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8-FOOT TRANSONIC WIND TUNNEL

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REPORT NO. I14-013
VOL I of II

TRANSONIC WIND TUNNEL TESTS OF A MODEL OF THE SANDIA SAUTERNE SHAPE-PHASE II

OCTOBER/NOVEMBER 1964

PROJECT NO. AA-1974-Y
CONTRACT NO. P.O. 4804-001

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CORNELL AERONAUTICAL LABORATORY, INC.
BUFFALO 21, NEW YORK

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TRANSONIC WIND TUNNEL TESTS OF A MODEL OF THE SANDIA SAUTERNE SHAPE-PHASE II

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BY _____
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APPROVED _____
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DATE January 21, 1965

THIS DOCUMENT CONSISTS OF 142

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TABLE OF CONTENTS

Section	Title	Page No.
I	Summary	2
II	Test Equipment	3
III	Nomenclature and Symbols	5
IV	Test Procedure	12
V	Presentation of Data	14
VI	Corrections to Data	16
VII	Precision of Data	18
VIII	References	20
IX	Table Index	21
X	Figure Index	256

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SECTION I SUMMARY

Wind tunnel tests were conducted on a model of the Sandia Sauterne shape in the Cornell Aeronautical Laboratory 8-Foot Transom. Wind Tunnel during October and November, 1964. These tests were performed in order to determine model static longitudinal stability with several different tail configurations, and to determine normal force and stability characteristics of the model with folding wing surfaces extended.

The tests were performed at Mach numbers from .60 to 1.10, at angles of attack from -4 to +20 degrees, at angles of yaw from -4 to +4 degrees, and at combined angles of attack and yaw.

This report presents details of the test program, an outline of the test procedure and results of the investigation in graphical and tabular form.

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SECTION II TEST EQUIPMENT

Model

The model of the Sandia Sauterne shape was built entirely by Cornell Aeronautical Laboratory, to specifications provided by the Sandia Corporation. The model was sting mounted in the perforated test section of the CAL 8-Foot Transonic Tunnel (Reference 1); photographs of various model configurations installed in the tunnel are shown in Figure 1, and installation sketches are shown in Figure 2. For the first 136 runs of the test, the model was installed on the single roll mechanism as shown in Figure 2a; the remaining 42 runs of the test were run about three weeks later, and the double roll mechanism installation shown in Figure 2b was used.

Earlier tests of a similar Sandia Sauterne model were made at CAL and are described in Reference 2. Model configurations for the present test included a series of new tailfins, expanded and flared afterbodies, different crushable vanes, and a refined wing design, as shown in the model drawings, Figure 3.

The extended positions of the folding wings of the full scale vehicle were simulated by two sets of rigid wings at fixed incidence angles of 26 and 33 degrees. These wings were located further back on the fuselage than the wings used during the tests of Reference 2. Filler plates were available to cover the exposed space between the forward part of the wing panels. The basic fuselage contour was the same as that of the previous test, but the structure was entirely new except for the nose shell. For tests with the wings in the extended position, a center fuselage fairing was used which simulated the wing storage recess; for the other parts of the test program, a smooth contour fairing was used to simulate the wing in the folded position. The fuselage afterbody was split into four segments, each of which held one tailfin. Each segment could be expanded either 5 or 10 degrees from the model centerline, as shown in Figure 1b. A flared skirt afterbody was also provided. The entire afterbody assembly could be rotated to position the tailfins either in a + or X attitude. Three basic sets of tailfins were provided.

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SECTION II TEST EQUIPMENT (CON'T)

Model - continued

Both rectangular and trapzoidal extensions and tip plates were added to various basic fins to make additional tailfin configurations

Instrumentation

Loads on the model were measured with the CAL E-538 six-component strain gage balance. Two pressure orifices were located in the balance cavity, and for most of the test two base pressure orifices were located directly behind the base of the model. When the flared skirt afterbody was installed, one cavity pressure was dropped and the base pressure tubes were replaced by a five-tube base pressure rake, with orifices located as shown in Figure 3d. All pressure orifices were connected to a CAL automanometer in the plenum chamber beneath the test section. Balance and automanometer outputs were read on the CAL automatic digital readout system, and were recorded on punch cards for electronic data processing.

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SECTION III NOMENCLATURE AND SYMBOLS

The following nomenclature is used throughout this report:

Tunnel Airflow Conditions

V	Free-stream velocity - feet per second
a	Local speed of sound - feet per second
M	Free-stream Mach number = $\frac{V}{a}$
M_c	Computed Mach number $= \sqrt{5\ (\frac{H}{p})^{2/7} - 5}$
γ	Ratio of specific heats of air = 1.400
q	Free-stream dynamic pressure - pounds per square foot = $\frac{\gamma}{2} pM^2$
H	Free-stream total pressure - pounds per square foot
p	Free-stream static pressure - pounds per square foot
ρ	Free-stream static density - slugs per cubic foot
ν	Kinematic viscosity of air - square feet per second
N_R	Reynolds number per foot = $\frac{V}{\nu}$
T_t	Free-stream total temperature - degrees Rankine
T	Free-stream static temperature - degrees Rankine

Model Angles and Reference Dimensions

α	Angle of attack. Angle between the model centerline and the projection of the relative wind vector on the model plane of symmetry. Positive nose up - degrees.
α'	Angle of attack - used with missile axis system data only. Angle between the model centerline and the relative wind vector.
β	Yaw angle. Angle between the wind vector and its projection on the model plane of symmetry. Positive nose left - degrees.

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SECTION III NOMENCLATURE AND SYMBOLS (CONT)

Model Angles and Reference Dimensions - continued

Φ Angle of roll. Angle between the model plane of symmetry and the plane which contains the model centerline and the relative wind vector (pitch plane). Measured in a plane perpendicular to the model centerline. Positive right wing down - degrees.

Φ_{fin} Roll orientation of tailfins

Φ_{fin} = 0: + orientation

Φ_{fin} = 45: X orientation

(Φ_{fin} is assumed to be 0 unless otherwise specified, throughout this report.)

ϵ_t Expanded afterbody angle. Angle between open and closed position of one afterbody segment - degrees

i_w Wing incidence angle - degrees

S Reference area = 0.09258 square feet

S_c Balance cavity = 0.02540 square feet

S_b Model base area = 0.04041 square feet (normal afterbody)

= 0.46584 square feet (flared skirt afterbody)

$\bar{l}$ Reference length = 30.250 inches

Model Pressures

p_{c_x} Balance cavity pressure - pounds per square foot

Where subscript x denotes pressure orifice number

x = 1 or 2

p_{b_x} Model base pressure - pounds per square foot

Where subscript x denotes pressure orifice number.

x = 1 or 2 for normal afterbody; x = r_1 - r_2 for flared skirt afterbody

$\bar{p}_c$ Average balance cavity pressure - average of p_{c_x} - pounds per square foot

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SECTION III NOMENCLATURE AND SYMBOLS (CON'T)

Model Pressures - continued

$\bar{p}_b$ Average model base pressure - average of p_{b_x} - pounds per square foot

C_{p_c} Balance cavity pressure coefficient = $\frac{\bar{p}_c - p}{q}$

C_{p_b} Model base pressure coefficient = $\frac{\bar{p}_b - p}{q}$

Model Forces and Moments

NOTE: Model moments were computed about two different moment centers. Subscript x on pitching and yawing moments denotes the moment center, as follows:

x	Fuselage Station	% Fuselage Length
1	15.500	42.76
3	18.000	49.65

These moment centers correspond to moment centers 1 and 3 used during the tests of Reference 2. Moment center 2 used during the previous test was not used during the present program.

Body Axis System

N Normal force - pounds

m_x Pitching moment - inch-pounds

Y Side force - pounds

n_x Yawing moment - inch-pounds

ℓ Rolling moment - inch-pounds

A_u Axial force - pounds

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SECTION III NOMENCLATURE AND SYMBOLS (CON'T)

Model Forces and Moments - continued

Body Axis System - continued

A Axial force corrected for balance cavity and model base pressures - pounds

$$= A_u + S_c (\bar{p}_c - p) + S_b (\bar{p}_b - p)$$

C_N Normal force coefficient = $\frac{N}{qS}$

C_{m_x} Pitching moment coefficient = $\frac{m_x}{qS\bar{l}}$

C_Y Side force coefficient = $\frac{Y}{qS}$

C_{n_x} Yawing moment coefficient = $\frac{n_x}{qS\bar{l}}$

C_ℓ Rolling moment coefficient = $\frac{\ell}{qS\bar{l}}$

C_{A_u} Uncorrected axial force coefficient = $\frac{A_u}{qS}$

C_A Axial force coefficient corrected for balance cavity and model base pressures

$$= \frac{A}{qS}$$

Model Forces and Moments - continued

Missile Axis System

N' Normal force - pounds

m'_x Pitching moment - inch-pounds

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SECTION III NOMENCLATURE AND SYMBOLS (CON'T)

Model Forces and Moments - continued

Missile Axis System - continued

Y' Side force - pounds

n'_x Yawing moment - inch-pounds

ℓ' Rolling moment - inch-pounds

A'_u Axial force - pounds

A' Axial force corrected for balance cavity and model base pressures - pounds

$$= A'_u + S_c(\bar{p}_c - p) + S_b(\bar{p}_b - p)$$

$C_{N'}$ Normal force coefficient = $\frac{N'}{qS}$

$C_{m'_x}$ Pitching moment coefficient = $\frac{m'_x}{qS\bar{\ell}}$

$C_{Y'}$ Side force coefficient = $\frac{Y'}{qS}$

$C_{n'_x}$ Yawing moment coefficient = $\frac{n'_x}{qS\bar{\ell}}$

$C_{\ell'}$ Rolling moment coefficient = $\frac{\ell'}{qS\bar{\ell}}$

$C_{A'_u}$ Uncorrected axial force coefficient = $\frac{A'_u}{qS}$

$C_{A'}$ Axial force coefficient corrected for balance cavity and model base pressure = $\frac{A'}{qS}$

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SECTION III NOMENCLATURE AND SYMBOLS (CON'T)

Configuration Symbols

B_2	Body. Wings simulated in folded position. Same contour as body B_1 of previous test.
B_3	Body. B_2 with simulated wing storage recess. Used with wings in extended position.
C_2	Crushable vane. Body centerline to tip distance = 2.75"
C_3	Crushable vane. Body centerline to tip distance = 3.00".
F_{2A}	Basic tailfin. Body centerline to tip distance = 2.48"
F_{2B}	Basic tailfin. Body centerline to tip distance = 3.09".
F_{2C}	Basic tailfin. Body centerline to tip distance = 3.71".
F_{2AX}	Tailfin. F_{2A} with 5.52 inch span rectangular extension.
F_{2BX}	Tailfin. F_{2B} with 4.91 inch span rectangular extension.
F_{2CX}	Tailfin. F_{2C} with 4.29 inch span rectangular extension.
F_{2AT}	Tailfin. F_{2A} with tip plate.
F_{2BT}	Tailfin. F_{2BT} with tip plate.
F_{2CT}	Tailfin. F_{2C} with tip plate.
F_{3A}	Tailfin. F_{2A} with 1.65 inch span trapezoidal extension.
F_{3B}	Tailfin. F_{2A} with 2.68 inch span trapezoidal extension.
F_{3C}	Tailfin. F_{2A} with 3.71 inch span trapezoidal extension.
S_1	Flared skirt afterbody, 20 degree half angle.
W_2	Wing, simulated in the extended position.
W_3	Wing. W_2 with filler plate covering the gap between the root chord lines at the forward part of the wing.

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SECTION III NOMENCLATURE AND SYMBOLS (CON'T)

Configuration Symbols - continued

The use of tailfin or crushable vane symbols as they appear on the previous page, with a single subscript, denotes four identical units arranged at 90 degree intervals around the periphery of the body. At times during the test, the fins or vanes installed in one plane were different from those installed in the perpendicular plane. This type of configuration is indicated by two subscripts separated by a diagonal line; the first subscript in each case denotes the fins installed in the model vertical plane, and the second subscript denotes the fins installed in the model horizontal plane (model upright in the tunnel). Thus, $F_{2A/2B}$ indicates F_{2A} fins on the top and bottom of the model, and F_{2B} fins on the sides.

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SECTION IV TEST PROCEDURE

Calibration

The CAL E-535 balance was calibrated prior to the test, and again in the interval between the two parts of the test. Deflection derivatives for the balance and sting system were also determined from these calibration data. The procedure for these calibrations is described in Reference 3 and the results are filed at CAL under this reference number. Pressure transducers were calibrated prior to use, as described in Reference 4. The results of these calibrations are also filed at CAL.

Operation

The first 136 runs of the test were run during October, 1964, and the remaining 42 runs were run about three weeks later. During this interval the E-535 balance axial force component was regaged, and the wing gap filler plates were fabricated. All runs were made at constant Mach number and with a constant mass of air in the tunnel circuit. The wind-off pressure ratio was either 0.65 or 0.50 atmosphere for wings-folded runs and 0.30 atmosphere for runs with wings in the extended position. No fixed boundary layer transition devices were used during this test.

Two different types of tailfins were installed on some model configurations, one pair in the model horizontal plane and another pair in the model vertical plane. The model was then tested in both $\Phi = 0$ and $\Phi = 90°$ attitudes. This method allowed two sets of tailfins to be tested in a position perpendicular to the pitch plane, with a minimum of model change time.

After Run 63, it was discovered that a hole in the wall of the sting had not been plugged; this hole opened into the sting base and therefore into the balance cavity. It was sealed, but after Run 112 was found to be unplugged again. Balance cavity pressures are, therefore, affected by an indeterminate amount, for Runs 1-63 and for some runs prior to 112. A permanent seal was installed after Run 112 and remained intact for the rest of the test.

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SECTION IV TEST PROCEDURE (CON'T)

Operation - continued

Messrs. R. E. Tate and P. R. Wilkes, Jr. represented the Sandia Corporation during the first part of the test. Mr. Tate was also present during the second part.

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SECTION V PRESENTATION OF DATA

A run schedule which gives information on the model configuration for each run is presented in Table I. Tunnel operating conditions for all runs are presented in Table II.

Model forces and moments have been reduced in both body and missile axis systems and about two moment centers, model stations 18.000 and 15.500 on the model longitudinal centerline. The two axis systems are shown in Figure 4. Both systems are aligned with the model longitudinal axis, but the body axis system follows the model as it rolls while the missile axis system remains in the pitch plane. Force and moment coefficients in the body axis system are listed in Tables IIIa and IIIb for the two moment center locations. Missile axis system coefficients for the two moment centers are listed in Tables IVa and IVb, for all runs in which roll angle is not zero. Since the two axis systems coincide at $\Phi = 0$, these data are not repeated in the Table IV listings. Balance cavity and model base pressure coefficients are listed in Table V. Five base pressure coefficients are presented for Runs 102-112, when the flared skirt afterbody and base pressure rake were installed. Two base pressure coefficients are listed for all other runs.

Plotted aerodynamic coefficients are presented in Figures 5-68. Normal force, axial force and pitching moment coefficients are plotted for all runs except yaw runs at constant angle of attack, for which side force, yawing moment and rolling moment coefficients are plotted. Plotted pitching and yawing moment coefficients are about the moment center at model station 18.000; moments about model station 15.500 are not plotted.

The wings-folded configurations were tested principally to determine relative tailfin effectiveness. During some of these runs, different pairs of tailfins were installed in the model vertical and horizontal planes. The model was otherwise symmetrical, and it was assumed that fins in the pitch plane would not effect longitudinal stability appreciably. Longitudinal data for a particular fin configuration, therefore, were determined with the entire model rolled to position that pair of fins perpendicular to the pitch plane.

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SECTION V PRESENTATION OF DATA (CON'T)

In order to present these data uniformly, missile axis system coefficients are plotted for configurations of this type at 90 degrees roll angle. At zero degrees roll angle, the plotted data can be considered to be in either body or missile axis system, as the two coincide. Thus, each of these data plots illustrates the effect of a particular tailfin configuration on model longitudinal stability. The fins which contribute to longitudinal stability in each case are indicated by a notation in the title block, and also in Table I and in the Figure Index.

Coefficients in the body axis system are plotted for all runs of the test other than those with two types of tailfins, as described above.

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SECTION VI CORRECTIONS TO DATA

No wind tunnel wall corrections have been applied to the data contained in this report. Within the limitations of theoretical computations the blockage and jet boundary corrections, usually applied to subsonic data from solid wall tunnels, are believed to be negligible in this perforated wall transonic wind tunnel. Above Mach number one, the perforated walls are effective in attenuating shock and expansion waves from the model thus reducing the effect of reflections from the walls. Although complete attenuation is not attained in general, experience has indicated that the effect of residual reflections is negligible on this size model except perhaps for the axial force component where some interference may be expected in the Mach number region around 1.05. Some experimental substantiation for this belief together with a discussion of some of these corrections and a bibliography covering theoretical aspects of the problem, are presented in Reference 5.

No buoyancy corrections were made to axial force as the clear tunnel pressure gradients in the region occupied by the model are negligible.

The balance strain gage readings were corrected for mechanical interactions present in the balance used for this program. These correction factors were obtained during the static calibration of the balance, the results of which are presented in Reference 3.

The main balance strain gages sense forces and moments which are the result of the model weight component change as the model attitude is varied. These forces and moments also vary with model configuration and are determined from test runs conducted at wind-off tunnel conditions during which the model attitude is varied. The balance data are then corrected for these static tare effects to obtain net aerodynamic forces and moments.

The model geometric angles were corrected for sting and balance deflections due to aerodynamic loads. Values for these corrections were obtained from the static loading calibration of the balance.

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SECTION VI CORRECTIONS TO DATA (CON'T)

The balance cavity pressure and model base pressure were used to correct the measured axial force to a condition corresponding to free-stream static pressure acting over the model base.

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SECTION VII PRECISION OF DATA

It is estimated that the model geometric angles are accurate to ± .1 degree.

A statistical determination of the accuracy of the strain gage balance system used for this program was accomplished by calculating the root mean square deviation between applied and calculated loadings. The calculated loads were determined by using final balance constants and balance readings produced by known static loads. The results are presented below.

Component	Root Mean Square Deviation	
	First Calibration (Runs 1 - 136)	Second Calibration (Runs 137 - 178)
Normal Force	± .86	± .50
Pitching Moment	± 5.30	± 1.84
Side Force	± .30	± .16
Yawing Moment	± .94	± .55
Rolling Moment	± 1.33	± .86
Axial Force	± .32	± .11

All pressure transducers are calibrated to an accuracy of ± 2 pounds per square foot.

No satisfactory method is known for determining the absolute accuracy of the final coefficients. However, since the testing procedure resulted in the repetition of at least one model attitude during each run, an estimate can be made of the repeatability with which these data were measured. The coefficients were examined at the various repeat points with the following results:

Coefficient	Root Mean Square Deviation
C_N	± .0149
C_m	± .0021

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SECTION VII PRECISION OF DATA (CON'T)

Coefficient	Root Mean Square Deviation
C_Y	± .0007
C_n	± .0013
C_l	± .0005
C_A	± .0057

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SECTION VIII REFERENCES

1. "8-Foot Transonic Wind Tunnel," Cornell Aeronautical Laboratory Wind Tunnel Report No. WTO-300, Revised November, 1964.

2. Reid, C. F., Jr.:
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"Procedure and Results of Strain Gage Balance Calibrations," Cornell Aeronautical Laboratory Wind Tunnel Report No. WTO-479, December, 1960.

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"Calibration of Consolidated Electrodynamics Corporation Pressure Transducers," Cornell Aeronautical Laboratory Wind Tunnel Report No. WTO-509, June, 1963.

5. Bird, K. D., and Martin, J. F.:
"Results of Calibrations and Various Model Configuration Tests in the 4-Foot Transonic Wind Tunnel," Cornell Aeronautical Laboratory Report No. AD-844-W-3, August, 1953.

