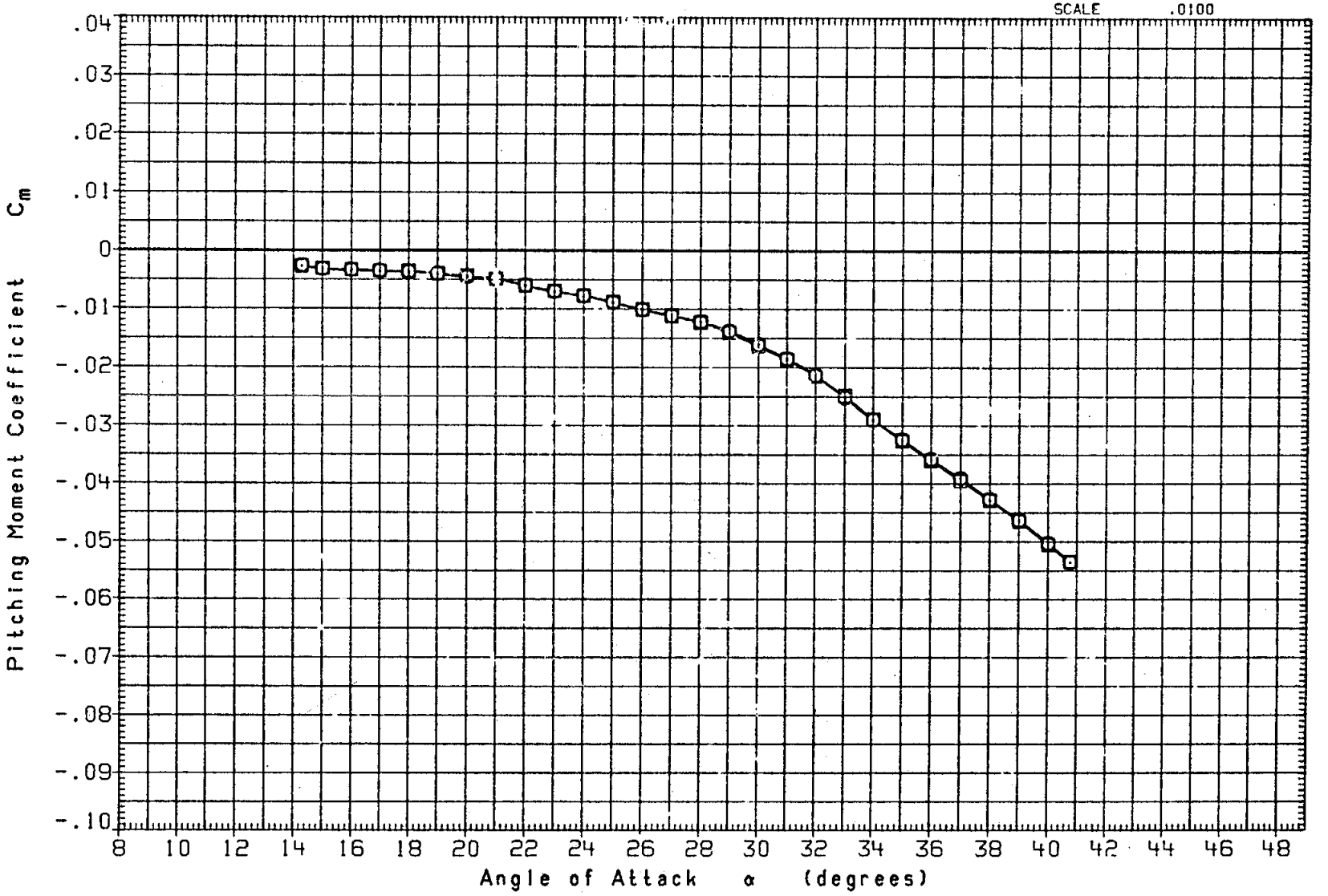


FIG. 12 DATA REPEATABILITY IN PITCH, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 1.99

DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3001	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	.000	INCRSE	CONTNU	2.000	6.000
RT3101	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

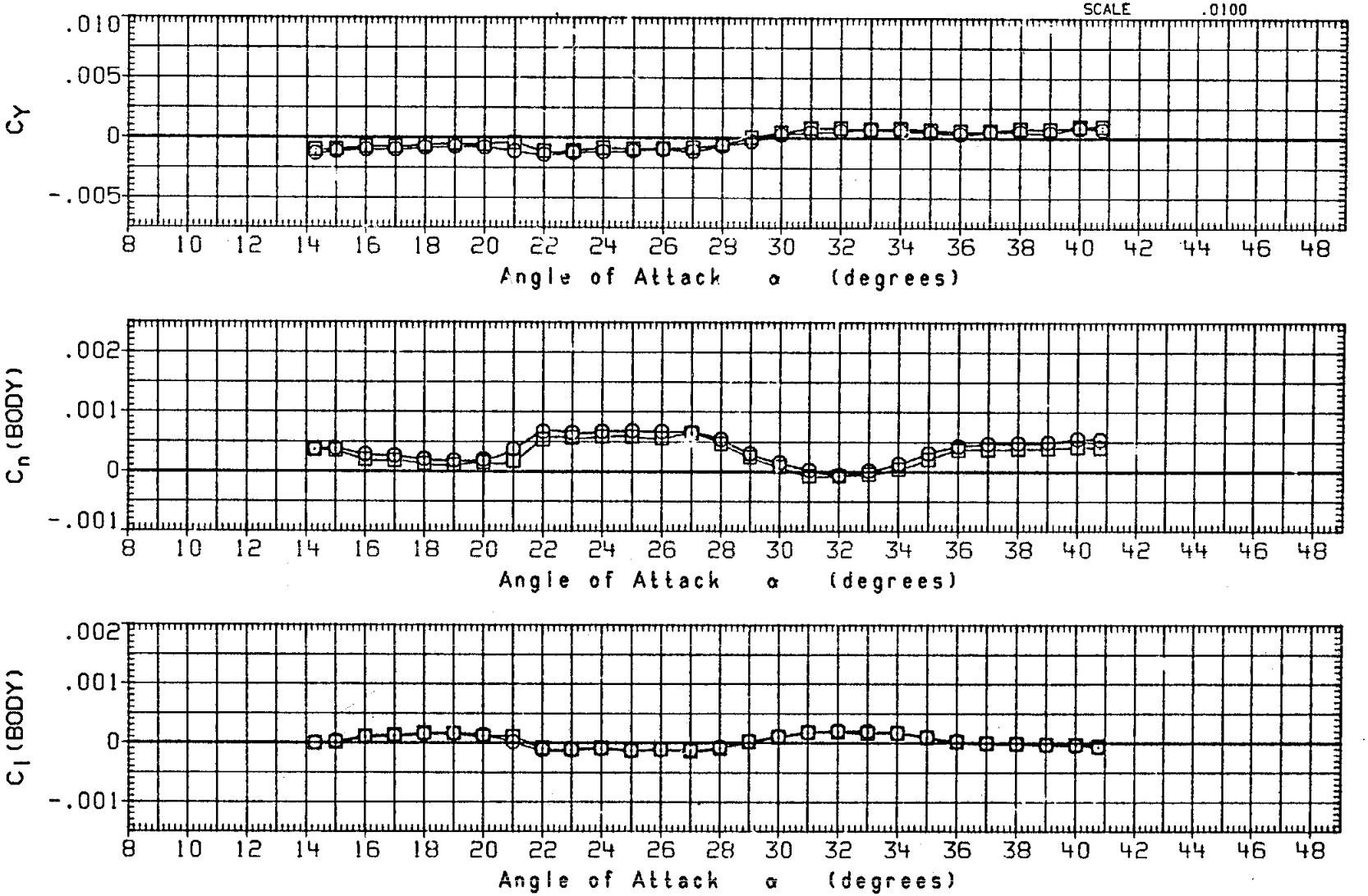


FIG. 12 DATA REPEATABILITY IN PITCH, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 1.99 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3001	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	.000	INCRSE	CONTNU	2.000	6.000
RT3101	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

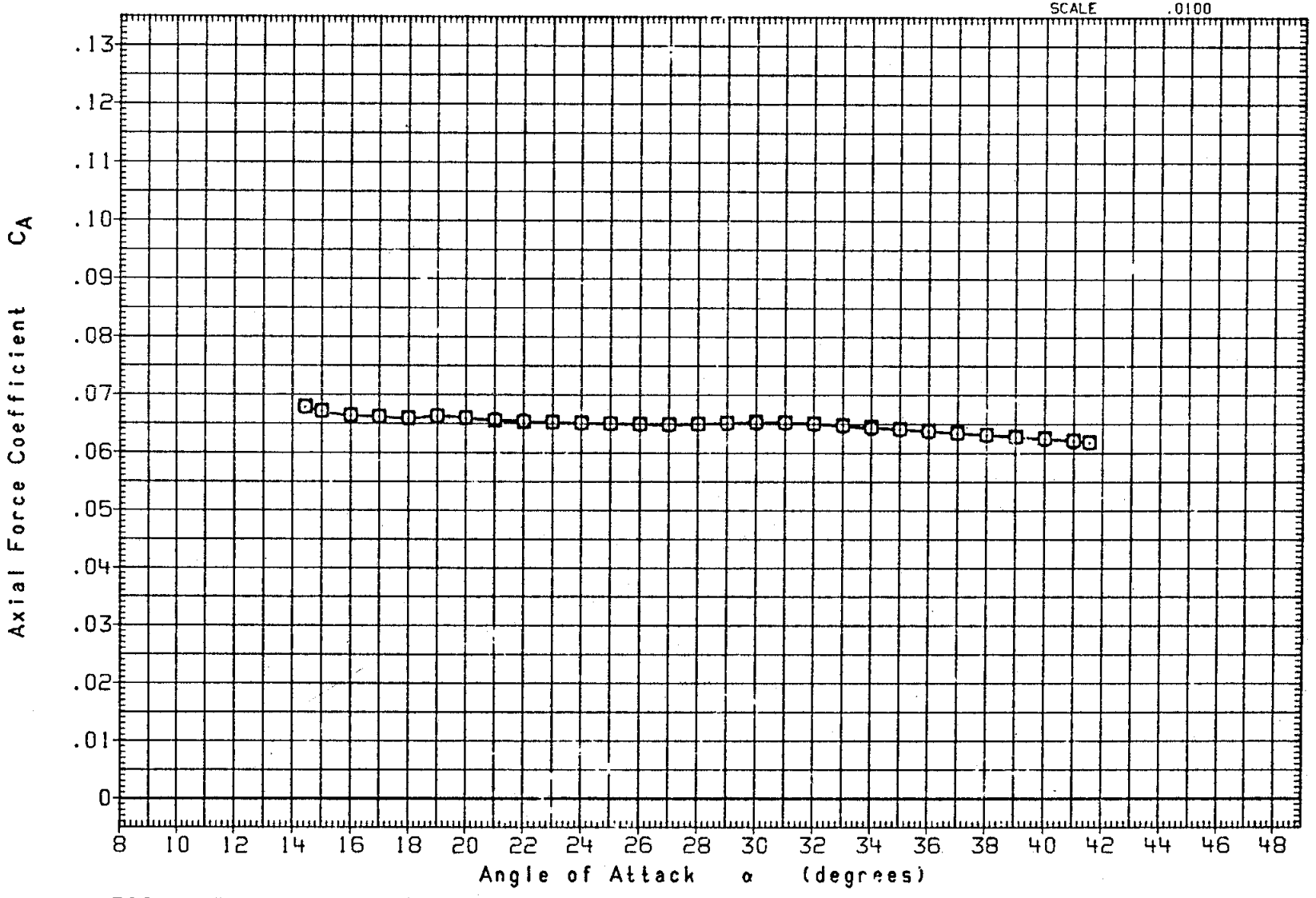


FIG. 12 DATA REPEATABILITY IN PITCH, STING A
(A) BASELINE CONFIGURATION

(B)RN/L = 4.37 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3001	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	.000	INCRSE	CONTNU	2.000	6.000
RT3101	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

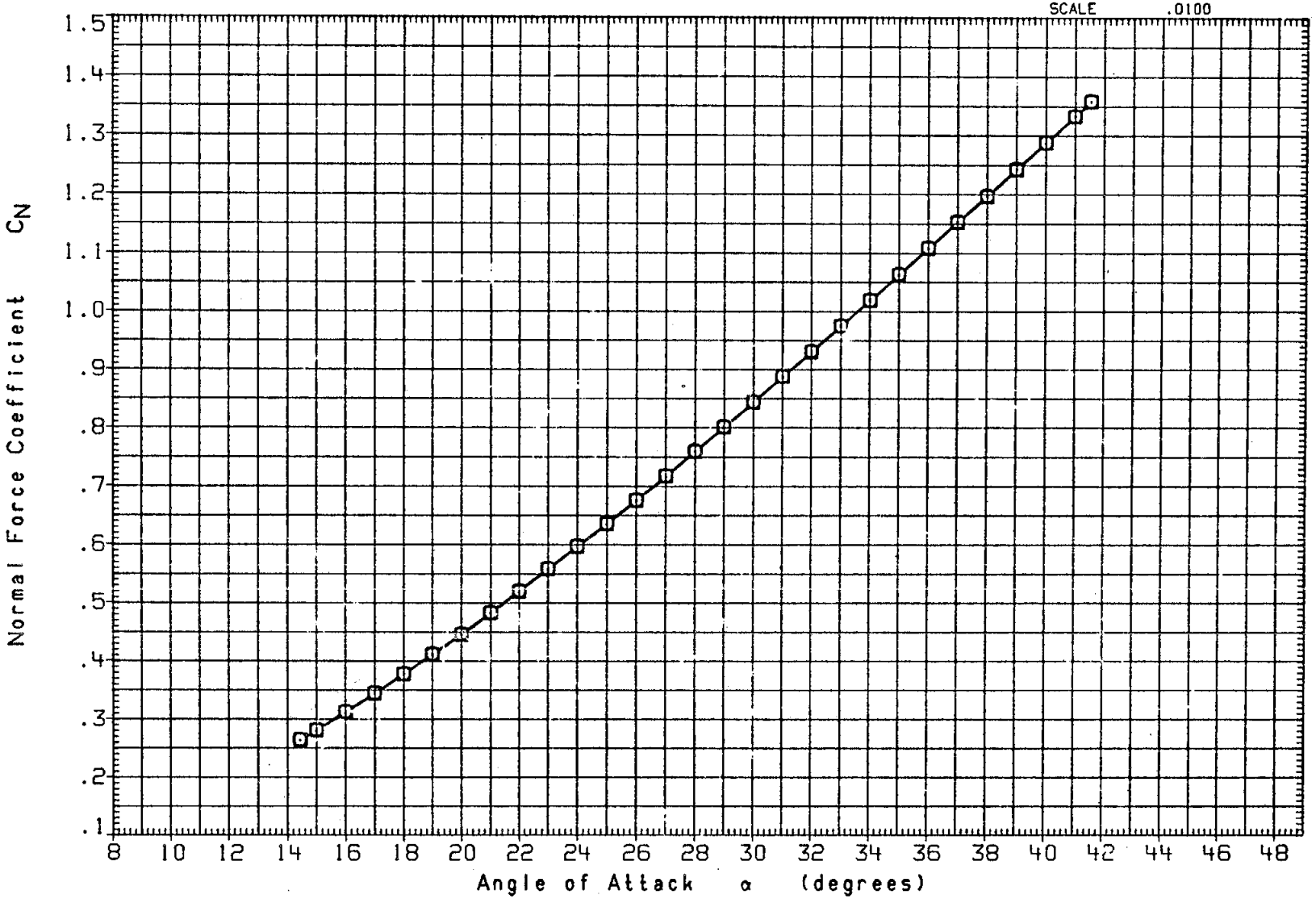


FIG. 12 DATA REPEATABILITY IN PITCH, STING A
(A) BASELINE CONFIGURATION

(B)RN/L = 4.37 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3001	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	.000	INCRSE	CONTNU	2.000	6.000
RT3101	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

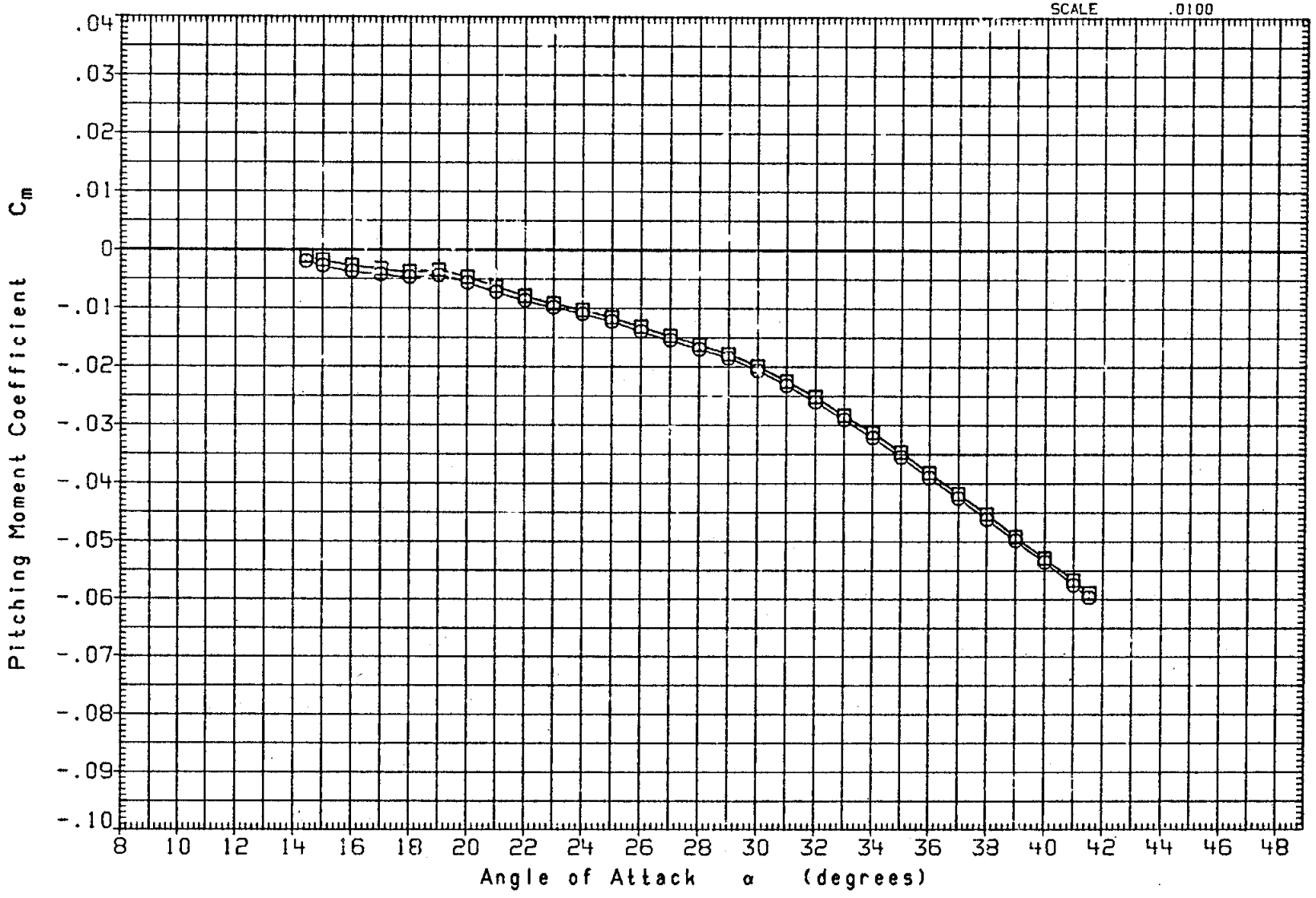


FIG. 12 DATA REPEATABILITY IN PITCH, STING A
(A) BASELINE CONFIGURATION

(B)RN/L = 4.37 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3001	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	.000	INCRSE	CONTNU	2.000	6.000
RT3101	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

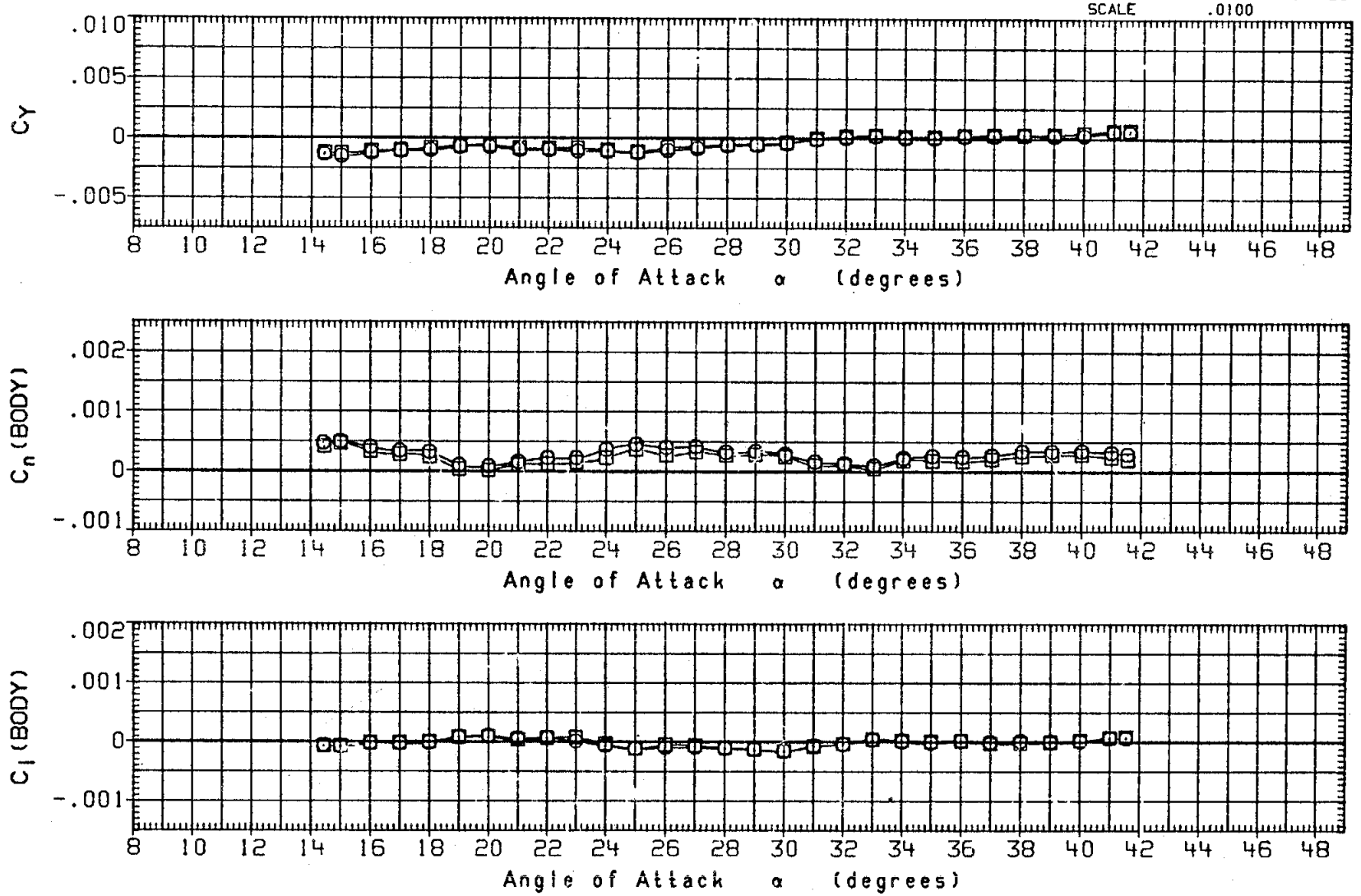


FIG. 12 DATA REPEATABILITY IN PITCH, STING A
(A) BASELINE CONFIGURATION

(B) RN/L = 4.37 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3002	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	.000	DECRSE	CONTNU	2.000	6.000
RT3102	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	3690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ,ZO
SCALE	.0100	

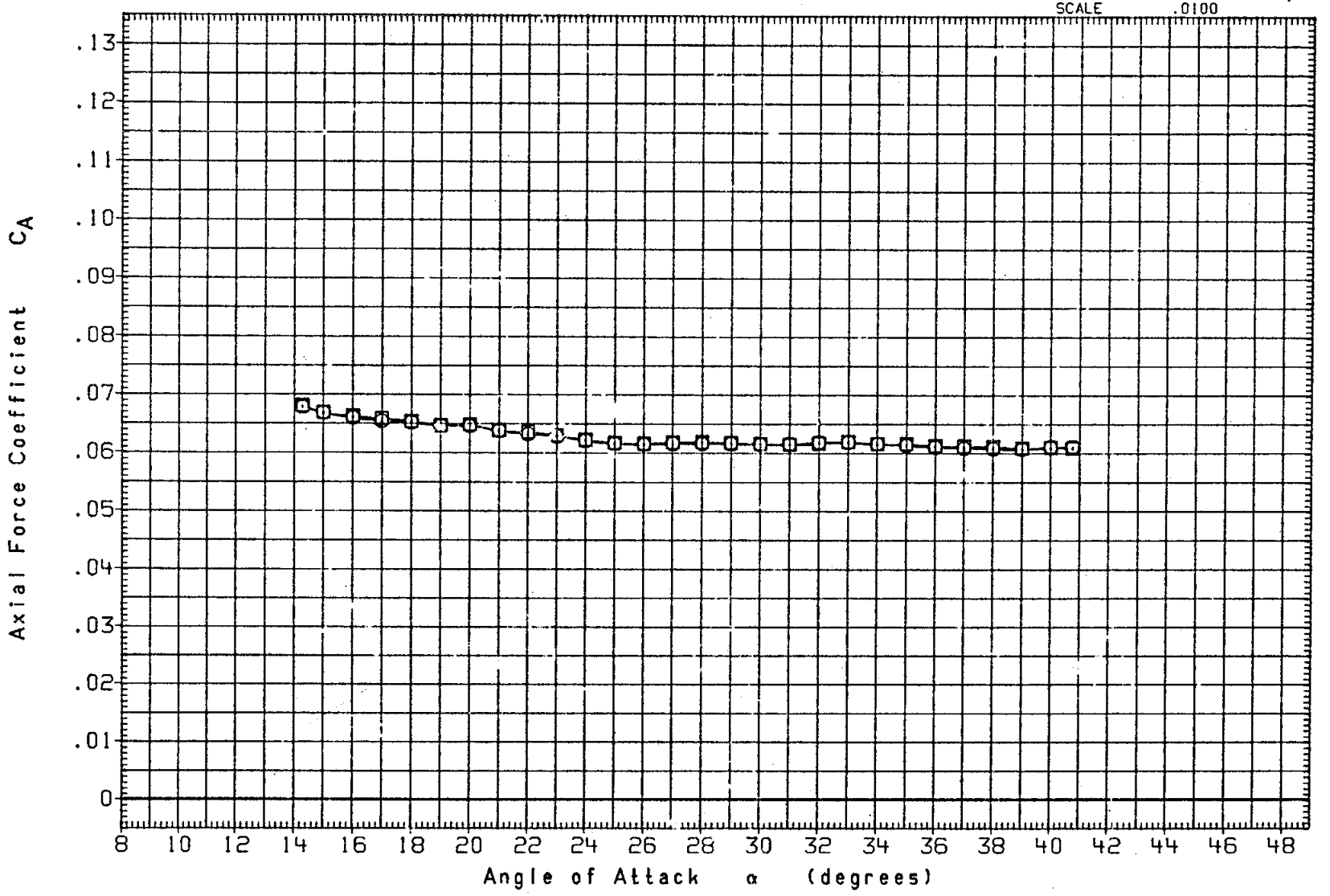


FIG. 12 DATA REPEATABILITY IN PITCH, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 2.01

DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3002	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	.000	DECRSE	CONTNU	2.000	6.000
RT3102	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	3690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

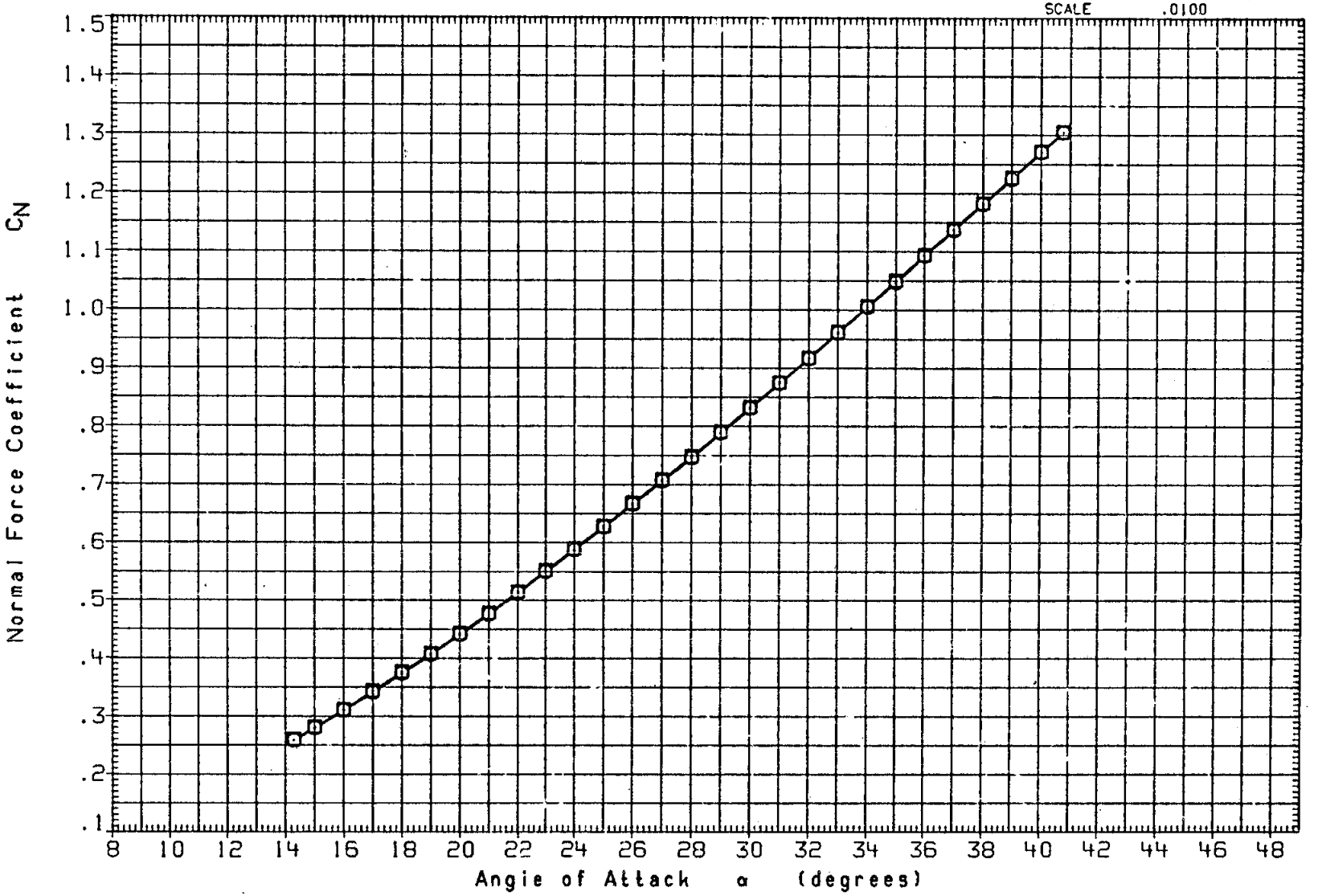


FIG. 12 DATA REPEATABILITY IN PITCH, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 2.01

DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3002	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	.000	DECRSE	CONTNU	2.000	6.000
RT3102	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

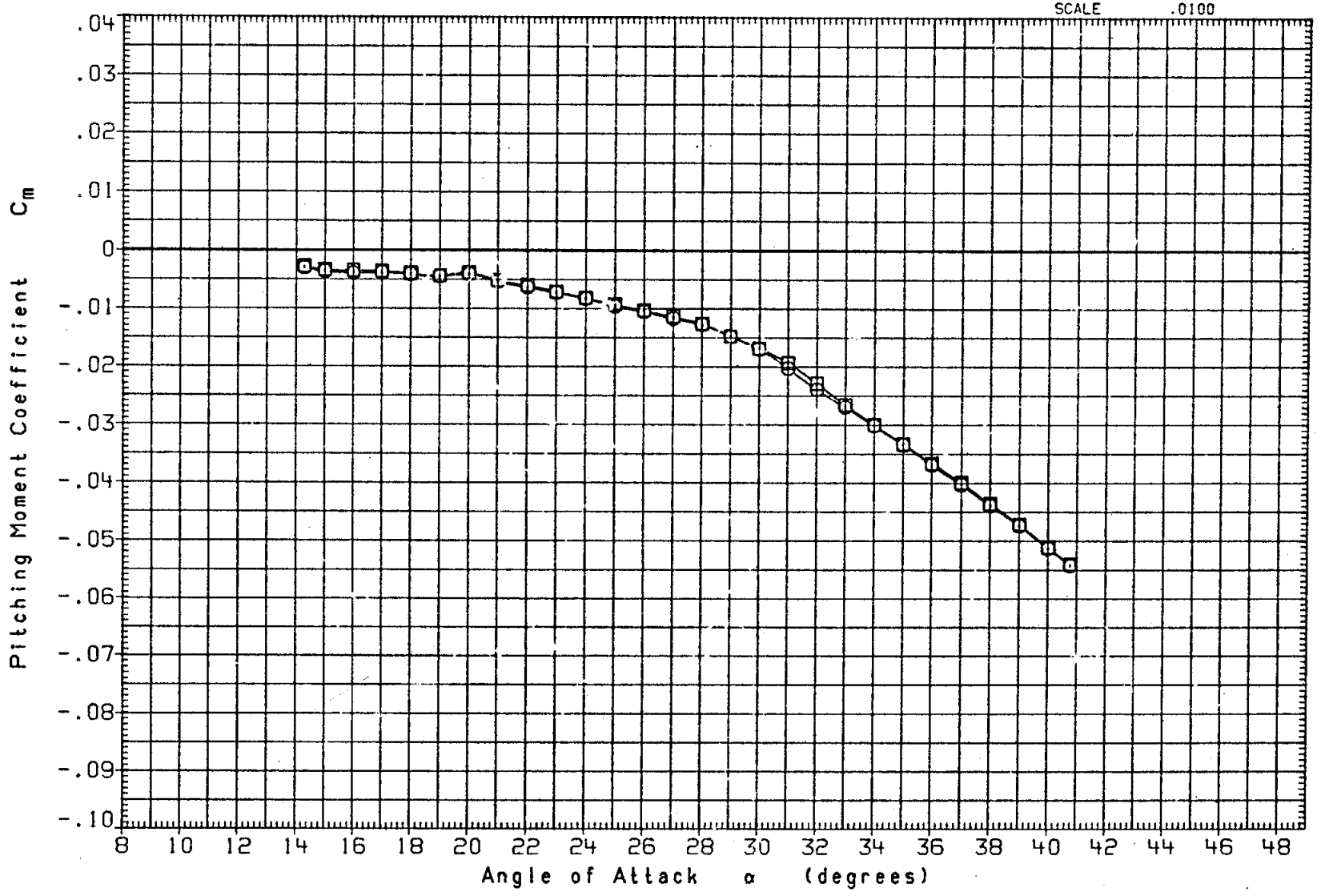


FIG. 12 DATA REPEATABILITY IN PITCH, STING A .
(A) BASELINE CONFIGURATION

(A)RN/L = 2.01

DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3002	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	.000	DECRSE	CONTNU	2.000	6.000
RT3102	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

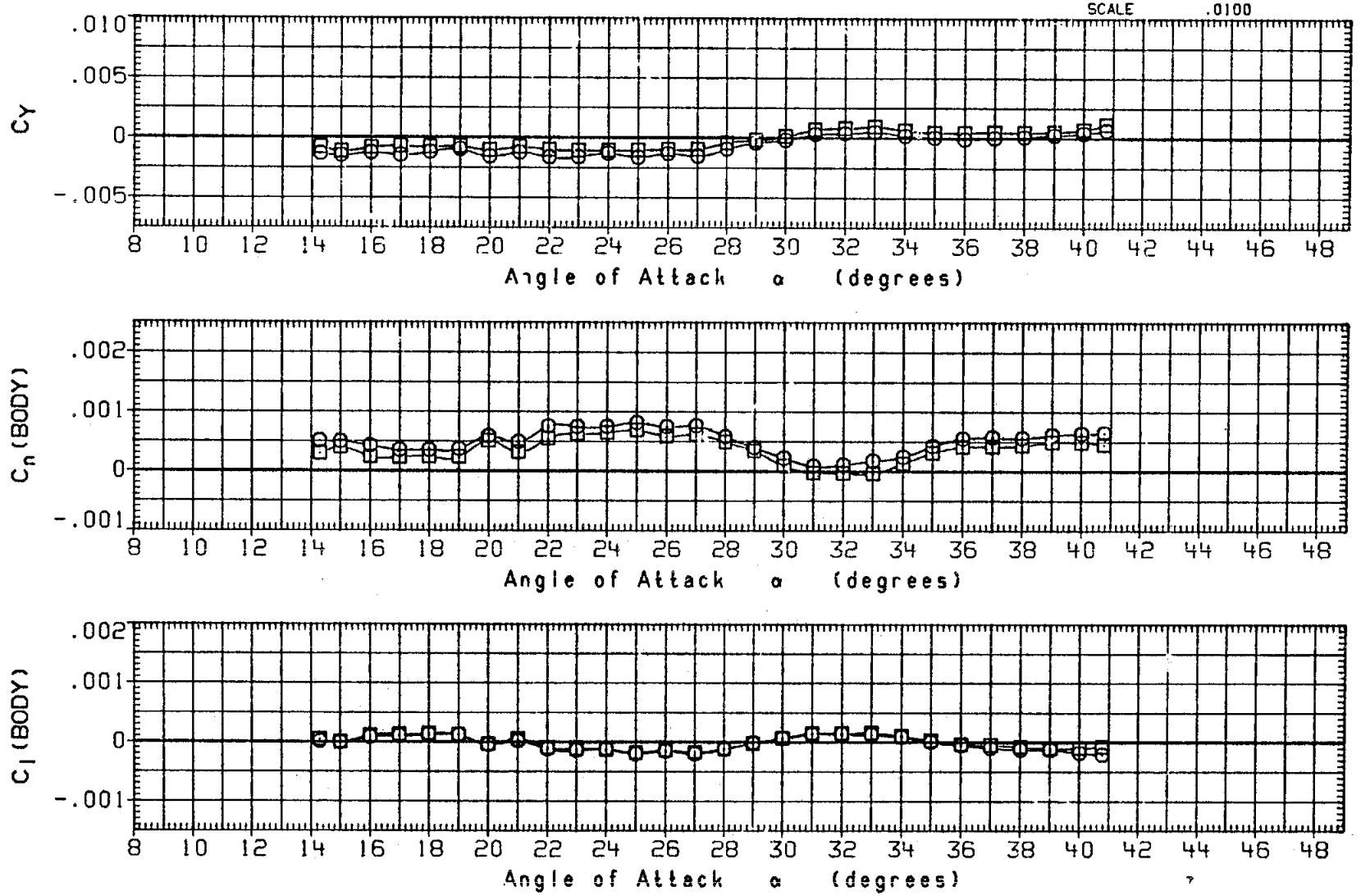


FIG. 12 DATA REPEATABILITY IN PITCH, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 2.01 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3002	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	.000	DECRSE	CONTNU	2.000	6.000
RT3102	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

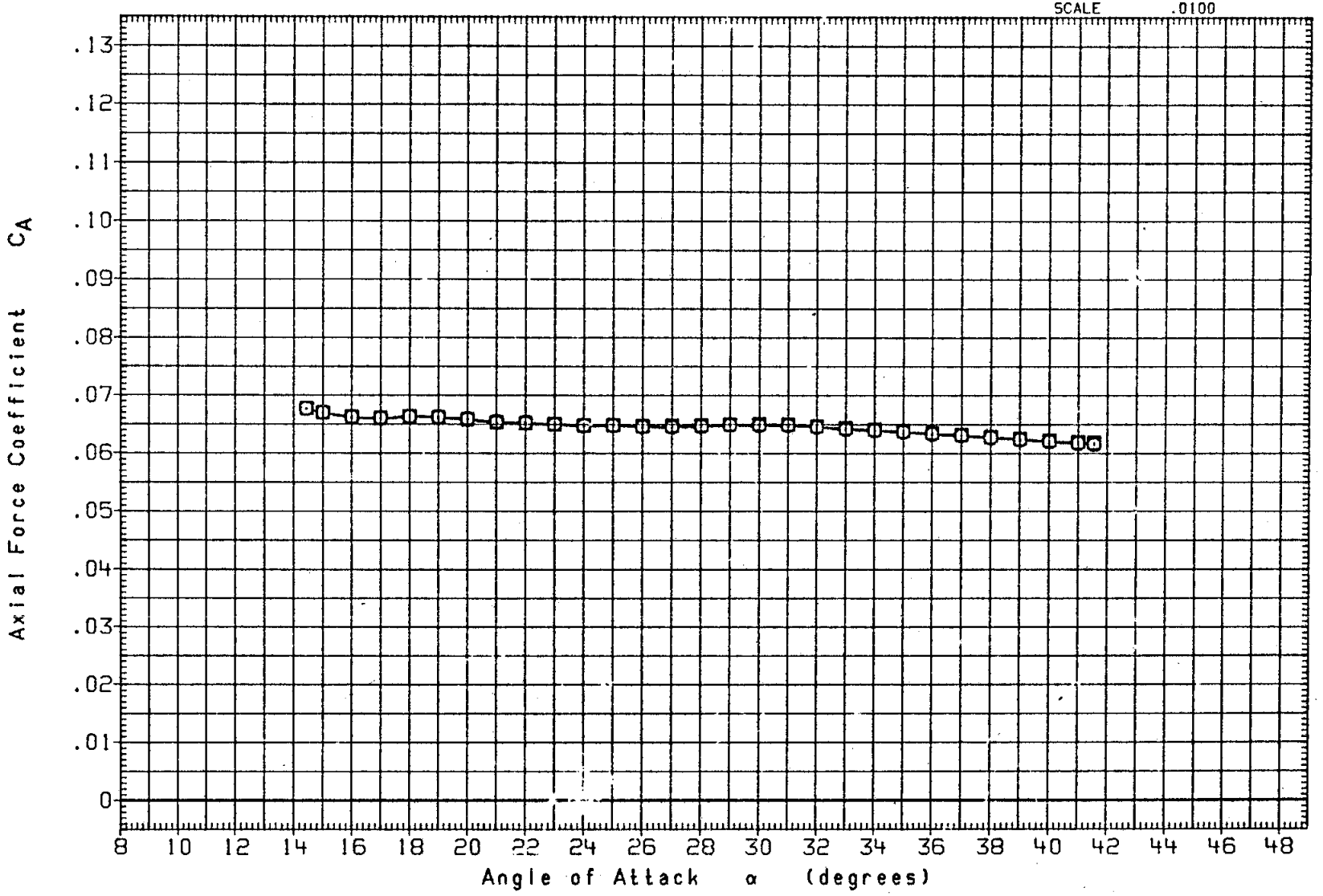


FIG. 12 DATA REPEATABILITY IN PITCH, STING A
(A) BASELINE CONFIGURATION

(B)RN/L = 4.38 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3002	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	.000	DECRSE	CONTNU	2.000	6.000
RT3102	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

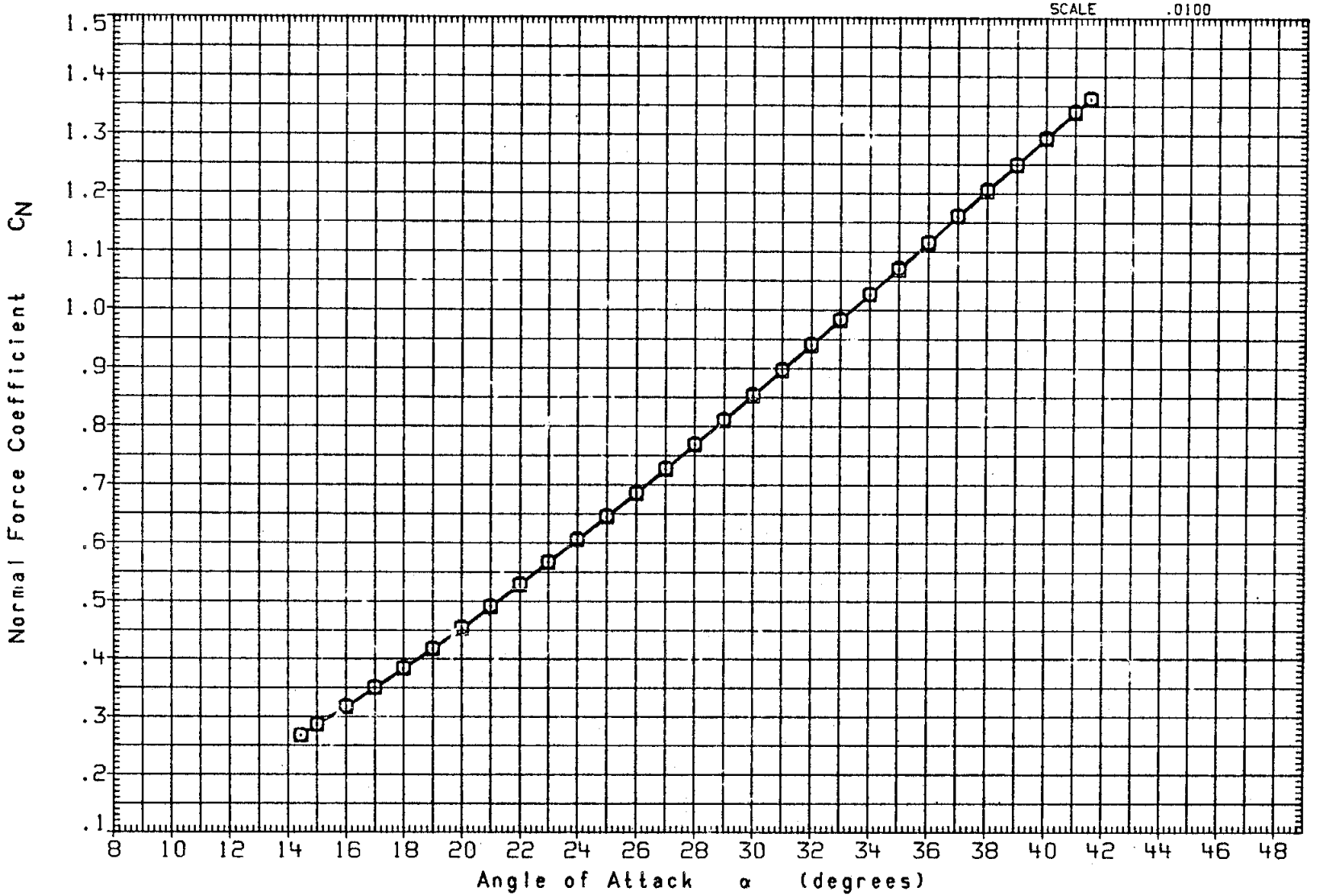


FIG. 12 DATA REPEATABILITY IN PITCH, STING A
(A) BASELINE CONFIGURATION

(R)RN/L = 4.38 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3002	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	.000	DECRSE	CONTNU	2.000	6.000
RT3102	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

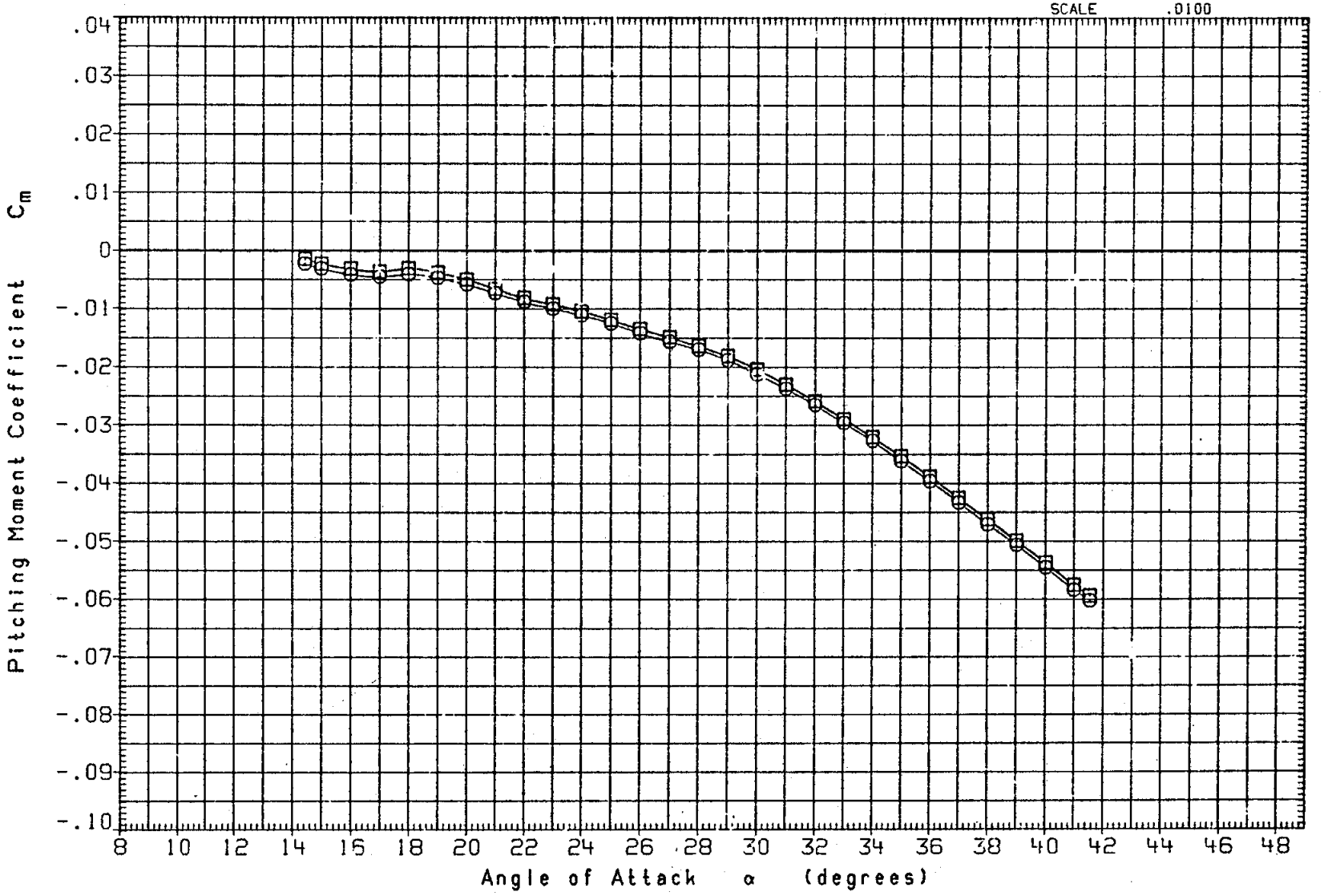


FIG. 12 DATA REPEATABILITY IN PITCH, STING A
(A) BASELINE CONFIGURATION

(B)RN/L = 4.38 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIP	S-MODE	CONFIG	MACH
RT3002	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	.000	DECRSE	CONTNU	2.000	6.000
RT3102	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

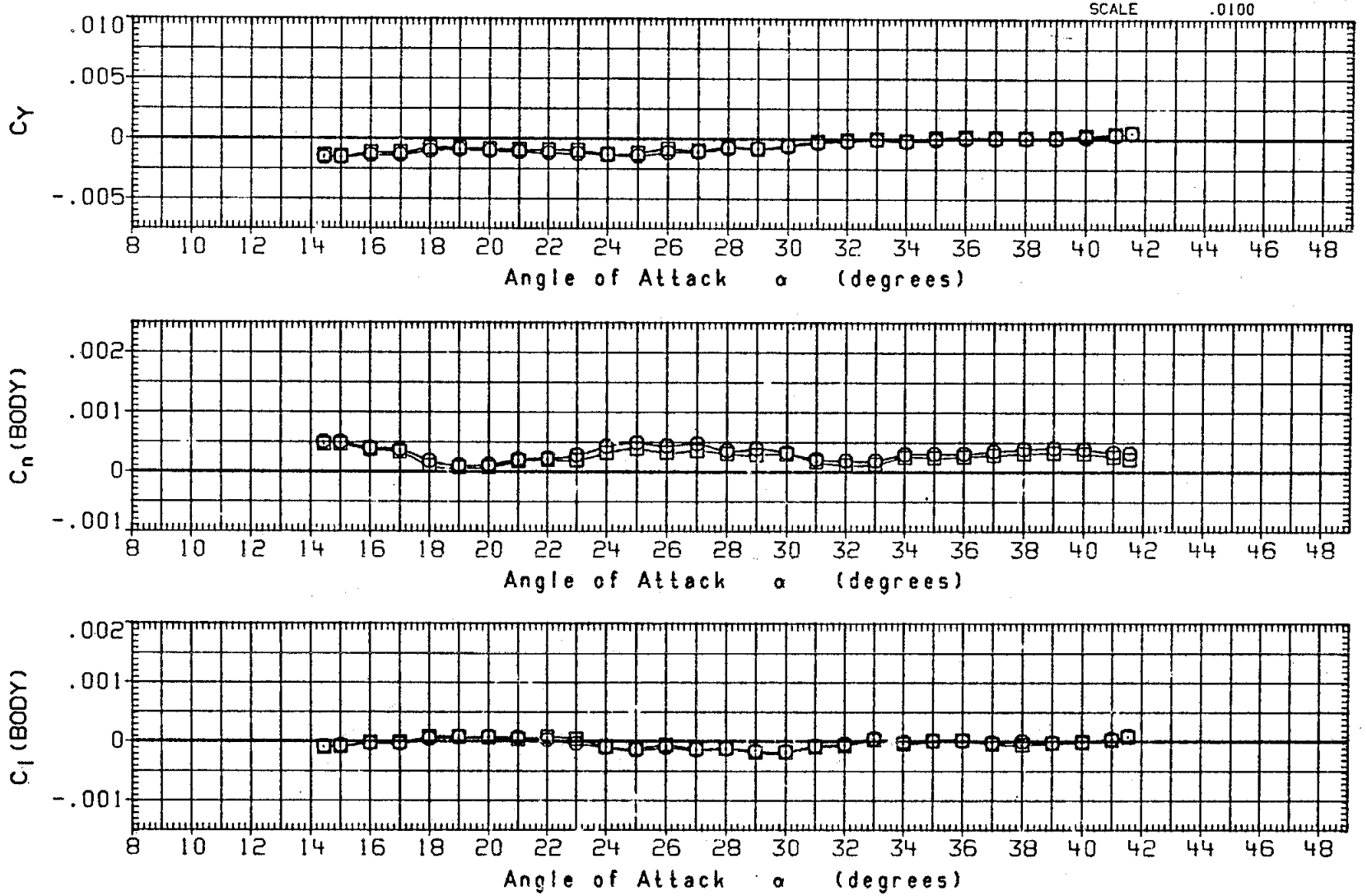


FIG. 12 DATA REPEATABILITY IN PITCH, STING A
(A) BASELINE CONFIGURATION

(B)RN/L = 4.38 DATE 02 MAR 81

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3043	○	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	INCRSE	P-PAUZ	5.000	6.000
RT3143	□	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	INCRSE	P-PAUZ	5.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

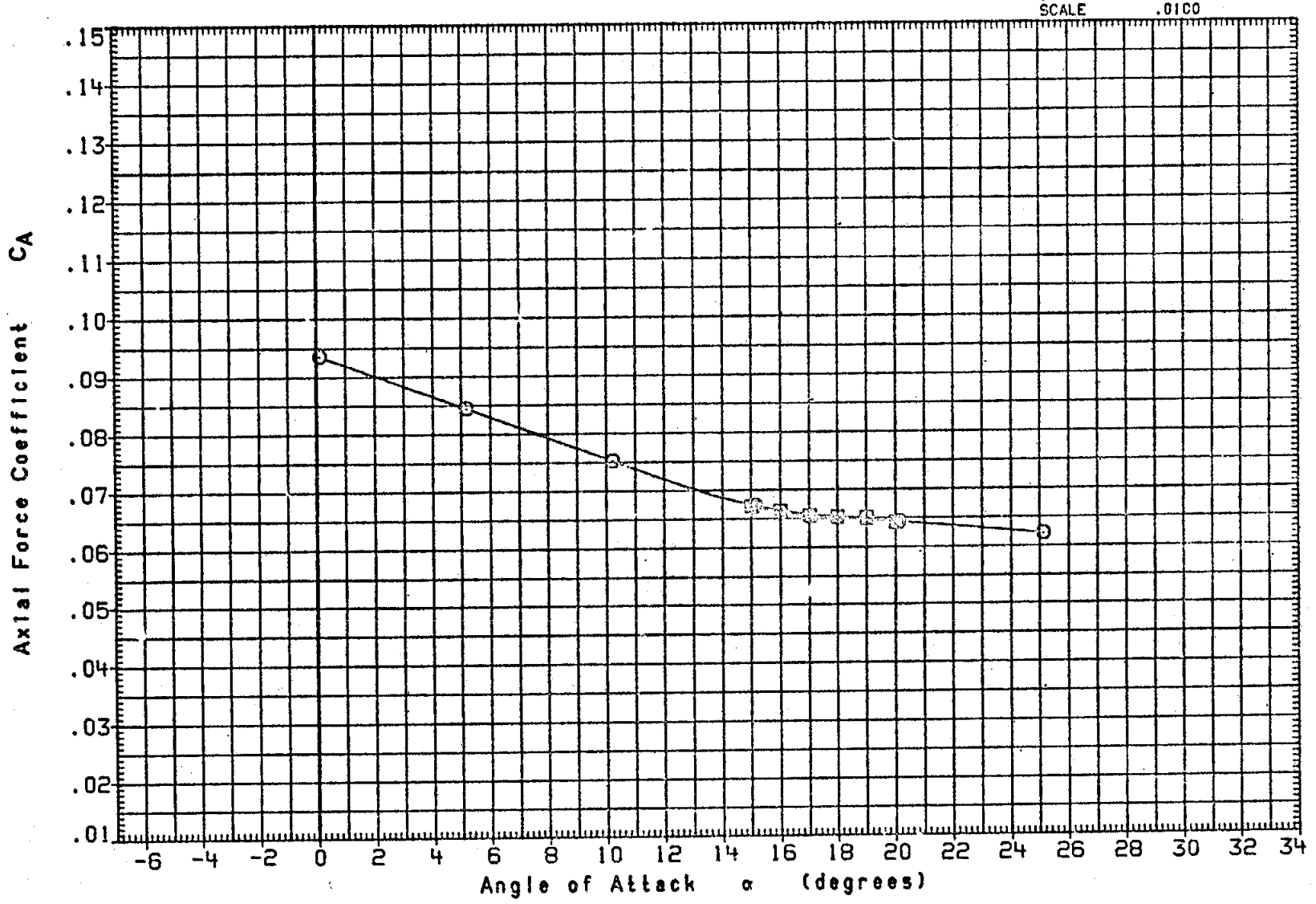


FIG. 13 DATA REPEATABILITY IN PITCH, STING B
(A) BASELINE CONFIGURATION

(A)RN/L = 2.00

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3043	○	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	INCRSE	P-PAUZ	5.000	6.000
RT3143	□	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	INCRSE	P-PAUZ	5.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6900	INCHES
XMRP	1076.6900	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

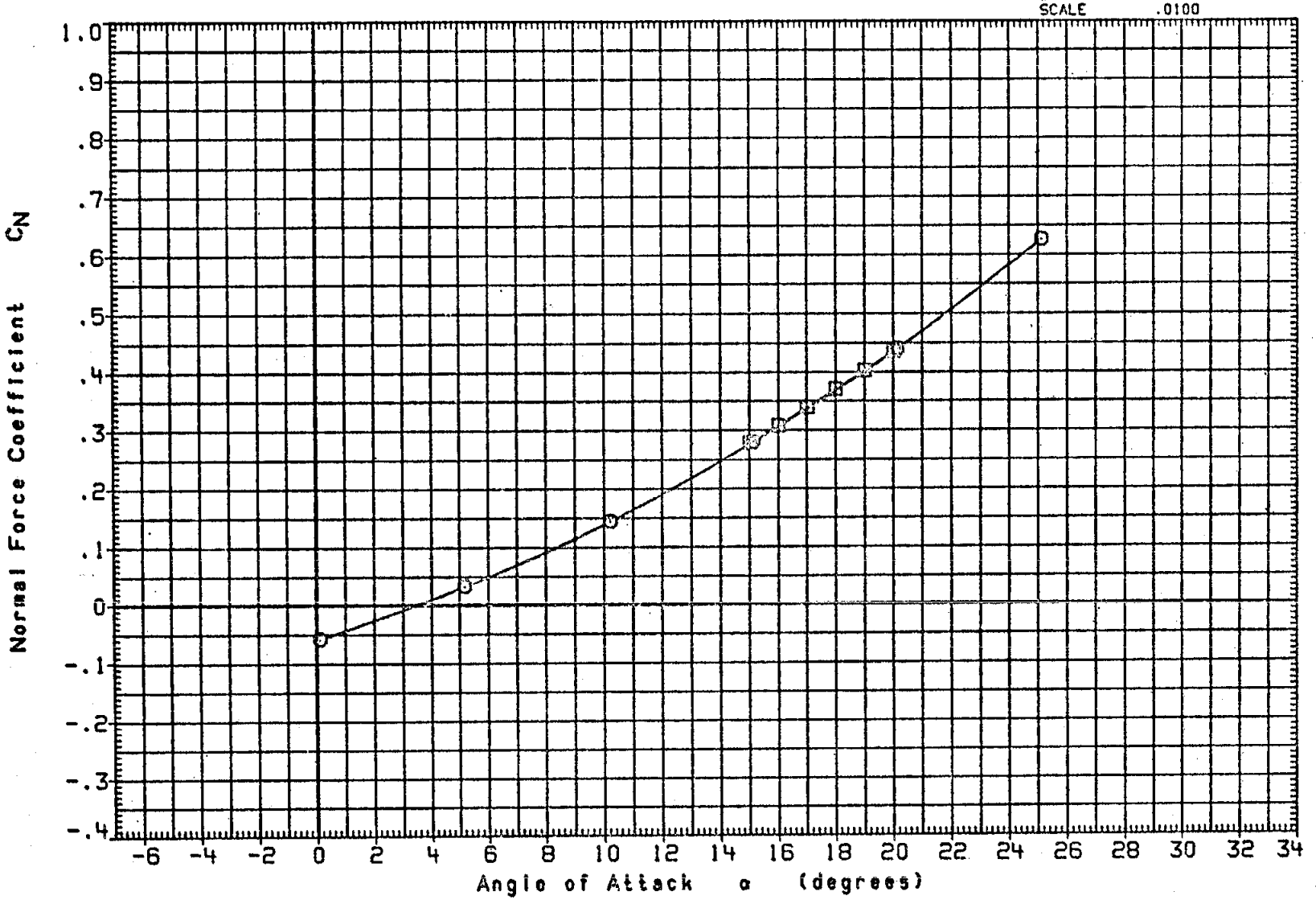


FIG. 13 DATA REPEATABILITY IN PITCH, STING B
(A) BASELINE CONFIGURATION

(A)RN/L = 2.00

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3043	○	OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)	.000	INCRSE	P-PAUZ	5.000	6.000
RT3143	□	OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)	.000	INCRSE	P-PAUZ	5.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

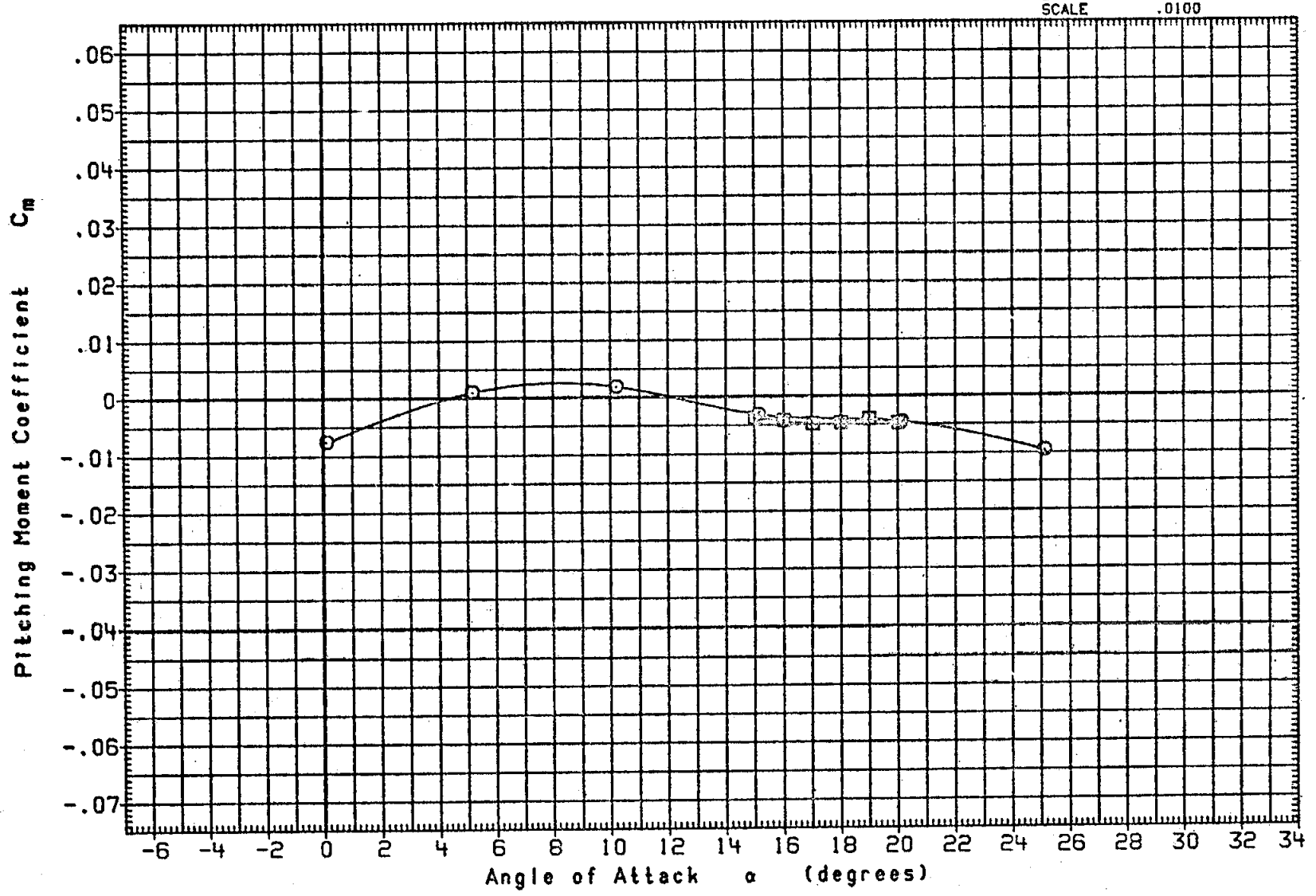


FIG. 13 DATA REPEATABILITY IN PITCH, STING B
(A) BASELINE CONFIGURATION

(A)RN/L = 2.00

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3043	○	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	INCRSE	P-PAUZ	5.000	6.000
RT3143	□	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	INCRSE	P-PAUZ	5.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

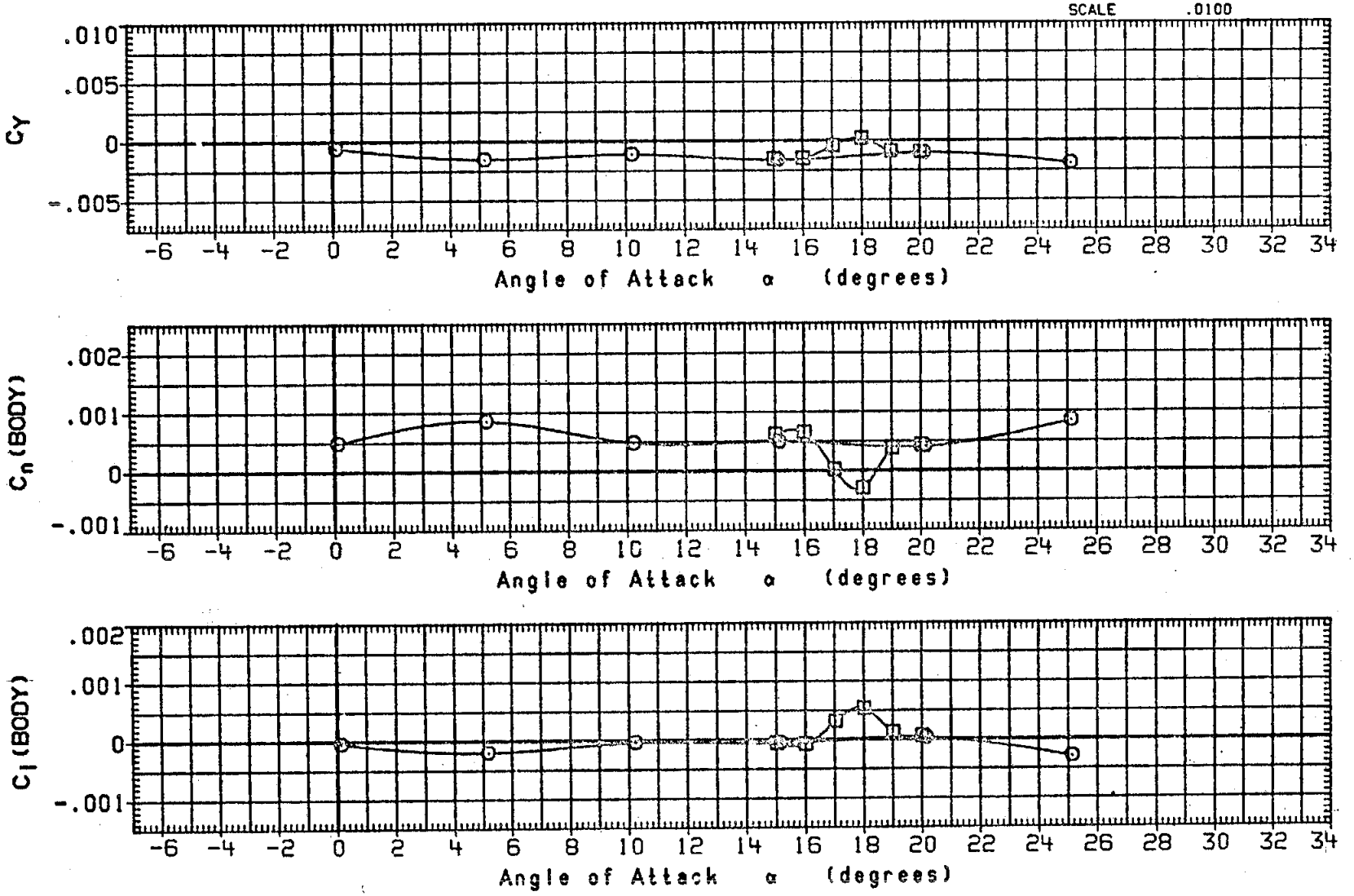


FIG. 13 DATA REPEATABILITY IN PITCH, STING B
(A) BASELINE CONFIGURATION

(A)RN/L = 2.00

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3046	○	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	INCRSE	CONTNU	5.000	6.000
RT3146	□	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	INCRSE	CONTNU	5.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

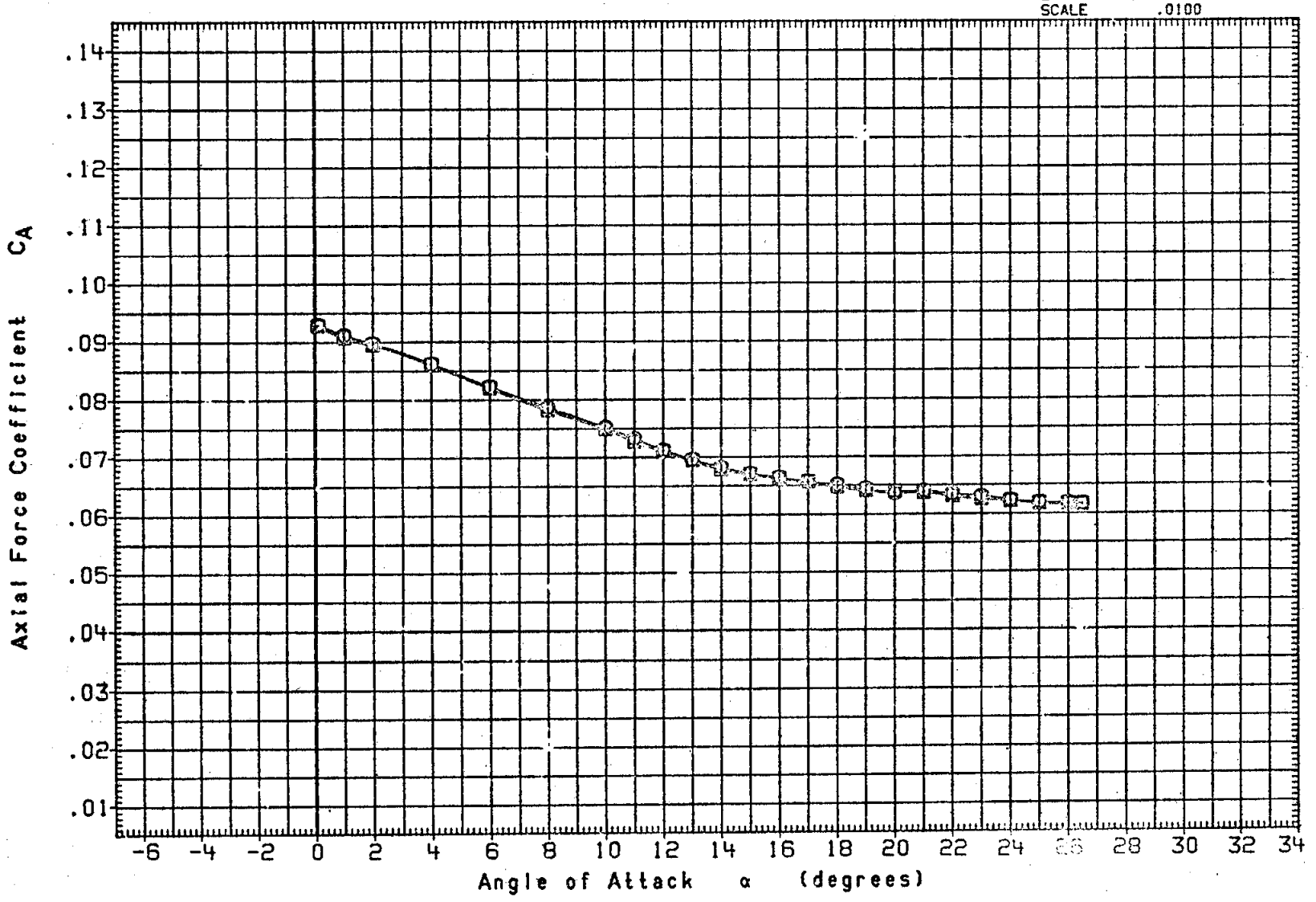


FIG. 13 DATA REPEATABILITY IN PITCH, STING B
(A) BASELINE CONFIGURATION

(A)RN/L = 2.00

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3046	○	OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)	.000	INCRSE	CONTNU	5.000	6.000
RT3146	□	OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)	.000	INCRSE	CONTNU	5.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

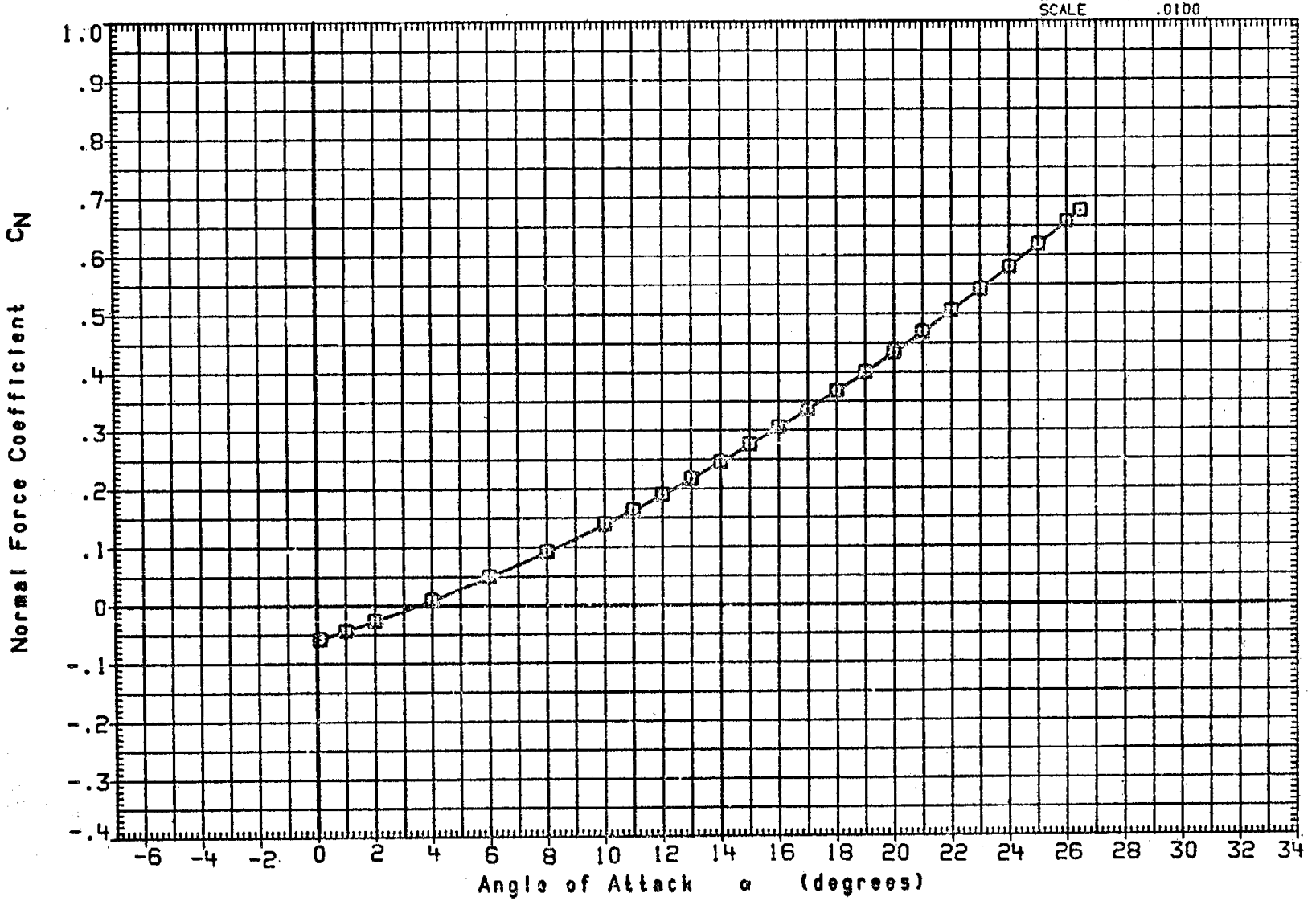


FIG. 13 DATA REPEATABILITY IN PITCH, STING B
(A) BASELINE CONFIGURATION

(A)RN/L = 2.00

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3048	○	OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)	.000	INCRSE	CONTNU	5.000	6.000
RT3146	□	OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)	.000	INCRSE	CONTNU	5.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	935.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