SECTION IX TABLE INDEX

Table No.		Contents
I		Test Schedule
II		Tunnel Operating Conditions
III	a	Model Force and Moment Coefficients - Body Axis System Moment Center = M. S. 18.000
	b	Model Force and Moment Coefficients - Body Axis System Moment Center = M. S. 15.500
IV	a	Model Force and Moment Coefficients - Missile Axis System Moment Center = M. S. 18.000
	b	Model Force and Moment Coefficients - Missile Axis System Moment Center = M. S. 15.500
V	a	Balance Cavity and Model Base Pressure Coefficients - Standard and Expanded Afterbodies
	b	Balance Cavity and Model Base Pressure Coefficients - Flared Skirt Afterbody

TABLE I

TEST SCHEDULE

RUN NO.	CONFIGURATION	M	α	Φ	ϵ_t	i_w	EFFECTIVE FINS	FIGURE NO.	REMARKS
1	B_2	--	Var	0	—	—	—	--	a
2	↓	1.10	↓	↓	↓	↓	↓	--	b, void
3	↓	↓	↓	↓	↓	↓	↓	5	
4	↓	.95	↓	↓	↓	↓	↓	5	
5	↓	.75	↓	↓	↓	↓	↓	--	b, void
6	↓	↓	↓	↓	↓	↓	↓	5	
7	B_2C_2	--	↓	Var	↓	↓	↓	--	a
8	↓	1.10	↓	0	↓	↓	↓	--	b, void
9	↓	↓	↓	↓	↓	↓	↓	6	
10	↓	↓	↓	-50	↓	↓	↓	--	c
11	↓	.95	↓	45	↓	↓	↓	7	
12	↓	1.10	↓	↓	↓	↓	↓	7	
13	↓	.95	↓	0	↓	↓	↓	6	
14	↓	.75	↓	↓	↓	↓	↓	6	
15	↓	↓	↓	45	↓	↓	↓	--	b, void
16	↓	↓	↓	↓	↓	↓	↓	7	
17	B_2C_3	1.10	↓	0	↓	↓	↓	--	b, void

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TABLE I (CON'T)
TEST SCHEDULE

RUN NO.	CONFIGURATION	M	α	Φ	ϵ_t	i_w	EFFECTIVE FINS	FIGURE NO.	REMARKS
18	B_2C_3	1.10	Var	0	—	—	—	8	
19	↓	.95	↓	↓	↓	↓	↓	8	
20	↓	↓	↓	45	↓	↓	↓	9	
21	↓	.75	↓	0	↓	↓	↓	8	
22	$B_2C_2F_{2A/2B}$	--	↓	↓	↓	↓	↓	--	a
23	↓	.95	↓	↓	↓	↓	F_{2B}	11	
24	↓	↓	↓	90	↓	↓	F_{2A}	10	
25	$B_2C_2F_{2C}$	1.10	↓	0	↓	↓	F_{2C}	--	b, void
26	↓	↓	↓	↓	↓	↓	↓	12	
27	↓	.95	↓	↓	↓	↓	↓	12	
28	↓	↓	↓	45	↓	↓	—	13	
29	↓	.75	↓	0	↓	↓	F_{2C}	12	
30	$B_2C_2F_{2CX}$	--	↓	Var	↓	↓	—	--	a
31	↓	1.10	↓	0	↓	↓	F_{2CX}	--	b, void
32	↓	↓	↓	↓	↓	↓	↓	16	
33	↓	.95	↓	↓	↓	↓	↓	16	
34	↓	↓	↓	45	↓	↓	—	17	

TABLE I (CON'T)
TEST SCHEDULE

RUN NO.	CONFIGURATION	M	α	Φ	ϵ_t	i_w	EFFECTIVE FINS	FIGURE NO.	REMARKS
35	$B_2C_2F_{2CX}$	.75	Var	0	—	—	F_{2CX}	16	
36	$B_2C_2F_{2CT}$	1.1[illegible]	↓	↓	↓	↓	F_{2CT}	--	b, void
37	↓	↓	↓	↓	↓	↓	↓	20	
38	↓	.95	↓	↓	↓	↓	↓	20	
39	↓	↓	↓	45	↓	↓	—	21	
40	↓	.75	↓	0	↓	↓	F_{2CT}	20	
41	$B_2C_2F_{2AX/2BX}$	.95	↓	0	↓	↓	F_{2BX}	15	
42	↓	↓	↓	90	↓	↓	F_{2AX}	14	
43	$B_2C_2F_{2AT/2BT}$	↓	↓	0	↓	↓	F_{2BT}	19	
44	↓	↓	↓	90	↓	↓	F_{2AT}	18	
45	$B_2C_2F_{3A/3B}$	↓	↓	0	↓	↓	F_{3B}	27	
46	↓	↓	↓	90	↓	↓	F_{3A}	26	
47	$B_2C_2F_{3C}$	1.10	↓	0	↓	↓	F_{3C}	--	b, void
48	↓	↓	↓	↓	↓	↓	↓	28	
49	↓	↓	↓	45	↓	↓	—	29	
50	↓	.95	↓	0	↓	↓	F_{3C}	28	
51	↓	↓	↓	45	↓	↓	—	29	

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TABLE I (CON'T)
TEST SCHEDULE

RUN NO.	CONFIGURATION	M	α	Φ	e_t	i_w	EFFECTIVE FINS	FIGURE NO.	REMARKS
52	$B_2C_2F_{3C}$	.75	Var	0	—	—	F_{3C}	--	b, void
53	↓	↓		45	↓	↓	—	--	b, void
54				0			F_{3C}	28	
55				45	--		—	29	
56	$B_2C_2F_{2A/2B}$	1.10		0	5		F_{2B}	--	b, void
57	↓	↓		↓	↓		↓	32	
58				90			F_{2A}	31	
59		.95		↓			↓	31	
60		↓		0			F_{2B}	32	
61		.75		↓			↓	--	b, void
62		↓						32	
63				90	↓		F_{2A}	31	
64		--		Var	10		--	--	a
65		1.10		0	↓		F_{2B}	--	b, void
66		↓		↓			↓	39	
67				90			F_{2A}	38	
68	↓	.95		↓	↓	↓	↓	38	

TABLE I (CON'T)
TEST SCHEDULE

RUN NO.	CONFIGURATION	M	α	Φ	ϵ_t	i_w	EFFECTIVE FINS	FIGURE NO.	REMARKS
69	$B_2C_2F_{2A/2B}$	.95	Var	0	.10	---	F_{2B}	39	
70	↓	.75		↓	↓	↓	↓	39	
71	↓	↓		90	↓	↓	F_{2A}	38	
72	$B_2C_2F_{2C}$	1.10		0	↓	↓	F_{2C}	41	
73	↓	1.05		↓	↓	↓	↓	41	
74	↓	1.00		↓	↓	↓	↓	41	
75	↓	.95		↓	↓	↓	↓	41	
76	↓	↓		45	↓	↓	---	42	
77	↓	.85		0	↓	↓	F_{2C}	41	
78	↓	.75		↓	↓	↓	↓	41	
79	↓	.60		↓	↓	↓	↓	41	
80	$B_2C_2F_{2C/-}$	--		Var	↓	↓	↓	--	a
81	↓	1.10		0	↓	↓	--	37	
82	↓	.95		↓	↓	↓	--	37	
83	↓	↓		90	↓	↓	F_{2C}	40	
84	↓	.75		0	↓	↓	--	--	b, void
85	↓	↓		↓	↓	↓	--	37	
86	↓	1.10		↓	5	↓	--	--	b, void

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TABLE I (CON'T)
TEST SCHEDULE

RUN NO.	CONFIGURATION	M	α	Φ	e_t	i_w	EFFECTIVE FINS	FIGURE NO.	REMARKS
87	$B_2C_2F_{2C}/-$	1.10	Var	0	5	—	--	30	
88	↓	.95	↓	↓	↓	↓	--	30	
89	↓	↓	↓	90	↓	↓	F_{2C}	33	
90	↓	.75	↓	0	↓	↓	--	30	
91	$B_2C_2F_{2C}$	1.10	↓	↓	↓	↓	F_{2C}	34	
92	↓	.95	↓	↓	↓	↓	↓	34	
93	↓	↓	↓	90	↓	↓	↓	36	
94	↓	.75	↓	0	↓	↓	↓	34	
95	↓	.95	↓	45	↓	↓	—	35	
96	$B_2C_{-/3}F_{-/2CT}$	↓	↓	0	—	↓	↓	22	
97	↓	↓	↓	22.5	↓	↓	↓	23	
98	↓	↓	↓	90	↓	↓	↓	24	
99	↓	↓	↓	-90	↓	↓	↓	25	
100	↓	1.10	↓	0	↓	↓	↓	22	
101	↓	.75	↓	↓	↓	↓	↓	22	
102	$B_2C_2S_1F_{2A/2B}$	--	↓	↓	↓	↓	↓	--	a
103	↓	.95	↓	↓	↓	↓	F_{2B}	--	b, void
104	↓	↓	↓	↓	↓	↓	↓	45	

TABLE I (CON'T)
TEST SCHEDULE

RUN NO.	CONFIGURATION	M	α	Φ	ϵ_t	i_w	EFFECTIVE FINS	FIGURE NO.	REMARKS
105	$B_2C_2S_1F_{2A/2B}$	.95	Var	90	—	—	F_{2A}	44	
106	↓	--	↓	Var	↓	↓	—	--	a
107	↓	1.10	↓	0	↓	↓	F_{2B}	45	
108	↓	.75	↓	↓	↓	↓	↓	45	
109	$B_2C_2S_1F_{-/2C}$	1.10	↓	↓	↓	↓	F_{2C}	46	
110	↓	.95	↓	↓	↓	↓	↓	46	
111	↓	↓	↓	90	↓	↓	--	43	
112	↓	.75	↓	0	↓	↓	F_{2C}	46	
113	$B_3W_2F_{2CX}$	--	↓	Var	↓	33	—	--	a
114	↓	1.10	↓	0	↓	↓	↓	47	
115	↓	.95	↓	↓	↓	↓	↓	47	
116	↓	↓	0	Var	↓	↓	↓	--	c
117	↓	↓	8	↓	↓	↓	↓	49	
118	↓	↓	16	↓	↓	↓	↓	49	
119	↓	.75	Var	0	↓	↓	↓	47	
120	↓	--	↓	Var	↓	26	↓	--	a
121	↓	1.10	↓	0	↓	↓	↓	56	
122	↓	.95	↓	↓	↓	↓	↓	56	

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TABLE I (CON'T)

TEST SCHEDULE

RUN NO.	CONFIGURATION	M	α	Φ	e_t	i_w	EFFECTIVE FINS	FIGURE NO.	REMARKS
123	$B_3W_2F_{2CX}$	.95	0	Var	—	26	—	57	
124			8					57	
125			16					57	
126		.75	Var	0				56	
127		.95	0	Var		33		49	d
128	$B_3W_2F_{3C}$	--	Var	Var		26		--	a
129		1.10		0				67	
130		1.05						67	
131		1.00						67	
132		.95						67	
133			0	Var				68	
134			8					68	
135			16					68	
136		.75	Var	0				67	
137	$B_3W_3F_{2CX}$	--		Var		33		--	a
138		1.10		0				51	
139		.95		0				51	

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TABLE I (CON'T)
TEST SCHEDULE

RUN NO.	CONFIGURATION	M	α	Φ	ϵ_t	i_w	EFFECTIVE FINS	FIGURE NO.	REMARKS
140	$B_3W_3F_{2CX}$	.95	Var	10	—	33	—	52	
141	↓	↓	↓	20	↓	↓	↓	53	
142	↓	↓	↓	30	↓	↓	↓	54	
143	↓	↓	0	Var	↓	↓	↓	55	
144	↓	↓	8	↓	↓	↓	↓	55	
145	↓	↓	16	↓	↓	↓	↓	55	
146	↓	.75	Var	0	↓	↓	↓	51	
147	$B_3W_2F_{2CX}$	.95	Var	0	↓	↓	↓	48	
148	↓	↓	0	Var	↓	↓	↓	50	
149	$B_3W_3F_{2CX}$	↓	Var	0	↓	26	↓	58	
150	↓	1.05	↓	↓	↓	↓	↓	58	
151	↓	1.00	↓	↓	↓	↓	↓	58	
152	↓	.95	↓	↓	↓	↓	↓	58	
153	↓	↓	↓	10	↓	↓	↓	59	
154	↓	↓	↓	20	↓	↓	↓	60	
155	↓	↓	↓	30	↓	↓	↓	61	
156	↓	↓	0	Var	↓	↓	↓	62	

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TABLE I (CON'T)
TEST SCHEDULE

RUN NO.	CONFIGURATION	M	α	Φ	e_t	i_w	EFFECTIVE FINS	FIGURE NO.	REMARKS
157	$B_3W_3F_{2CX}$	.95	8	Var	—	26	—	62	
158	↓	↓	16	↓	↓	↓	↓	62	
159	↓	.85	Var	0	↓	↓	↓	58	
160	↓	.75	↓	↓	↓	↓	↓	58	
161	↓	.60	↓	↓	↓	↓	↓	58	
162	↓	1.10	↓	↓	↓	↓	↓	58	
163	$B_3W_3F_{2C}$	↓	↓	↓	↓	↓	↓	63	
164	↓	.95	↓	↓	↓	↓	↓	63	
165	↓	↓	0	Var	↓	↓	↓	64	
166	↓	↓	8	↓	↓	↓	↓	64	
167	↓	↓	16	↓	↓	↓	↓	64	
168	↓	.75	Var	0	↓	↓	↓	63	
169	$B_3W_3F_{2C}(\Phi_{fin}=45)$	1.10	↓	↓	↓	↓	↓	65	
170	↓	1.05	↓	↓	↓	↓	↓	65	
171	↓	1.00	↓	↓	↓	↓	↓	65	
172	↓	.95	↓	↓	↓	↓	↓	65	
173	↓	↓	0	Var	↓	↓	↓	66	

TABLE I (CON'T)
TEST SCHEDULE

RUN NO.	CONFIGURATION	M	α	Φ	ϵ_t	i_w	EFFECTIVE FINS	FIGURE NO.	REMARKS
174	$B_3W_3F_{2C}(\Phi_{fin}=45)$	.95	8	Var	—	26	—	66	
175	↓	↓	16	↓	↓	↓	↓	66	
176	↓	.85	Var	0	↓	↓	↓	65	
177	↓	.75	↓	↓	↓	↓	↓	65	
178	↓	.60	↓	↓	↓	↓	↓	65	

Remarks:

a) Static tare run.

b) Void run - excessive drift on axial force component.

c) Incorrect angle range.

d) Rerun of Run 116.

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
3	6	1.100	- 4.07	655.0	770.7	1648.5	592	476	9.436	1178.2	3.185	1.101
3	7	1.100	- 3.05	654.8	771.7	1649.3	592	476	9.443	1177.6	3.189	1.101
3	8	1.100	- 2.03	655.2	771.7	1649.8	592	476	9.445	1177.8	3.189	1.101
3	9	1.100	- 1.01	655.0	772.7	1650.6	592	476	9.451	1177.3	3.193	1.100
3	10	1.100	.00	654.8	771.7	1649.3	592	476	9.443	1177.6	3.189	1.101
3	11	1.100	1.02	654.9	771.7	1649.4	592	476	9.443	1177.7	3.189	1.101
3	12	1.100	2.04	654.3	771.7	1648.6	592	476	9.440	1177.3	3.189	1.100
3	13	1.100	3.05	653.2	769.7	1645.2	590	474	9.450	1175.7	3.195	1.101
3	14	1.100	4.08	653.2	770.7	1646.2	590	474	9.458	1175.2	3.199	1.100
3	15	1.100	6.12	654.8	770.7	1648.3	590	474	9.467	1176.1	3.199	1.101
3	16	1.100	8.15	654.1	771.7	1648.3	590	474	9.471	1175.2	3.203	1.100
3	17	1.100	12.24	655.3	771.7	1649.9	590	474	9.478	1175.9	3.203	1.101
3	18	1.100	16.35	655.3	772.7	1650.9	590	474	9.486	1175.4	3.207	1.101
3	19	1.100	19.98	655.0	772.7	1651.9	590	474	9.489	1175.8	3.207	1.101
3	21	1.100	.00	656.0	772.7	1651.9	592	476	9.457	1177.8	3.193	1.101
4	2	.950	- 4.05	566.0	895.0	1600.5	584	494	10.548	1035.9	3.043	.950
4	3	.950	- 3.04	566.3	895.0	1600.9	584	494	10.550	1036.1	3.043	.951
4	4	.950	- 2.02	567.5	896.0	1603.4	584	494	10.565	1036.5	3.046	.951
4	5	.950	- 1.01	566.6	897.0	1603.3	584	494	10.568	1035.5	3.049	.950
4	6	.950	.00	567.1	897.0	1603.9	584	494	10.571	1035.8	3.049	.950
4	7	.950	1.01	566.9	895.0	1601.6	584	494	10.554	1036.4	3.043	.951
4	8	.950	2.03	567.0	895.0	1601.8	584	494	10.553	1036.6	3.043	.951
4	9	.950	3.05	567.3	896.0	1603.1	584	494	10.564	1036.3	3.046	.951
4	10	.950	4.06	567.7	896.0	1604.7	584	494	10.565	1036.6	3.046	.951
4	11	.950	6.09	567.7	897.0	1604.6	584	494	10.575	1036.1	3.049	.951
4	12	.950	8.12	567.9	897.0	1604.9	584	494	10.575	1036.3	3.049	.951
4	13	.950	12.19	566.9	897.0	1603.7	584	494	10.569	1035.7	3.049	.950
4	14	.950	16.28	567.4	897.0	1604.3	584	494	10.572	1036.0	3.049	.951
4	15	.950	19.88	567.9	897.0	1604.9	584	494	10.575	1036.3	3.049	.951
4	16	.950	.00	567.9	897.0	1604.9	584	494	10.575	1036.3	3.049	.951
6	4	.750	- 4.04	421.9	1069.0	1553.6	572	514	12.123	834.2	2.729	.751
6	5	.750	- 3.03	422.2	1070.0	1555.0	572	514	12.132	834.2	2.731	.751
6	6	.750	- 2.02	420.9	1070.0	1553.5	572	514	12.123	833.2	2.731	.750
6	7	.750	- 1.01	422.6	1070.0	1555.5	572	514	12.134	834.5	2.731	.751
6	8	.750	.00	421.8	1071.0	1555.5	572	514	12.140	833.6	2.734	.750
6	9	.750	1.01	422.6	1071.0	1556.5	572	514	12.143	834.2	2.734	.751
6	10	.750	2.02	423.0	1071.0	1556.9	572	514	12.147	834.5	2.734	.751

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
6	11	.750	3.03	423.3	1071.0	1556.1	572	514	12.142	834.0	2.734	.751
6	12	.750	4.05	422.2	1071.0	1556.0	572	514	12.141	833.9	2.734	.750
6	13	.750	6.06	421.7	1071.0	1555.4	572	514	12.139	833.5	2.734	.750
6	14	.750	8.09	423.1	1071.0	1557.0	572	513	12.147	834.6	2.734	.751
6	15	.750	12.14	422.2	1072.0	1557.0	572	514	12.151	833.6	2.736	.750
6	16	.750	16.19	421.9	1072.0	1556.6	572	514	12.150	833.3	2.736	.750
6	17	.750	19.75	422.6	1073.0	1558.4	572	514	12.163	833.5	2.739	.750
6	18	.750	.00	423.0	1073.0	1558.9	572	514	12.165	833.9	2.739	.750
9	2	1.100	-4.08	655.8	773.7	1651.7	588	473	9.520	1173.7	3.222	1.101
9	3	1.100	-3.06	656.4	774.7	1654.5	590	475	9.506	1175.1	3.216	1.100
9	4	1.100	-2.04	657.3	774.7	1655.6	590	474	9.512	1175.6	3.216	1.101
9	5	1.100	-1.02	658.0	776.7	1658.5	592	476	9.499	1177.0	3.210	1.100
9	6	1.100	.00	658.4	776.7	1659.1	594	478	9.469	1179.2	3.196	1.100
9	7	1.100	1.02	659.0	777.7	1661.0	594	478	9.479	1179.1	3.200	1.100
9	8	1.100	2.04	659.5	777.7	1661.6	594	478	9.483	1179.3	3.200	1.100
9	9	1.100	3.06	659.1	777.7	1661.1	594	478	9.480	1179.1	3.200	1.100
9	10	1.100	4.09	658.2	775.7	1657.9	594	478	9.460	1179.6	3.191	1.101
9	11	1.100	6.13	657.5	774.7	1656.0	592	476	9.480	1177.7	3.201	1.101
9	12	1.100	8.18	656.8	774.7	1655.0	592	476	9.477	1177.3	3.201	1.100
9	13	1.100	12.29	656.8	774.7	1655.0	592	476	9.477	1177.3	3.201	1.100
9	14	1.100	16.43	657.7	774.7	1656.2	592	476	9.481	1177.8	3.201	1.101
9	15	1.100	20.08	656.9	774.7	1655.1	590	474	9.509	1175.4	3.216	1.100
9	16	1.100	.00	657.3	774.7	1655.7	590	474	9.511	1175.6	3.216	1.101
10	2	1.100	-2.63	652.6	769.7	1644.3	582	468	9.577	1167.3	3.253	1.100
10	3	1.100	-1.97	657.0	774.7	1655.3	590	474	9.510	1175.4	3.216	1.101
10	4	1.100	-1.30	658.2	776.7	1658.9	592	475	9.532	1175.1	3.224	1.100
10	5	1.100	-.66	657.5	774.7	1656.0	590	474	9.512	1175.7	3.216	1.101
10	6	1.100	.01	655.5	774.7	1653.2	592	476	9.470	1176.5	3.201	1.100
10	7	1.100	.66	656.9	774.7	1655.1	592	476	9.477	1177.3	3.201	1.100
10	8	1.100	1.31	656.8	774.7	1655.0	592	476	9.477	1177.3	3.201	1.100
10	9	1.100	1.98	657.2	774.7	1655.5	592	476	9.479	1177.5	3.201	1.101
10	10	1.100	2.64	657.3	774.7	1655.6	592	476	9.480	1177.5	3.201	1.101
10	11	1.100	.01	657.2	774.7	1655.5	594	478	9.447	1179.5	3.187	1.101
11	1	.950	-2.89	573.2	935.0	1619.5	592	501	10.527	1043.5	3.023	.951
11	2	.950	-2.16	572.4	935.0	1618.6	592	501	10.522	1043.2	3.023	.950