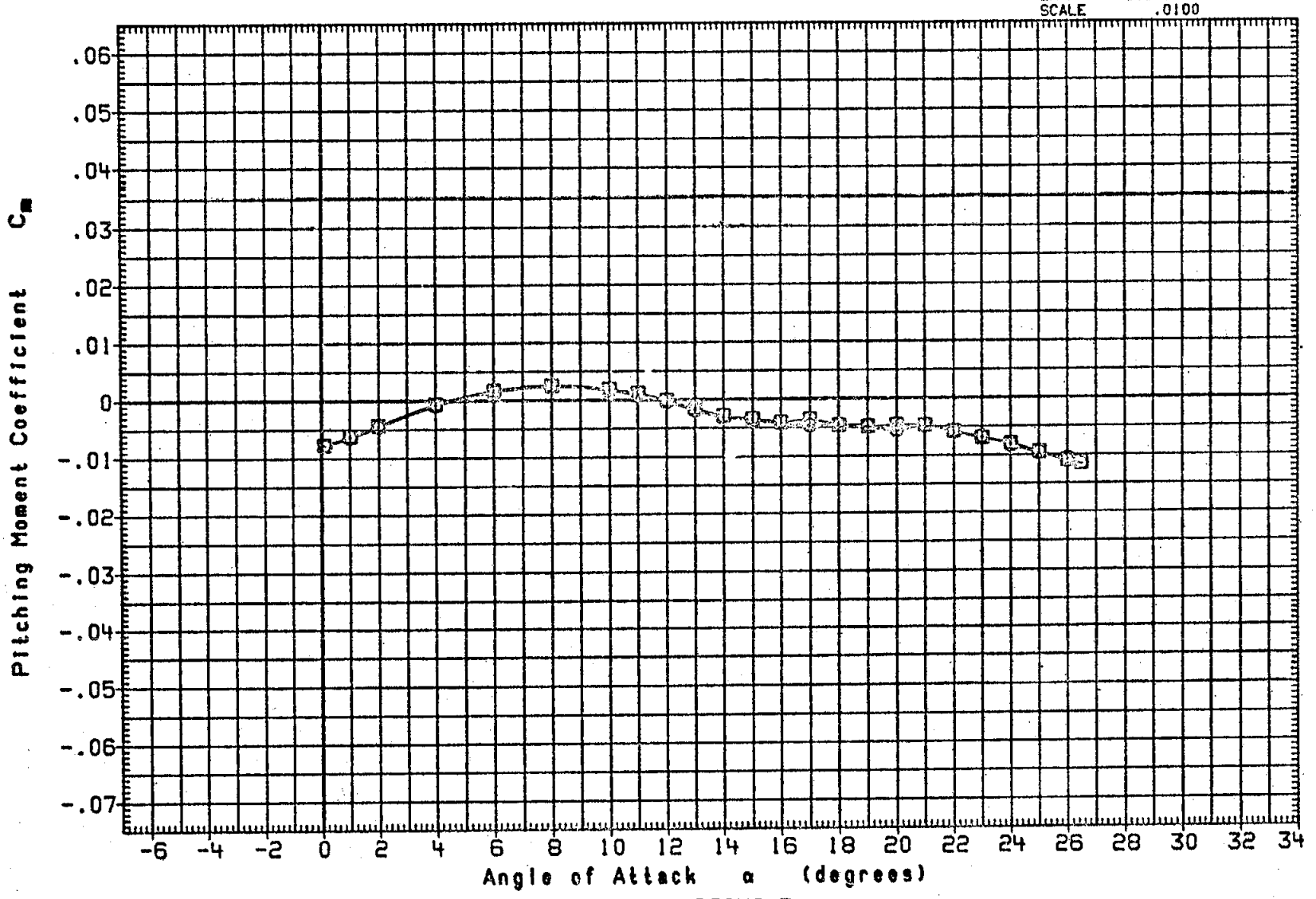


FIG. 13 DATA REPEATABILITY IN PITCH, STING B
(A) BASELINE CONFIGURATION

(A)RN/L = 2.00

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3046	○	OA259 (AEDC V41B-141 OV102, STING B (UPRIGHT)	.000	INCRSE	CONTNU	5.000	6.000
RT3146	□	OA259 (AEDC V41B-141 OV102, STING B (UPRIGHT)	.000	INCRSE	CONTNU	5.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

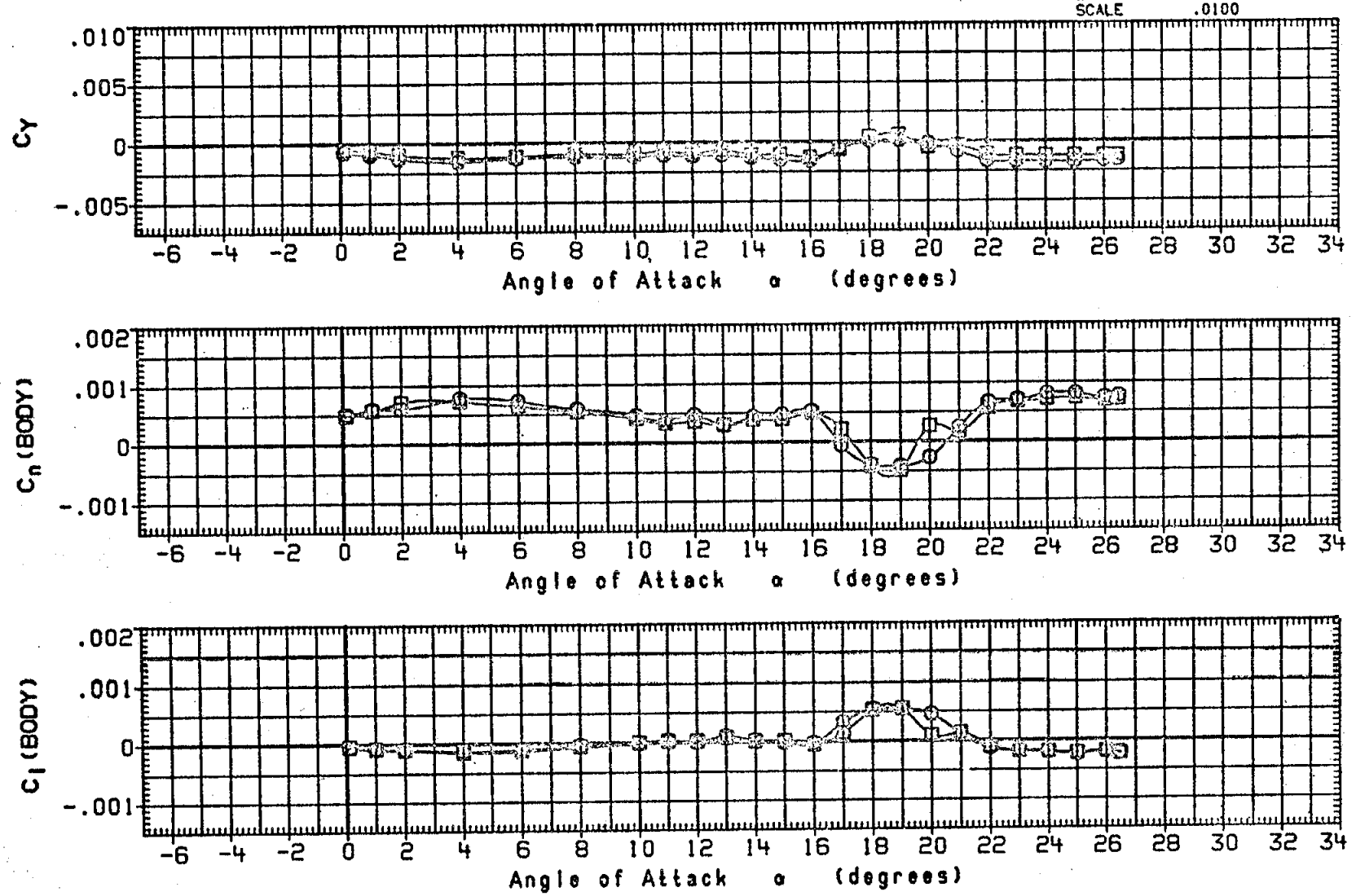


FIG. 13 DATA REPEATABILITY IN PITCH, STING B
(A) BASELINE CONFIGURATION

(A) RN/L = 2.00

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3047	○	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	DECRSE	CONTNU	5.000	6.000
RT3147	□	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	DECRSE	CONTNU	5.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

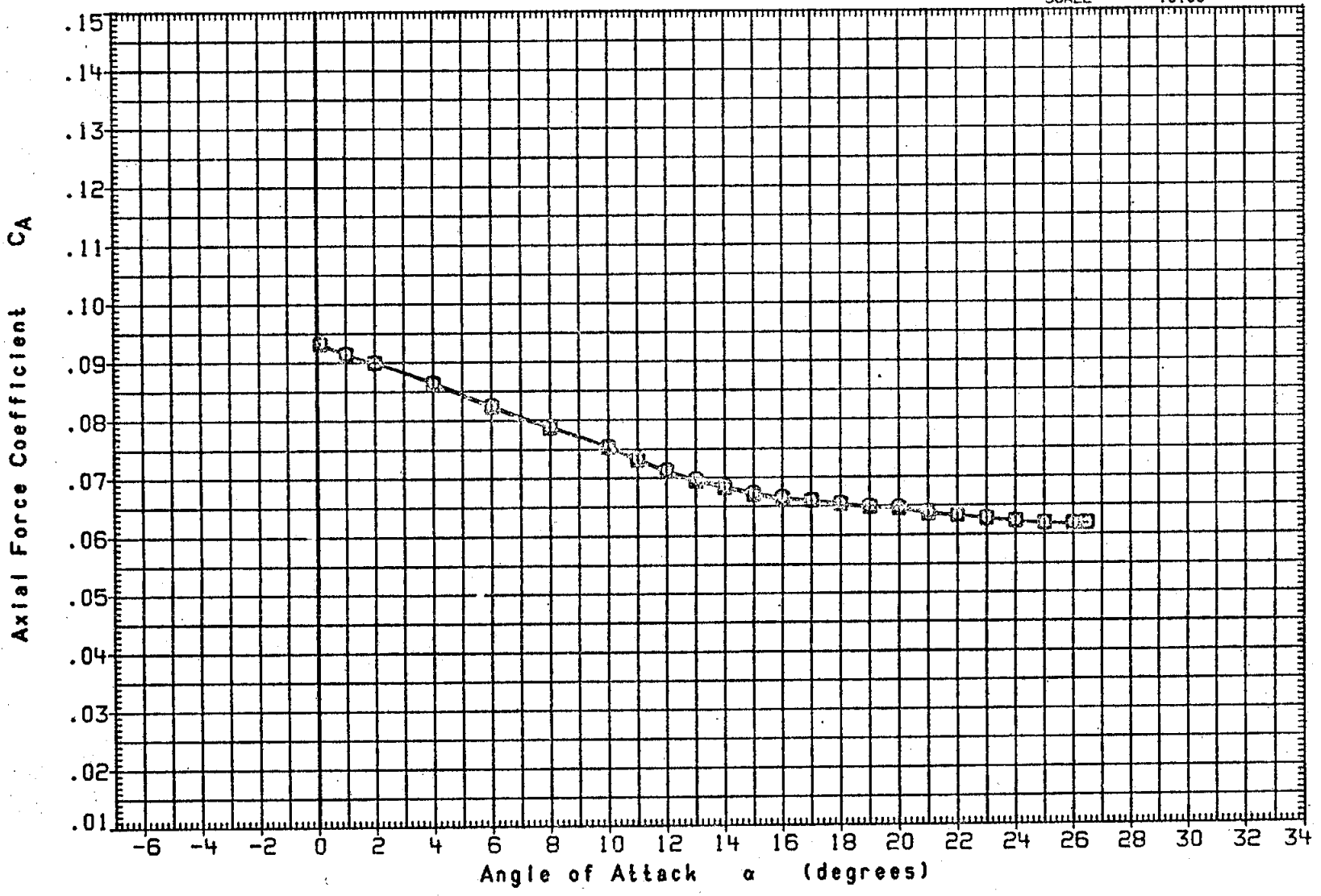


FIG. 13 DATA REPEATABILITY IN PITCH, STING B
(A) BASELINE CONFIGURATION

(A)RN/L = 2.02

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3047	○	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	DECRSE	CONTNU	5.000	6.000
RT3147	□	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	DECRSE	CONTNU	5.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

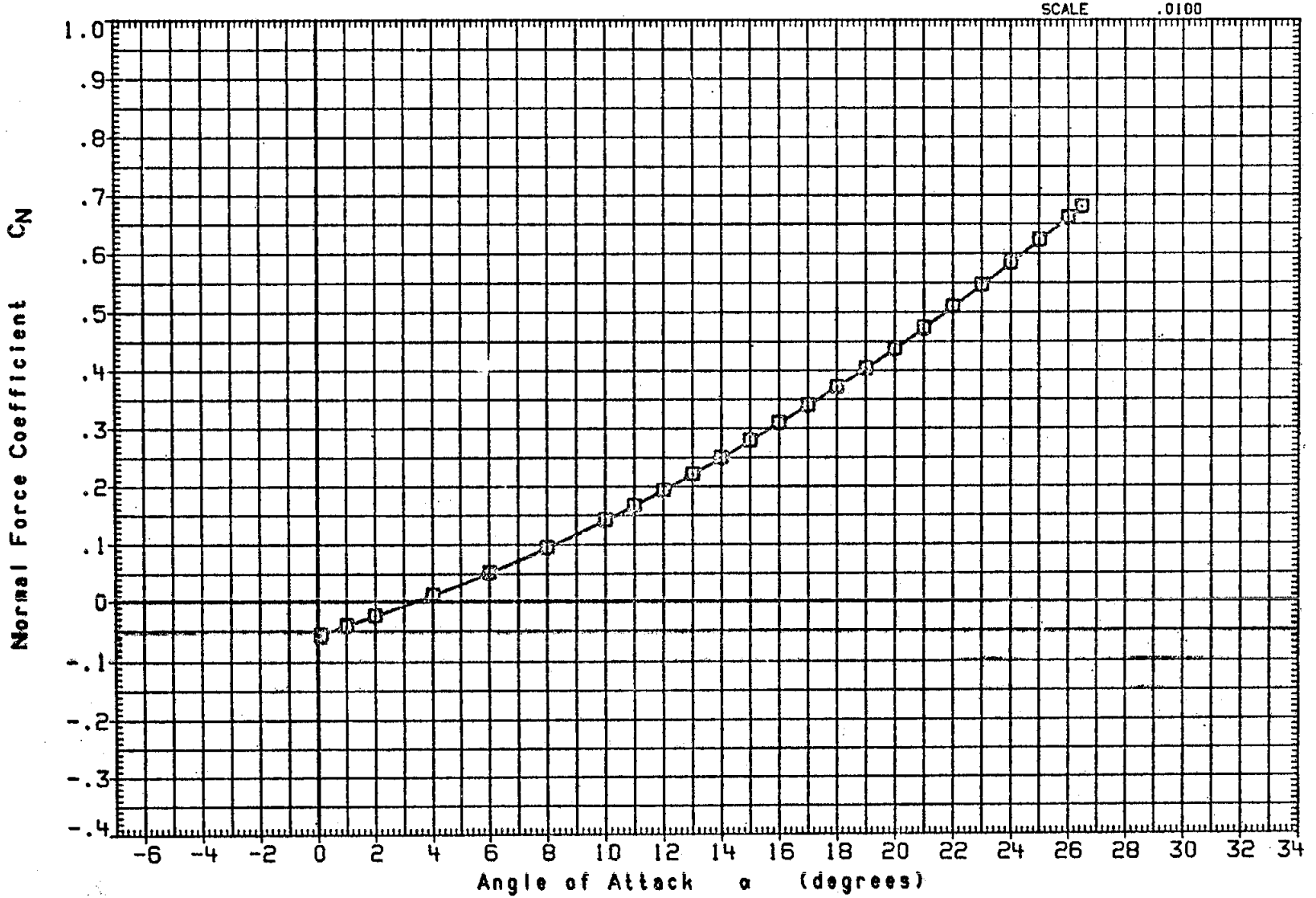


FIG. 13 DATA REPEATABILITY IN PITCH, STING B
(A) BASELINE CONFIGURATION

(A)RN/L = 2.02

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3047	○	OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)	.000	DECRSE	CONTNU	5.000	6.000
RT3147	□	OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)	.000	DECRSE	CONTNU	5.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

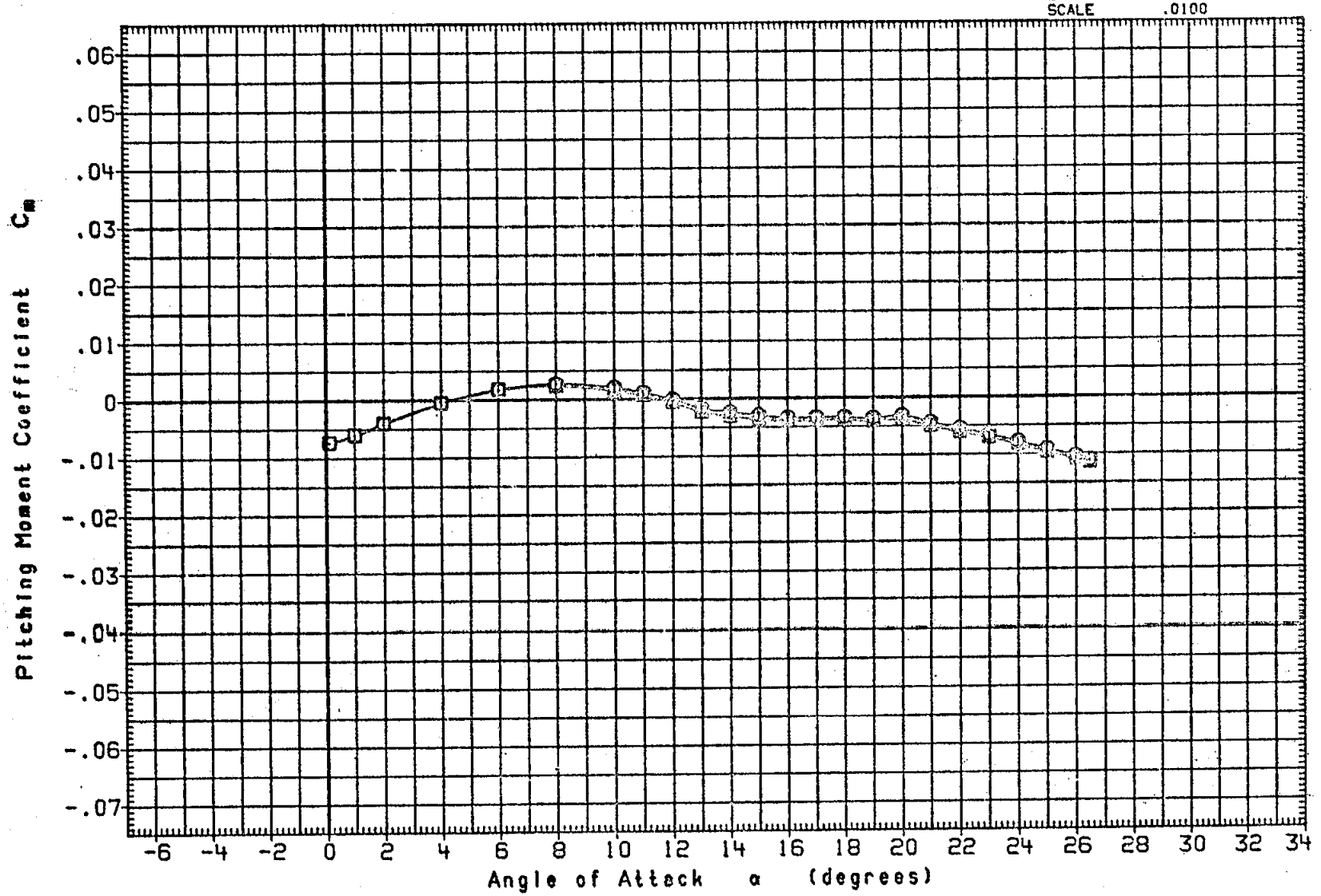


FIG. 13 DATA REPEATABILITY IN PITCH, STING B
(A) BASELINE CONFIGURATION

(A)RN/L = 2.02

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3047	○	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	DECRSE	CONTNU	5.000	6.000
RT3147	□	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	DECRSE	CONTNU	5.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6900	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

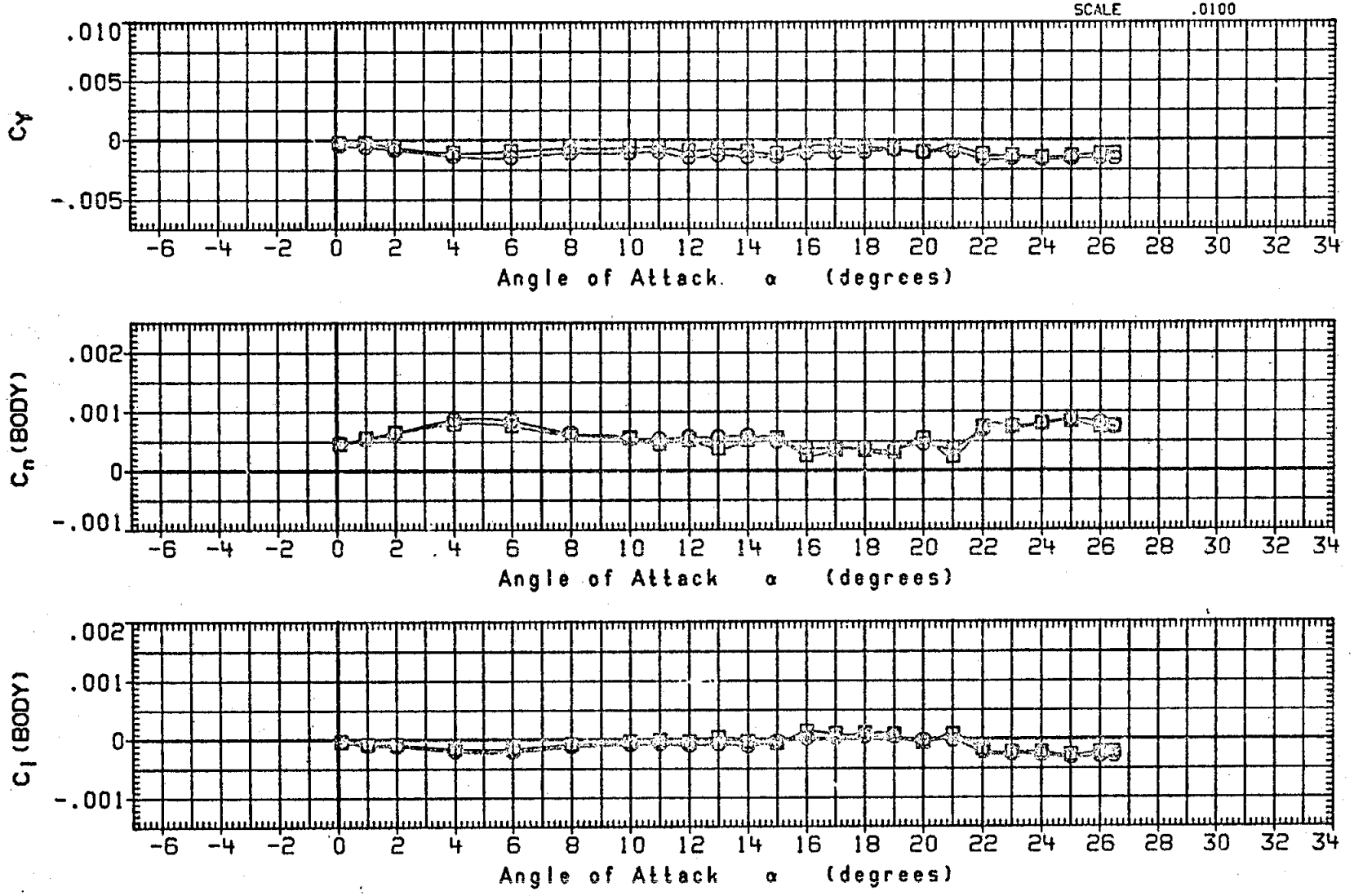


FIG. 13 DATA REPEATABILITY IN PITCH, STING B
(A) BASELINE CONFIGURATION

(A)RN/L = 2.02

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3047	○	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	DECRSE	CONTNU	5.000	6.000
RT3147	□	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	DECRSE	CONTNU	5.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6000	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

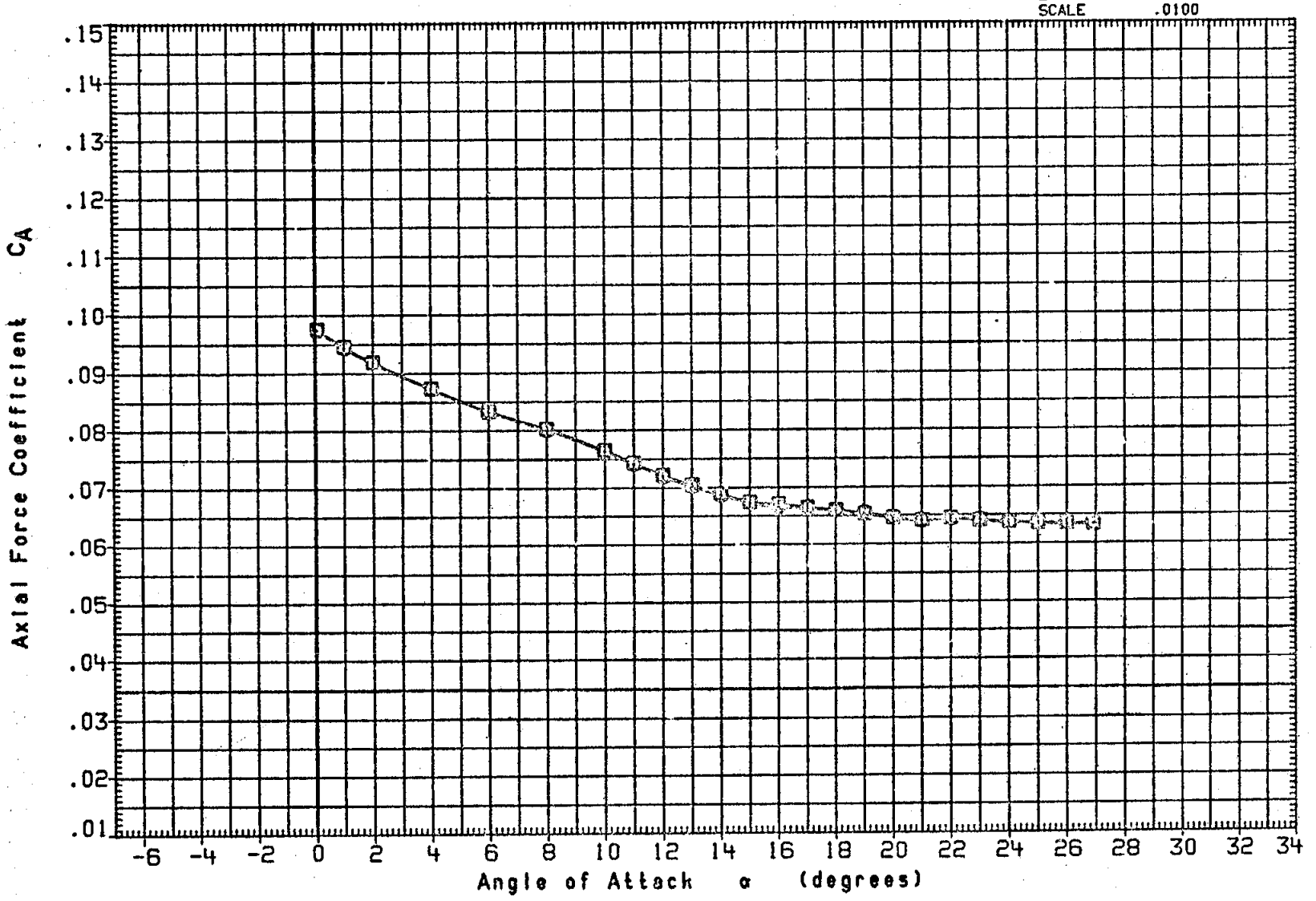


FIG. 13 DATA REPEATABILITY IN PITCH, STING B
(A) BASELINE CONFIGURATION

(B)RN/L = 4.36

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3047	○	OA259 (AEDC V418-14) OV102, STING B (UPRIGHT)	.000	DECRSE	CONTNU	5.000	6.000
RT3147	□	OA259 (AEDC V418-14) OV102, STING B (UPRIGHT)	.000	DECRSE	CONTNU	5.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