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TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
11	3	.950	- 1.45	570.3	901.0	1611.9	592	501	10.478	1043.3	3.009	.951
11	4	.950	- .72	569.5	899.0	1608.9	592	501	10.458	1043.6	3.003	.951
11	5	.950	.00	569.3	899.0	1608.6	592	501	10.457	1043.4	3.003	.951
11	6	.950	.71	568.2	899.0	1607.3	592	501	10.450	1042.8	3.003	.950
11	7	.950	1.44	568.1	899.0	1607.1	592	501	10.450	1042.7	3.003	.950
11	8	.950	2.16	568.4	899.0	1607.5	592	501	10.452	1042.9	3.003	.950
11	9	.950	2.88	569.5	899.0	1608.9	592	501	10.458	1043.6	3.003	.951
11	10	.950	.00	569.3	899.0	1608.6	592	501	10.457	1043.4	3.003	.951
11	11	.950	.00	569.5	899.0	1608.9	592	501	10.458	1043.6	3.003	.951
12	2	1.100	- 2.90	649.8	766.6	1637.6	590	474	9.409	1175.2	3.182	1.100
12	3	1.100	- 2.18	651.0	766.6	1639.1	590	474	9.416	1175.9	3.182	1.101
12	4	1.100	- 1.44	651.0	767.6	1640.1	592	476	9.392	1177.4	3.172	1.100
12	5	1.100	- .73	652.3	767.6	1641.9	592	476	9.398	1178.1	3.172	1.101
12	6	1.100	.00	651.9	768.7	1642.4	592	476	9.404	1177.4	3.176	1.101
12	7	1.100	.72	652.2	768.7	1642.8	594	478	9.374	1179.6	3.162	1.101
12	8	1.100	1.44	651.8	768.7	1642.3	594	478	9.371	1179.4	3.162	1.101
12	9	1.100	2.16	652.8	769.7	1644.6	594	478	9.385	1179.4	3.167	1.101
12	10	1.100	2.89	653.4	769.7	1645.4	594	478	9.388	1179.8	3.167	1.101
12	11	1.100	- .01	653.2	770.7	1646.2	594	478	9.394	1179.2	3.171	1.100
13	1	.950	- 4.07	566.4	895.0	1601.0	590	499	10.443	1041.5	3.002	.951
13	2	.950	- 3.05	566.1	895.0	1600.6	590	499	10.442	1041.2	3.002	.950
13	3	.950	- 2.03	565.8	895.0	1600.3	590	499	10.439	1041.1	3.002	.950
13	4	.950	- 1.01	567.1	895.0	1601.9	590	499	10.447	1041.9	3.002	.951
13	5	.950	.00	566.1	895.0	1600.6	590	499	10.442	1041.2	3.002	.950
13	6	.950	1.01	566.8	895.0	1601.5	590	499	10.445	1041.7	3.002	.951
13	7	.950	2.03	566.4	895.0	1601.0	590	499	10.443	1041.5	3.002	.951
13	8	.950	3.05	566.6	895.0	1601.3	590	499	10.444	1041.6	3.002	.951
13	9	.950	4.07	565.9	895.0	1600.4	590	499	10.440	1041.1	3.002	.950
13	10	.950	6.10	567.2	895.0	1602.0	590	499	10.448	1042.0	3.002	.951
13	11	.950	8.15	566.4	895.0	1601.0	590	499	10.443	1041.5	3.002	.951
13	12	.950	12.24	567.3	895.0	1602.2	590	499	10.447	1042.1	3.002	.951
13	13	.950	16.35	565.5	895.0	1601.1	590	499	10.444	1041.5	3.002	.951
13	14	.950	19.98	567.2	895.0	1602.0	590	499	10.448	1042.0	3.002	.951
13	15	.950	.00	566.4	896.0	1602.0	590	499	10.451	1041.0	3.006	.950
14	2	.750	- 4.05	417.9	1059.9	1540.0	576	517	11.934	836.8	2.681	.750

UNCLASSIFIED

UNCLASSIFIED

TABLE II
TUNNEL OPERATING CONDITIONS

Run	Pt	M		α	q	p	H	T_0	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
14	3	.750	-	3.04	417.6	1059.9	1539.7	576	517	11.931	836.6	2.681	.750
14	4	.750	-	2.03	418.7	1061.0	1542.0	576	517	11.946	837.2	2.684	.751
14	5	.750	-	1.01	418.0	1061.0	1541.1	576	517	11.944	836.6	2.684	.750
14	6	.750		.00	417.9	1059.9	1539.0	579	519	11.884	838.6	2.667	.751
14	7	.750		1.01	417.9	1059.9	1540.0	579	519	11.893	838.3	2.669	.750
14	8	.750		2.03	418.7	1059.9	1540.9	579	519	11.898	838.9	2.669	.751
14	9	.750		3.03	418.1	1059.9	1540.3	579	519	11.893	838.5	2.669	.751
14	10	.750		4.03	418.0	1059.9	1540.1	579	519	11.894	838.3	2.669	.751
14	11	.750		3.04	417.5	1061.0	1540.6	578	519	11.898	837.7	2.672	.750
14	12	.750		2.10	418.0	1061.0	1541.1	579	519	11.903	838.0	2.672	.750
14	13	.750		1.01	418.0	1061.0	1541.5	579	519	11.903	838.3	2.672	.751
14	14	.750		.00	418.0	1061.0	1541.5	579	519	11.905	838.6	2.672	.751
14	15	.750		1.03	417.9	1061.0	1540.9	579	519	11.901	837.9	2.672	.750
14	16	.750		.00	418.0	1061.0	1541.5	579	519	11.904	838.4	2.672	.751
16	4	.750	-	3.07	416.8	1057.9	1536.7	574	515	11.952	835.1	2.688	.750
16	5	.750	-	2.14	416.7	1057.9	1536.6	574	515	11.951	835.0	2.688	.750
16	6	.750	-	1.03	417.5	1057.9	1537.6	574	515	11.954	835.7	2.688	.751
16	7	.750	-	.01	416.5	1057.9	1536.5	574	515	11.950	835.0	2.688	.750
16	8	.750		.00	417.0	1057.9	1537.0	574	515	11.952	835.3	2.688	.750
16	9	.750		.71	417.7	1056.9	1536.8	574	515	11.947	834.2	2.686	.751
16	10	.750		1.43	417.8	1057.9	1537.6	574	515	11.954	835.7	2.688	.751
16	11	.750		2.14	416.7	1058.9	1537.6	574	515	11.960	836.7	2.691	.750
16	12	.750		2.87	417.5	1058.9	1538.5	574	515	11.963	835.4	2.691	.751
16	13	.750		.00	418.0	1058.9	1539.1	574	515	11.968	836.7	2.691	.751
13	2	1.10	-	4.10	553.0	760.7	1544.0	584	470	9.546	1169.6	3.228	1.101
13	3	1.10	-	3.08	553.0	760.7	1544.0	585	471	9.526	1171.5	3.228	1.101
13	4	1.10	-	2.05	555.4	761.7	1550.1	588	473	9.510	1174.0	3.217	1.101
13	5	1.10	-	1.03	555.0	761.7	1550.3	590	474	9.478	1176.0	3.203	1.101
13	6	1.10		.00	555.0	761.7	1551.5	590	474	9.487	1175.6	3.207	1.101
13	7	1.10		1.03	554.4	760.7	1550.3	590	474	9.498	1175.6	3.212	1.101
13	8	1.10		2.05	555.0	760.7	1550.9	590	474	9.510	1175.6	3.216	1.101
13	9	1.10		3.08	554.7	760.7	1550.6	590	474	9.491	1177.6	3.207	1.101
13	10	1.10		4.10	554.7	760.7	1550.6	590	474	9.498	1177.6	3.210	1.101
13	11	1.10		3.08	554.7	760.7	1550.6	590	474	9.491	1177.6	3.207	1.101
13	12	1.10		2.05	554.7	760.7	1550.6	590	474	9.485	1177.6	3.205	1.101
13	13	1.10		1.03	554.7	760.7	1550.6	590	474	9.485	1177.6	3.205	1.101
13	14	1.10		.00	554.7	760.7	1550.6	590	474	9.485	1177.6	3.205	1.101
13	15	1.10		1.03	554.7	760.7	1550.6	590	474	9.485	1177.6	3.205	1.101
13	16	1.10		2.05	554.7	760.7	1550.6	590	474	9.485	1177.6	3.205	1.101

UNCLASSIFIED

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
18	15	1.100	20.13	659.5	777.7	1661.6	594	478	9.483	1179.3	3.200	1.100
18	16	1.100	.00	659.6	778.7	1662.8	594	478	9.490	1178.9	3.204	1.100
19	3	.950	- 4.08	566.4	896.0	1602.0	580	491	10.632	1032.2	3.073	.950
19	4	.950	- 3.06	568.1	898.0	1606.2	582	492	10.621	1034.3	3.066	.951
19	5	.950	- 2.04	567.7	898.0	1605.6	582	492	10.619	1034.0	3.066	.950
19	6	.950	- 1.02	569.6	899.0	1609.0	584	494	10.602	1036.6	3.056	.951
19	7	.950	.00	569.6	899.0	1609.0	584	494	10.602	1036.6	3.056	.951
19	8	.950	1.02	569.5	900.0	1609.9	586	496	10.573	1037.9	3.046	.951
19	9	.950	2.04	569.4	900.0	1609.8	586	496	10.572	1037.8	3.046	.951
19	10	.950	3.06	570.3	901.0	1611.9	586	496	10.586	1038.0	3.049	.951
19	11	.950	4.08	569.3	901.0	1610.6	586	496	10.581	1037.3	3.049	.950
19	12	.950	6.12	570.2	901.0	1611.8	586	496	10.585	1037.9	3.049	.951
19	13	.950	8.17	570.5	901.0	1612.1	586	496	10.587	1038.1	3.049	.951
19	14	.950	12.29	569.9	901.0	1611.4	586	496	10.583	1037.7	3.049	.950
19	15	.950	16.44	570.3	902.0	1612.9	586	496	10.594	1037.6	3.053	.950
19	16	.950	20.00	570.4	903.0	1614.0	588	498	10.567	1039.0	3.043	.950
19	17	.950	.00	571.3	903.0	1615.2	588	498	10.571	1039.6	3.043	.951
20	1	.950	- 2.89	569.6	900.0	1610.0	588	497	10.538	1039.7	3.033	.951
20	2	.950	- 2.17	569.6	900.0	1610.0	588	497	10.538	1039.7	3.033	.951
20	3	.950	- 1.44	568.9	900.0	1609.2	588	498	10.533	1039.3	3.033	.950
20	4	.950	- .72	568.8	900.0	1609.0	588	498	10.533	1039.2	3.033	.950
20	5	.950	.00	568.2	900.0	1608.3	588	498	10.529	1038.8	3.033	.950
20	6	.950	.72	569.5	900.0	1609.9	588	497	10.537	1039.6	3.033	.951
20	7	.950	1.44	569.6	900.0	1610.0	588	497	10.538	1039.7	3.033	.951
20	8	.950	2.16	569.2	900.0	1609.5	588	498	10.536	1039.4	3.033	.950
20	9	.950	2.89	569.8	900.0	1610.3	588	497	10.538	1039.8	3.033	.951
20	10	.950	- .01	569.8	900.0	1610.3	588	497	10.538	1039.8	3.033	.951
21	3	.750	- 4.06	417.6	1059.9	1539.7	576	517	11.931	836.6	2.681	.750
21	4	.750	- 3.04	417.6	1059.9	1539.7	576	517	11.931	836.6	2.681	.750
21	5	.750	- 2.03	417.7	1061.0	1540.8	576	517	11.941	836.4	2.684	.750
21	6	.750	- 1.01	417.9	1061.0	1541.0	576	517	11.943	836.5	2.684	.750
21	7	.750	.00	418.7	1061.0	1541.9	576	517	11.948	837.1	2.684	.751
21	8	.750	1.01	418.3	1061.0	1541.5	576	517	11.945	836.8	2.684	.751
21	9	.750	2.02	418.8	1061.0	1542.1	576	517	11.947	837.3	2.684	.751
21	10	.750	3.05	418.2	1061.0	1541.4	576	517	11.944	836.8	2.684	.750

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
21	11	.750	4.06	418.3	1062.0	1542.5	576	517	11.954	836.5	2.686	.750
21	12	.750	6.09	417.8	1062.0	1541.9	576	517	11.951	836.1	2.686	.750
21	13	.750	8.12	418.3	1061.0	1542.0	576	517	11.946	837.2	2.684	.751
21	14	.750	12.21	417.9	1061.0	1541.0	576	517	11.943	836.5	2.684	.750
21	15	.750	16.30	418.1	1061.0	1541.2	576	517	11.945	836.6	2.684	.750
21	16	.750	19.99	417.9	1061.0	1541.0	576	517	11.943	836.5	2.684	.750
21	17	.750	.00	418.8	1061.0	1542.1	576	517	11.947	837.3	2.684	.751
23	2	.950	- 4.06	562.6	889.0	1590.3	580	491	10.551	1032.6	3.049	.951
23	3	.950	- 3.04	562.0	889.0	1589.5	580	491	10.548	1032.2	3.049	.950
23	4	.950	- 2.02	562.6	889.0	1590.3	582	492	10.515	1034.4	3.036	.951
23	5	.950	- 1.01	562.8	889.0	1590.5	582	492	10.517	1034.5	3.036	.951
23	6	.950	.00	563.0	889.0	1590.7	582	492	10.518	1034.6	3.036	.951
23	7	.950	1.01	563.3	889.0	1591.1	582	492	10.520	1034.8	3.036	.951
23	8	.950	2.02	563.3	890.0	1592.1	582	492	10.528	1034.4	3.039	.951
23	9	.950	3.05	563.6	891.0	1593.5	584	494	10.502	1036.0	3.029	.950
23	10	.950	4.06	564.4	891.0	1594.5	584	494	10.506	1036.5	3.029	.951
23	11	.950	6.09	563.7	892.0	1594.6	584	494	10.511	1035.6	3.032	.950
23	12	.950	8.12	564.1	892.0	1595.2	584	494	10.512	1035.9	3.032	.950
23	13	.950	12.17	563.6	892.0	1594.5	584	494	10.510	1035.6	3.032	.950
23	14	.950	16.24	564.5	892.0	1595.6	584	494	10.515	1036.1	3.032	.951
23	15	.950	19.82	564.5	892.0	1595.6	584	494	10.515	1036.1	3.032	.951
23	16	.950	.00	565.9	893.0	1598.4	586	496	10.495	1038.4	3.022	.951
24	2	.950	- .01	563.7	891.0	1593.6	582	492	10.538	1034.3	3.042	.951
24	3	.950	.00	564.8	893.0	1597.0	584	494	10.525	1035.9	3.036	.950
24	4	.950	.00	564.2	893.0	1596.2	584	494	10.521	1035.6	3.036	.950
24	5	.950	- .01	564.4	893.0	1596.5	584	494	10.523	1035.7	3.036	.950
24	6	.950	- .01	565.7	893.0	1598.2	584	494	10.532	1036.5	3.036	.951
24	7	.950	- .01	565.5	895.0	1599.0	584	494	10.545	1035.6	3.043	.950
24	8	.950	.00	565.0	895.0	1599.3	584	494	10.542	1035.3	3.043	.950
24	9	.950	.00	564.9	895.0	1599.1	586	496	10.506	1036.9	3.029	.950
24	10	.950	- .01	565.4	895.0	1599.8	586	496	10.508	1037.3	3.029	.950
24	11	.950	- .01	566.7	895.0	1601.4	586	496	10.516	1038.1	3.029	.951
26	2	1.100	- 4.06	559.3	777.7	1661.4	592	476	9.513	1177.3	3.214	1.100
26	3	1.100	- 3.04	559.7	777.7	1661.9	592	476	9.515	1177.5	3.214	1.101
26	4	1.100	- 2.03	560.5	778.7	1664.2	592	476	9.527	1177.5	3.218	1.101

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
26	5	1.100	- 1.01	660.0	778.7	1663.3	594	478	9.493	1179.2	3.204	1.100
26	6	1.100	.00	660.1	778.7	1663.4	594	478	9.494	1179.2	3.204	1.100
26	7	1.100	1.01	660.7	778.7	1664.3	594	478	9.496	1179.6	3.204	1.101
26	9	1.100	3.04	660.9	778.7	1664.5	594	478	9.498	1179.7	3.204	1.101
26	10	1.100	4.06	660.9	778.7	1664.5	594	478	9.498	1179.7	3.204	1.101
26	11	1.100	6.08	661.6	779.7	1666.4	594	478	9.509	1179.6	3.208	1.101
26	12	1.100	8.10	661.3	779.7	1666.0	594	478	9.508	1179.4	3.208	1.101
26	13	1.100	12.15	661.4	779.7	1666.2	594	478	9.508	1179.5	3.208	1.101
26	14	1.100	16.21	661.8	779.7	1666.8	594	478	9.510	1179.7	3.208	1.101
26	15	1.100	20.31	660.4	778.7	1663.9	594	478	9.494	1179.4	3.204	1.101
26	16	1.100	.00	659.2	776.7	1660.2	594	478	9.473	1179.7	3.196	1.101
27	2	.950	- 4.05	565.4	895.0	1599.8	580	491	10.617	1032.0	3.070	.950
27	3	.950	- 3.04	569.1	900.0	1609.4	586	496	10.571	1037.6	3.046	.950
27	4	.950	- 2.02	568.2	900.0	1608.3	586	496	10.565	1037.1	3.046	.950
27	5	.950	- 1.01	569.7	900.0	1610.1	588	497	10.539	1039.7	3.033	.951
27	6	.950	.00	569.5	900.0	1609.9	588	497	10.537	1039.6	3.033	.951
27	7	.950	1.01	569.9	900.0	1610.4	588	497	10.539	1039.9	3.033	.951
27	8	.950	2.02	570.2	900.0	1610.8	590	499	10.505	1041.9	3.019	.951
27	9	.950	3.03	570.4	901.0	1612.0	590	499	10.515	1041.6	3.023	.951
27	10	.950	4.05	570.4	901.0	1612.0	590	499	10.515	1041.6	3.023	.951
27	11	.950	6.07	571.4	903.0	1615.3	590	499	10.536	1041.4	3.029	.951
27	12	.950	8.09	570.3	903.0	1613.9	590	499	10.530	1040.7	3.029	.950
27	13	.950	12.13	567.3	898.0	1605.2	590	499	10.472	1040.8	3.012	.950
27	14	.950	16.18	568.1	898.0	1606.2	590	499	10.476	1041.4	3.012	.951
27	15	.950	20.24	569.5	899.0	1608.9	590	499	10.493	1041.8	3.016	.951
27	17	.950	.00	569.6	900.0	1610.0	590	499	10.502	1041.5	3.019	.951
28	2	.950	- 2.87	565.5	893.0	1597.9	582	492	10.565	1034.6	3.049	.951
28	3	.950	- 2.14	565.5	895.0	1599.9	584	494	10.545	1035.6	3.043	.950
28	4	.950	- 1.44	566.4	895.0	1601.0	586	496	10.514	1037.9	3.029	.951
28	5	.950	- 2.15	567.9	897.0	1604.9	588	497	10.503	1039.8	3.022	.951
28	6	.950	- .71	568.1	897.0	1605.1	588	497	10.505	1039.9	3.022	.951
28	7	.950	.00	568.1	898.0	1606.2	588	498	10.512	1039.6	3.026	.951
28	8	.950	.72	568.1	898.0	1606.2	588	498	10.512	1039.6	3.026	.951
28	9	.950	1.43	567.3	898.0	1605.1	588	498	10.509	1039.0	3.026	.950
28	10	.950	2.15	568.1	898.0	1606.1	588	498	10.513	1039.5	3.026	.951
28	11	.950	2.87	568.1	899.0	1607.1	590	499	10.486	1040.0	3.016	.950
28	12	.950	.00	569.6	899.0	1609.0	590	499	10.494	1041.9	3.016	.951

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
29	1	.750	- 4.03	416.8	1055.9	1534.7	582	523	11.770	841.5	2.636	.751
29	2	.750	- 3.03	416.8	1055.9	1534.8	582	523	11.768	841.6	2.636	.751
29	3	.750	- 2.01	416.4	1055.9	1534.3	582	523	11.766	841.2	2.636	.751
29	4	.750	- 1.00	417.1	1058.9	1538.1	582	523	11.797	840.9	2.643	.750
29	5	.750	.00	417.7	1059.9	1539.8	580	521	11.850	839.6	2.657	.750
29	6	.750	1.01	417.7	1059.9	1539.8	580	521	11.850	839.6	2.657	.750
29	7	.750	2.02	418.0	1060.9	1540.1	580	521	11.853	839.8	2.657	.751
29	8	.750	3.03	418.7	1059.9	1540.9	580	521	11.857	840.3	2.657	.751
29	9	.750	4.04	417.8	1057.9	1537.9	580	521	11.833	840.3	2.652	.751
29	10	.750	6.06	417.0	1057.9	1537.0	580	521	11.828	839.7	2.652	.750
29	11	.750	8.07	417.0	1057.9	1537.0	580	521	11.828	839.7	2.652	.750
29	12	.750	12.11	417.8	1057.9	1537.9	580	521	11.833	840.3	2.652	.751
29	13	.750	16.15	417.0	1057.9	1537.0	580	521	11.828	839.7	2.652	.750
29	14	.750	20.20	417.8	1057.9	1537.9	580	521	11.833	840.3	2.652	.751
29	15	.750	.00	416.4	1057.9	1536.3	580	521	11.825	839.2	2.652	.750
32	2	1.100	- 3.98	653.0	768.7	1643.9	588	473	9.474	1174.1	3.205	1.101
32	3	1.100	- 2.99	653.4	769.7	1645.4	590	474	9.452	1175.8	3.195	1.101
32	4	1.100	- 1.99	655.3	771.7	1649.9	592	476	9.446	1177.0	3.189	1.101
32	5	1.100	- 1.00	656.0	772.7	1651.9	594	478	9.425	1179.8	3.179	1.101
32	6	1.100	.00	655.4	773.7	1652.1	594	478	9.430	1179.0	3.183	1.100
32	7	1.100	.99	655.8	773.7	1652.6	594	478	9.432	1179.2	3.183	1.100
32	8	1.100	1.99	656.2	773.7	1653.2	594	478	9.434	1179.4	3.183	1.101
32	9	1.100	2.98	656.3	773.7	1653.3	594	478	9.434	1179.5	3.183	1.101
32	10	1.100	3.97	656.1	773.7	1653.0	596	479	9.402	1181.3	3.169	1.100
32	11	1.100	5.96	656.6	773.7	1653.7	596	479	9.404	1181.6	3.169	1.101
32	12	1.100	7.95	656.9	773.7	1654.1	596	479	9.406	1181.8	3.169	1.101
32	13	1.100	11.96	656.9	774.7	1655.1	596	479	9.414	1181.3	3.173	1.100
32	14	1.100	16.01	657.4	776.7	1657.8	596	479	9.432	1180.6	3.182	1.100
32	15	1.100	.00	658.2	776.7	1658.9	596	479	9.436	1181.1	3.182	1.100
33	2	.950	- 3.97	566.4	894.0	1600.0	586	496	10.506	1038.3	3.026	.951
33	3	.950	- 2.98	567.1	895.0	1601.9	586	496	10.518	1038.4	3.029	.951
33	4	.950	- 1.99	567.4	897.0	1604.3	586	496	10.536	1037.8	3.036	.951
33	5	.950	- 1.00	567.3	897.0	1604.2	588	498	10.499	1039.5	3.022	.950
33	6	.950	.00	567.3	897.0	1604.2	588	498	10.499	1039.5	3.022	.950
33	7	.950	.99	567.2	897.0	1604.0	588	498	10.500	1039.4	3.022	.950
33	8	.950	1.99	567.5	897.0	1604.4	588	498	10.501	1039.6	3.022	.951
33	9	.950	2.98	567.9	898.0	1605.9	588	498	10.512	1039.4	3.026	.950