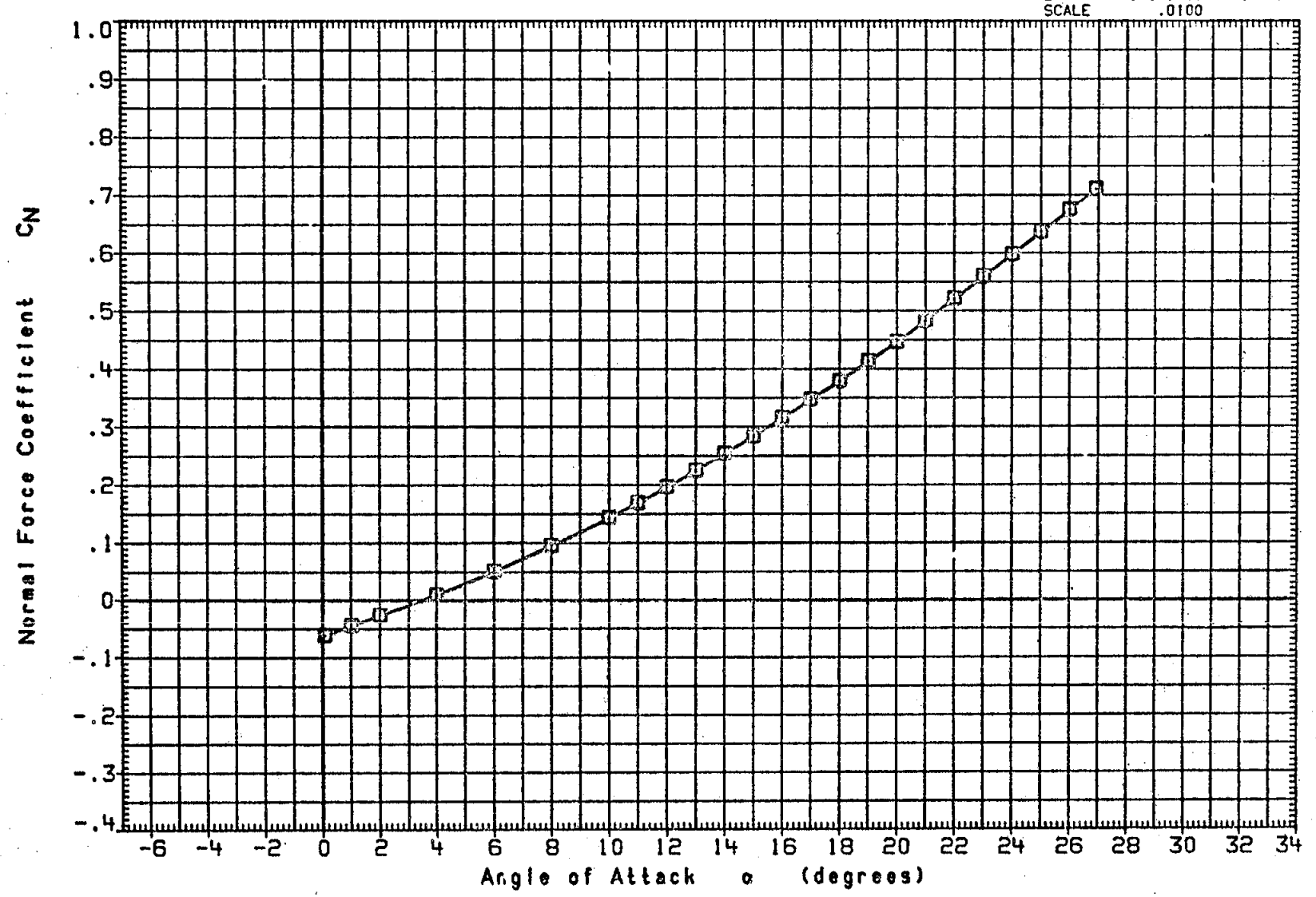


FIG. 13 DATA REPEATABILITY IN PITCH, STING B
(A) BASELINE CONFIGURATION

(B)RN/L = 4.36

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3047	○	OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)	.000	DECRSE	CONTNU	5.000	6.000
RT3147	□	OA259 [AEDC V41B-14] OV102, STING B (UPRIGHT)	.000	DECRSE	CONTNU	5.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

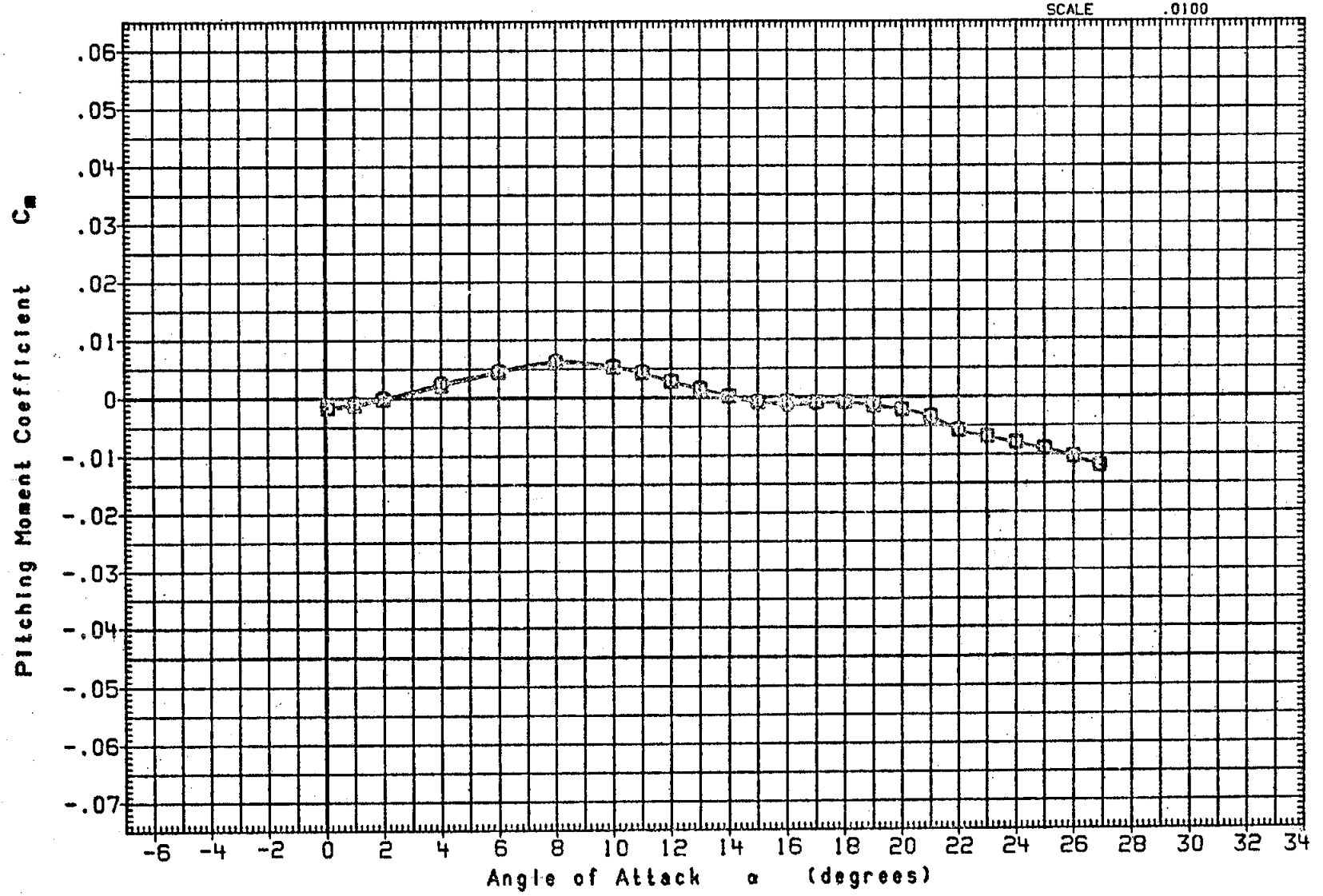


FIG. 13 DATA REPEATABILITY IN PITCH, STING B
(A) BASELINE CONFIGURATION

(B)RN/L = 4.36

DATA SET	SYMBOL	CONFIGURATION	BETA	S-DIR	S-MODE	CONFIG	MACH
RT3047	○	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	DECRSE	CONTNU	5.000	6.000
RT3147	□	OA259 (AEDC V41B-14) OV102, STING B (UPRIGHT)	.000	DECRSE	CONTNU	5.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

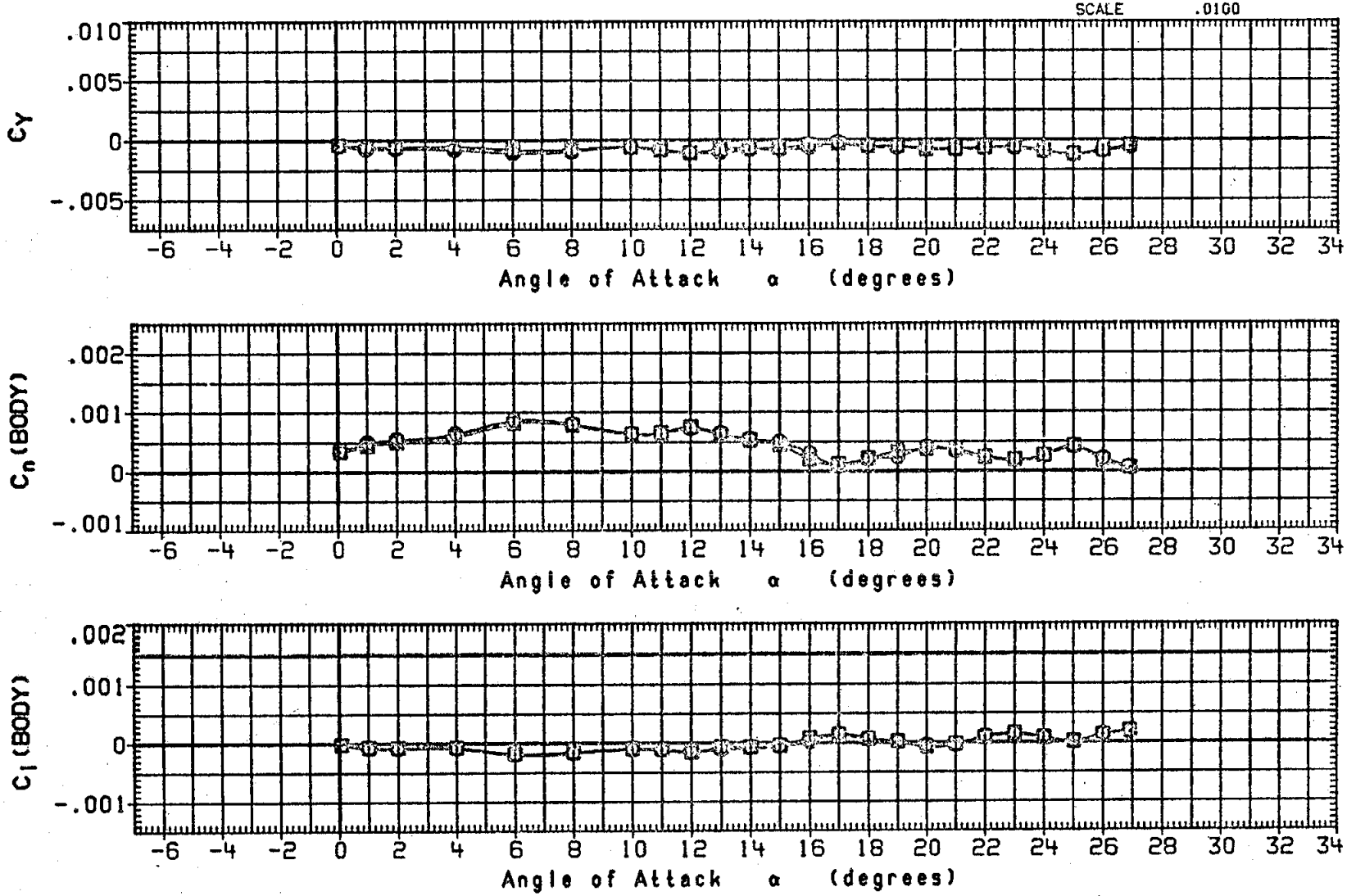


FIG. 13 DATA REPEATABILITY IN PITCH, STING B
(A) BASELINE CONFIGURATION

(B) RN/L = 4.36

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3005	○	OA259 [AEDC-V41B-14] OV102, STING A (UPRIGHT)	15.000	INCRSE	CONTNU	2.000	6.000
RT3105	□	OA259 [AEDC-V41B-14] OV102, STING A (UPRIGHT)	15.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

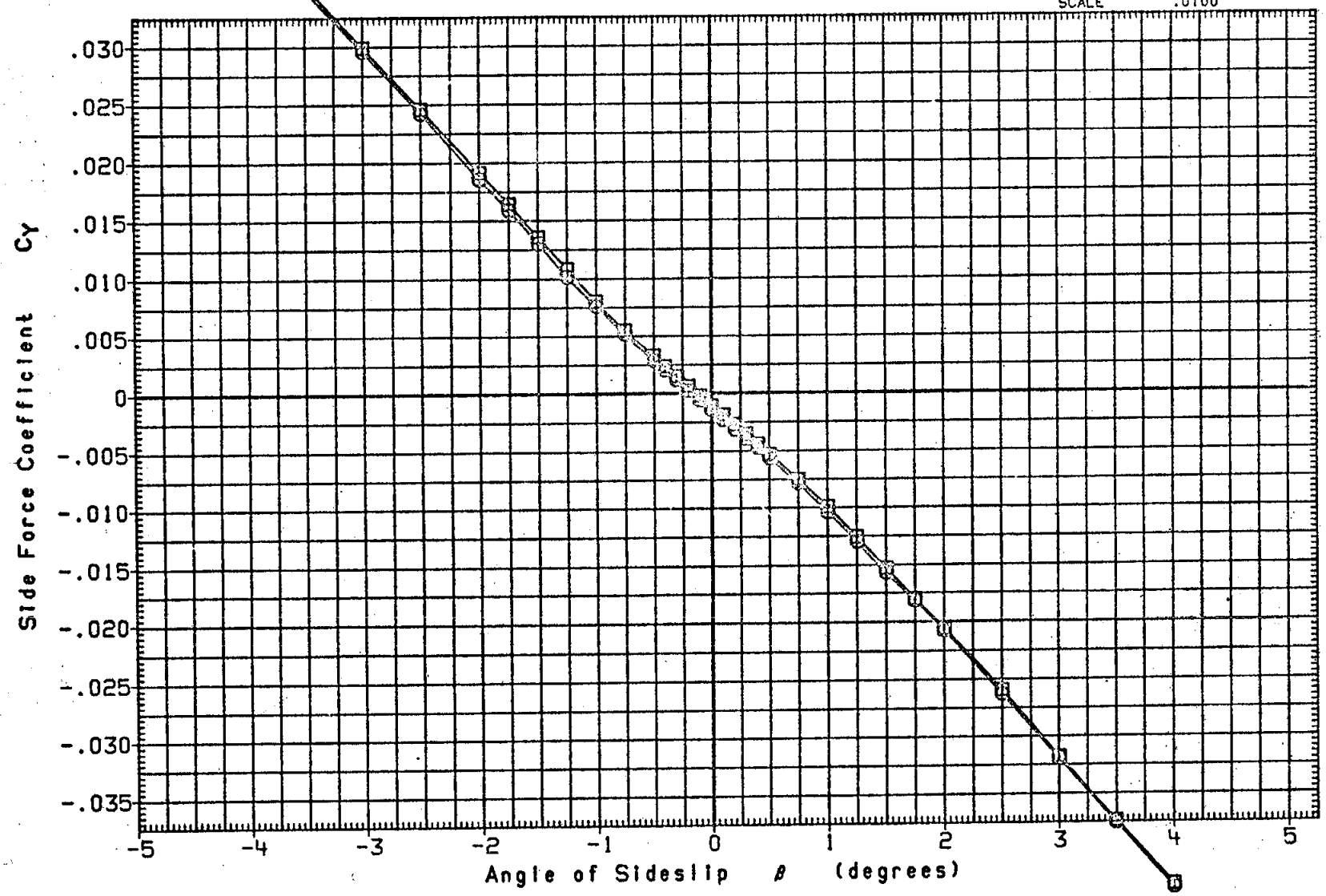


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 4.40

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3005	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	15.000	INCRSE	CONTNU	2.000	6.000
RT3105	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	15.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

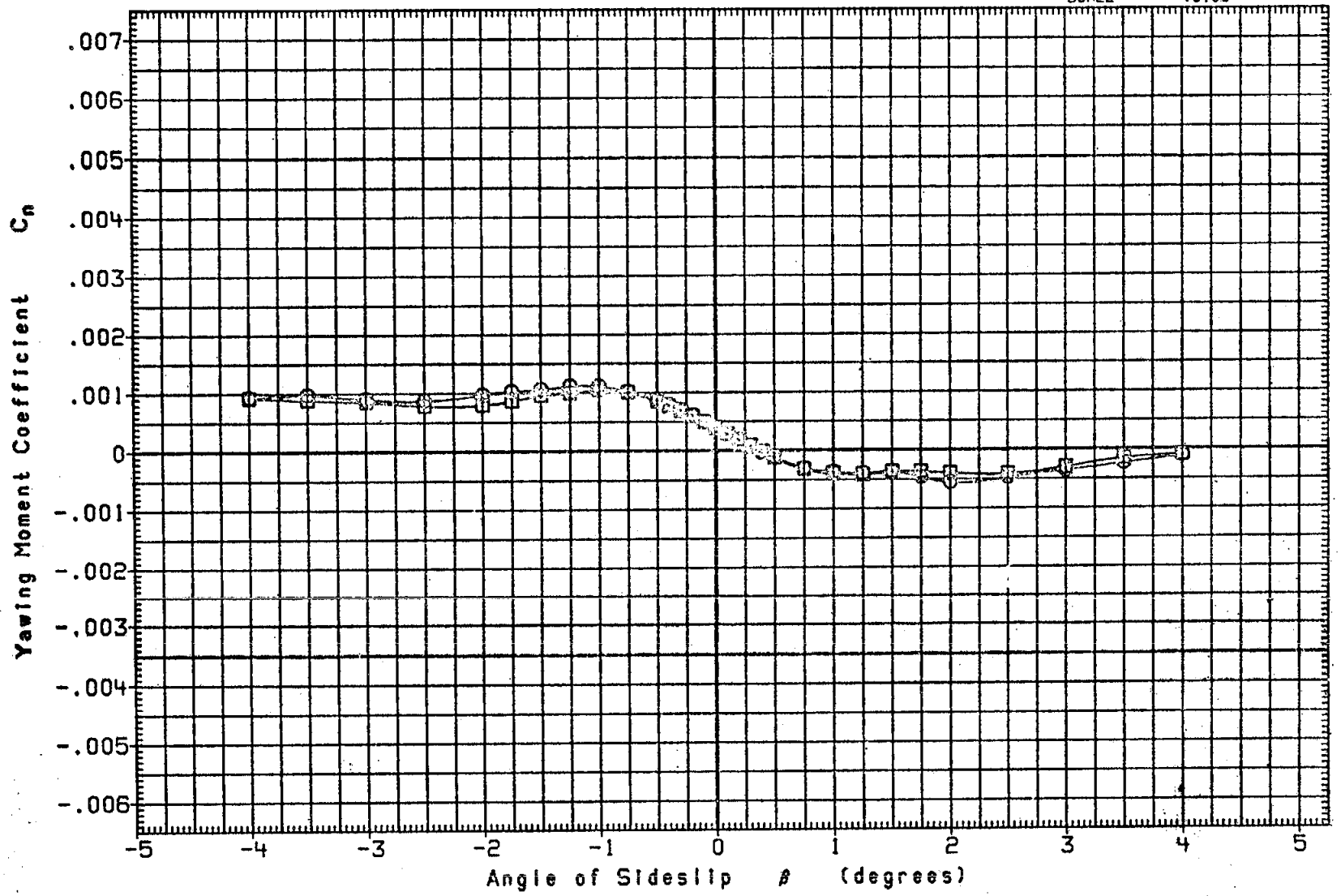


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 4.40

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3005	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	15.000	INCRSE	CONTNU	2.000	6.000
RT3105	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	15.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6900	INCHES
XMRP	1076.6900	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

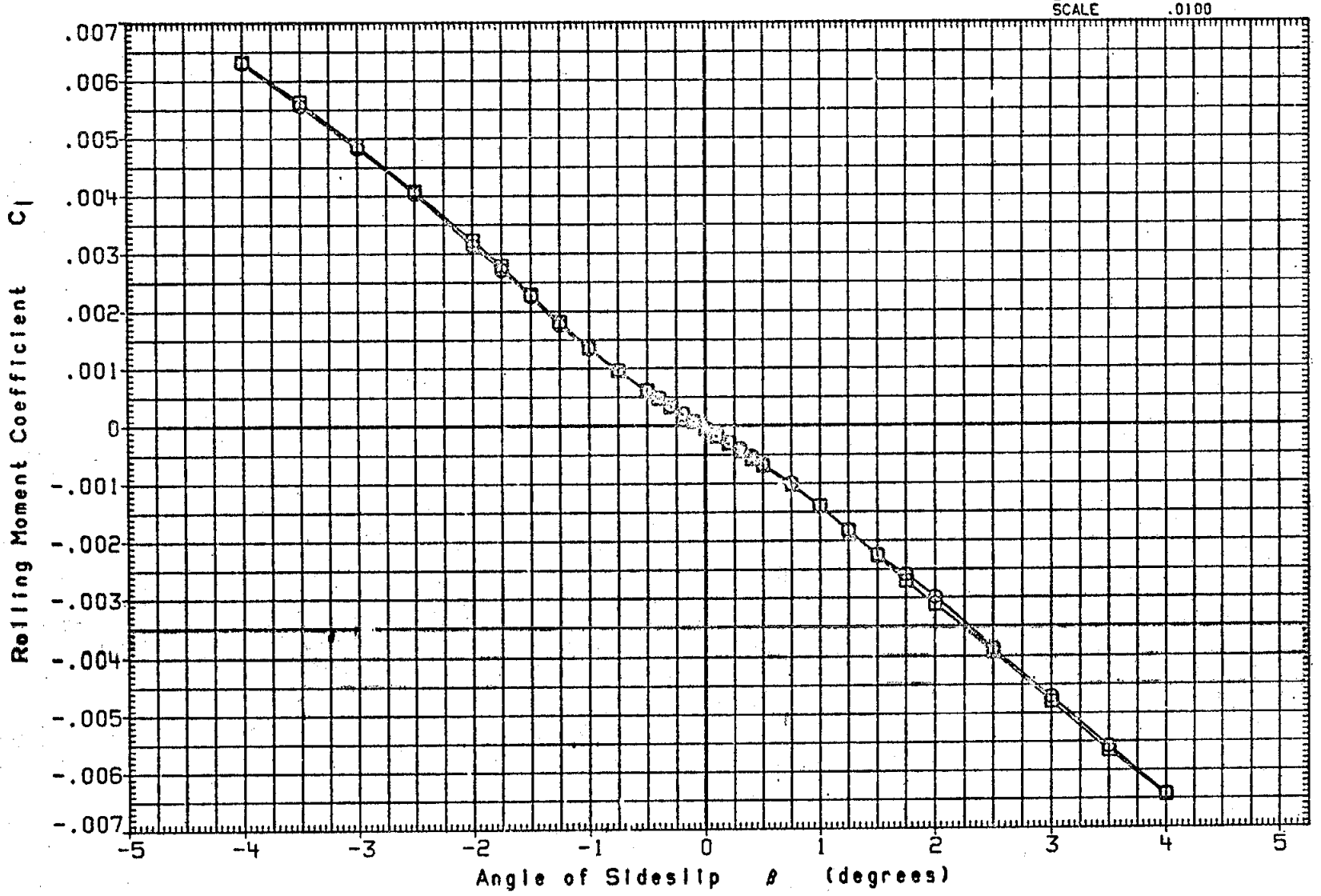


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 4.40

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3005	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	15.000	INCRSE	CONTNU	2.000	6.000
RT3105	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	15.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6900	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

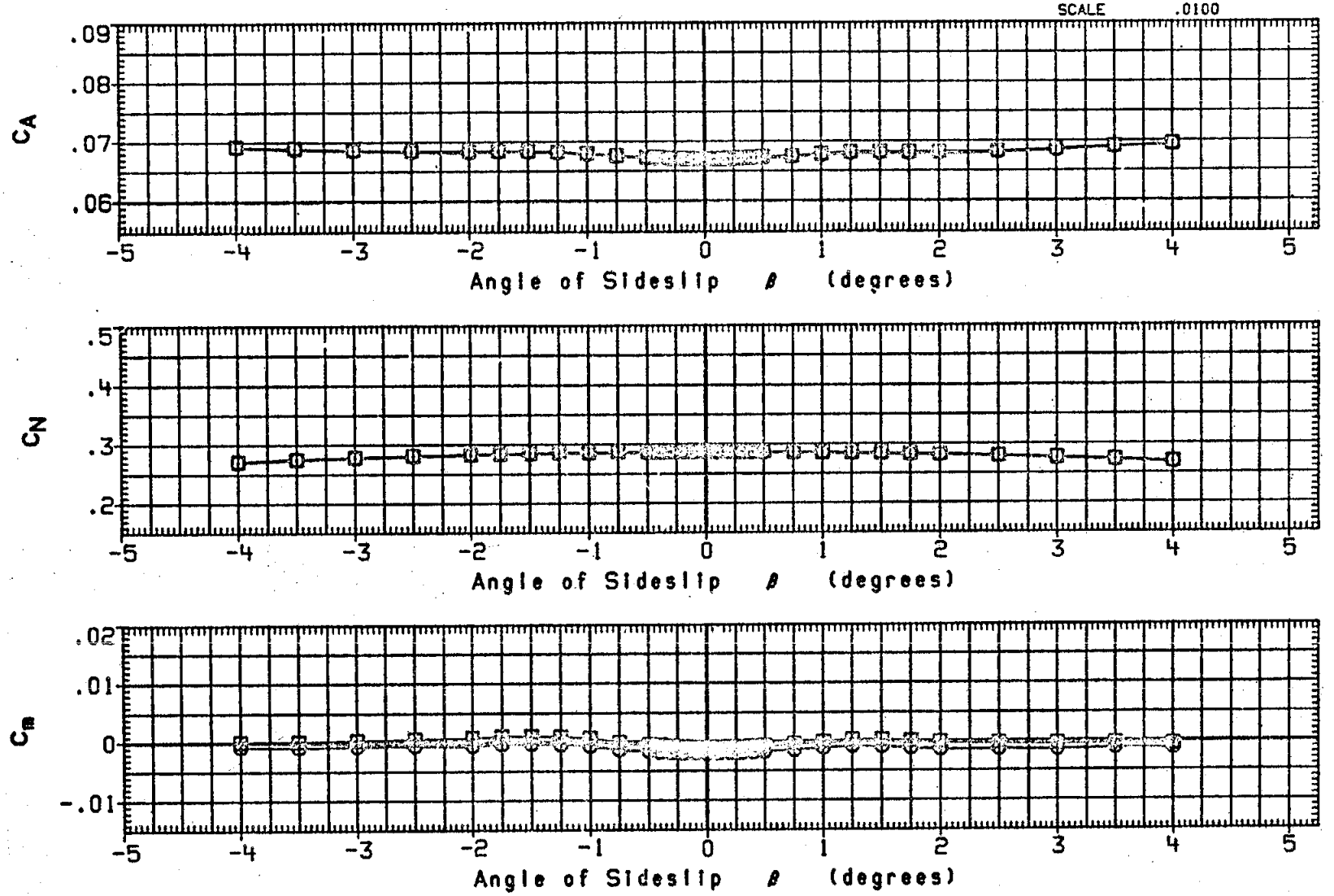


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 4.40

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3013	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	25.000	INCRSE	CONTNU	2.000	6.000
RT3113	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	25.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

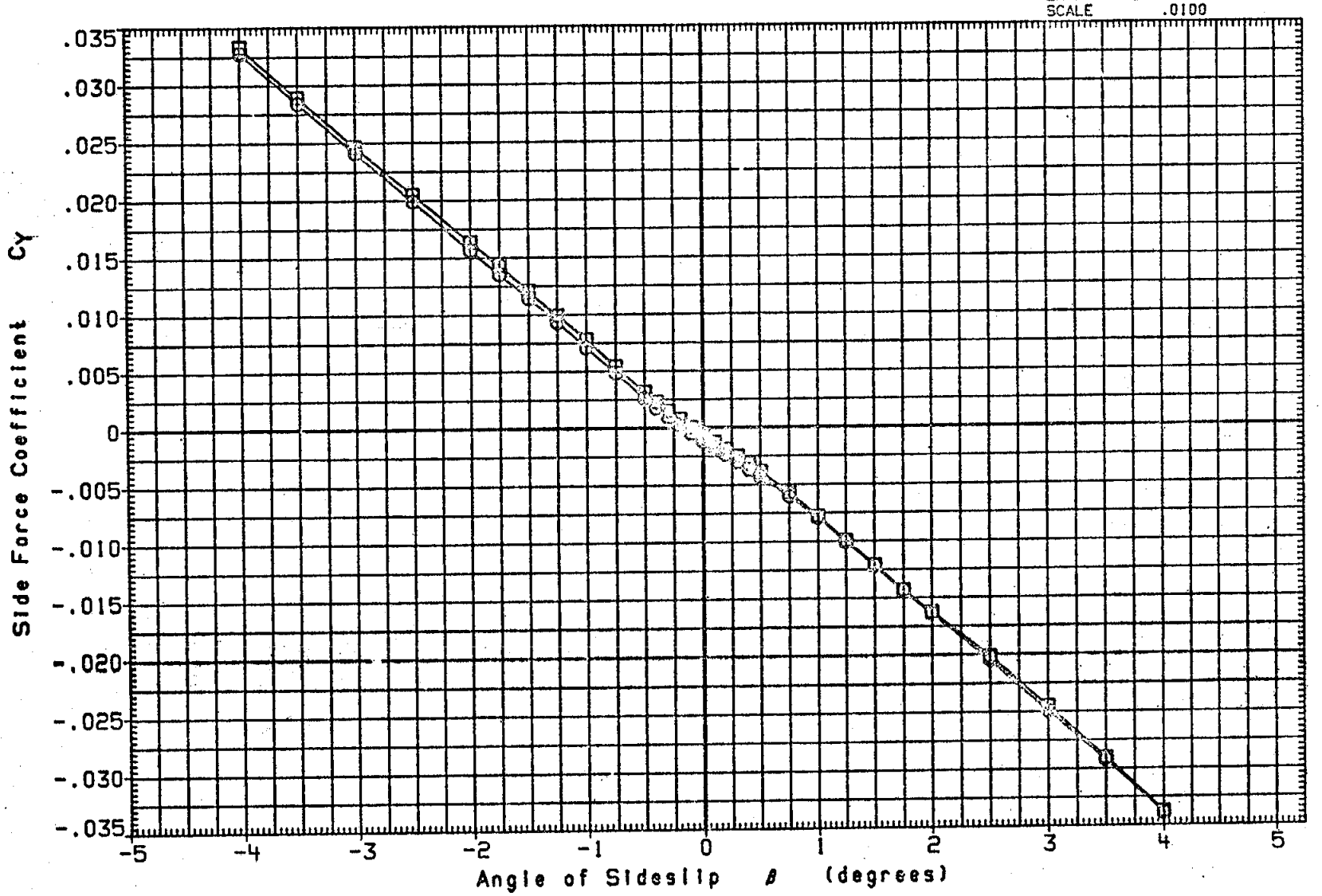


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 4.40

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3013	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	25.000	INCRSE	CONTNU	2.000	6.000
RT3113	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	25.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6900	INCHES
XMRP	1076.6900	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

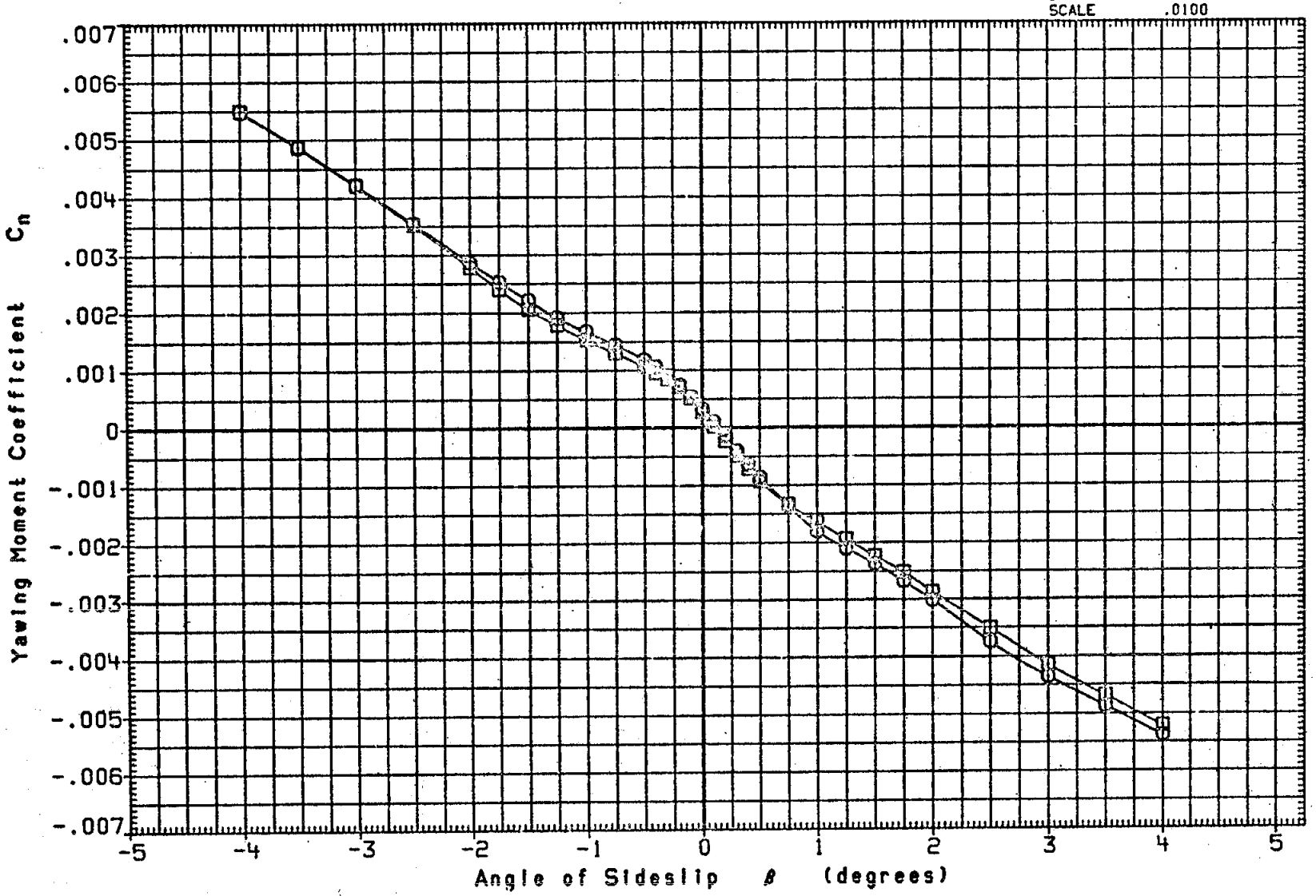


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 4.40

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3013	○	0A259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	25.000	INCRSE	CONTNU	2.000	6.000
RT3113	□	0A259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	25.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

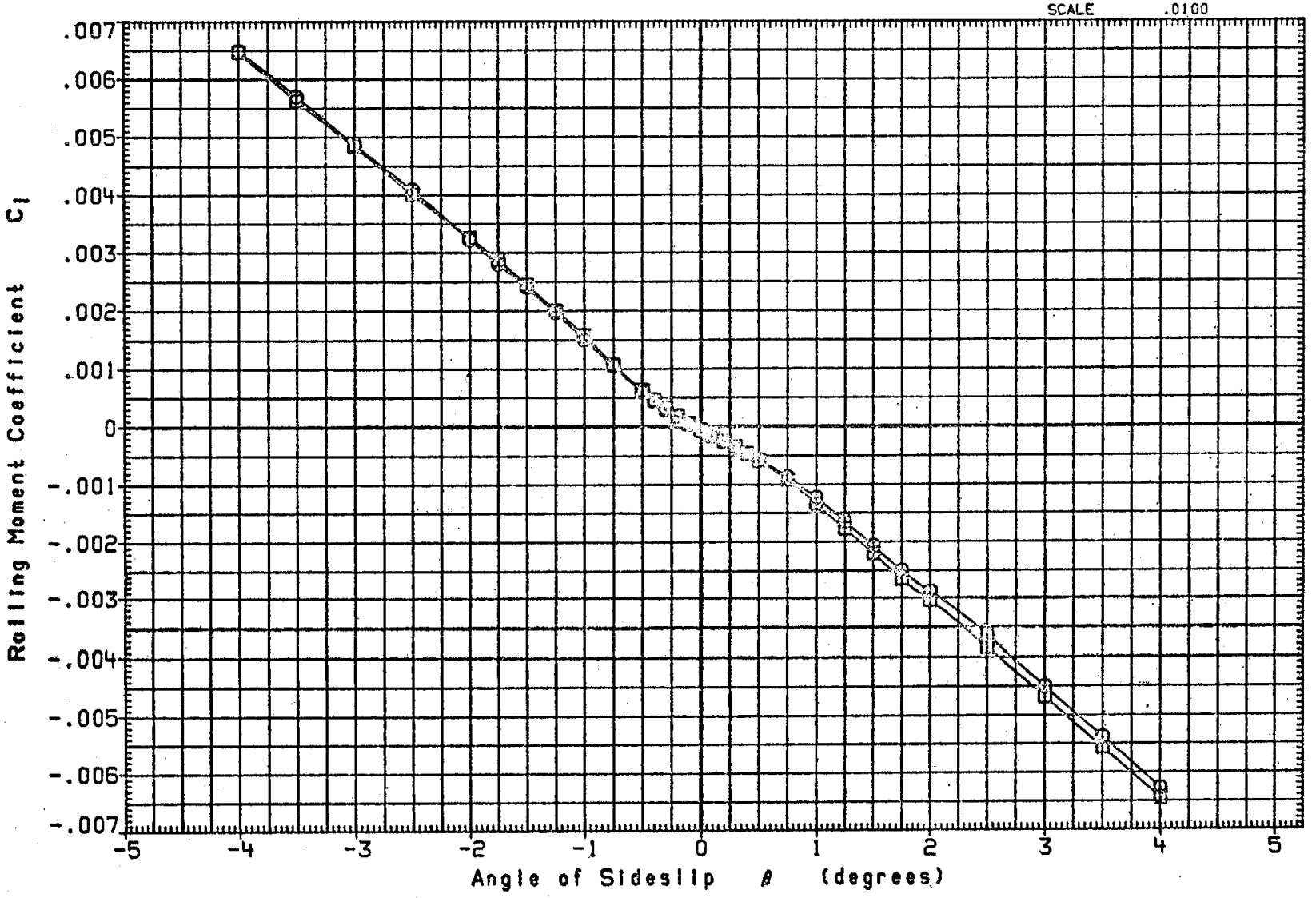


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 4.40

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3013	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	25.000	INCRSE	CONTNU	2.000	6.000
RT3113	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	25.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

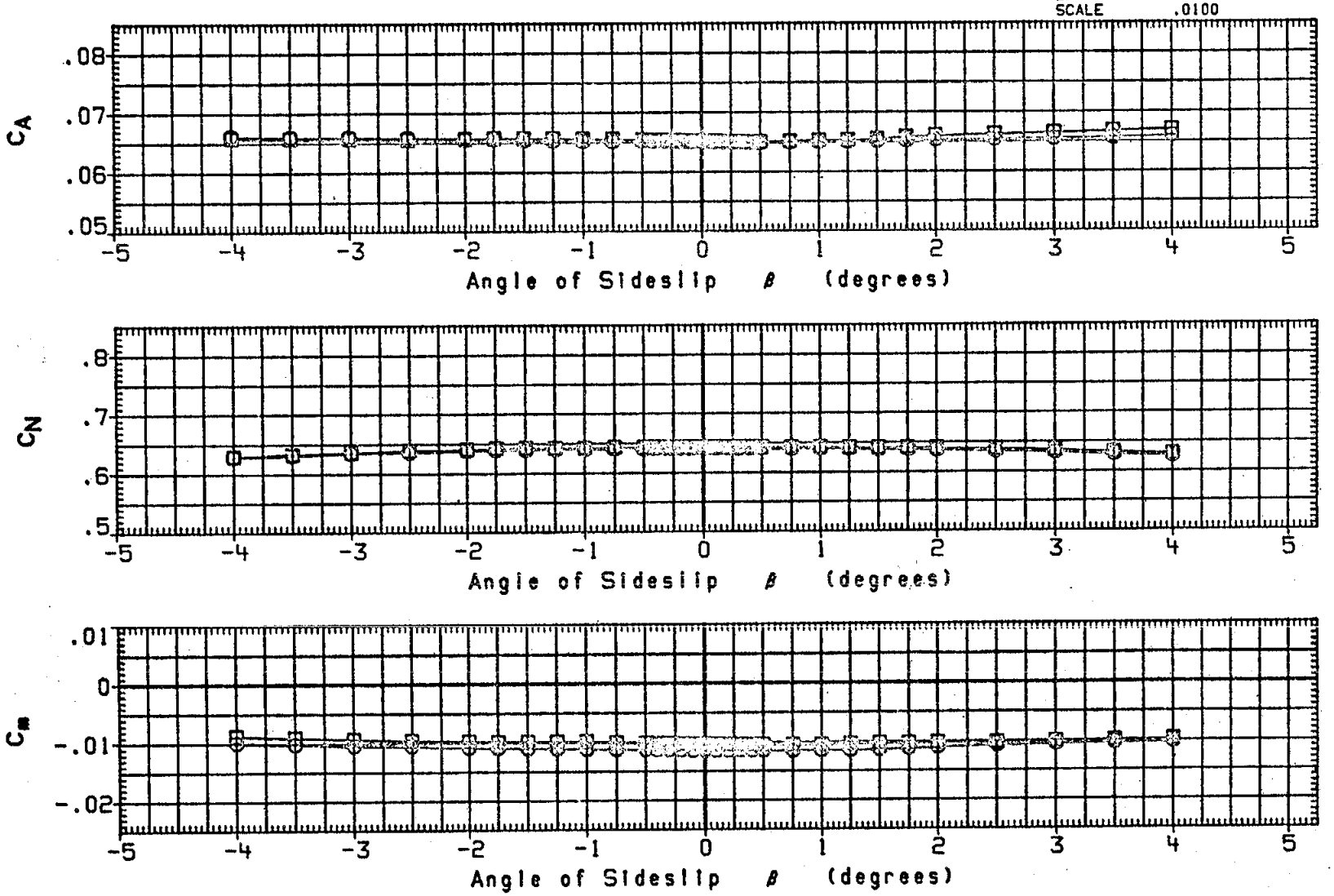


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(A) RN/L = 4.40

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3017	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3117	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3217	◇	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

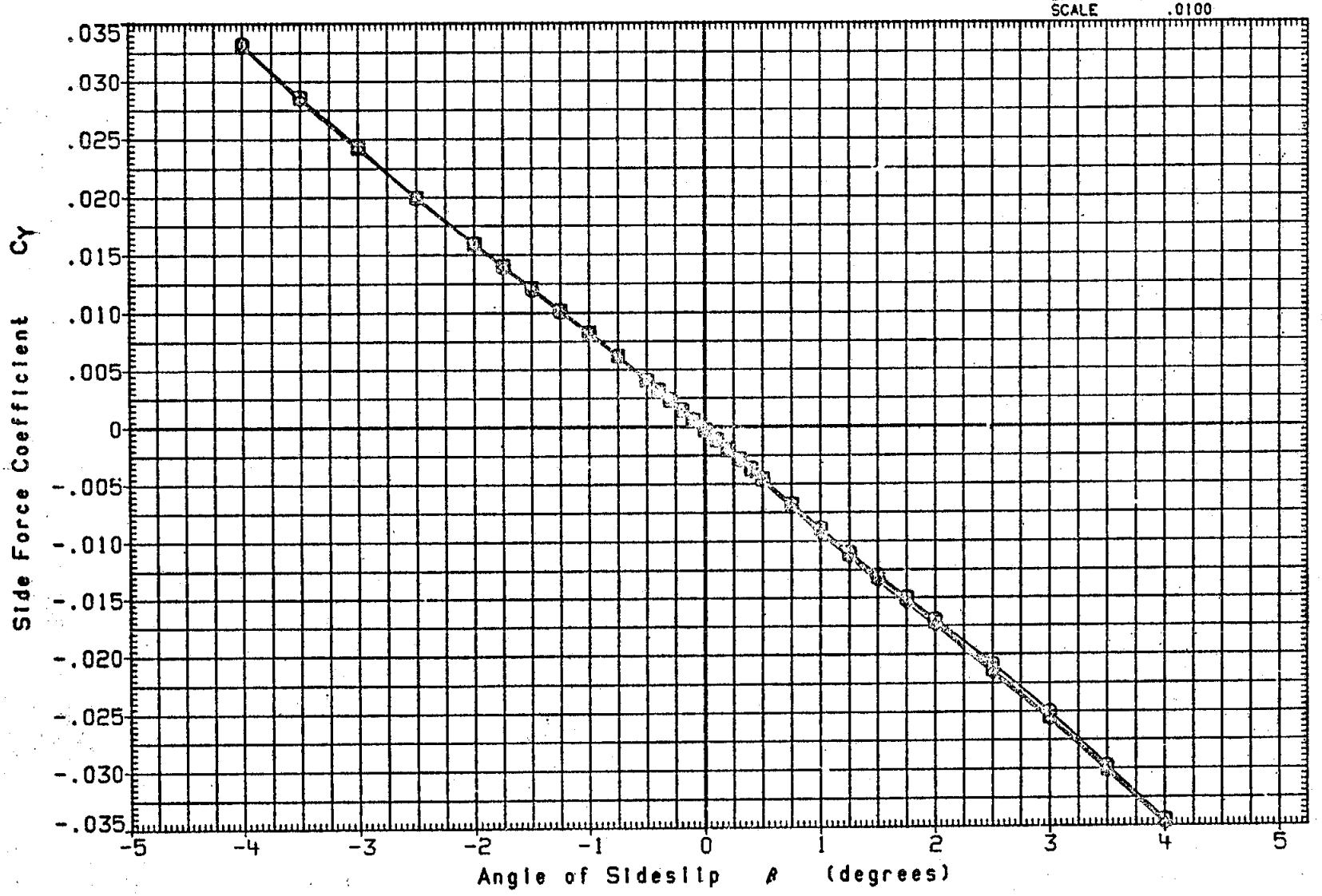


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 2.00

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3017	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3117	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3217	◇	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

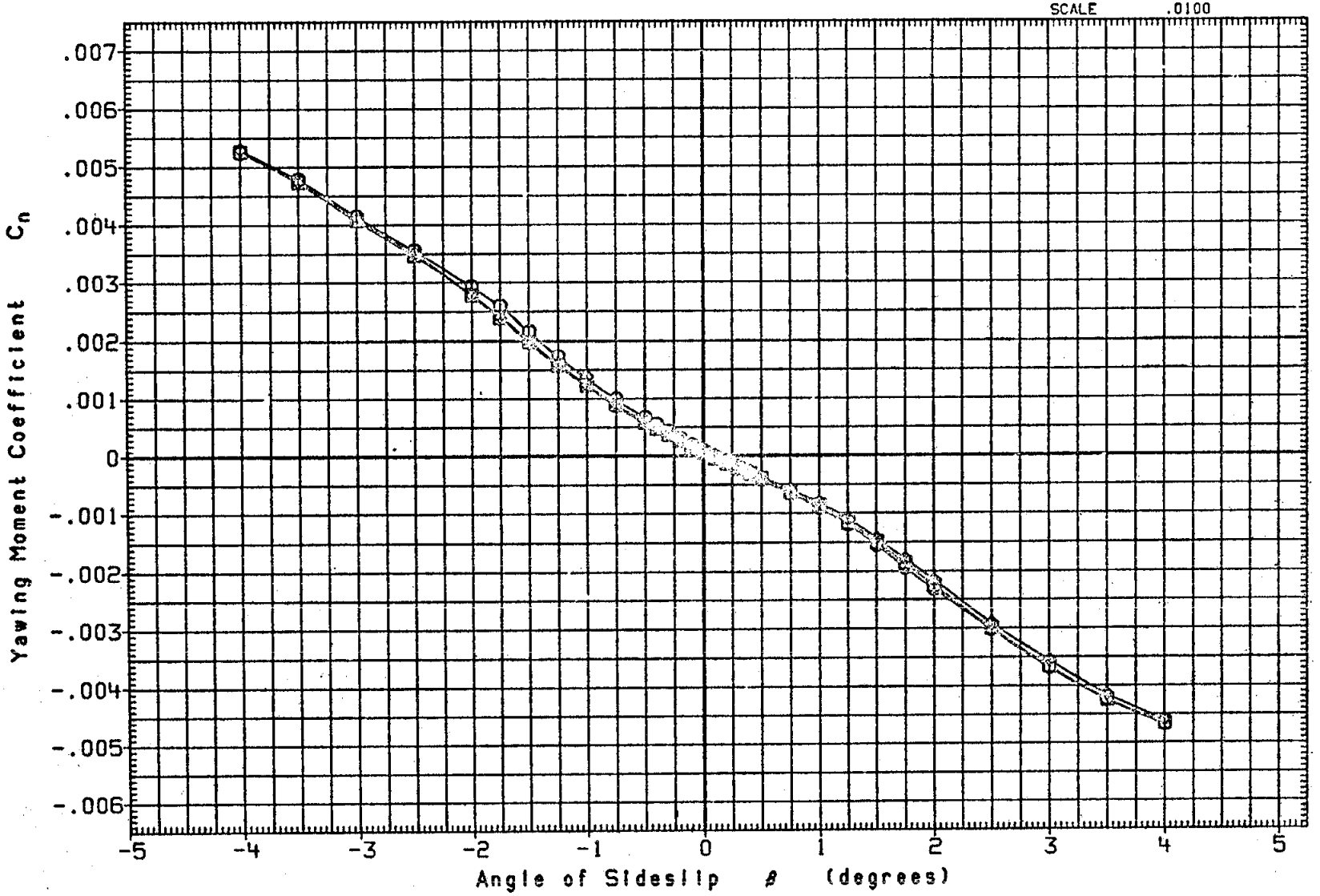


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 2.00

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3017	○	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3117	□	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3217	◇	OA259 (AEDC V41B-14) OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