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
33	10	.950	3.96	568.3	898.0	1606.4	588	497	10.514	1039.7	3.026	.951
33	11	.950	5.95	568.3	898.0	1606.4	588	497	10.514	1039.7	3.026	.951
33	12	.950	7.94	569.3	898.0	1606.4	590	499	10.478	1041.5	3.012	.951
33	13	.950	11.95	568.1	899.0	1607.1	590	499	10.486	1040.9	3.016	.950
33	14	.950	16.00	568.4	899.0	1607.5	590	499	10.487	1041.1	3.016	.950
33	15	.950	.00	569.5	899.0	1608.9	590	499	10.493	1041.8	3.016	.951
34	2	.950	- 2.82	566.0	893.0	1598.5	582	492	10.568	1034.9	3.049	.951
34	3	.950	- 2.11	566.4	895.0	1601.0	584	494	10.550	1036.1	3.043	.951
34	4	.950	- 1.41	566.4	895.0	1601.0	586	496	10.514	1037.9	3.029	.951
34	5	.950	- .71	567.4	897.0	1604.3	586	496	10.536	1037.8	3.036	.951
34	6	.950	- .01	568.2	898.0	1606.3	586	496	10.549	1037.9	3.039	.951
34	7	.950	.70	568.2	898.0	1606.3	588	497	10.513	1039.6	3.026	.951
34	8	.950	1.40	568.2	898.0	1606.3	588	497	10.513	1039.6	3.026	.951
34	9	.950	2.12	568.0	898.0	1606.0	588	498	10.512	1039.5	3.026	.950
34	10	.950	2.82	568.1	899.0	1607.1	588	498	10.521	1039.1	3.029	.950
34	11	.950	.00	569.7	899.0	1609.1	588	497	10.530	1040.2	3.029	.951
35	1	.750	- 3.98	420.8	1069.0	1552.4	584	524	11.866	842.1	2.656	.750
35	2	.750	- 2.97	421.3	1069.0	1551.9	584	524	11.861	842.8	2.654	.751
35	3	.750	- 1.97	420.9	1069.0	1552.5	584	524	11.867	842.2	2.656	.750
35	4	.750	- .98	422.0	1069.0	1553.7	584	524	11.874	843.0	2.656	.751
35	5	.750	.00	421.4	1069.0	1553.1	584	524	11.869	842.6	2.656	.750
35	6	.750	.98	420.8	1068.0	1551.4	584	524	11.857	842.4	2.654	.750
35	7	.750	1.97	421.7	1069.0	1553.4	584	524	11.872	842.8	2.656	.751
35	8	.750	2.98	421.3	1069.0	1553.0	584	524	11.868	842.5	2.656	.750
35	9	.750	3.98	421.3	1069.0	1552.9	584	524	11.870	842.5	2.656	.750
35	10	.750	5.98	421.3	1069.0	1552.9	584	524	11.870	842.5	2.656	.750
35	11	.750	7.98	420.6	1068.0	1551.1	584	524	11.857	842.2	2.654	.750
35	12	.750	12.02	421.6	1068.0	1552.3	584	524	11.862	843.1	2.654	.751
35	13	.750	16.05	420.7	1068.0	1551.3	584	524	11.856	842.4	2.654	.750
35	14	.750	20.09	420.5	1068.0	1551.0	584	524	11.856	842.2	2.654	.750
35	15	.750	.00	421.3	1068.0	1551.9	584	524	11.861	842.8	2.654	.751
37	2	1.100	- 4.03	656.2	772.7	1652.2	590	474	9.490	1175.9	3.207	1.101
37	3	1.100	- 3.02	656.9	773.7	1654.1	592	476	9.470	1177.8	3.197	1.101
37	4	1.100	- 2.01	657.0	774.7	1655.2	592	476	9.478	1177.4	3.201	1.101
37	5	1.100	- 1.01	658.4	774.7	1657.1	594	478	9.454	1180.2	3.187	1.101

UNCLASSIFIED

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M		α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
37	6	1.100		.00	657.5	775.7	1656.2	594	478	9.456	1179.2	3.121	1.100
37	7	1.100		1.01	657.8	774.7	1656.4	594	478	9.450	1179.6	3.187	1.101
37	8	1.100		2.02	658.2	774.7	1656.9	594	478	9.452	1180.1	3.187	1.101
37	9	1.100		3.02	657.9	774.7	1656.5	594	478	9.450	1179.9	3.187	1.101
37	10	1.100		4.03	658.2	776.7	1658.9	594	478	9.468	1179.1	3.196	1.100
37	11	1.100		6.05	658.2	776.7	1658.9	594	478	9.468	1179.1	3.196	1.100
37	12	1.100		8.07	658.2	776.7	1658.9	594	478	9.468	1179.1	3.196	1.100
37	13	1.100		12.14	658.4	776.7	1659.1	594	478	9.469	1179.2	3.196	1.100
37	14	1.100		16.22	658.4	776.7	1659.2	594	478	9.468	1179.2	3.196	1.100
37	15	1.100		20.34	659.7	776.7	1660.9	594	478	9.476	1180.0	3.196	1.101
37	16	1.100		.00	659.7	776.7	1660.9	594	478	9.476	1180.0	3.196	1.101
38	2	.950	-	4.03	568.1	899.0	1607.1	586	496	10.557	1037.4	3.043	.950
38	3	.950	-	3.02	569.0	899.0	1608.3	586	496	10.562	1038.0	3.043	.951
38	4	.950	-	2.01	569.6	900.0	1610.0	586	496	10.574	1037.9	3.046	.951
38	5	.950	-	1.01	569.5	900.0	1609.9	588	497	10.537	1039.6	3.033	.951
38	6	.950		.00	568.7	900.0	1608.9	588	498	10.532	1039.1	3.033	.950
38	7	.950		1.01	569.1	901.0	1610.4	588	498	10.543	1039.0	3.036	.950
38	8	.950		2.02	570.3	901.0	1611.9	588	497	10.550	1039.7	3.036	.951
38	9	.950		3.02	569.9	901.0	1611.4	588	498	10.547	1039.5	3.036	.950
38	10	.950		4.03	569.9	902.0	1612.4	590	499	10.520	1040.9	3.026	.950
38	11	.950		6.05	569.8	902.0	1612.3	590	499	10.519	1040.8	3.026	.950
38	12	.950		8.07	571.2	902.0	1614.0	590	499	10.527	1041.7	3.026	.951
38	13	.950		12.13	571.2	903.0	1615.0	590	499	10.536	1041.3	3.029	.950
38	14	.950		16.21	570.3	903.0	1613.9	590	499	10.530	1040.7	3.029	.950
38	15	.950		20.30	570.3	902.0	1612.9	590	499	10.522	1041.1	3.026	.950
38	16	.950		.00	571.9	904.0	1616.9	590	499	10.547	1041.3	3.033	.951
39	2	.950	-	2.85	569.0	898.0	1607.3	582	492	10.526	1034.8	3.066	.951
39	3	.950	-	2.14	569.0	899.0	1608.3	584	494	10.508	1036.2	3.056	.951
39	4	.950	-	1.43	569.7	900.0	1610.1	586	496	10.575	1038.0	3.046	.951
39	5	.950	-	.71	569.5	900.0	1609.9	586	496	10.573	1037.9	3.046	.951
39	6	.950	-	.01	570.1	900.0	1610.6	586	496	10.577	1038.2	3.046	.951
39	7	.950		.71	570.1	901.0	1611.6	586	496	10.585	1037.8	3.049	.951
39	8	.950		1.43	571.2	902.0	1614.1	588	497	10.562	1040.0	3.039	.951
39	9	.950		2.14	571.8	903.0	1615.8	588	497	10.574	1039.9	3.043	.951
39	10	.950		2.85	570.5	901.0	1612.2	588	497	10.550	1039.9	3.036	.951
39	11	.950		.00	567.1	897.0	1603.9	588	498	10.499	1039.3	3.022	.950

UNCLASSIFIED

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
40	1	.750	- 4.02	420.0	1066.0	1548.4	584	524	11.836	842.4	2.649	.750
40	2	.750	- 3.01	420.6	1064.0	1547.1	584	524	11.822	843.5	2.644	.751
40	3	.750	- 2.01	419.7	1064.0	1546.1	584	524	11.816	842.8	2.644	.751
40	4	.750	- 1.01	420.3	1065.0	1547.8	584	524	11.828	843.0	2.646	.751
40	5	.750	.00	420.3	1065.0	1547.8	584	524	11.828	843.0	2.646	.751
40	6	.750	1.01	420.3	1065.0	1547.8	584	524	11.828	843.0	2.646	.751
40	7	.750	2.01	419.8	1065.0	1547.2	584	524	11.826	842.6	2.646	.750
40	8	.750	3.02	420.4	1065.0	1547.9	584	524	11.829	843.0	2.646	.751
40	9	.750	4.03	420.0	1065.0	1547.4	584	524	11.827	842.7	2.646	.751
40	10	.750	6.04	419.7	1065.0	1547.1	584	524	11.825	842.5	2.646	.750
40	11	.750	8.06	418.8	1065.0	1546.1	584	524	11.819	841.8	2.646	.750
40	12	.750	12.11	420.4	1064.0	1546.9	584	524	11.820	843.4	2.644	.751
40	13	.750	16.17	420.0	1064.0	1546.4	584	524	11.819	843.0	2.644	.751
40	14	.750	20.26	419.9	1065.0	1547.3	584	524	11.827	842.6	2.646	.750
40	15	.750	.00	420.3	1065.0	1547.8	584	524	11.828	843.0	2.646	.751
41	3	.950	- 4.00	564.1	892.0	1595.2	582	492	10.548	1034.2	3.046	.950
41	4	.950	- 3.00	564.9	893.0	1597.1	582	492	10.562	1034.2	3.049	.950
41	5	.950	- 2.00	564.2	891.0	1594.3	582	492	10.541	1034.6	3.042	.951
41	6	.950	- 1.00	564.1	893.0	1596.1	582	493	10.557	1033.7	3.049	.950
41	7	.950	.00	565.5	893.0	1597.9	584	494	10.529	1036.4	3.036	.951
41	8	.950	.99	564.8	893.0	1597.0	584	494	10.525	1035.9	3.036	.950
41	9	.950	1.99	565.8	895.0	1600.3	584	494	10.547	1035.8	3.043	.950
41	10	.950	2.99	566.0	894.0	1599.5	584	494	10.540	1036.3	3.039	.951
41	11	.950	3.99	565.7	895.0	1600.2	584	494	10.546	1035.7	3.043	.950
41	12	.950	5.98	566.4	894.0	1600.0	584	494	10.542	1036.6	3.039	.951
41	13	.950	7.98	567.1	895.0	1601.9	584	494	10.554	1036.6	3.043	.951
41	14	.950	12.00	566.4	895.0	1601.0	586	496	10.514	1037.9	3.029	.951
41	15	.950	16.05	566.2	895.0	1600.8	586	496	10.513	1037.8	3.029	.951
41	16	.950	20.17	565.8	896.0	1601.3	586	496	10.519	1037.1	3.032	.950
41	17	.950	.00	567.9	897.0	1604.9	586	496	10.539	1038.1	3.036	.951
42	2	.950	.00	565.3	893.0	1597.6	582	492	10.564	1034.5	3.049	.951
42	3	.950	.00	565.5	895.0	1599.9	582	493	10.581	1033.8	3.056	.950
42	4	.950	- .01	566.4	895.0	1601.0	584	494	10.550	1036.1	3.043	.951
42	5	.950	.00	567.1	895.0	1601.9	584	494	10.554	1036.6	3.043	.951
42	6	.950	- .01	567.1	898.0	1604.9	586	496	10.543	1037.2	3.039	.950
42	7	.950	- .01	568.1	897.0	1605.2	586	496	10.540	1038.2	3.036	.951
42	8	.950	.00	568.1	898.0	1606.1	586	496	10.549	1037.8	3.039	.951

UNCLASSIFIED

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
42	9	.950	.00	568.9	898.0	1607.1	586	496	10.554	1038.3	3.039	.951
42	10	.950	.00	568.1	898.0	1606.1	586	496	10.549	1037.8	3.039	.951
42	11	.950	-.01	568.3	899.0	1607.4	586	496	10.558	1037.5	3.043	.950
43	3	.950	-4.04	563.3	890.0	1592.1	582	492	10.528	1034.4	3.039	.951
43	4	.950	-3.03	562.5	891.0	1592.1	582	493	10.532	1033.5	3.042	.950
43	5	.950	-2.02	563.5	889.0	1591.4	582	492	10.520	1035.0	3.036	.951
43	6	.950	-1.01	562.6	890.0	1591.2	582	492	10.524	1033.9	3.039	.950
43	7	.950	.00	563.4	892.0	1594.2	582	493	10.545	1033.6	3.046	.950
43	8	.950	1.01	563.4	891.0	1593.2	582	492	10.537	1034.1	3.042	.950
43	9	.950	2.02	564.1	892.0	1595.1	584	494	10.513	1035.9	3.032	.950
43	10	.950	3.03	564.9	892.0	1596.1	584	494	10.517	1036.4	3.032	.951
43	11	.950	4.05	564.7	892.0	1595.9	584	494	10.516	1036.3	3.032	.951
43	12	.950	.00	564.7	893.0	1596.9	584	494	10.524	1035.9	3.036	.950
44	2	.950	-.01	562.0	889.0	1589.5	580	491	10.548	1032.2	3.049	.950
44	3	.950	-.01	564.7	893.0	1596.9	582	492	10.560	1034.1	3.049	.950
44	4	.950	-.01	564.7	893.0	1596.9	582	492	10.560	1034.1	3.049	.950
44	5	.950	-.01	564.1	893.0	1596.1	582	493	10.557	1033.7	3.049	.950
44	6	.950	.00	565.1	893.0	1597.4	584	494	10.526	1036.1	3.036	.951
44	7	.950	-.01	565.2	893.0	1597.5	584	494	10.527	1036.2	3.036	.951
44	8	.950	-.01	565.8	895.0	1600.3	584	494	10.547	1035.8	3.043	.950
44	9	.950	-.01	565.8	895.0	1600.3	584	494	10.547	1035.8	3.043	.950
44	10	.950	.00	566.3	895.0	1600.9	584	494	10.550	1036.1	3.043	.951
44	11	.950	-.01	565.8	895.0	1600.3	584	494	10.547	1035.8	3.043	.950
44	12	.950	-.01	566.3	895.0	1600.9	584	494	10.550	1036.1	3.043	.951
45	3	.950	-3.99	562.0	889.0	1589.5	580	491	10.548	1032.2	3.049	.950
45	4	.950	-2.99	563.4	890.0	1592.2	580	491	10.565	1032.7	3.053	.951
45	5	.950	-1.99	563.1	890.0	1591.9	580	491	10.563	1032.5	3.053	.951
45	6	.950	-1.00	562.9	890.0	1591.6	580	491	10.562	1032.4	3.053	.950
45	7	.950	.00	563.3	890.0	1592.1	582	492	10.528	1034.4	3.039	.951
45	8	.950	1.00	563.4	890.0	1592.3	582	492	10.528	1034.5	3.039	.951
45	9	.950	2.00	562.6	890.0	1591.3	582	492	10.522	1034.0	3.039	.950
45	10	.950	2.99	563.9	891.0	1593.9	582	492	10.532	1034.4	3.042	.951
45	11	.950	3.99	563.9	892.0	1594.9	582	492	10.547	1034.9	3.046	.950
45	12	.950	3.99	564.8	892.0	1596.9	582	492	10.553	1034.6	3.046	.951
45	14	.950	.00	564.9	893.0	1597.1	584	494	10.526	1036.0	3.036	.950

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
46	1	.950	.00	565.5	893.0	1597.9	584	494	10.529	1036.4	3.036	.951
46	2	.950	.00	565.3	895.0	1599.7	584	494	10.544	1035.5	3.043	.950
46	3	.950	.00	566.4	895.0	1601.0	584	494	10.550	1036.1	3.043	.951
46	4	.950	.00	565.7	894.0	1599.1	584	494	10.539	1036.1	3.039	.951
46	5	.950	.00	566.1	895.0	1600.7	584	494	10.548	1036.0	3.043	.951
46	7	.950	.00	566.3	895.0	1600.9	584	494	10.550	1036.1	3.043	.951
46	8	.950	.00	566.3	895.0	1600.9	584	494	10.550	1036.1	3.043	.951
46	9	.950	.00	566.4	895.0	1601.0	584	494	10.550	1036.1	3.043	.951
46	10	.950	- .01	566.3	895.0	1600.9	586	496	10.514	1037.9	3.029	.951
46	11	.950	.00	566.5	896.0	1602.2	586	496	10.523	1037.6	3.032	.950
48	2	1.100	- 3.94	659.0	776.7	1659.9	592	476	9.504	1177.5	3.210	1.101
48	3	1.100	- 2.95	659.8	776.7	1661.0	592	476	9.508	1178.0	3.210	1.101
48	4	1.100	- 1.97	660.4	777.7	1662.9	592	476	9.519	1177.9	3.214	1.101
48	5	1.100	- .98	660.0	778.7	1663.3	592	476	9.525	1177.2	3.218	1.100
48	6	1.100	.00	660.4	777.7	1662.8	592	476	9.519	1177.9	3.214	1.101
48	7	1.100	.99	660.8	778.7	1664.4	592	476	9.529	1177.6	3.218	1.101
48	8	1.100	1.96	660.8	779.7	1665.4	594	478	9.505	1179.1	3.208	1.100
48	9	1.100	2.95	661.6	779.7	1666.4	594	478	9.509	1179.6	3.208	1.101
48	10	1.100	3.94	660.4	777.7	1662.9	592	476	9.519	1177.9	3.214	1.101
48	11	1.100	4.93	660.4	777.7	1662.9	592	476	9.519	1177.9	3.214	1.101
48	12	1.100	5.92	660.8	777.7	1663.4	592	476	9.521	1178.1	3.214	1.101
48	13	1.100	7.91	660.4	778.7	1663.9	592	476	9.527	1177.4	3.218	1.101
48	14	1.100	11.93	660.4	778.7	1663.9	592	476	9.527	1177.4	3.218	1.101
48	15	1.100	.00	660.6	779.7	1665.1	592	476	9.536	1177.0	3.222	1.100
49	2	1.100	- 2.78	659.0	777.7	1660.9	588	473	9.577	1173.1	3.243	1.100
49	3	1.100	- 2.09	659.0	775.7	1658.9	590	474	9.529	1176.0	3.220	1.101
49	4	1.100	- 1.39	659.9	777.7	1662.2	590	474	9.549	1175.6	3.228	1.101
49	5	1.100	- .69	659.9	777.7	1662.2	590	474	9.549	1175.6	3.228	1.101
49	6	1.100	.00	660.4	777.7	1662.9	590	474	9.551	1175.9	3.228	1.101
49	7	1.100	.69	660.6	777.7	1663.1	590	474	9.553	1176.0	3.228	1.101
49	8	1.100	1.39	660.9	778.7	1664.5	590	474	9.562	1175.7	3.232	1.101
49	9	1.100	2.09	660.5	779.7	1665.0	590	475	9.567	1175.0	3.237	1.100
49	10	1.100	2.79	661.2	779.7	1665.9	592	476	9.539	1177.4	3.222	1.100
49	11	1.100	4.20	661.2	779.7	1665.9	592	476	9.539	1177.4	3.222	1.100
49	12	1.100	.00	662.8	780.7	1669.1	592	476	9.555	1177.8	3.226	1.101
50	2	.950	- 3.95	563.2	890.0	1592.0	588	497	10.420	1039.7	2.999	.951

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M		α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
50	3	.950	-	2.97	562.5	890.0	1591.1	588	498	10.416	1039.2	2.999	.950
50	4	.950	-	1.98	562.7	890.0	1591.4	588	498	10.417	1039.4	2.999	.950
50	5	.950	-	.99	562.6	890.0	1591.3	588	498	10.416	1039.3	2.999	.950
50	6	.950		.00	563.5	890.0	1592.4	588	497	10.421	1039.9	2.999	.951
50	7	.950		.99	563.2	891.0	1593.0	588	498	10.428	1039.3	3.002	.950
50	8	.950		1.97	564.7	891.0	1594.9	588	497	10.436	1040.2	3.002	.951
50	9	.950		2.96	563.5	892.0	1594.4	588	498	10.438	1039.1	3.005	.950
50	10	.950		3.96	564.7	891.0	1594.9	588	497	10.436	1040.2	3.002	.951
50	11	.950		5.93	564.4	891.0	1594.5	588	497	10.435	1040.0	3.002	.951
50	12	.950		7.92	564.9	892.0	1596.1	588	497	10.446	1039.9	3.005	.951
50	13	.950		11.90	564.7	892.0	1595.9	588	497	10.444	1039.8	3.005	.951
50	14	.950		15.92	564.7	892.0	1595.9	588	497	10.444	1039.8	3.005	.951
50	15	.950		.00	564.7	893.0	1596.9	588	498	10.452	1039.4	3.009	.950
51	1	.950	-	2.79	565.5	893.0	1597.9	588	497	10.457	1039.9	3.009	.951
51	2	.950	-	2.10	566.3	893.0	1598.9	588	497	10.461	1040.5	3.009	.951
51	3	.950	-	1.40	564.7	893.0	1596.9	588	498	10.452	1039.4	3.009	.950
51	4	.950	-	.70	565.5	893.0	1597.9	588	497	10.457	1039.9	3.009	.951
51	5	.950		.00	565.5	893.0	1597.9	588	497	10.457	1039.9	3.009	.951
51	6	.950		.69	564.9	895.0	1599.1	588	498	10.471	1038.7	3.016	.950
51	7	.950		1.39	565.3	894.0	1598.6	590	499	10.429	1041.1	2.999	.950
51	8	.950		2.09	565.4	894.0	1598.8	590	499	10.429	1041.2	2.999	.950
51	9	.950		2.79	566.3	894.0	1599.9	590	499	10.434	1041.8	2.999	.951
51	10	.950		4.20	566.4	894.0	1600.0	590	499	10.435	1041.9	2.999	.951
51	11	.950		5.61	566.5	894.0	1600.1	590	499	10.436	1041.9	2.999	.951
51	12	.950		.00	566.4	894.0	1600.0	590	499	10.435	1041.9	2.999	.951
54	2	.750	-	3.98	416.9	1057.9	1536.9	568	510	12.077	830.9	2.725	.750
54	3	.750	-	2.99	416.9	1059.9	1538.9	570	512	12.053	831.7	2.718	.750
54	4	.750	-	1.99	417.8	1061.0	1540.9	570	512	12.068	832.1	2.721	.750
54	5	.750	-	1.00	418.7	1061.0	1541.9	572	514	12.092	834.2	2.728	.751
54	6	.750		.00	418.8	1059.9	1541.1	572	513	12.092	834.7	2.726	.751
54	7	.750		1.00	418.7	1061.0	1542.0	572	514	12.090	834.0	2.726	.751
54	8	.750		1.99	418.0	1061.0	1541.1	57	514	12.078	833.7	2.728	.750
54	9	.750		2.99	418.0	1063.0	1543.1	572	514	12.066	833.0	2.713	.750
54	10	.750		3.98	418.5	1063.0	1543.8	572	514	12.060	833.5	2.713	.750
54	11	.750		5.98	418.1	1063.0	1543.2	572	514	12.066	833.1	2.713	.750
54	12	.750		7.97	418.0	1063.0	1543.1	572	514	12.066	833.0	2.713	.750
54	13	.750		11.97	418.5	1062.0	1542.7	572	514	12.060	833.8	2.711	.750