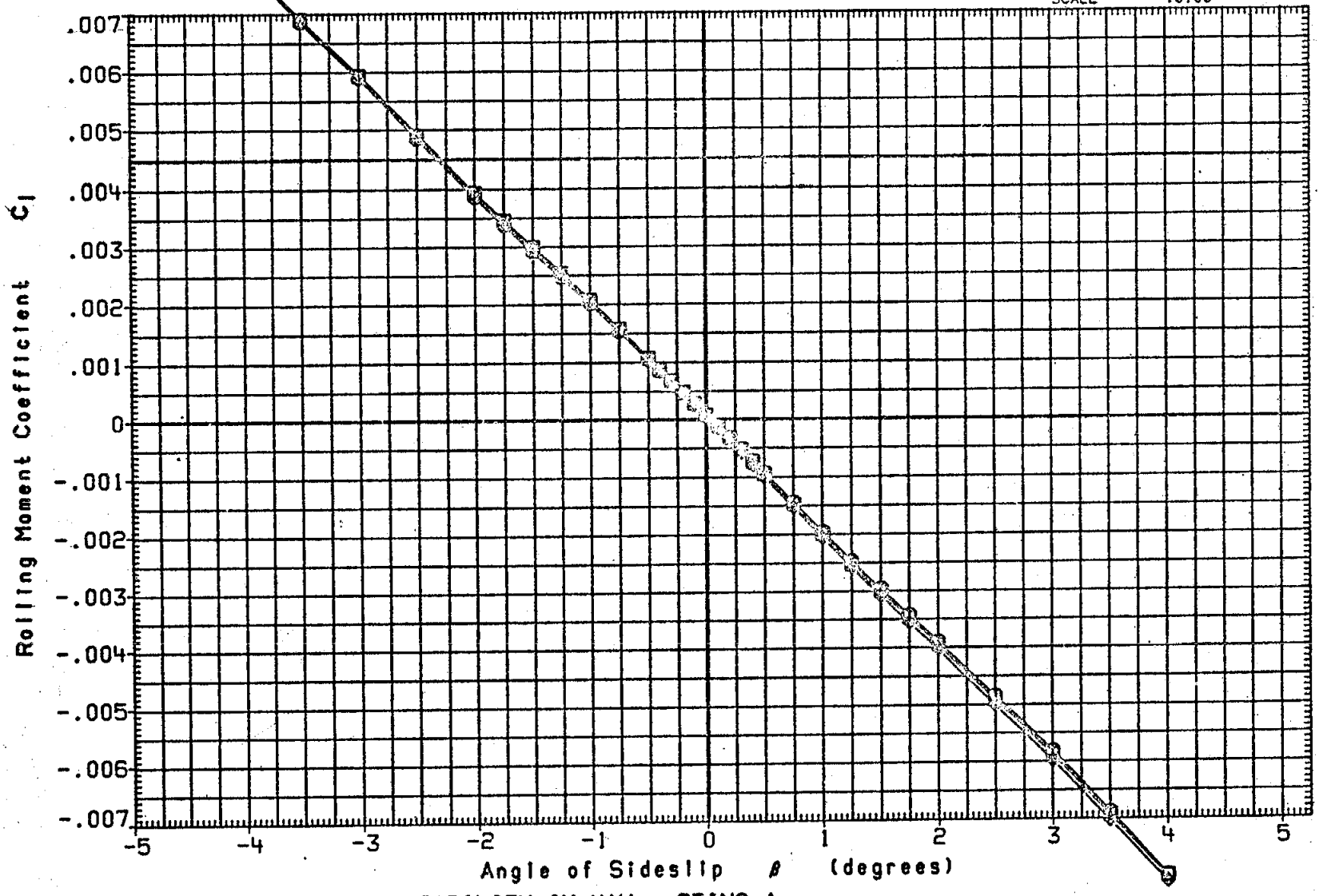


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 2.00

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3017	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3117	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3217	◇	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

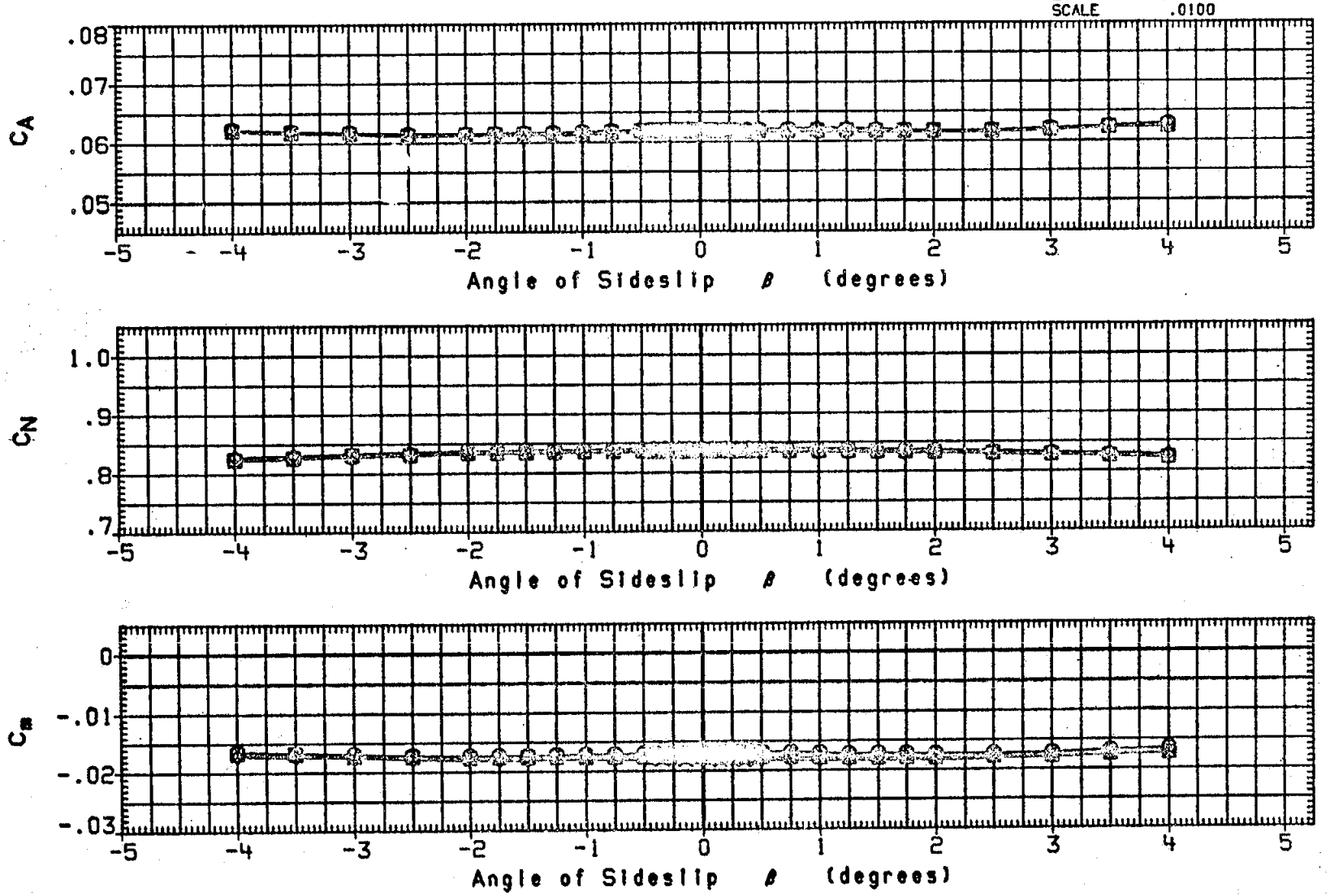


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 2.00

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3017	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3117	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3217	◇	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	935.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

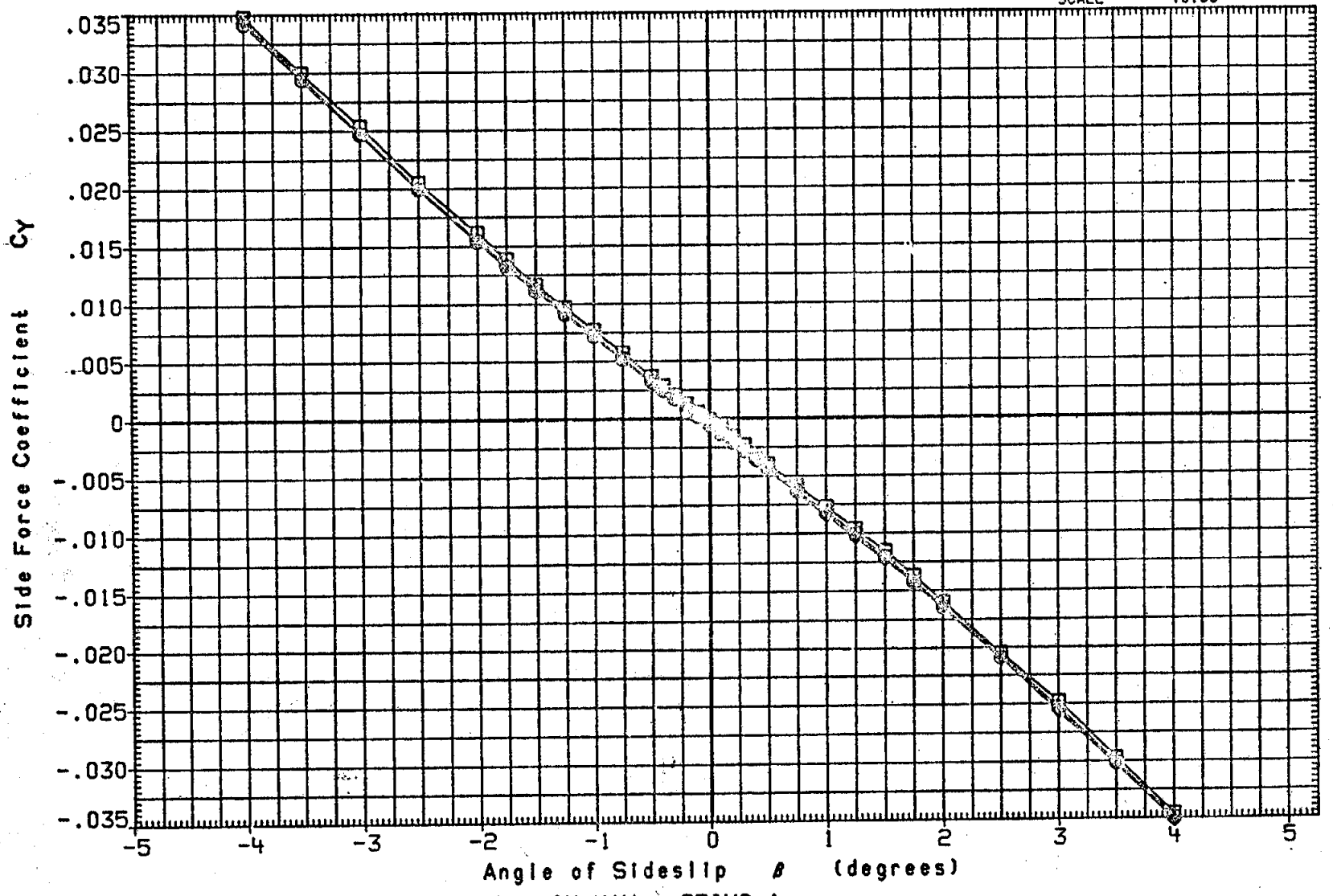


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(B) RN/L = 4.40

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3017	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3117	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3217	◇	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

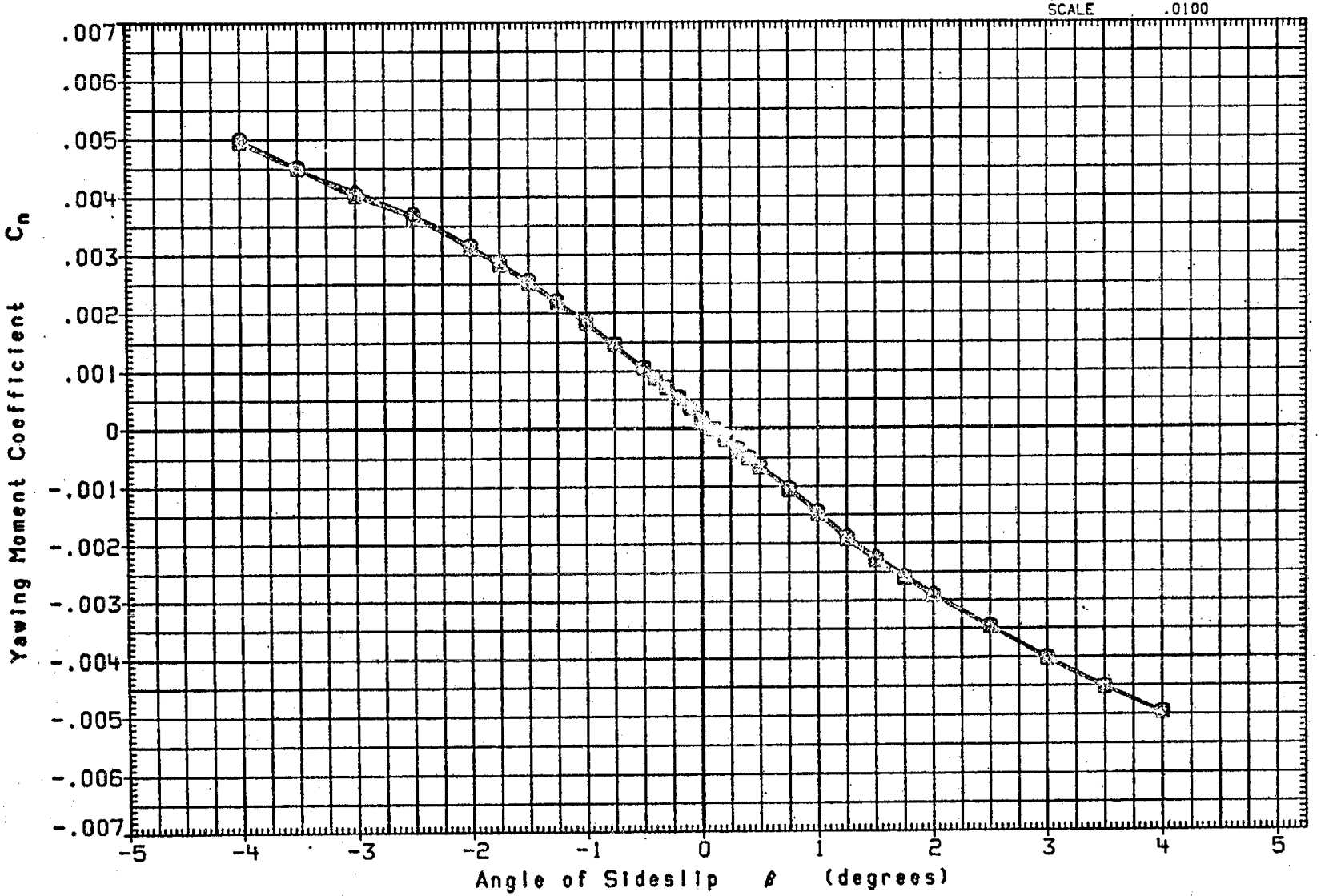


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(B) RN/L = 4.40

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3017	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3117	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3217	◇	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

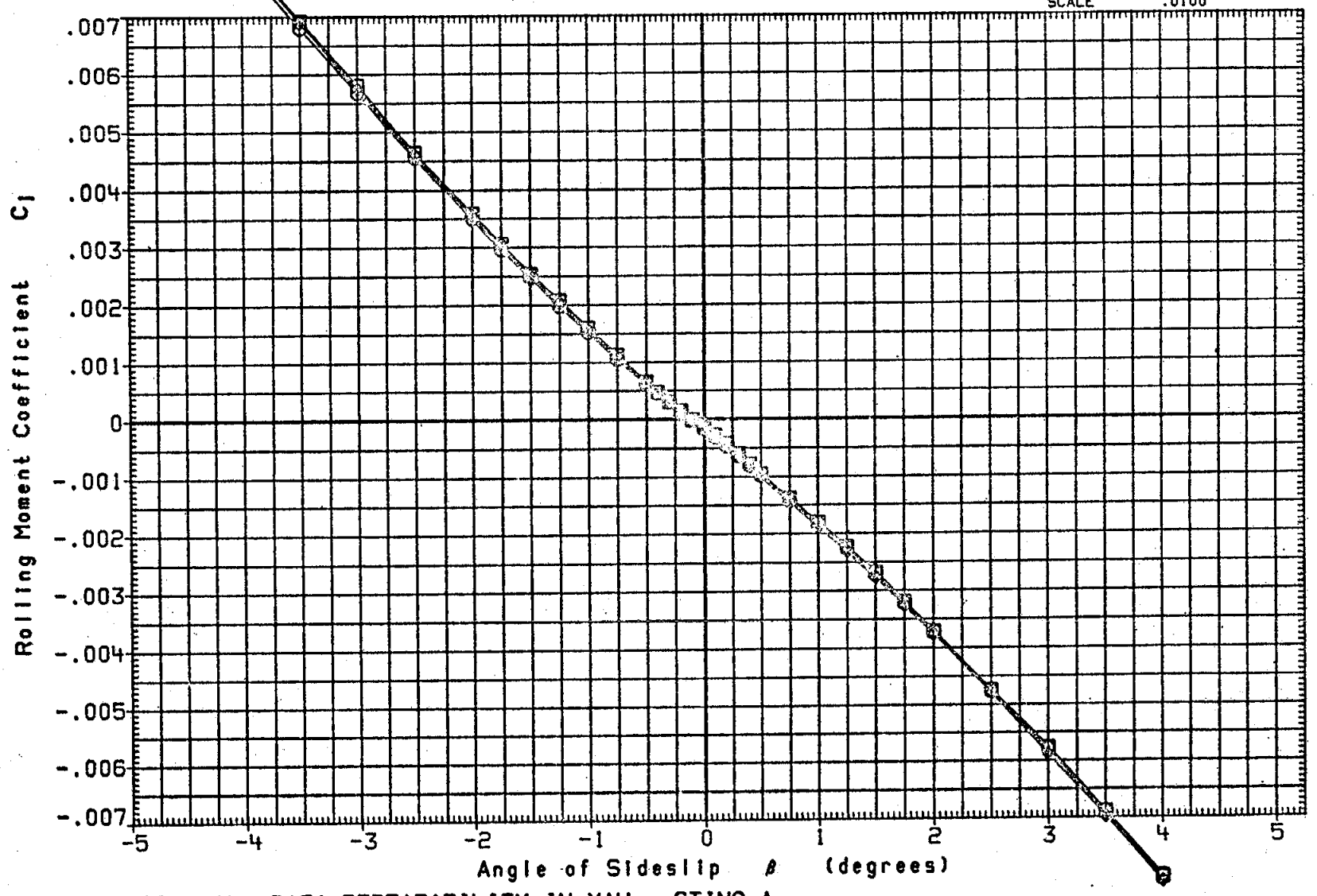


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(B)RN/L = 4.40

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3017	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3117	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000
RT3217	◇	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	INCRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

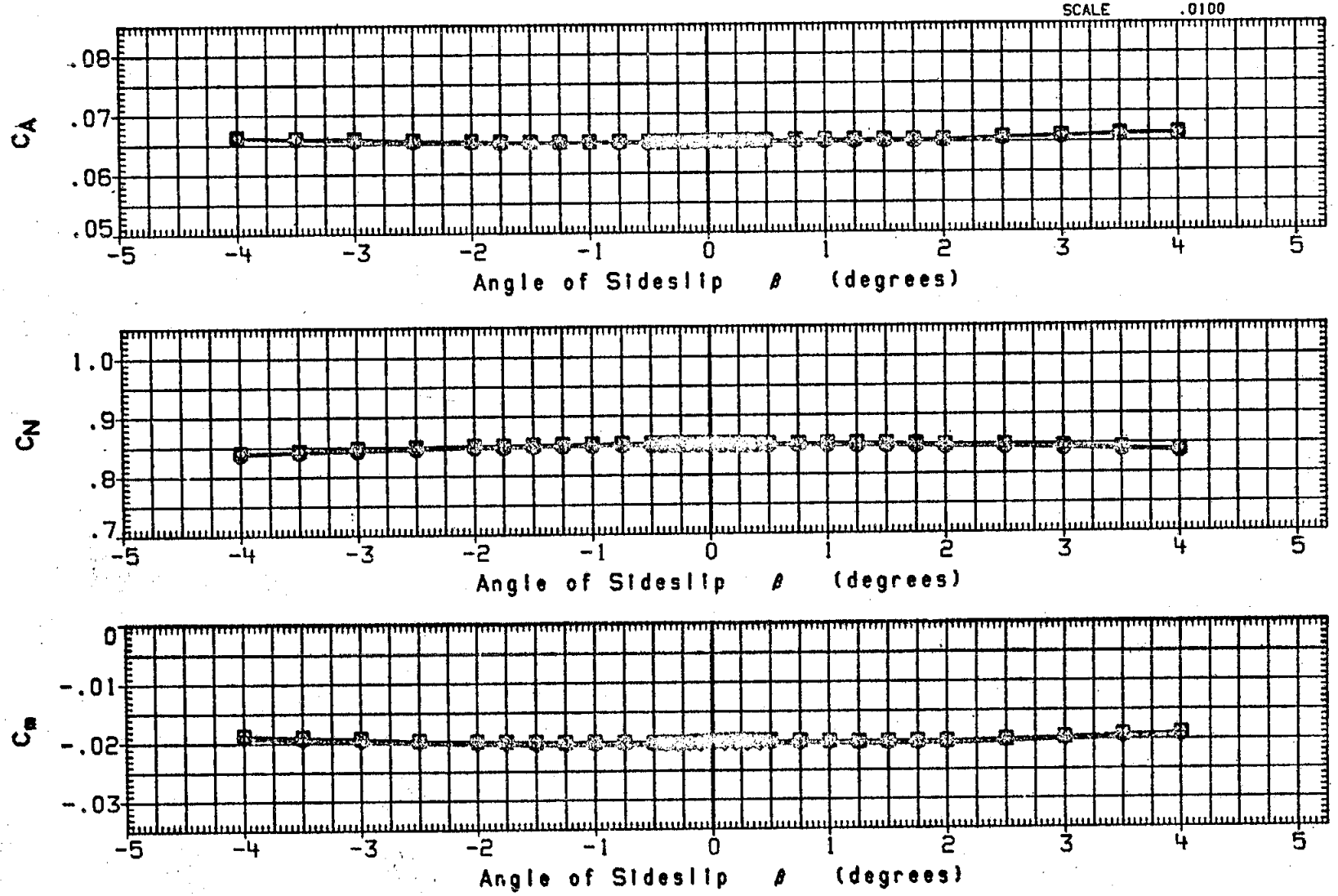


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(B) RN/L = 4.40

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	M/CH
RT3018	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	DECRSE	CONTNU	2.000	6.000
RT3118	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	DECRSE	CONTNU	2.000	6.000
RT3218	◇	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

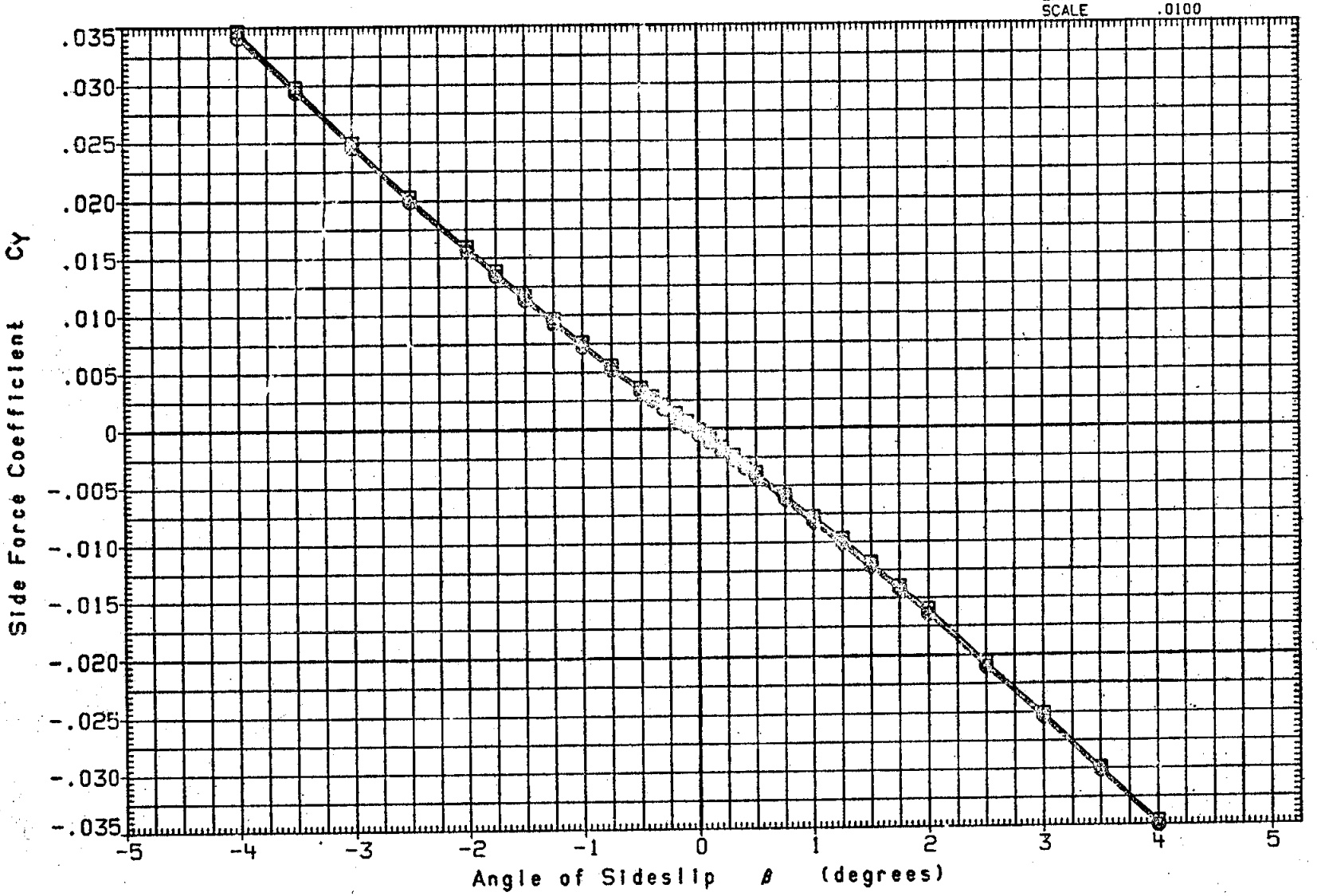


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 4.42

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3018	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	DECRSE	CONTNU	2.000	6.000
RT3118	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	DECRSE	CONTNU	2.000	6.000
RT3218	◇	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6300	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

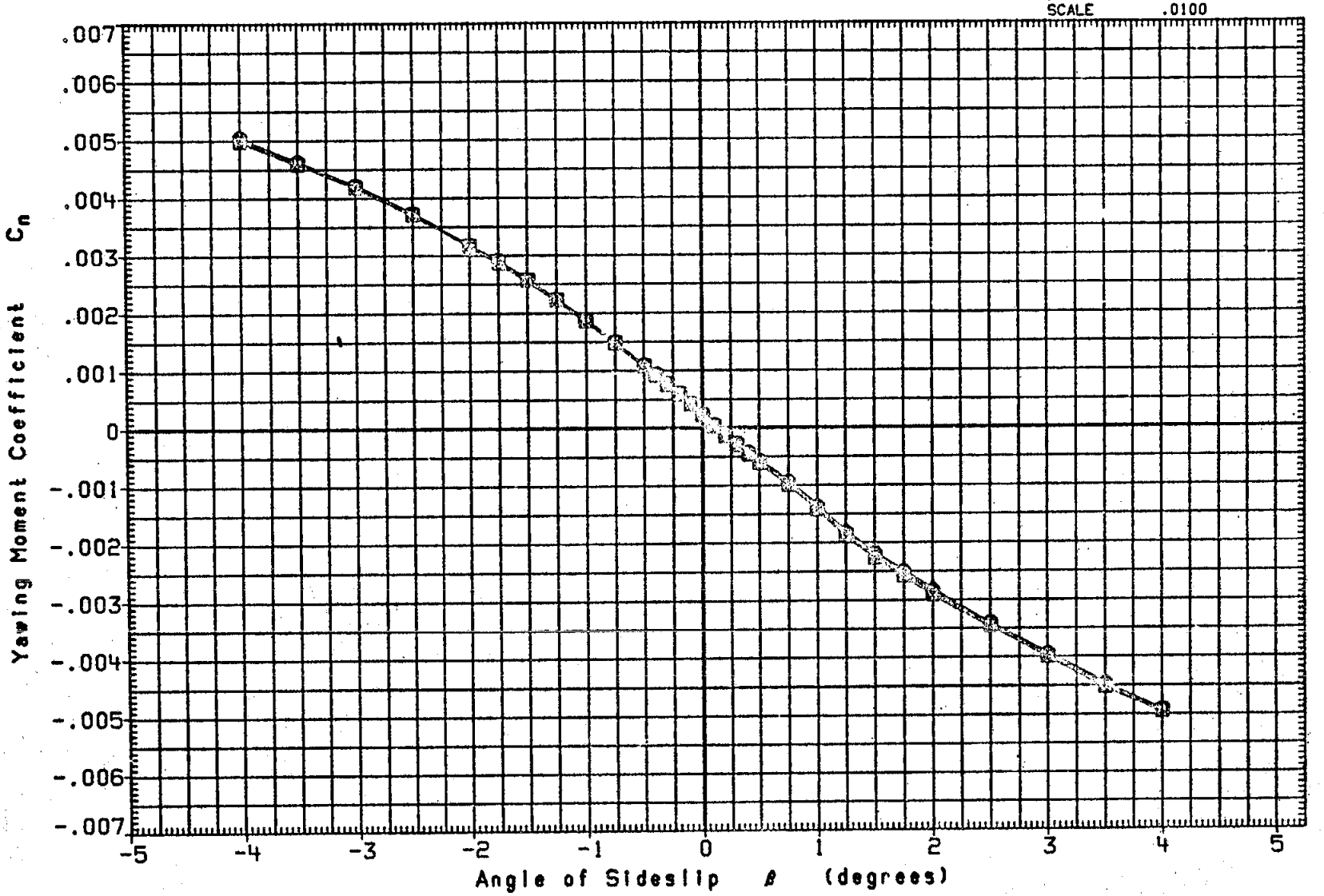


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 4.42

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT301B	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	DECRSE	CONTNU	2.000	6.000
RT311B	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	DECRSE	CONTNU	2.000	6.000
RT321B	◇	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

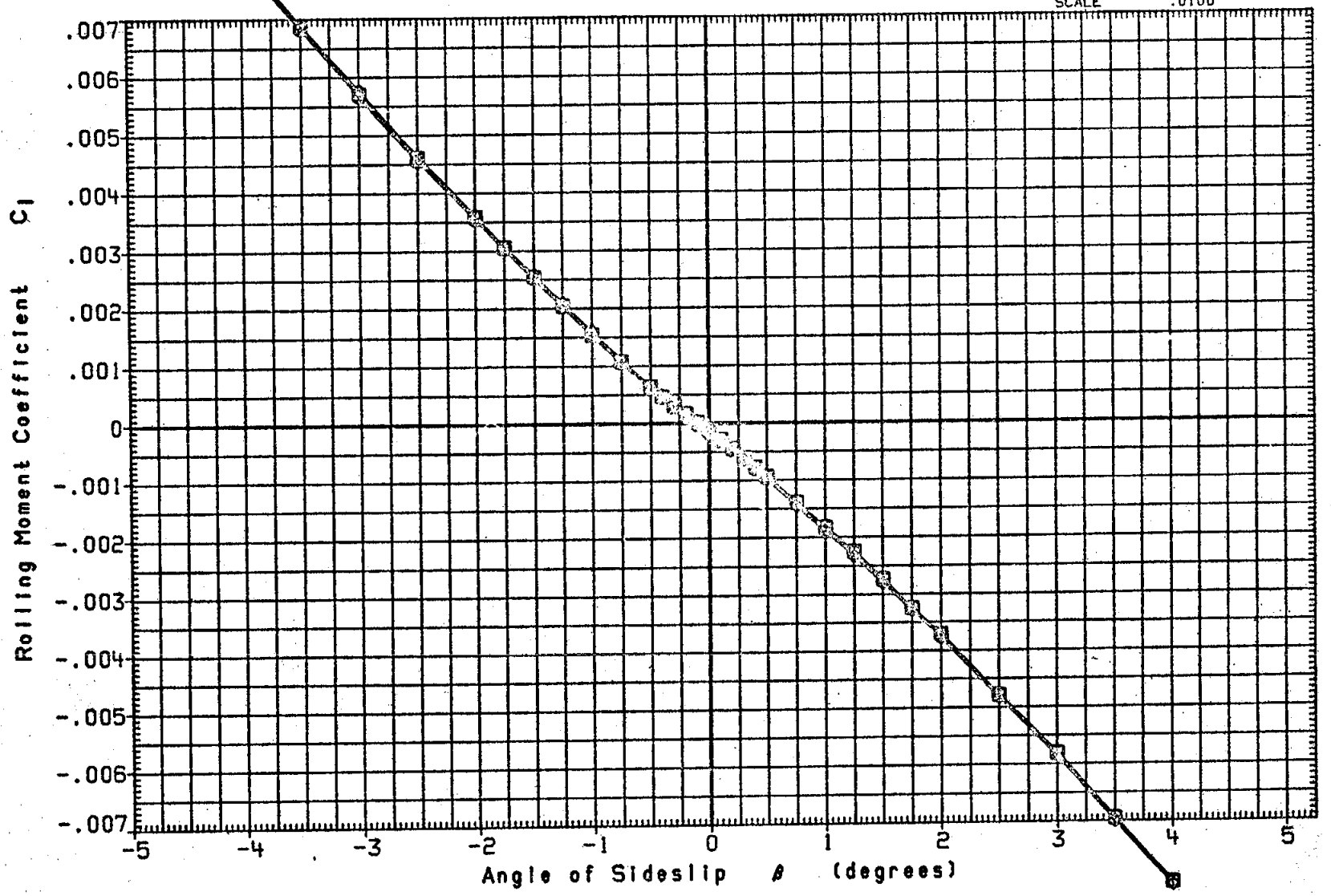


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 4.42

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3018	○	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	DECRSE	CONTNU	2.000	6.000
RT3118	□	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	DECRSE	CONTNU	2.000	6.000
RT3218	◇	OA259 [AEDC V41B-14] OV102, STING A (UPRIGHT)	30.000	DECRSE	CONTNU	2.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

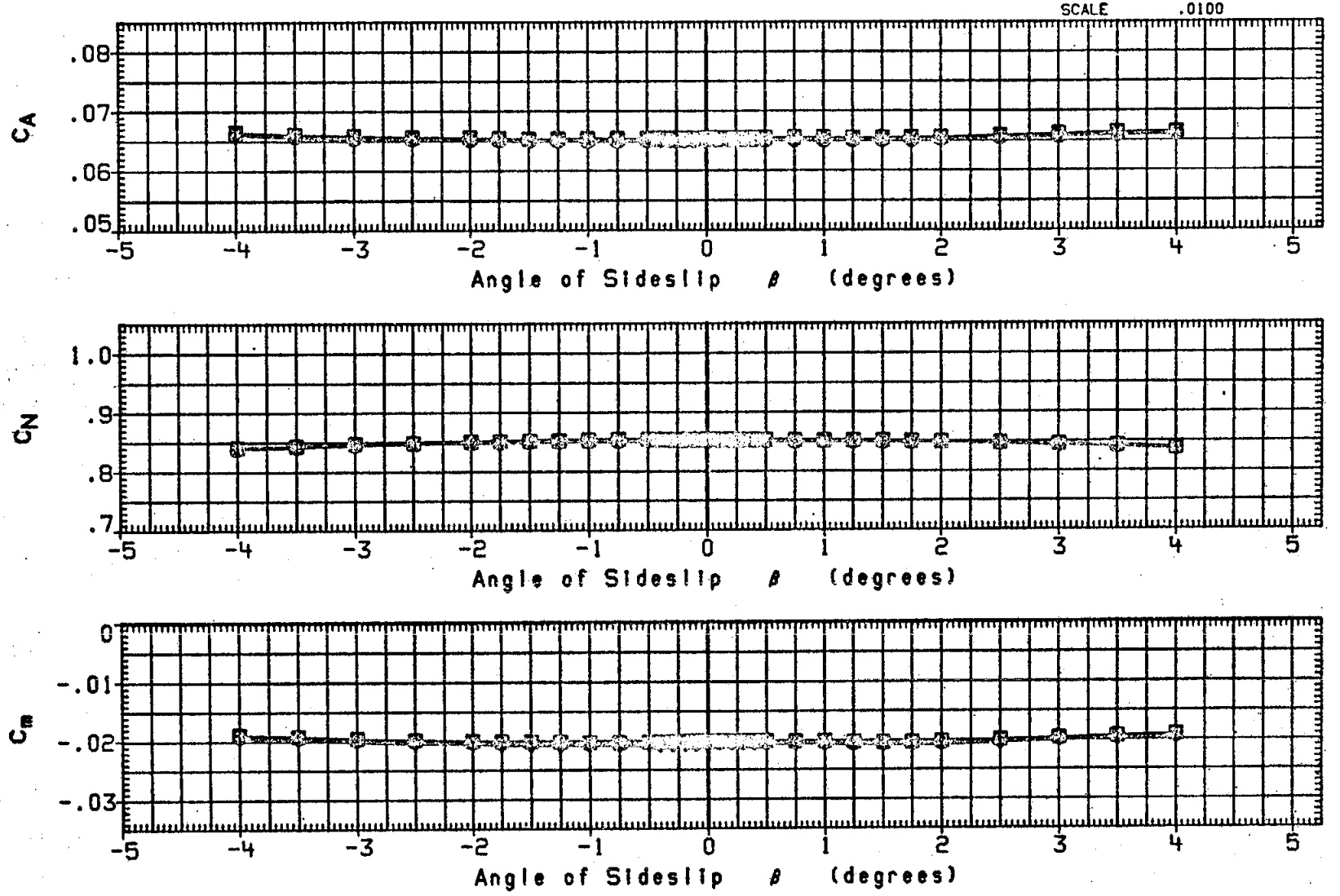


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(A) BASELINE CONFIGURATION

(A)RN/L = 4.42

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3033	○	OA259 (AEDC V41B-14) OV102, STING A (INVERTED)	30.000	INCRSE	CONTNU	1.000	6.000
RT3133	□	OA259 (AEDC V41B-14) OV102, STING A (INVERTED)	30.000	INCRSE	CONTNU	1.000	6.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6900	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

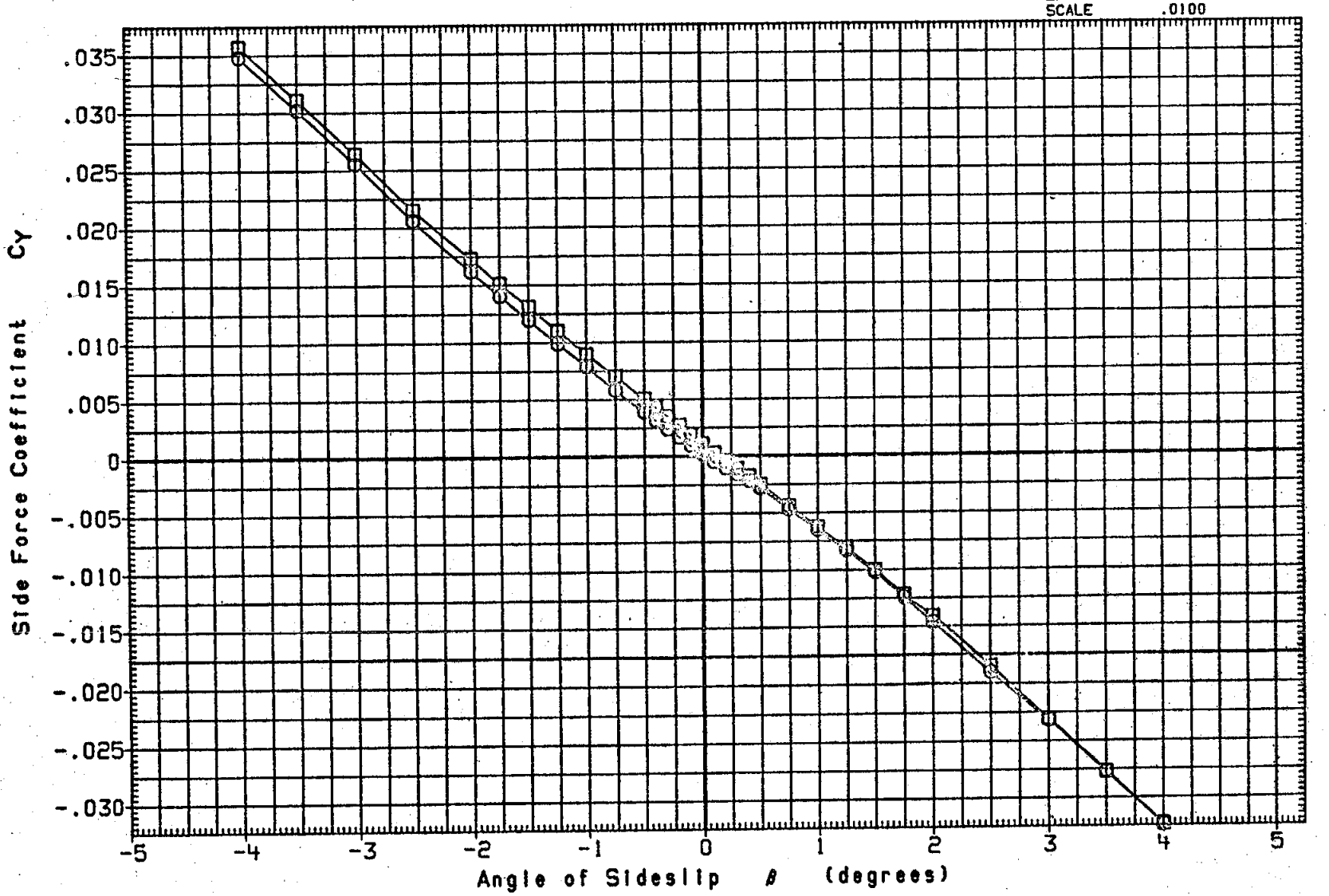


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(B) MODEL INVERTED

(A) RN/L = 4.38

DATA-SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3033	○	OA259 (AEDC V41B-14) OV102, STING A (INVERTED)	30.000	INCRSE	CONTNU	1.000	6.000
RT3133	□	OA259 (AEDC V41B-14) OV102, STING A'(INVERTED)	30.000	INCRSE	CONTNU	1.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

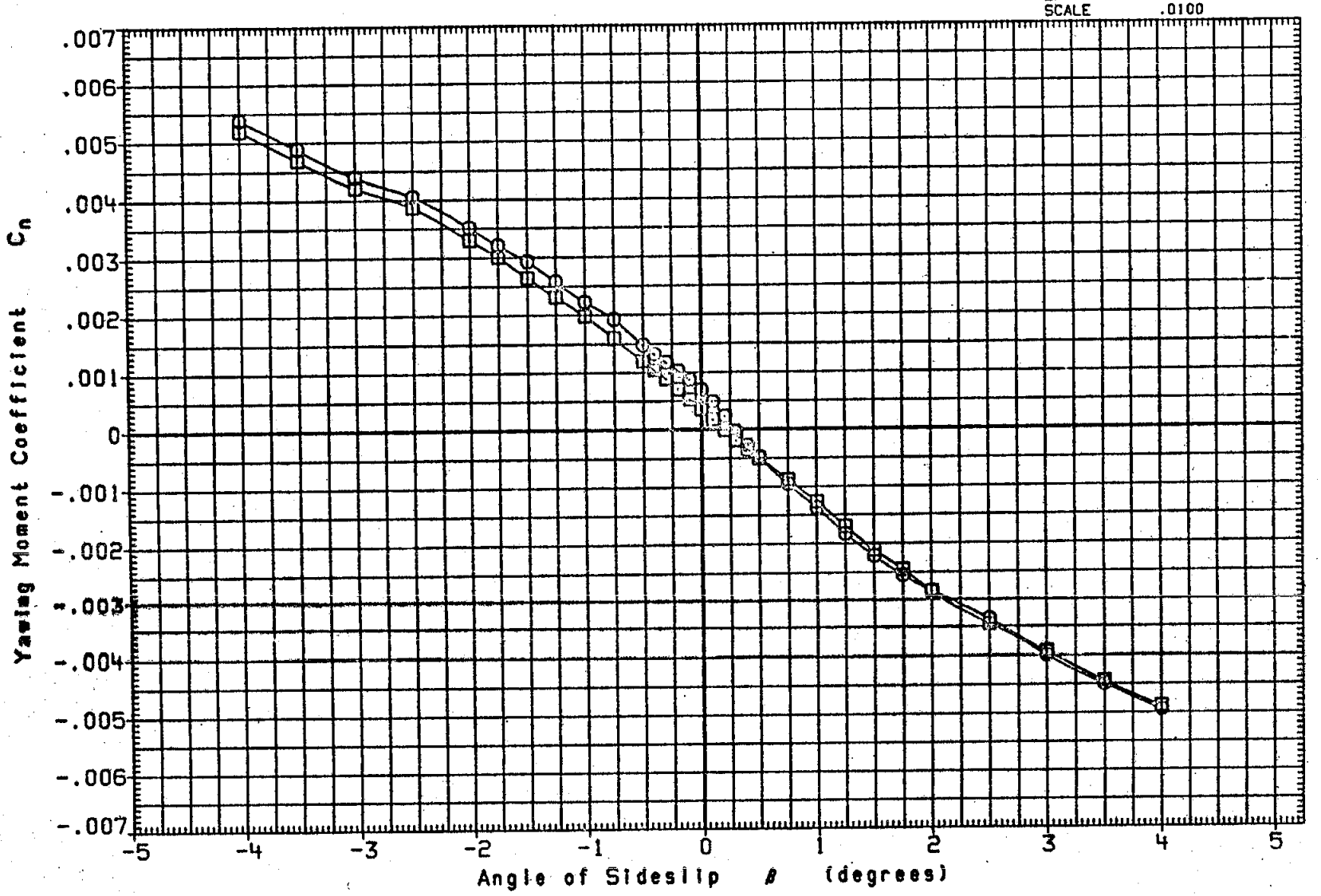


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(B) MODEL INVERTED

(A)RN/L = 4.38

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3033	○	OA259 (AEDC V41B-14) OV102, STING A (INVERTED)	30.000	INCRSE	CONTNU	1.000	6.000
RT3133	□	OA259 (AEDC V41B-14) OV102, STING A (INVERTED)	30.000	INCRSE	CONTNU	1.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

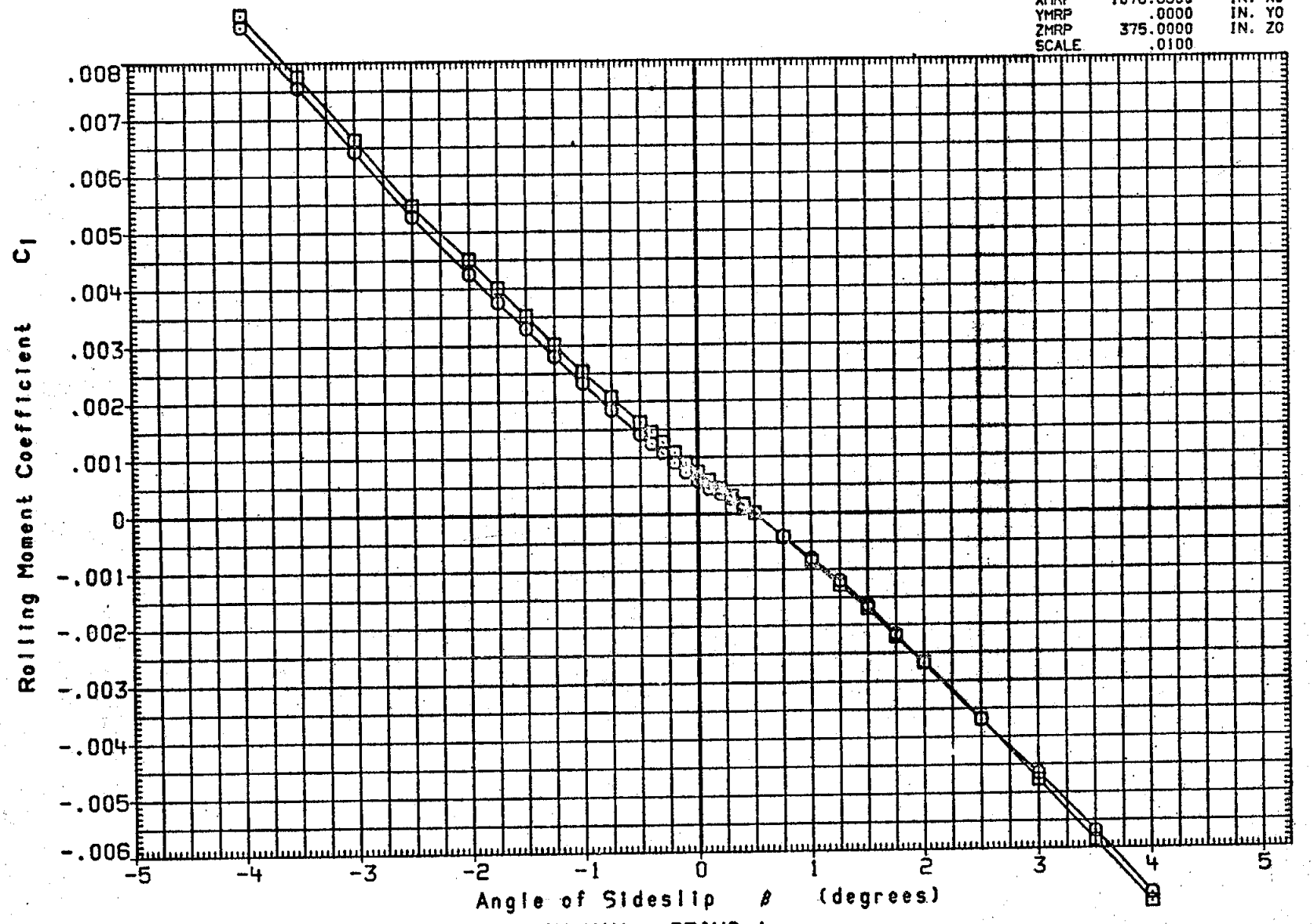


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(B) MODEL INVERTED

(A)RN/L = 4.38

DATA SET	SYMBOL	CONFIGURATION	ALPHA	S-DIR	S-MODE	CONFIG	MACH
RT3033	○	OA259 (AEDC V41B-14) OV102, STING A (INVERTED)	30.000	INCRSE	CONTNU	1.000	6.000
RT3133	□	OA259 (AEDC V41B-14) OV102, STING A (INVERTED)	30.000	INCRSE	CONTNU	1.000	6.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	INCHES
BREF	936.6800	INCHES
XMRP	1076.6800	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

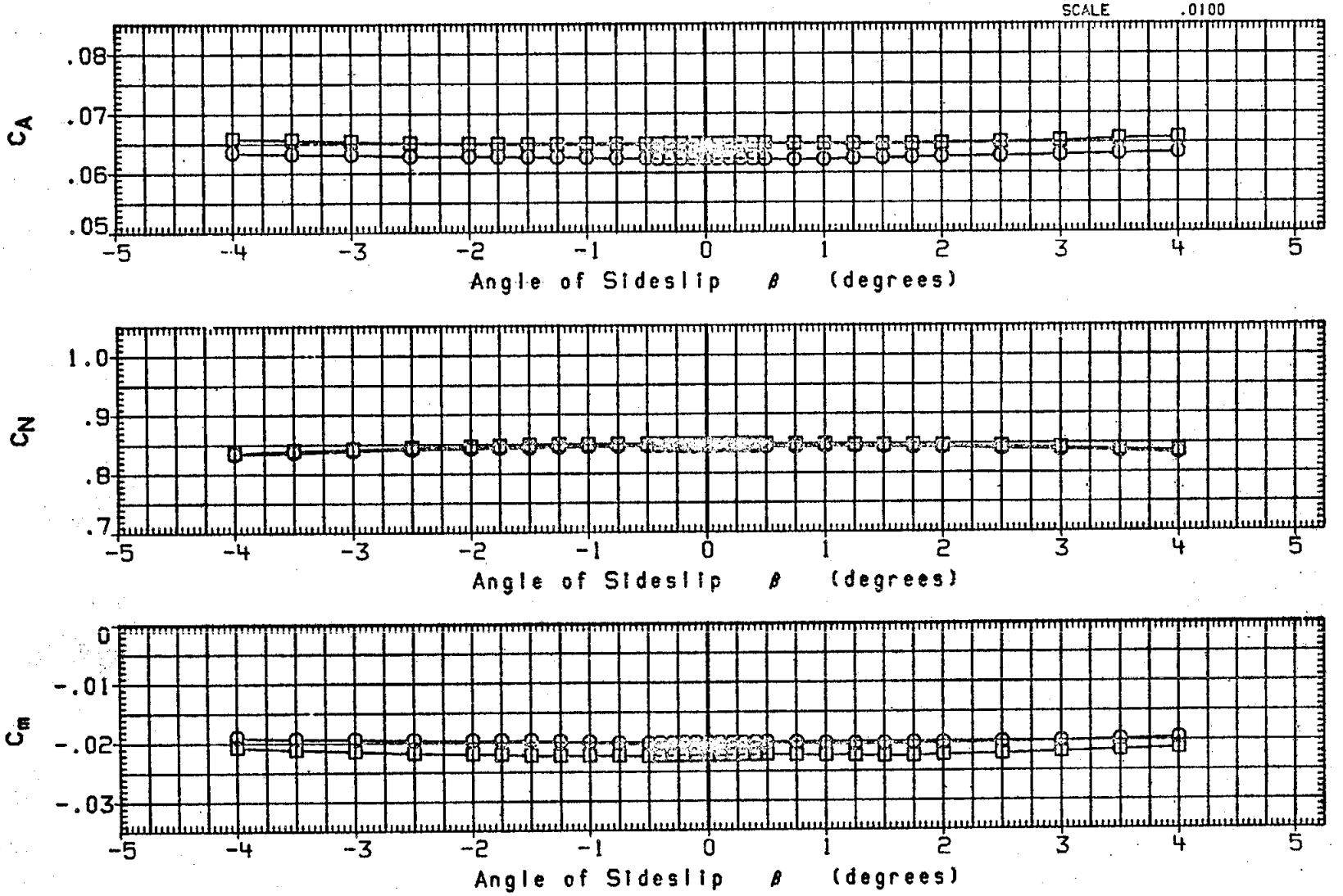


FIG. 14 DATA REPEATABILITY IN YAW, STING A
(B) MODEL INVERTED

(A) RN/L = 4.38