UNCLASSIFIED

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
54	14	.750	15.98	418.8	1062.0	1543.1	572	514	12.040	834.0	2.711	.751
54	15	.750	20.03	418.0	1061.8	1541.1	572	514	12.028	833.7	2.708	.750
54	16	.750	.00	419.0	1061.0	1542.3	572	514	12.032	834.5	2.708	.751
55	1	.750	- 2.82	418.9	1063.0	1544.2	570	512	12.092	832.3	2.726	.750
55	2	.750	- 2.11	418.9	1064.0	1545.2	570	512	12.101	832.0	2.728	.750
55	3	.750	- 1.41	419.7	1064.0	1546.1	570	512	12.106	832.6	2.728	.751
55	4	.750	- .71	419.7	1064.0	1546.1	570	512	12.106	832.6	2.728	.751
55	5	.750	.00	420.0	1065.0	1547.4	570	512	12.118	832.5	2.731	.751
55	6	.750	.71	420.0	1066.0	1548.4	572	514	12.085	833.7	2.721	.750
55	7	.750	1.41	419.9	1066.0	1548.3	572	514	12.084	833.6	2.721	.750
55	8	.750	2.12	420.3	1066.0	1548.8	572	514	12.085	834.0	2.721	.751
55	9	.750	2.82	419.7	1066.0	1548.1	572	514	12.082	833.5	2.721	.750
55	10	.750	4.23	420.4	1067.0	1549.9	572	514	12.095	833.7	2.724	.750
55	11	.750	5.65	420.4	1067.0	1549.9	572	514	12.095	833.7	2.724	.750
55	12	.750	8.53	420.4	1067.0	1549.9	572	514	12.095	833.7	2.724	.750
55	13	.750	.00	420.5	1067.0	1550.0	572	514	12.096	833.8	2.724	.750
57	3	1.100	- 4.06	655.5	772.7	1651.2	588	473	9.519	1173.5	3.222	1.101
57	4	1.100	- 3.04	655.7	772.7	1651.5	590	474	9.487	1175.6	3.207	1.101
57	5	1.100	- 2.03	656.7	774.7	1654.9	590	474	9.508	1175.3	3.216	1.100
57	6	1.100	- 1.01	657.6	774.7	1656.1	592	476	9.481	1177.8	3.201	1.101
57	7	1.100	.00	656.7	774.7	1654.9	590	474	9.508	1175.3	3.216	1.100
57	8	1.100	1.01	656.7	774.7	1654.9	590	474	9.508	1175.3	3.216	1.100
57	9	1.100	2.03	656.7	774.7	1654.9	590	474	9.508	1175.3	3.216	1.100
57	10	1.100	3.04	656.7	774.7	1654.9	590	474	9.508	1175.3	3.216	1.100
57	11	1.100	4.06	656.7	774.7	1654.9	590	474	9.508	1175.3	3.216	1.100
57	12	1.100	6.09	657.6	774.7	1656.1	590	474	9.513	1175.8	3.216	1.101
57	13	1.100	8.12	656.7	774.7	1654.9	590	474	9.508	1175.3	3.216	1.100
57	14	1.100	12.19	657.1	775.7	1656.4	590	475	9.518	1175.0	3.220	1.100
57	15	1.100	16.29	657.1	774.7	1655.4	590	474	9.510	1175.5	3.216	1.101
57	16	1.100	19.90	657.1	774.7	1655.4	590	474	9.510	1175.5	3.216	1.101
57	17	1.100	.00	657.8	775.7	1657.3	590	474	9.522	1175.4	3.220	1.100
58	2	1.100	- .01	653.1	770.7	1646.0	582	468	9.588	1167.2	3.257	1.100
58	3	1.100	- .01	656.1	773.7	1653.1	586	471	9.562	1171.4	3.240	1.101
58	4	1.100	- .01	656.9	774.7	1655.1	588	473	9.542	1173.4	3.230	1.100
58	5	1.100	- .01	656.9	774.7	1655.1	588	473	9.542	1173.4	3.230	1.100

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M		α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
58	6	1.100	-	.01	657.8	774.7	1655.2	590	474	9.510	1175.4	3.216	1.101
58	7	1.100	-	.01	656.9	774.7	1655.1	590	474	9.509	1175.4	3.216	1.100
58	8	1.100	-	.01	657.0	774.7	1655.2	590	474	9.510	1175.4	3.216	1.101
58	9	1.100	-	.01	657.1	774.7	1655.4	590	474	9.510	1175.5	3.216	1.101
58	10	1.100	-	.01	657.1	775.7	1656.4	590	475	9.518	1175.0	3.220	1.100
58	11	1.100	-	.01	658.0	775.7	1657.6	590	474	9.523	1175.5	3.220	1.101
58	12	1.100	-	.01	658.0	775.7	1657.6	590	474	9.523	1175.5	3.220	1.101
58	13	1.100	-	.01	658.4	776.7	1659.1	590	474	9.533	1175.2	3.224	1.100
58	14	1.100	-	.01	658.2	775.7	1657.9	590	474	9.524	1175.6	3.220	1.101
58	15	1.100		.00	659.0	776.7	1659.9	590	474	9.537	1175.6	3.224	1.101
58	16	1.100	-	.01	659.1	776.7	1660.1	590	474	9.537	1175.6	3.224	1.101
58	17	1.100	-	.01	659.6	777.7	1661.7	590	474	9.548	1175.4	3.228	1.101
59	1	.950	-	.01	570.6	904.0	1615.3	586	496	10.612	1037.0	3.060	.950
59	2	.950	-	.01	569.0	901.0	1610.3	586	496	10.578	1037.2	3.049	.950
59	3	.950	-	.01	568.2	897.0	1605.3	584	494	10.577	1036.5	3.049	.951
59	4	.950	-	.01	566.3	895.0	1600.9	584	494	10.550	1036.1	3.043	.951
59	5	.950	-	.01	564.9	894.0	1598.1	584	494	10.534	1035.6	3.039	.950
59	6	.950	-	.01	565.5	894.0	1598.9	584	494	10.537	1036.0	3.039	.951
59	7	.950	-	.01	566.3	894.0	1599.9	584	494	10.541	1036.5	3.039	.951
59	8	.950	-	.01	565.7	894.0	1599.1	584	494	10.539	1036.1	3.039	.951
59	9	.950	-	.01	565.7	894.0	1599.2	584	494	10.537	1036.1	3.039	.951
59	10	.950	-	.01	566.1	894.0	1599.7	584	494	10.540	1036.4	3.039	.951
59	11	.950	-	.01	565.5	894.0	1598.9	584	494	10.537	1036.0	3.039	.951
59	12	.950	-	.01	565.7	894.0	1599.1	584	494	10.539	1036.1	3.039	.951
59	13	.950	-	.01	564.9	894.0	1598.1	584	494	10.534	1035.6	3.039	.950
59	14	.950	-	.01	566.3	894.0	1599.9	584	494	10.541	1036.5	3.039	.951
59	15	.950	-	.01	565.8	894.0	1599.3	584	494	10.538	1036.2	3.039	.951
60	2	.950	-	4.04	567.9	898.0	1605.9	580	491	10.557	1032.3	3.080	.950
60	3	.950	-	3.03	568.8	899.0	1608.0	582	492	10.624	1034.3	3.070	.951
60	4	.950	-	2.02	568.7	898.0	1606.9	582	492	10.624	1034.6	3.066	.951
60	5	.950	-	1.01	568.1	898.0	1606.2	582	492	10.621	1034.3	3.066	.951
60	6	.950		.00	568.0	899.0	1607.0	582	492	10.622	1033.8	3.070	.950
60	7	.950		1.01	568.2	899.0	1607.3	582	492	10.623	1033.9	3.070	.950
60	8	.950		2.02	568.7	899.0	1607.9	582	492	10.623	1034.2	3.070	.951
60	9	.950		3.04	569.0	899.0	1608.3	582	492	10.624	1034.4	3.070	.951
60	10	.950		4.05	569.2	899.0	1608.5	582	492	10.625	1034.5	3.070	.951
60	11	.950		5.08	568.8	899.0	1608.0	582	492	10.624	1034.3	3.070	.951

UNCLASSIFIED

TABLE II
TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
60	12	.950	8.12	569.0	900.0	1609.3	582	492	10.642	1034.0	3.073	.950
60	13	.950	12.16	569.7	900.0	1610.1	582	492	10.647	1034.4	3.073	.951
60	14	.950	16.24	568.9	900.0	1609.2	582	492	10.642	1034.0	3.073	.950
60	15	.950	19.82	569.8	900.0	1610.3	582	492	10.647	1034.5	3.073	.951
60	16	.950	.00	570.5	900.0	1611.1	582	492	10.652	1034.9	3.073	.951
62	2	.750	- 4.03	417.1	1059.9	1539.1	566	508	12.140	828.9	2.743	.750
62	3	.750	- 3.02	418.0	1059.9	1540.1	568	510	12.103	831.1	2.730	.751
62	4	.750	- 2.01	418.1	1059.9	1540.2	568	510	12.104	831.1	2.730	.751
62	5	.750	- 1.01	418.1	1061.0	1541.2	569	510	12.113	830.8	2.733	.750
62	6	.750	.00	418.2	1061.0	1541.4	568	510	12.112	830.9	2.733	.750
62	7	.750	1.01	418.5	1061.0	1541.7	568	510	12.115	831.2	2.733	.751
62	8	.750	2.02	418.5	1063.0	1543.7	568	510	12.133	830.5	2.738	.750
62	9	.750	3.03	418.5	1061.0	1541.7	568	510	12.115	831.2	2.733	.751
62	10	.750	4.04	418.7	1061.0	1541.9	568	510	12.116	831.3	2.733	.751
62	11	.750	6.06	418.1	1061.0	1541.3	568	510	12.111	830.9	2.733	.750
62	12	.750	8.08	418.6	1062.0	1542.8	568	510	12.125	830.9	2.736	.750
62	13	.750	12.13	418.1	1062.0	1542.2	568	510	12.122	830.5	2.736	.750
62	14	.750	16.19	418.6	1062.0	1542.8	568	510	12.125	830.9	2.736	.750
62	15	.750	19.74	418.1	1062.0	1542.2	568	510	12.122	830.5	2.736	.750
62	16	.750	.00	418.5	1062.0	1542.7	568	510	12.124	830.8	2.736	.750
62	17	.750	.00	418.5	1062.0	1542.7	568	510	12.124	830.8	2.736	.750
63	1	.750	.00	418.7	1062.0	1543.0	568	510	12.124	831.0	2.736	.751
63	2	.750	.00	418.1	1062.0	1542.2	568	510	12.122	830.5	2.736	.750
63	3	.750	.00	418.1	1062.0	1542.3	568	510	12.120	830.6	2.736	.750
63	4	.750	.00	418.4	1062.0	1542.6	570	512	12.080	832.2	2.723	.750
63	5	.750	.00	418.1	1062.0	1542.2	570	512	12.080	832.0	2.723	.750
63	6	.750	- .01	418.2	1062.0	1542.4	570	512	12.079	832.1	2.723	.750
63	7	.750	.00	418.2	1063.0	1543.4	568	510	12.130	830.3	2.738	.750
63	8	.750	.00	418.6	1062.0	1542.8	570	512	12.082	832.4	2.723	.750
63	9	.750	.00	418.6	1062.0	1542.8	570	512	12.082	832.4	2.723	.750
63	10	.750	.00	419.5	1063.0	1544.9	570	512	12.095	832.8	2.726	.751
63	11	.750	- .01	418.1	1063.0	1543.3	570	512	12.087	831.7	2.726	.750
63	12	.750	- .01	418.3	1063.0	1543.5	570	512	12.089	831.9	2.726	.750
63	13	.750	.00	418.3	1063.0	1543.5	569	510	12.131	830.4	2.738	.750
63	14	.750	.00	419.0	1062.0	1543.3	570	512	12.084	832.7	2.723	.751
63	15	.750	.00	418.7	1063.0	1543.9	569	510	12.135	830.7	2.738	.750

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TABLE II
TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
66	2	1.100	4.03	504.8	595.4	1272.0	584	470	7.383	1169.4	2.505	1.100
66	3	1.100	3.03	505.5	595.4	1272.8	584	470	7.387	1169.9	2.505	1.101
66	4	1.100	2.02	505.5	595.4	1272.9	584	470	7.387	1169.9	2.505	1.101
66	5	1.100	1.01	505.7	595.4	1273.1	584	470	7.388	1170.0	2.505	1.101
66	6	1.100	.00	505.5	596.4	1273.9	584	470	7.395	1169.2	2.509	1.100
66	7	1.100	1.01	505.3	596.4	1273.6	584	470	7.394	1169.1	2.509	1.100
66	8	1.100	2.02	506.4	596.4	1275.1	584	470	7.400	1169.9	2.509	1.101
66	9	1.100	3.03	505.7	596.4	1274.2	584	470	7.396	1169.4	2.509	1.100
66	10	1.100	4.04	505.7	596.4	1274.2	584	470	7.396	1169.4	2.509	1.100
66	11	1.100	6.05	506.4	596.4	1275.1	584	470	7.400	1169.9	2.509	1.101
66	12	1.100	8.07	505.7	597.4	1275.1	584	470	7.404	1168.7	2.513	1.100
66	13	1.100	12.11	506.4	597.4	1276.1	584	470	7.407	1169.3	2.513	1.100
66	14	1.100	16.19	506.7	597.4	1276.5	584	470	7.409	1169.5	2.513	1.101
66	15	1.100	19.79	507.0	597.4	1276.9	584	470	7.411	1169.7	2.513	1.101
66	16	1.100	.00	507.1	598.4	1278.1	586	471	7.393	1171.2	2.506	1.100
67	1	1.100	.00	507.4	598.4	1278.5	586	471	7.395	1171.4	2.506	1.100
67	2	1.100	.00	505.7	597.4	1275.1	586	471	7.379	1170.7	2.502	1.100
67	3	1.100	.00	504.9	594.4	1271.1	586	471	7.350	1172.0	2.489	1.101
67	4	1.100	.00	505.1	595.4	1272.4	586	471	7.359	1171.6	2.494	1.101
67	5	1.100	.00	504.8	594.4	1271.0	586	471	7.350	1172.0	2.489	1.101
67	6	1.100	.01	504.3	594.4	1270.3	586	471	7.347	1171.6	2.489	1.101
67	7	1.100	.00	504.5	594.4	1270.5	586	471	7.349	1171.7	2.489	1.101
67	8	1.100	.01	504.6	594.4	1270.7	586	471	7.349	1171.8	2.489	1.101
67	9	1.100	.00	504.6	594.4	1270.7	586	471	7.349	1171.8	2.489	1.101
67	10	1.100	.00	504.8	594.4	1271.0	586	471	7.350	1172.0	2.489	1.101
67	11	1.100	.00	504.8	594.4	1271.0	586	471	7.350	1172.0	2.489	1.101
67	12	1.100	.00	504.9	594.4	1271.1	586	471	7.350	1172.0	2.489	1.101
67	13	1.100	.00	505.7	595.4	1273.1	586	471	7.363	1172.0	2.494	1.101
67	14	1.100	.00	504.8	595.4	1271.9	586	471	7.358	1171.3	2.494	1.100
67	15	1.100	.00	505.7	595.4	1273.1	586	471	7.363	1172.0	2.494	1.101
68	4	.950	.00	562.5	889.0	1530.1	586	494	10.443	1037.9	3.009	.951
68	5	.950	.01	563.0	890.0	1531.7	586	494	10.455	1037.8	3.012	.950
68	6	.950	.00	563.9	890.0	1532.9	586	494	10.459	1038.4	3.012	.951
68	7	.950	.01	563.2	890.0	1532.0	586	494	10.450	1039.7	3.009	.951
68	8	.950	.00	563.4	891.0	1533.2	586	494	10.460	1039.4	3.012	.950
68	9	.950	.00	564.1	891.0	1534.1	586	494	10.473	1039.8	3.012	.951
68	10	.950	.01	564.1	892.0	1535.1	586	494	10.461	1039.4	3.015	.950

UNCLASSIFIED

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
68	11	.950	- .01	563.4	892.0	1594.3	588	498	10.437	1039.0	3.005	.950
68	12	.950	- .01	564.3	892.0	1595.4	588	498	10.442	1039.6	3.005	.951
68	13	.950	- .01	564.0	892.0	1595.0	588	498	10.441	1039.4	3.005	.950
68	14	.950	.00	565.5	893.0	1597.9	588	497	10.457	1039.9	3.009	.951
68	15	.950	.00	564.2	894.0	1597.3	590	499	10.422	1040.5	2.999	.950
68	16	.950	.00	564.2	894.0	1597.3	590	499	10.422	1040.5	2.999	.950
68	17	.950	- .01	566.1	894.0	1599.6	590	499	10.434	1041.7	2.999	.951
69	1	.950	- 4.03	566.1	894.0	1599.6	590	499	10.434	1041.7	2.999	.951
69	2	.950	- 3.02	566.1	895.0	1600.6	590	499	10.442	1041.2	3.002	.950
69	3	.950	- 2.02	564.9	894.0	1598.2	590	499	10.426	1040.9	2.999	.950
69	4	.950	- 1.01	564.9	893.0	1597.1	590	499	10.419	1041.3	2.996	.950
69	5	.950	.00	563.9	893.0	1595.9	588	498	10.448	1038.9	3.009	.950
69	6	.950	1.00	564.9	892.0	1596.1	588	497	10.446	1039.9	3.005	.951
69	7	.950	2.01	564.7	892.0	1595.9	588	497	10.444	1039.8	3.005	.951
69	8	.950	3.02	565.8	893.0	1598.3	588	497	10.458	1040.1	3.009	.951
69	9	.950	4.02	565.6	893.0	1598.0	588	497	10.458	1040.0	3.009	.951
69	10	.950	6.04	565.6	893.0	1598.0	588	497	10.458	1040.0	3.009	.951
69	11	.950	8.05	565.8	893.0	1598.3	588	497	10.458	1040.1	3.009	.951
69	12	.950	12.12	564.7	893.0	1596.9	588	498	10.452	1039.4	3.009	.950
69	13	.950	16.21	564.3	893.0	1596.4	588	498	10.450	1039.2	3.009	.950
69	14	.950	19.79	564.7	893.0	1596.9	588	498	10.452	1039.4	3.009	.950
69	15	.950	.00	566.3	893.0	1598.9	588	497	10.461	1040.5	3.009	.951
70	2	.750	- 4.03	417.4	1059.9	1539.4	576	517	11.932	836.4	2.681	.750
70	3	.750	- 3.02	417.6	1061.0	1540.7	576	517	11.940	836.3	2.684	.750
70	4	.750	- 2.01	417.7	1062.0	1541.8	578	519	11.909	837.5	2.674	.750
70	5	.750	- 1.01	418.1	1062.0	1542.2	578	519	11.912	837.8	2.674	.750
70	6	.750	.00	418.5	1062.0	1542.7	578	519	11.914	838.1	2.674	.750
70	7	.750	1.00	419.0	1062.0	1543.3	578	519	11.916	838.5	2.674	.751
70	8	.750	2.01	418.7	1061.0	1541.9	578	519	11.907	838.6	2.672	.751
70	9	.750	3.02	418.0	1061.0	1541.1	578	519	11.903	838.0	2.672	.750
70	10	.750	4.02	418.1	1063.0	1543.3	578	519	11.919	837.5	2.677	.750
70	11	.750	6.04	417.4	1062.0	1541.4	578	519	11.908	837.2	2.674	.749
70	12	.750	8.05	417.8	1062.0	1541.9	578	519	11.910	837.6	2.674	.750
70	13	.750	12.09	419.2	1061.0	1542.5	578	519	11.909	839.0	2.672	.751
70	14	.750	16.16	418.1	1061.0	1541.2	578	519	11.904	838.1	2.672	.750
70	15	.750	19.72	418.3	1061.0	1541.5	578	519	11.903	838.3	2.672	.751
70	16	.750	.00	418.3	1061.0	1541.5	578	519	11.903	838.3	2.672	.751

TABLE II
TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
71	2	.750	- .01	417.8	1056.9	1536.9	572	513	11.990	834.8	2.698	.751
71	3	.750	- .00	416.6	1057.9	1535.4	574	516	11.943	834.2	2.688	.749
71	4	.750	.00	417.0	1057.9	1537.0	574	515	11.952	835.3	2.688	.750
71	5	.750	.00	417.8	1058.9	1538.9	574	515	11.966	835.6	2.691	.751
71	6	.750	- .01	417.8	1058.9	1538.9	574	515	11.966	835.6	2.691	.751
71	7	.750	.00	417.3	1059.9	1539.3	574	515	11.972	834.9	2.693	.750
71	8	.750	.00	418.0	1059.9	1540.1	576	517	11.935	836.9	2.681	.751
71	9	.750	- .01	418.1	1058.9	1539.2	576	517	11.927	837.3	2.679	.751
71	10	.750	- .01	418.0	1059.9	1540.1	576	517	11.935	836.9	2.681	.751
71	11	.750	.00	417.9	1061.0	1541.0	576	517	11.943	836.5	2.684	.750
71	12	.750	.00	418.3	1061.0	1541.5	576	517	11.945	836.8	2.684	.751
71	13	.750	.00	417.9	1061.0	1541.0	576	517	11.943	836.5	2.684	.750
71	14	.750	.00	418.3	1061.0	1541.5	576	517	11.945	836.8	2.684	.751
71	15	.750	.00	418.1	1061.0	1541.3	576	517	11.943	836.7	2.684	.750
71	16	.750	- .01	418.7	1061.0	1541.9	576	517	11.948	837.1	2.684	.751
72	4	1.100	- 4.02	501.9	591.3	1264.0	582	468	7.361	1167.7	2.499	1.101
72	5	1.100	- 3.02	502.7	592.3	1266.1	582	468	7.373	1167.7	2.503	1.101
72	6	1.100	- 2.01	502.6	592.3	1266.0	582	468	7.373	1167.6	2.503	1.101
72	7	1.100	- 1.01	502.6	592.3	1266.0	582	468	7.373	1167.6	2.503	1.101
72	8	1.100	.00	502.1	592.3	1265.3	582	468	7.370	1167.2	2.503	1.100
72	9	1.100	1.00	503.3	592.3	1266.9	582	468	7.377	1168.1	2.503	1.101
72	10	1.100	2.01	503.4	592.3	1267.1	582	468	7.377	1168.2	2.503	1.101
72	11	1.100	3.02	502.8	592.3	1266.3	584	470	7.348	1169.8	2.492	1.101
72	12	1.100	4.02	502.6	592.3	1266.0	584	470	7.347	1169.6	2.492	1.101
72	13	1.100	6.03	503.3	593.4	1267.9	584	470	7.359	1169.5	2.496	1.101
72	14	1.100	8.05	503.2	593.4	1267.9	584	470	7.359	1169.5	2.496	1.101
72	15	1.100	12.06	50[illegible].2	593.4	1269.1	584	469	7.364	1170.1	2.496	1.101
72	16	1.100	16.12	503.4	594.4	1269.1	584	470	7.367	1169.9	2.501	1.100
72	17	1.100	19.71	504.1	594.4	1270.0	584	470	7.371	1169.4	2.501	1.101
72	18	1.100	.00	505.5	595.4	1272.9	584	470	7.387	1169.9	2.505	1.101
73	2	1.050	- 4.02	483.3	625.5	1257.1	578	473	7.721	1120.3	2.488	1.050
73	3	1.050	- 3.02	484.1	625.5	1258.1	580	475	7.680	1122.8	2.477	1.051
73	4	1.050	- 2.01	484.1	626.5	1259.1	580	475	7.688	1122.2	2.481	1.050
73	5	1.050	- 1.01	484.8	626.5	1260.1	580	475	7.691	1122.8	2.481	1.051
73	6	1.050	.00	484.9	626.5	1260.2	582	476	7.665	1124.7	2.470	1.051
73	7	1.050	1.01	485.3	626.5	1264.0	582	476	7.690	1124.5	2.478	1.051
73	8	1.050	2.01	486.2	628.5	1263.9	582	476	7.689	1124.5	2.478	1.051

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M		α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
73	9	1.050		3.01	496.2	628.5	1263.9	584	478	7.662	1126.5	2.467	1.051
73	10	1.050		4.02	496.0	628.5	1263.7	584	478	7.661	1126.4	2.467	1.051
73	11	1.050		.00	496.0	629.5	1264.7	584	478	7.669	1125.8	2.471	1.050
74	1	1.000	-	4.02	461.9	657.8	1247.1	584	486	7.886	1082.3	2.405	1.001
74	2	1.000	-	3.01	461.2	657.8	1246.2	584	486	7.882	1081.7	2.405	1.001
74	3	1.000	-	2.01	460.4	657.8	1245.1	584	486	7.878	1081.1	2.405	1.000
74	4	1.000	-	1.01	461.9	657.8	1247.1	584	486	7.886	1082.3	2.405	1.001
74	5	1.000		.00	461.0	657.8	1245.9	584	486	7.881	1081.6	2.405	1.000
74	6	1.000		1.00	461.0	657.8	1245.9	584	486	7.881	1081.6	2.405	1.000
74	7	1.000		2.01	461.9	658.8	1248.0	584	486	7.895	1081.7	2.408	1.001
74	8	1.000		3.01	462.6	658.8	1248.9	584	486	7.899	1082.2	2.408	1.001
74	9	1.000		4.02	461.0	658.8	1246.9	584	486	7.889	1081.0	2.408	1.000
74	10	1.000		.00	461.8	658.8	1247.9	584	486	7.894	1081.6	2.408	1.001
75	2	.950	-	4.02	572.8	905.0	1619.0	582	492	10.706	1034.4	3.090	.951
75	3	.950	-	3.01	571.9	903.0	1615.9	582	492	10.684	1034.6	3.084	.951
75	4	.950	-	2.01	569.8	900.0	1610.3	584	494	10.611	1036.3	3.060	.951
75	5	.950	-	1.01	568.9	899.0	1608.2	584	494	10.597	1036.1	3.056	.951
75	6	.950		.00	567.3	896.0	1603.2	584	494	10.563	1036.3	3.046	.951
75	7	.950		1.00	566.6	896.0	1602.3	584	494	10.559	1035.9	3.046	.950
75	8	.950		2.00	568.1	898.0	1606.1	584	494	10.585	1036.0	3.053	.951
75	9	.950		3.01	566.6	898.0	1604.3	584	494	10.576	1035.1	3.053	.950
75	10	.950		4.01	567.4	898.0	1605.3	584	494	10.580	1035.6	3.053	.950
75	11	.950		6.01	567.7	898.0	1605.7	584	494	10.582	1035.8	3.053	.950
75	12	.950		8.02	568.2	898.0	1606.3	586	496	10.549	1037.9	3.039	.951
75	13	.950		12.06	568.1	899.0	1607.2	586	496	10.556	1037.4	3.043	.950
75	14	.950		16.13	569.5	900.0	1609.9	586	496	10.573	1037.9	3.046	.951
75	15	.950		19.71	568.3	899.0	1607.4	586	496	10.558	1037.5	3.043	.950
75	16	.950		.00	569.7	900.0	1610.1	586	496	10.575	1038.0	3.046	.951
76	1	.950	-	2.85	566.9	895.0	1601.7	586	496	10.516	1038.3	3.029	.951
76	2	.950	-	2.14	565.7	893.0	1598.1	586	496	10.494	1038.3	3.022	.951
76	3	.950	-	1.42	565.7	895.0	1600.1	586	496	10.511	1037.5	3.029	.950
76	4	.950	-	.71	565.7	894.0	1599.1	586	496	10.503	1037.9	3.026	.951
76	5	.950		.00	565.6	895.0	1600.0	586	496	10.510	1037.4	3.029	.950
76	6	.950		.70	565.6	895.0	1600.0	588	498	10.474	1039.2	3.016	.950
76	7	.950		1.41	565.7	895.0	1600.1	588	498	10.475	1039.2	3.016	.950

UNCLASSIFIED

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
76	8	.950	2.13	565.6	895.0	1600.0	588	498	10.474	1039.2	3.016	.950
76	9	.950	2.84	565.6	895.0	1600.0	588	498	10.474	1039.2	3.016	.950
76	10	.950	4.27	565.6	895.0	1600.0	588	498	10.474	1039.2	3.016	.950
76	11	.950	5.70	567.1	895.0	1601.9	588	497	10.482	1040.1	3.016	.951
76	12	.950	8.59	566.5	895.0	1601.2	588	497	10.478	1039.8	3.016	.951
76	13	.950	11.53	566.4	895.0	1601.0	588	497	10.479	1039.7	3.016	.951
76	14	.950	14.17	566.4	896.0	1602.0	588	498	10.487	1039.3	3.019	.950
76	15	.950	- .01	565.4	897.0	1603.0	588	498	10.495	1038.9	3.022	.950
77	2	.850	- 4.02	495.1	978.0	1569.1	580	506	11.252	938.1	2.883	.850
77	3	.850	- 3.02	495.1	978.0	1569.1	580	506	11.252	938.1	2.883	.850
77	4	.850	- 2.01	496.2	979.0	1571.4	580	506	11.267	938.5	2.886	.851
77	5	.850	- 1.01	494.9	979.0	1569.9	582	508	11.220	939.2	2.873	.850
77	6	.850	.00	496.2	980.0	1572.5	582	508	11.235	939.8	2.876	.850
77	7	.850	1.00	496.2	980.0	1572.5	582	508	11.235	939.8	2.876	.850
77	8	.850	2.01	496.5	980.0	1572.8	582	508	11.238	940.0	2.876	.851
77	9	.850	3.01	496.0	981.0	1573.2	582	508	11.244	939.2	2.879	.850
77	10	.850	4.02	496.9	981.0	1574.3	582	508	11.249	939.9	2.879	.851
77	11	.850	.00	496.1	981.0	1573.3	582	508	11.245	939.3	2.879	.850
78	1	.750	- 4.02	419.0	1064.0	1545.3	578	519	11.934	837.9	2.679	.750
78	2	.750	- 3.01	419.0	1064.0	1545.3	578	519	11.934	837.9	2.679	.750
78	3	.750	- 2.01	419.0	1064.0	1545.3	578	519	11.934	837.9	2.679	.750
78	4	.750	- 1.00	418.7	1062.0	1543.0	578	519	11.914	838.3	2.674	.751
78	5	.750	.00	418.7	1063.0	1544.0	578	519	11.923	838.0	2.677	.750
78	6	.750	1.00	418.7	1063.0	1544.0	578	519	11.923	838.0	2.677	.750
78	7	.750	2.01	418.7	1063.0	1544.0	578	519	11.923	838.0	2.677	.750
78	8	.750	3.01	418.8	1063.0	1544.1	578	519	11.924	838.1	2.677	.750
78	9	.750	4.02	418.8	1063.0	1544.1	578	519	11.924	838.1	2.677	.750
78	10	.750	6.03	418.8	1063.0	1544.1	578	519	11.924	838.1	2.677	.750
78	11	.750	8.04	418.2	1063.0	1543.4	578	519	11.920	837.6	2.677	.750
78	12	.750	12.06	418.7	1062.0	1542.9	578	519	11.916	838.3	2.674	.750
78	13	.750	16.11	418.7	1062.0	1542.9	578	519	11.916	838.3	2.674	.750
78	14	.750	19.68	418.8	1062.0	1543.1	578	519	11.915	838.4	2.674	.751
78	15	.750	.00	419.1	1062.0	1543.4	578	519	11.917	838.6	2.674	.751
79	2	.600	- 4.01	292.6	1156.9	1476.8	566	527	12.778	676.7	2.283	.601
79	3	.600	- 3.01	291.9	1154.9	1474.9	566	527	12.755	676.5	2.279	.601

UNCLASSIFIED

TABLE II
TUNNEL OPERATING CONDITIONS

Run	Pt	M		α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
79	4	.600	-	2.01	290.2	1154.9	1472.2	566	528	12.743	674.8	2.279	.599
79	5	.600	-	1.00	290.4	1153.8	1471.4	566	528	12.735	675.3	2.277	.600
79	6	.600		.00	291.0	1153.8	1472.1	566	527	12.737	675.9	2.277	.600
79	7	.600		1.00	291.0	1153.8	1472.1	566	527	12.737	675.9	2.277	.600
79	8	.600		2.01	291.3	1153.8	1472.4	566	527	12.740	676.2	2.277	.601
79	9	.600		3.01	291.3	1153.8	1472.4	566	527	12.740	676.2	2.277	.601
79	10	.600		4.02	291.3	1153.8	1472.4	566	527	12.740	676.2	2.277	.601
79	11	.600		.00	291.3	1152.8	1471.4	566	527	12.731	676.4	2.275	.601
81	3	1.100	-	4.05	502.7	592.3	1266.1	582	468	7.373	1167.7	2.503	1.101
81	4	1.100	-	3.04	502.2	592.3	1265.4	582	468	7.371	1167.3	2.503	1.100
81	5	1.100	-	2.03	502.8	592.3	1266.2	582	468	7.374	1167.7	2.503	1.101
81	6	1.100	-	1.01	504.0	593.4	1268.9	584	470	7.363	1170.0	2.496	1.101
81	7	1.100		.00	504.0	593.4	1268.9	584	470	7.363	1170.0	2.496	1.101
81	8	1.100		1.01	503.7	594.4	1269.5	584	470	7.369	1169.2	2.501	1.100
81	9	1.100		2.03	503.8	594.4	1269.6	584	470	7.370	1169.2	2.501	1.100
81	10	1.100		3.04	503.8	594.4	1269.6	586	471	7.345	1171.2	2.489	1.100
81	11	1.100		4.05	505.0	594.4	1271.2	586	471	7.351	1172.1	2.489	1.101
81	12	1.100		6.08	505.2	595.4	1272.5	586	471	7.360	1171.6	2.494	1.101
81	13	1.100		8.11	505.4	595.4	1272.8	586	471	7.361	1171.8	2.494	1.101
81	14	1.100		12.20	504.3	595.4	1271.3	586	471	7.355	1171.0	2.494	1.100
81	15	1.100		16.28	505.8	596.4	1274.3	586	471	7.371	1171.4	2.498	1.101
81	16	1.100		19.89	505.8	596.4	1274.3	586	471	7.371	1171.4	2.498	1.101
81	17	1.100		.00	505.8	596.4	1274.3	588	473	7.346	1173.4	2.487	1.101
82	3	.950	-	4.08	563.4	891.0	1593.3	584	494	10.500	1035.9	3.029	.950
82	4	.950	-	3.06	564.1	892.0	1595.2	584	494	10.512	1035.9	3.032	.950
82	5	.950	-	2.02	564.9	893.0	1597.2	586	496	10.489	1037.8	3.022	.951
82	6	.950	-	1.01	564.1	893.0	1596.2	586	496	10.484	1037.3	3.022	.950
82	7	.950		.00	564.7	893.0	1596.9	586	496	10.488	1037.7	3.022	.950
82	8	.950		1.01	565.5	894.0	1598.9	588	498	10.465	1039.5	3.012	.951
82	9	.950		2.04	566.6	895.0	1601.3	588	497	10.479	1039.8	3.016	.951
82	10	.950		3.06	566.2	895.0	1600.8	588	498	10.477	1039.6	3.016	.951
82	11	.950		4.07	566.2	895.0	1600.8	588	498	10.477	1039.6	3.016	.951
82	12	.950		6.10	564.9	894.0	1598.2	588	498	10.461	1039.2	3.012	.950
82	13	.950		8.13	565.0	894.0	1598.3	588	498	10.462	1039.2	3.012	.950
82	14	.950		12.20	566.5	894.0	1600.2	586	496	10.506	1038.4	3.026	.951
82	15	.950		16.31	565.7	894.0	1599.1	586	496	10.503	1037.9	3.026	.951
82	16	.950		19.92	565.6	895.0	1600.0	586	496	10.510	1037.4	3.029	.950

UNCLASSIFIED

TABLE II
TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
82	17	.950	.00	566.7	895.0	1600.9	586	496	10.514	1037.9	3.029	.951
83	3	.950	-.01	566.5	896.0	1602.2	588	498	10.487	1039.4	3.019	.950
83	4	.950	-.01	567.3	896.0	1603.2	588	497	10.491	1039.9	3.019	.951
83	5	.950	.00	566.5	896.0	1602.1	588	498	10.488	1039.3	3.019	.950
83	6	.950	.00	567.9	897.0	1604.9	588	497	10.503	1039.8	3.022	.951
83	7	.950	-.01	567.3	897.0	1604.2	588	498	10.499	1039.5	3.022	.950
83	8	.950	.00	568.2	898.0	1606.3	588	497	10.513	1039.6	3.026	.951
83	9	.950	.00	568.2	898.0	1606.3	588	497	10.513	1039.6	3.026	.951
83	10	.950	.00	568.4	897.0	1605.5	588	497	10.506	1040.1	3.022	.951
83	11	.950	.00	568.0	899.0	1607.0	588	498	10.521	1039.1	3.029	.950
83	12	.950	-.01	569.9	898.0	1607.2	590	499	10.481	1041.9	3.012	.951
83	13	.950	.00	567.4	898.0	1605.3	590	499	10.473	1040.9	3.012	.950
83	14	.950	.01	568.7	899.0	1607.9	590	499	10.489	1041.3	3.016	.951
83	16	.950	.00	568.3	899.0	1607.4	588	498	10.522	1039.3	3.029	.950
83	17	.950	.01	568.3	899.0	1607.4	588	498	10.522	1039.3	3.029	.950
85	2	.750	-4.03	419.9	1064.0	1546.3	568	510	12.151	831.3	2.741	.751
85	3	.750	-3.03	419.9	1064.0	1546.3	570	512	12.108	832.8	2.728	.751
85	4	.750	-2.02	419.7	1066.0	1548.1	570	512	12.124	832.0	2.733	.750
85	5	.750	-1.01	420.0	1066.0	1548.4	572	514	12.085	833.7	2.721	.750
85	6	.750	.00	419.9	1066.0	1548.3	572	514	12.084	833.6	2.721	.750
85	7	.750	1.01	421.4	1067.0	1551.1	572	514	12.100	834.5	2.724	.751
85	8	.750	2.02	420.5	1067.0	1550.0	572	514	12.096	833.8	2.724	.750
85	9	.750	3.03	420.5	1067.0	1550.0	572	514	12.096	833.8	2.724	.750
85	10	.750	4.04	420.6	1069.0	1552.1	572	514	12.115	833.2	2.729	.750
85	11	.750	6.07	420.6	1067.0	1550.1	572	514	12.097	833.8	2.724	.750
85	12	.750	8.10	421.3	1069.0	1552.9	572	514	12.119	833.8	2.729	.750
85	13	.750	12.16	421.3	1069.0	1552.9	572	514	12.119	833.8	2.729	.750
85	14	.750	16.23	421.3	1069.0	1552.9	572	514	12.119	833.8	2.729	.750
85	15	.750	19.81	420.6	1069.0	1552.1	572	514	12.115	833.2	2.729	.750
85	16	.750	.00	421.6	1068.0	1552.3	574	515	12.069	835.8	2.714	.751
87	2	1.100	-4.07	651.1	767.6	1640.3	588	473	9.456	1173.5	3.201	1.101
87	3	1.100	-3.06	651.8	768.7	1642.3	590	474	9.435	1175.4	3.191	1.101
87	4	1.100	-2.04	652.3	769.7	1643.9	590	475	9.446	1175.2	3.195	1.100
87	5	1.100	-1.02	652.8	770.7	1645.9	592	476	9.430	1177.5	3.195	1.101
87	6	1.100	.00	651.9	769.7	1643.4	592	476	9.412	1176.9	3.191	1.100

UNCLASSIFIED

TABLE II
TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
87	7	1.100	1.02	651.6	767.6	1641.0	592	476	9.394	1177.8	3.172	1.101
87	8	1.100	2.04	651.8	768.7	1642.2	590	474	9.436	1175.4	3.191	1.100
87	9	1.100	3.06	651.8	768.7	1642.3	590	474	9.435	1175.4	3.191	1.101
87	10	1.100	4.08	652.4	768.7	1643.0	590	474	9.439	1175.7	3.191	1.101
87	11	1.100	.00	652.3	768.7	1642.9	590	474	9.438	1175.7	3.191	1.101
88	1	.950	- 4.06	566.6	897.0	1603.3	588	498	10.496	1039.0	3.022	.950
88	2	.950	- 3.04	566.6	896.0	1602.3	588	498	10.488	1039.4	3.019	.950
88	3	.950	- 2.03	566.9	896.0	1602.7	588	497	10.489	1039.6	3.019	.951
88	4	.950	- 1.01	566.5	896.0	1602.1	588	498	10.488	1039.3	3.019	.950
88	5	.950	.00	566.5	896.0	1602.1	588	498	10.488	1039.3	3.019	.950
88	6	.950	1.02	565.1	896.0	1601.7	588	498	10.485	1039.1	3.019	.950
88	7	.950	2.03	566.6	896.0	1602.3	588	498	10.488	1039.4	3.019	.950
88	8	.950	3.05	566.8	896.0	1602.5	588	498	10.489	1039.5	3.019	.951
88	9	.950	4.07	567.4	896.0	1603.3	588	497	10.492	1039.9	3.019	.951
88	10	.950	6.10	566.6	897.0	1603.3	588	498	10.496	1039.0	3.022	.950
88	11	.950	8.14	567.1	897.0	1603.9	588	498	10.499	1039.3	3.022	.950
88	12	.950	12.23	567.8	897.0	1604.8	588	497	10.502	1039.8	3.022	.951
88	13	.950	16.33	567.2	897.0	1604.0	588	498	10.500	1039.4	3.022	.950
88	14	.950	19.95	567.1	898.0	1604.9	588	498	10.507	1038.9	3.026	.950
88	15	.950	.00	568.1	898.0	1606.1	588	498	10.513	1039.5	3.026	.951
89	2	.950	- .01	564.9	893.0	1597.1	584	494	10.526	1036.0	3.036	.950
89	3	.950	- .01	565.1	895.0	1599.4	584	494	10.543	1035.3	3.043	.950
89	4	.950	- .01	566.3	895.0	1600.9	584	494	10.550	1036.1	3.043	.951
89	5	.950	.00	565.8	895.0	1600.3	586	496	10.511	1037.6	3.029	.950
89	6	.950	- .01	565.9	895.0	1600.4	586	496	10.511	1037.6	3.029	.950
89	7	.950	- .01	566.6	896.0	1602.3	586	496	10.523	1037.7	3.032	.950
89	8	.950	- .01	566.6	896.0	1602.3	586	496	10.523	1037.7	3.032	.950
89	9	.950	- .01	566.6	896.0	1602.3	586	496	10.523	1037.7	3.032	.950
89	10	.950	- .01	566.6	897.0	1603.3	586	496	10.532	1037.3	3.036	.950
89	11	.950	- .01	567.9	897.0	1604.9	586	496	10.539	1038.1	3.036	.951
89	12	.950	- .01	568.7	898.0	1606.9	588	497	10.516	1039.9	3.026	.951
89	13	.950	.00	568.0	898.0	1606.0	588	498	10.512	1039.5	3.026	.950
89	14	.950	- .01	568.9	898.0	1607.2	588	497	10.517	1040.1	3.026	.951
90	1	.750	- 4.05	417.0	1058.9	1538.0	580	521	11.837	839.3	2.655	.750
90	2	.750	- 3.03	417.8	1058.9	1538.9	580	521	11.842	840.0	2.655	.751

UNCLASSIFIED

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M		α	q	p	H	T_0	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
90	3	.750	-	2.02	417.2	1057.0	1537.2	580	521	11.830	839.8	2.652	.751
90	4	.750	-	1.01	416.5	1057.0	1536.4	580	521	11.826	839.2	2.652	.750
90	5	.750		.00	416.8	1056.9	1535.8	580	521	11.817	839.8	2.650	.751
90	6	.750		1.01	416.8	1056.9	1535.9	580	521	11.817	839.8	2.650	.751
90	7	.750		2.03	417.8	1057.9	1537.9	578	519	11.874	838.8	2.664	.751
90	8	.750		3.04	419.0	1064.0	1545.3	578	519	11.934	837.9	2.679	.750
90	9	.750		4.05	419.0	1063.0	1544.3	578	519	11.925	838.2	2.677	.750
90	10	.750		.00	419.4	1063.0	1544.8	578	519	11.927	838.6	2.677	.751
91	3	1.100	-	4.04	651.2	768.7	1641.5	590	475	9.432	1175.1	3.191	1.100
91	4	1.100	-	3.03	650.9	768.7	1641.0	590	475	9.431	1174.9	3.191	1.100
91	5	1.100	-	2.02	650.8	767.6	1639.9	590	474	9.422	1175.3	3.186	1.100
91	6	1.100	-	1.01	651.0	766.6	1639.1	590	474	9.416	1175.9	3.182	1.101
91	8	1.100		1.01	654.1	771.7	1648.3	590	474	9.471	1175.2	3.203	1.100
91	9	1.100		2.02	654.2	771.7	1648.5	590	474	9.471	1175.3	3.203	1.100
91	10	1.100		.00	655.3	772.7	1650.9	590	474	9.486	1175.4	3.207	1.101
91	11	1.100		3.03	654.9	772.7	1650.4	590	474	9.483	1175.2	3.207	1.100
91	12	1.100		4.05	655.0	772.7	1650.5	590	474	9.484	1175.2	3.207	1.100
91	13	1.100		6.07	655.4	772.7	1651.1	590	474	9.486	1175.5	3.207	1.101
91	14	1.100		8.09	655.4	772.7	1651.1	590	474	9.486	1175.5	3.207	1.101
91	15	1.100		12.13	655.4	772.7	1651.1	590	474	9.486	1175.5	3.207	1.101
91	16	1.100		16.22	655.5	772.7	1651.2	590	474	9.486	1175.5	3.207	1.101
91	17	1.100		.00	657.0	774.7	1655.2	592	476	9.478	1177.4	3.201	1.101
92	2	.950	-	4.03	566.4	895.0	1601.0	582	492	10.587	1034.4	3.056	.951
92	3	.950	-	3.02	566.9	895.0	1601.7	582	492	10.589	1034.7	3.056	.951
92	4	.950	-	2.02	567.1	897.0	1603.9	584	494	10.571	1035.8	3.049	.950
92	5	.950	-	1.01	568.1	898.0	1606.1	584	494	10.585	1036.0	3.053	.951
92	6	.950		.00	568.0	898.0	1606.0	584	494	10.584	1035.9	3.053	.950
92	7	.950		1.01	568.1	898.0	1606.1	584	494	10.585	1036.0	3.053	.951
92	8	.950		2.02	568.3	899.0	1607.4	586	496	10.558	1037.5	3.043	.950
92	9	.950		3.03	568.3	899.0	1607.4	586	496	10.558	1037.5	3.043	.950
92	10	.950		4.04	568.3	900.0	1608.4	586	496	10.566	1037.1	3.046	.950
92	11	.950		6.06	569.7	900.0	1610.2	586	496	10.573	1038.0	3.046	.951
92	12	.950		8.07	569.0	900.0	1609.3	586	496	10.570	1037.6	3.046	.950
92	13	.950		12.11	568.8	900.0	1609.0	586	496	10.569	1037.4	3.046	.950
92	14	.950		16.17	568.9	900.0	1609.1	586	496	10.570	1037.5	3.046	.950
92	15	.950		.00	572.3	901.0	1611.9	588	497	10.550	1039.7	3.036	.951

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
93	1	.950	.00	564.9	893.0	1597.1	588	498	10.454	1039.5	3.009	.950
93	2	.950	.00	564.9	893.0	1597.1	588	498	10.454	1039.5	3.009	.950
93	3	.950	.00	565.3	894.0	1598.6	588	498	10.465	1039.4	3.012	.950
93	4	.950	.00	564.3	894.0	1597.4	588	498	10.459	1038.8	3.012	.950
93	5	.950	.00	565.1	894.0	1598.4	588	498	10.463	1039.3	3.012	.950
93	6	.950	.00	565.1	894.0	1598.4	588	498	10.463	1039.3	3.012	.950
93	7	.950	.00	565.1	894.0	1598.4	588	498	10.463	1039.3	3.012	.950
93	8	.950	.00	564.9	894.0	1598.2	588	498	10.461	1039.2	3.012	.950
93	9	.950	.00	564.9	894.0	1598.2	588	498	10.461	1039.2	3.012	.950
93	10	.950	.00	565.0	894.0	1598.3	588	498	10.462	1039.2	3.012	.950
93	11	.950	.00	565.7	894.0	1599.2	588	497	10.466	1039.7	3.012	.951
93	12	.950	.00	566.1	895.0	1600.6	588	498	10.477	1039.5	3.016	.950
93	13	.950	.00	566.1	895.0	1600.6	590	499	10.442	1041.2	3.002	.950
94	3	.750	-4.03	420.4	1065.0	1547.9	576	517	11.993	837.2	2.694	.751
94	4	.750	-3.02	419.5	1065.0	1546.9	576	517	11.987	836.6	2.694	.750
94	5	.750	-2.01	420.0	1066.0	1548.4	576	517	12.001	836.6	2.697	.750
94	6	.750	-1.00	420.2	1065.0	1547.7	576	517	11.992	837.1	2.694	.751
94	7	.750	.00	419.9	1065.0	1547.3	576	517	11.991	836.8	2.694	.750
94	8	.750	1.01	419.7	1065.0	1547.1	576	517	11.989	836.7	2.694	.750
94	9	.750	2.02	419.5	1065.0	1546.9	576	517	11.987	836.6	2.694	.750
94	10	.750	3.02	420.7	1066.0	1549.2	576	517	12.005	837.1	2.697	.751
94	11	.750	4.03	420.5	1065.0	1548.0	576	517	11.994	837.3	2.694	.751
94	12	.750	6.05	419.8	1065.0	1547.2	576	517	11.990	836.8	2.694	.750
94	13	.750	8.06	419.8	1067.0	1549.2	576	517	12.008	836.1	2.699	.750
94	14	.750	12.09	420.3	1066.0	1548.8	576	517	12.001	836.9	2.697	.751
94	15	.750	16.14	419.7	1066.0	1548.1	576	517	11.998	836.4	2.697	.750
94	16	.750	20.20	420.1	1067.0	1549.6	576	517	12.009	836.4	2.699	.750
94	17	.750	.00	420.6	1066.0	1549.1	576	517	12.004	837.1	2.697	.751
95	1	.950	-2.85	568.9	900.0	1609.1	584	494	10.606	1035.7	3.060	.950
95	2	.950	-2.14	563.9	893.0	1595.9	584	494	10.520	1035.4	3.036	.950
95	3	.950	-1.43	564.9	893.0	1597.1	586	496	10.490	1037.8	3.022	.950
95	4	.950	-.71	564.2	895.0	1598.3	586	496	10.502	1036.5	3.029	.949
95	5	.950	.00	564.9	895.0	1599.2	586	496	10.505	1037.0	3.029	.950
95	6	.950	.71	565.2	895.0	1600.8	586	496	10.513	1037.8	3.029	.951
95	7	.950	1.43	565.7	895.0	1600.1	586	496	10.511	1037.5	3.029	.950
95	8	.950	2.14	566.5	895.0	1601.2	586	496	10.514	1038.0	3.029	.951
95	9	.950	2.85	566.6	895.0	1601.3	588	497	10.479	1039.8	3.016	.951

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
95	10	.950	.00	566.9	897.0	1603.6	588	498	10.498	1039.2	3.022	.950
96	6	.950	-4.05	561.8	889.0	1589.3	582	492	10.510	1033.9	3.036	.950
96	7	.950	-3.03	562.3	889.0	1589.9	582	492	10.513	1034.2	3.036	.950
96	8	.950	-2.02	562.7	891.0	1592.4	582	493	10.532	1033.6	3.042	.950
96	9	.950	-1.01	563.1	890.0	1591.0	584	494	10.490	1036.1	3.025	.951
96	10	.950	.00	563.6	890.0	1591.3	584	494	10.487	1035.8	3.025	.950
96	11	.950	1.01	563.4	890.0	1592.3	584	494	10.492	1036.3	3.025	.951
96	12	.950	2.02	563.1	891.0	1592.0	584	494	10.499	1035.7	3.029	.950
96	13	.950	3.03	564.2	891.0	1594.3	584	494	10.504	1036.4	3.029	.951
96	14	.950	4.05	564.0	893.0	1596.0	584	494	10.520	1035.4	3.036	.950
96	15	.950	6.08	564.1	893.0	1596.1	584	494	10.521	1035.5	3.036	.950
96	16	.950	8.11	564.9	892.0	1596.1	584	494	10.517	1036.4	3.032	.951
96	17	.950	12.20	564.9	893.0	1597.1	586	496	10.490	1037.8	3.022	.950
96	18	.950	16.31	564.9	893.0	1597.1	586	496	10.490	1037.8	3.022	.950
96	19	.950	20.41	564.8	893.0	1597.0	586	496	10.489	1037.7	3.022	.950
96	20	.950	.00	564.9	894.0	1598.2	586	496	10.497	1037.4	3.026	.950
97	2	.950	-3.75	561.0	889.0	1589.3	578	489	10.570	1029.8	3.063	.950
97	3	.950	-2.80	563.1	889.0	1590.9	580	491	10.554	1032.2	3.049	.951
97	4	.950	-1.87	563.9	892.0	1594.9	582	492	10.547	1034.0	3.046	.950
97	5	.950	-.93	564.3	892.0	1595.4	584	494	10.514	1036.0	3.032	.951
97	6	.950	-.00	564.3	893.0	1596.4	584	494	10.522	1035.6	3.036	.950
97	7	.950	.93	564.6	893.0	1598.0	584	494	10.529	1036.4	3.036	.951
97	8	.950	1.87	564.1	893.0	1596.1	584	494	10.521	1035.5	3.036	.950
97	9	.950	2.80	564.6	894.0	1597.8	584	494	10.532	1035.4	3.039	.950
97	10	.950	3.74	564.9	894.0	1598.1	586	496	10.498	1037.3	3.026	.950
97	11	.950	4.68	565.7	894.0	1599.1	586	496	10.503	1037.7	3.026	.951
97	12	.950	.00	566.4	895.0	1601.0	586	496	10.514	1037.6	3.029	.951
98	1	.950	-.01	567.9	897.0	1604.0	586	496	10.532	1038.1	3.036	.951
98	2	.950	-.01	567.7	897.0	1604.6	586	496	10.530	1037.9	3.036	.951
98	3	.950	-.01	567.8	897.0	1604.8	588	497	10.502	1039.8	3.022	.951
98	4	.950	-.01	567.1	897.0	1603.0	588	498	10.490	1039.3	3.022	.950
98	5	.950	-.01	567.2	898.0	1605.0	588	498	10.508	1039.0	3.026	.950
98	6	.950	-.01	566.5	894.0	1600.1	588	497	10.471	1040.1	3.012	.951
98	7	.950	-.01	564.9	893.0	1597.1	588	498	10.454	1039.5	3.002	.950
98	8	.950	-.01	566.3	894.0	1599.0	588	497	10.470	1040.0	3.012	.951

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
98	9	.950	-.01	565.8	893.0	1598.3	588	497	10.458	1040.1	3.009	.951
98	10	.950	-.01	564.9	894.0	1598.1	588	498	10.462	1039.1	3.012	.950
98	11	.950	-.01	564.9	895.0	1599.1	588	498	10.471	1038.7	3.016	.950
98	12	.950	-.01	566.3	895.0	1600.9	588	497	10.478	1039.6	3.016	.951
98	13	.950	-.01	565.7	894.0	1599.1	588	497	10.467	1039.6	3.012	.951
98	14	.950	-.01	565.1	896.0	1600.4	588	498	10.479	1038.5	3.019	.949
98	15	.950	-.01	566.4	896.0	1602.0	590	499	10.451	1041.0	3.006	.950
99	2	.950	.00	560.8	886.9	1586.0	578	489	10.561	1030.5	3.056	.950
99	3	.950	.00	565.0	892.0	1596.3	580	491	10.590	1032.9	3.060	.951
99	4	.950	.00	565.8	894.0	1599.3	582	492	10.575	1034.4	3.053	.951
99	5	.950	.00	566.1	895.0	1600.6	584	494	10.549	1035.9	3.043	.950
99	6	.950	.00	566.5	895.0	1601.2	586	496	10.514	1038.0	3.029	.951
99	7	.950	.00	565.8	896.0	1602.5	586	496	10.525	1037.8	3.032	.951
99	8	.950	.00	566.7	897.0	1603.4	586	496	10.532	1037.3	3.036	.950
99	9	.950	.00	567.0	898.0	1604.8	586	496	10.542	1037.1	3.039	.950
99	10	.950	.00	568.7	898.0	1606.9	588	497	10.516	1039.9	3.026	.951
99	11	.950	.00	568.1	899.0	1607.1	588	498	10.521	1039.1	3.029	.950
100	1	1.100	-4.05	650.1	766.6	1637.9	590	474	9.411	1175.4	3.182	1.100
100	2	1.100	-2.03	652.8	769.7	1644.6	592	476	9.416	1177.5	3.181	1.101
100	3	1.100	.00	653.8	770.7	1646.9	592	476	9.430	1177.5	3.185	1.101
100	4	1.100	2.02	653.6	771.7	1647.7	592	476	9.436	1176.9	3.189	1.100
100	5	1.100	4.05	653.6	771.7	1647.7	592	476	9.436	1176.9	3.189	1.100
100	6	1.100	6.08	655.3	771.7	1649.9	594	478	9.414	1179.9	3.175	1.101
100	7	1.100	8.12	655.3	772.7	1650.9	594	478	9.422	1179.4	3.179	1.101
100	8	1.100	12.22	655.3	772.7	1650.9	594	478	9.422	1179.4	3.179	1.101
100	9	1.100	16.32	655.4	772.7	1651.1	594	478	9.422	1179.5	3.179	1.101
100	10	1.100	20.43	655.8	773.7	1652.6	594	478	9.432	1179.2	3.183	1.100
100	11	1.100	.00	655.8	774.7	1653.6	594	478	9.440	1178.7	3.187	1.100
101	2	.750	-4.04	417.9	1059.9	1540.0	576	517	11.934	836.8	2.681	.750
101	3	.750	-2.02	418.0	1062.0	1542.1	576	517	11.953	836.3	2.686	.750
101	4	.750	.00	417.8	1061.0	1540.9	576	517	11.942	836.4	2.684	.750
101	5	.750	2.02	418.1	1062.0	1542.2	576	517	11.954	836.3	2.686	.750
101	6	.750	4.04	419.0	1062.0	1543.3	578	519	11.916	838.5	2.674	.751
101	7	.750	6.06	418.7	1062.0	1543.0	578	519	11.914	838.3	2.674	.751
101	8	.750	8.09	418.7	1061.0	1542.0	578	519	11.905	838.6	2.672	.751

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
101	9	.750	12.16	418.7	1061.0	1542.0	578	519	11.905	838.6	2.672	.751
101	10	.750	16.25	418.7	1062.0	1543.0	578	519	11.914	838.3	2.674	.751
101	11	.750	20.34	418.7	1062.0	1543.0	578	519	11.914	838.3	2.674	.751
101	12	.750	.00	418.8	1062.0	1543.1	578	519	11.915	838.4	2.674	.751
104	6	.950	- 3.00	568.7	899.0	1607.9	584	494	10.596	1036.0	3.056	.951
104	7	.950	- 2.00	569.7	899.0	1609.1	584	494	10.602	1036.6	3.056	.951
104	8	.950	- 1.00	569.7	900.0	1610.1	584	494	10.611	1036.2	3.060	.951
104	9	.950	.00	568.7	900.0	1608.9	584	494	10.605	1035.6	3.060	.950
104	10	.950	1.00	569.5	900.0	1609.9	584	494	10.609	1036.1	3.060	.951
104	11	.950	2.00	570.0	900.0	1610.5	584	494	10.612	1036.4	3.060	.951
104	12	.950	3.00	570.0	900.0	1610.5	584	494	10.612	1036.4	3.060	.951
104	13	.950	4.01	569.8	900.0	1610.3	584	494	10.611	1036.3	3.060	.951
104	14	.950	.00	569.8	900.0	1610.3	586	496	10.574	1038.1	3.046	.951
105	1	.950	.00	570.0	901.0	1611.5	586	496	10.584	1037.8	3.049	.951
105	2	.950	.00	570.1	902.0	1612.6	586	496	10.593	1037.4	3.053	.950
105	3	.950	.00	570.7	902.0	1613.4	586	496	10.596	1037.8	3.053	.951
105	4	.950	.00	570.7	902.0	1613.4	586	496	10.596	1037.8	3.053	.951
105	5	.950	.00	570.7	903.0	1614.4	586	496	10.604	1037.4	3.056	.950
105	6	.950	.00	569.7	900.0	1610.1	586	496	10.575	1038.0	3.046	.951
105	7	.950	.00	566.6	898.0	1604.7	586	496	10.540	1036.8	3.039	.950
105	8	.950	.00	566.8	895.0	1601.5	586	496	10.517	1038.2	3.029	.951
105	9	.950	.00	566.4	896.0	1602.0	586	496	10.523	1037.5	3.032	.950
105	10	.950	.00	567.1	895.0	1601.9	586	496	10.518	1038.4	3.029	.951
107	2	1.100	- 4.01	504.8	594.4	1271.0	582	468	7.400	1168.0	2.512	1.101
107	3	1.100	- 3.00	504.0	594.4	1269.9	582	468	7.396	1167.4	2.512	1.100
107	4	1.100	- 2.01	503.7	594.4	1269.4	582	468	7.395	1167.1	2.512	1.100
107	5	1.100	- 1.00	503.9	593.4	1268.8	582	468	7.387	1168.0	2.508	1.101
107	6	1.100	.00	504.5	595.4	1271.5	582	468	7.407	1167.1	2.516	1.100
107	7	1.100	1.00	504.2	594.4	1270.1	582	468	7.398	1167.5	2.512	1.101
107	8	1.100	2.00	504.7	594.4	1270.8	582	468	7.400	1167.2	2.512	1.101
107	9	1.100	3.00	504.9	595.4	1272.1	582	468	7.409	1167.4	2.516	1.101
107	10	1.100	4.01	504.8	595.4	1272.0	584	470	7.393	1169.4	2.505	1.100
107	11	1.100	.00	504.8	594.4	1271.9	584	470	7.391	1168.7	2.503	1.100
108	2	.750	- 4.01	321.0	814.5	1197.2	564	504	7.266	827.2	2.117	.750

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
108	3	.750	-3.00	321.8	815.5	1185.2	566	508	9.345	829.8	2.110	.751
108	4	.750	-2.00	322.3	816.5	1186.8	566	508	9.357	830.0	2.113	.751
108	5	.750	-1.00	321.6	816.5	1186.0	568	510	9.319	830.7	2.103	.750
108	6	.750	.00	321.8	815.5	1185.2	568	510	9.312	831.3	2.101	.751
108	7	.750	1.00	321.8	815.5	1185.2	568	510	9.312	831.3	2.101	.751
108	8	.750	2.00	321.8	815.5	1185.2	568	510	9.312	831.3	2.101	.751
108	9	.750	3.01	321.8	815.5	1185.2	568	510	9.312	831.3	2.101	.751
108	10	.750	4.01	321.6	815.5	1185.0	568	510	9.310	831.1	2.101	.751
108	11	.750	.00	321.8	815.5	1185.2	566	508	9.345	829.8	2.110	.751
109	2	1.100	-4.00	300.3	354.6	757.1	562	452	4.567	1146.7	1.569	1.100
109	3	1.100	-3.00	301.2	353.6	757.3	562	452	4.564	1148.8	1.565	1.102
109	4	1.100	-2.00	300.5	354.6	757.3	564	454	4.553	1148.9	1.562	1.100
109	5	1.100	-1.00	301.1	354.6	758.2	564	453	4.556	1149.7	1.562	1.101
109	6	1.100	.00	301.4	354.6	758.6	564	453	4.557	1150.1	1.562	1.102
109	7	1.100	1.00	301.4	355.6	759.6	564	454	4.565	1149.0	1.566	1.100
109	8	1.100	2.00	301.6	355.6	759.8	564	454	4.567	1149.2	1.566	1.101
109	9	1.100	3.00	301.6	355.6	759.9	564	454	4.566	1149.3	1.566	1.101
109	10	1.100	4.00	301.2	355.6	759.3	564	454	4.564	1148.8	1.566	1.100
109	11	1.100	6.00	302.5	356.6	762.1	564	454	4.580	1149.3	1.571	1.101
109	12	1.100	8.00	301.6	354.6	758.9	564	453	4.558	1150.3	1.562	1.102
109	13	1.100	12.01	302.5	356.6	762.1	564	454	4.580	1149.3	1.571	1.101
109	14	1.100	16.02	302.6	356.6	762.2	564	453	4.580	1149.4	1.571	1.101
109	15	1.100	20.03	302.6	356.6	762.2	566	455	4.564	1151.5	1.564	1.101
109	16	1.100	.00	302.7	356.6	762.3	566	455	4.565	1151.5	1.564	1.101
110	2	.950	-4.00	263.4	414.8	743.2	554	468	5.160	1010.4	1.511	.952
110	3	.950	-3.00	262.9	414.8	742.6	556	470	5.138	1011.5	1.504	.951
110	4	.950	-2.00	261.8	413.8	740.2	558	472	5.105	1012.7	1.493	.951
110	5	.950	-1.00	261.8	413.8	740.2	560	474	5.087	1014.5	1.486	.951
110	6	.950	.00	261.3	411.8	737.5	560	474	5.067	1015.5	1.479	.952
110	7	.950	1.00	260.9	411.8	737.0	560	474	5.065	1014.9	1.479	.951
110	8	.950	2.00	260.8	411.8	736.9	560	474	5.064	1014.8	1.479	.951
110	9	.950	3.00	260.8	411.8	736.9	560	474	5.064	1014.8	1.479	.951
110	10	.950	4.00	261.6	412.8	738.9	560	474	5.077	1015.1	1.483	.951
110	11	.950	6.00	261.6	412.8	738.9	560	474	5.077	1015.1	1.483	.951
110	12	.950	8.00	261.1	412.8	738.3	560	474	5.074	1014.4	1.483	.950
110	13	.950	12.00	261.6	412.8	738.9	560	474	5.077	1015.1	1.483	.951
110	14	.950	16.00	261.9	412.8	739.3	562	475	5.061	1017.3	1.476	.952

UNCLASSIFIED

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
110	15	.950	20.01	261.9	412.8	739.3	562	475	5.061	1017.7	1.476	.952
110	16	.950	.00	261.9	412.8	739.3	562	476	5.065	1016.1	1.476	.950
111	2	.950	.00	259.7	409.8	733.6	550	465	5.131	1006.0	1.507	.951
111	3	.950	.00	260.9	411.8	737.1	554	469	5.119	1009.6	1.500	.951
111	4	.950	.00	261.3	412.8	739.6	556	470	5.111	1011.1	1.497	.951
111	5	.950	.00	261.9	412.8	739.3	556	470	5.115	1011.9	1.497	.952
111	6	.950	.00	261.9	412.8	739.3	558	472	5.097	1013.7	1.490	.952
111	7	.950	.00	261.7	412.8	739.1	558	472	5.095	1013.5	1.490	.951
111	8	.950	.00	262.4	413.8	740.9	560	474	5.091	1015.3	1.486	.951
111	9	.950	.00	262.5	413.8	741.1	560	474	5.091	1015.5	1.486	.952
111	10	.950	.01	261.7	414.8	741.1	560	474	5.095	1013.5	1.490	.949
111	11	.950	.00	262.5	414.8	742.1	560	474	5.099	1014.6	1.490	.951
112	1	.750	-4.00	194.1	489.9	712.9	558	501	5.699	825.3	1.291	.752
112	2	.750	-3.00	193.4	489.9	712.1	556	499	5.715	822.6	1.297	.751
112	3	.750	-2.00	193.4	489.9	712.1	556	499	5.715	822.6	1.297	.751
112	4	.750	-1.00	192.4	489.9	710.9	556	499	5.710	820.9	1.297	.749
112	5	.750	.00	193.6	489.9	711.1	556	499	5.712	821.2	1.297	.749
112	6	.750	1.00	193.4	489.9	712.1	556	499	5.715	822.6	1.297	.751
112	7	.750	2.00	193.8	489.9	712.5	556	499	5.719	823.2	1.297	.752
112	8	.750	3.00	193.8	489.9	712.5	554	497	5.739	821.7	1.304	.752
112	9	.750	4.00	193.3	489.9	712.0	554	497	5.735	821.0	1.304	.751
112	10	.750	6.00	194.1	489.9	712.9	554	497	5.740	822.3	1.304	.752
112	11	.750	8.01	193.4	489.9	712.1	554	497	5.736	821.2	1.304	.751
112	12	.750	10.01	192.4	489.9	709.9	554	497	5.721	820.1	1.301	.750
112	13	.750	15.02	193.5	489.9	712.2	554	497	5.737	821.7	1.304	.751
112	14	.750	20.03	192.4	489.9	710.9	554	498	5.731	819.4	1.304	.749
112	15	.750	.00	193.4	489.9	712.1	554	497	5.736	821.2	1.304	.751
113	2	1.100	-3.49	304.8	759.6	768.2	554	446	4.790	1138.8	1.622	1.100
113	3	1.100	-2.48	305.1	759.6	768.5	556	447	4.786	1141.1	1.614	1.101
113	4	1.100	-1.47	305.1	758.6	767.5	556	447	4.777	1142.3	1.610	1.102
113	5	1.100	-.47	305.3	758.6	767.7	558	448	4.761	1144.3	1.602	1.102
113	6	1.100	.53	304.8	758.6	767.2	558	449	4.758	1143.2	1.602	1.101
113	7	1.100	1.54	303.2	758.6	765.6	560	451	4.737	1144.8	1.595	1.100
113	8	1.100	2.54	303.5	758.6	765.6	560	450	4.742	1144.6	1.598	1.100
113	9	1.100	3.54	303.5	758.6	765.6	560	450	4.742	1145.6	1.598	1.101

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
114	10	1.100	4.54	303.5	357.6	764.4	562	452	4.610	1147.4	1.583	1.101
114	11	1.100	6.54	303.2	357.6	764.0	562	452	4.608	1147.1	1.583	1.100
114	12	1.100	8.54	303.2	357.6	764.0	562	452	4.608	1147.1	1.583	1.100
114	13	1.100	12.53	303.6	357.6	764.6	564	453	4.594	1149.6	1.575	1.101
114	14	1.100	16.56	304.2	358.6	766.3	564	454	4.606	1149.2	1.580	1.101
114	15	1.100	20.55	304.6	358.6	766.9	564	453	4.608	1149.8	1.580	1.101
114	16	1.100	.53	304.0	358.6	766.1	566	455	4.588	1151.1	1.572	1.100
115	2	.950	-3.64	263.2	414.8	742.9	554	469	5.159	1010.0	1.511	.952
115	3	.950	-2.62	262.6	414.8	742.2	556	470	5.137	1011.1	1.504	.951
115	4	.950	-1.62	262.5	414.8	742.0	558	472	5.119	1012.7	1.497	.951
115	5	.950	-.60	263.2	413.8	741.9	560	473	5.095	1016.4	1.486	.953
115	6	.950	.42	263.2	413.8	741.9	560	473	5.095	1016.4	1.486	.953
115	7	.950	1.43	261.0	412.8	738.2	560	474	5.073	1014.3	1.483	.950
115	8	.950	2.43	261.9	413.8	740.3	560	474	5.088	1014.6	1.486	.951
115	9	.950	3.44	260.0	411.8	735.9	562	476	5.041	1015.6	1.472	.950
115	10	.950	4.45	260.8	411.8	736.9	562	475	5.046	1016.6	1.472	.951
115	11	.950	6.45	259.4	411.8	735.2	562	476	5.037	1014.8	1.472	.949
115	12	.950	8.46	260.1	411.8	736.1	562	476	5.041	1015.8	1.472	.950
115	13	.950	12.46	260.6	411.8	736.7	562	475	5.044	1016.4	1.472	.951
115	14	.950	16.47	260.1	411.8	736.0	562	476	5.042	1015.7	1.472	.950
115	15	.950	20.47	261.6	411.8	737.9	562	475	5.051	1017.7	1.472	.952
115	16	.950	.42	261.6	411.8	737.9	562	475	5.051	1017.7	1.472	.952
116	1	.950	4.45	260.8	410.8	735.9	556	470	5.092	1012.1	1.489	.952
116	2	.950	3.44	261.6	410.8	736.9	556	470	5.097	1013.2	1.489	.953
116	3	.950	2.44	261.6	411.8	737.9	558	472	5.087	1014.1	1.486	.952
116	4	.950	1.43	261.6	411.8	737.9	560	474	5.069	1015.9	1.479	.952
116	5	.950	.42	261.7	411.8	738.1	560	474	5.069	1016.1	1.479	.952
116	6	.950	-.61	261.1	412.8	738.3	560	474	5.074	1014.4	1.483	.950
116	7	.950	-1.61	261.8	412.8	739.2	560	474	5.078	1015.4	1.483	.951
116	8	.950	-2.63	261.8	412.8	739.2	560	474	5.078	1015.4	1.483	.951
116	9	.950	-3.64	262.1	412.8	739.5	562	475	5.063	1017.5	1.476	.952
116	10	.950	.42	263.2	413.8	741.9	562	475	5.077	1018.2	1.479	.953
117	1	.950	8.46	262.5	412.8	740.1	562	475	5.064	1018.2	1.476	.953
117	2	.950	8.46	260.8	411.8	736.9	562	475	5.046	1016.6	1.472	.951
117	3	.950	8.45	260.8	410.8	735.9	562	475	5.037	1017.5	1.469	.952

UNCLASSIFIED

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
117	4	.950	8.45	260.0	409.8	733.9	562	475	5.024	1017.3	1.465	.952
117	5	.950	8.46	260.0	411.8	735.6	562	476	5.041	1015.6	1.472	.950
117	6	.950	8.45	260.0	410.8	734.9	562	475	5.033	1016.4	1.469	.951
117	7	.950	8.45	260.8	412.8	737.9	562	476	5.055	1015.8	1.476	.950
117	8	.950	8.45	260.1	412.8	737.0	562	476	5.051	1014.8	1.476	.949
117	9	.950	8.45	260.2	409.8	734.2	562	475	5.025	1017.6	1.465	.952
117	10	.950	8.46	260.2	410.8	735.2	564	477	5.016	1018.6	1.462	.951
118	2	.950	16.44	260.0	408.8	732.9	554	468	5.088	1010.9	1.489	.953
118	3	.950	16.44	259.3	408.8	732.1	556	470	5.065	1011.8	1.482	.952
118	4	.950	16.45	260.0	410.8	734.9	556	470	5.087	1011.0	1.489	.951
118	5	.950	16.46	260.2	411.8	736.2	558	472	5.078	1012.3	1.486	.950
118	6	.950	16.47	260.3	411.8	736.3	560	474	5.061	1014.2	1.479	.950
118	7	.950	16.46	261.6	412.8	738.9	560	474	5.077	1015.1	1.483	.951
118	8	.950	16.46	261.6	412.8	738.9	360	474	5.077	1015.1	1.483	.951
118	9	.950	16.45	261.6	412.8	738.9	562	475	5.059	1016.9	1.476	.951
118	10	.950	16.45	261.6	412.8	738.9	562	475	5.059	1016.9	1.476	.951
118	11	.950	16.47	261.7	412.8	739.1	562	475	5.059	1017.1	1.476	.951
119	1	.750	- 3.76	195.8	492.9	717.9	558	501	5.736	826.2	1.299	.753
119	2	.750	- 2.75	195.1	491.9	716.0	558	501	5.725	825.6	1.297	.752
119	3	.750	- 1.75	194.3	491.9	715.1	558	501	5.719	824.2	1.297	.751
119	4	.750	- .74	194.1	490.9	713.9	558	501	5.708	824.6	1.294	.751
119	5	.750	.26	194.1	490.9	713.9	556	499	5.729	823.1	1.300	.751
119	6	.750	1.26	193.4	490.9	713.1	556	499	5.724	822.0	1.300	.750
119	7	.750	2.28	193.5	490.9	713.2	556	499	5.725	822.1	1.300	.750
119	8	.750	3.28	193.5	490.9	713.2	556	499	5.725	822.1	1.300	.750
119	9	.750	4.28	193.5	490.9	713.2	556	499	5.725	822.1	1.300	.750
119	10	.750	6.28	193.3	490.9	713.0	556	499	5.723	821.8	1.300	.750
119	11	.750	8.28	193.4	490.9	713.1	556	499	5.724	822.0	1.300	.750
119	12	.750	12.29	193.8	490.9	713.5	556	499	5.728	822.6	1.300	.751
119	13	.750	16.31	194.3	490.9	714.1	556	499	5.731	823.4	1.300	.752
119	14	.750	20.33	193.4	490.9	713.1	556	499	5.715	822.6	1.297	.751
119	15	.750	.26	194.1	490.9	713.9	556	499	5.729	823.1	1.300	.751
121	2	1.100	- 3.59	301.3	355.6	750.4	560	450	4.598	1144.8	1.581	1.100
121	3	1.100	- 2.57	302.4	355.6	752.0	560	450	4.604	1146.1	1.581	1.102
121	4	1.100	- 1.55	301.9	355.6	750.2	560	450	4.601	1145.5	1.581	1.101

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
121	5	1.100	-.53	303.1	356.6	762.9	562	452	4.599	1148.0	1.578	1.102
121	6	1.100	-.48	303.1	356.6	762.9	562	452	4.599	1148.0	1.578	1.102
121	7	1.100	1.49	303.1	356.6	762.9	562	452	4.599	1148.0	1.578	1.102
121	8	1.100	2.50	302.8	356.6	762.4	562	452	4.598	1147.6	1.578	1.101
121	9	1.100	3.51	302.8	356.6	762.4	564	453	4.582	1149.6	1.571	1.101
121	10	1.100	4.51	302.9	356.6	762.6	564	453	4.582	1149.8	1.571	1.101
121	11	1.100	6.50	302.9	357.6	763.6	564	454	4.590	1148.8	1.575	1.100
121	13	1.100	8.50	303.9	357.6	765.0	564	453	4.595	1150.0	1.575	1.101
121	14	1.100	8.50	303.9	357.6	765.0	564	453	4.595	1150.0	1.575	1.101
121	15	1.100	12.51	303.9	358.6	765.9	566	455	4.588	1150.9	1.572	1.100
121	16	1.100	16.55	304.0	357.6	765.1	566	455	4.580	1152.1	1.568	1.102
121	17	1.100	20.56	303.9	357.6	764.9	566	455	4.580	1151.9	1.568	1.101
121	18	1.100	.49	304.0	358.6	766.1	566	455	4.588	1151.1	1.572	1.100
122	2	.950	-3.67	262.4	413.8	740.9	554	469	5.146	1009.8	1.507	.951
122	3	.950	-2.66	262.4	413.8	740.9	556	470	5.127	1011.6	1.500	.951
122	4	.950	-1.66	260.1	412.8	737.1	556	471	5.104	1009.5	1.497	.949
122	5	.950	-.64	261.7	412.8	739.1	558	472	5.095	1013.5	1.490	.951
122	6	.950	.37	261.8	412.8	739.2	558	472	5.096	1013.6	1.490	.951
122	7	.950	1.37	261.9	412.8	739.3	560	474	5.079	1015.5	1.483	.952
122	8	.950	2.38	261.6	412.8	738.9	560	474	5.077	1015.1	1.483	.951
122	9	.950	3.41	263.2	413.8	741.9	560	473	5.095	1016.4	1.486	.953
122	10	.950	4.42	262.4	413.8	740.9	560	474	5.091	1015.3	1.486	.951
122	11	.950	6.43	260.2	411.8	736.2	562	476	5.042	1015.9	1.472	.950
122	12	.950	8.45	261.7	412.8	739.1	562	475	5.059	1017.1	1.476	.951
122	13	.950	12.45	260.8	412.8	737.9	562	476	5.055	1015.8	1.476	.950
122	14	.950	16.49	261.6	412.8	738.9	562	475	5.059	1016.9	1.476	.951
122	15	.950	20.50	260.9	412.8	738.1	562	476	5.055	1016.0	1.476	.950
122	16	.950	.37	263.2	412.8	740.9	562	475	5.069	1019.0	1.476	.954
123	2	.950	.39	260.9	411.8	737.0	552	467	5.138	1007.7	1.507	.951
123	3	.950	.39	261.7	411.8	738.0	554	468	5.125	1010.6	1.500	.952
123	4	.950	.39	261.6	411.8	737.9	556	470	5.105	1012.3	1.493	.952
123	5	.950	.40	262.6	413.8	741.2	558	472	5.110	1013.8	1.493	.952
123	6	.950	.39	262.5	413.8	741.0	558	472	5.110	1013.6	1.493	.952
123	7	.950	.39	262.4	414.8	741.9	558	472	5.118	1012.6	1.497	.950
123	8	.950	.40	263.3	414.8	743.1	560	474	5.104	1015.7	1.490	.952
123	11	.950	.40	263.2	415.8	744.0	562	475	5.094	1016.5	1.487	.951
123	12	.950	.39	262.5	411.8	739.1	562	475	5.055	1019.0	1.472	.954

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
123	13	.950	.40	262.5	411.8	739.1	562	475	5.055	1019.0	1.472	.954
123	14	.950	.39	262.5	411.8	739.1	562	475	5.055	1019.0	1.472	.954
123	15	.950	.39	260.0	411.8	735.9	562	476	5.041	1015.6	1.472	.950
123	16	.950	.39	261.6	411.8	737.9	562	475	5.051	1017.7	1.472	.952
124	1	.950	8.45	262.4	412.8	739.9	562	475	5.064	1017.9	1.476	.952
124	2	.950	8.45	260.8	412.8	737.9	562	476	5.055	1015.8	1.476	.950
124	3	.950	8.44	262.4	413.8	740.9	564	477	5.055	1018.9	1.472	.951
124	4	.950	8.45	262.4	413.8	740.9	564	477	5.055	1018.9	1.472	.951
124	5	.950	8.45	262.4	412.8	739.9	564	477	5.046	1019.8	1.469	.952
124	6	.950	8.44	262.4	412.8	739.9	564	477	5.046	1019.8	1.469	.952
124	7	.950	8.44	262.4	412.8	739.9	564	477	5.046	1019.8	1.469	.952
124	8	.950	8.44	261.6	413.8	739.9	564	477	5.050	1017.8	1.472	.950
124	9	.950	8.45	262.4	413.8	740.9	564	477	5.055	1018.9	1.472	.951
124	10	.950	8.45	262.4	413.8	740.9	564	477	5.055	1018.9	1.472	.951
125	2	.950	16.47	260.1	409.8	734.1	552	467	5.115	1008.4	1.500	.952
125	3	.950	16.48	260.4	410.8	735.4	554	469	5.108	1009.7	1.496	.952
125	4	.950	16.48	260.8	411.8	736.9	556	470	5.101	1011.2	1.493	.951
125	5	.950	16.49	262.4	412.8	739.9	558	472	5.100	1014.3	1.490	.952
125	6	.950	16.49	262.4	412.8	739.9	558	472	5.100	1014.3	1.490	.952
125	7	.950	16.49	262.4	413.8	740.9	560	474	5.091	1015.3	1.486	.951
125	8	.950	16.49	263.2	413.8	742.0	560	473	5.094	1016.5	1.486	.953
125	11	.950	16.48	262.5	411.8	739.0	562	475	5.056	1018.9	1.472	.953
125	12	.950	16.48	262.5	410.8	738.0	562	475	5.048	1019.8	1.469	.954
125	13	.950	16.49	262.5	411.8	739.1	562	475	5.055	1019.0	1.472	.954
126	1	.750	- 3.79	192.4	488.9	709.9	560	503	5.660	824.5	1.283	.750
126	2	.750	- 2.78	192.6	488.9	710.2	558	501	5.680	823.5	1.289	.750
126	3	.750	- 1.78	192.4	486.9	707.9	558	501	5.662	824.4	1.284	.751
126	4	.750	- .77	192.4	487.9	708.9	558	501	5.671	823.7	1.286	.751
126	5	.750	.23	192.6	486.9	708.2	558	501	5.662	824.8	1.284	.752
126	6	.750	1.24	194.2	491.9	715.2	556	499	5.720	822.6	1.303	.751
126	7	.750	2.25	194.2	491.9	715.2	556	499	5.720	822.6	1.303	.751
126	8	.750	3.25	193.4	491.9	714.1	556	499	5.714	821.7	1.303	.750
126	9	.750	4.26	193.9	491.9	714.6	556	499	5.718	822.2	1.303	.750
126	10	.750	6.27	194.0	491.9	714.8	556	499	5.717	822.3	1.303	.751
126	11	.750	8.29	194.1	491.9	714.9	556	499	5.718	822.5	1.303	.751

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
126	12	.750	10.29	194.1	491.9	714.9	556	499	5.738	822.5	1.303	.751
126	13	.750	12.30	194.1	491.9	714.9	556	499	5.738	822.5	1.303	.751
126	14	.750	16.34	193.9	491.9	714.7	556	499	5.736	822.2	1.303	.750
126	15	.750	20.36	193.9	491.9	714.7	556	499	5.736	822.2	1.303	.750
126	16	.750	.23	193.9	491.9	714.7	556	499	5.736	822.2	1.303	.750
127	2	.950	.45	263.2	414.8	743.0	548	463	5.215	1004.7	1.533	.952
127	3	.950	.46	263.3	416.8	745.1	550	465	5.214	1004.9	1.533	.950
127	4	.950	.46	263.3	414.8	743.1	552	467	5.178	1008.4	1.518	.952
127	5	.950	.46	263.3	414.8	743.1	554	469	5.159	1010.2	1.511	.952
127	6	.950	.46	263.2	414.8	742.9	554	469	5.159	1010.0	1.511	.952
127	7	.950	.46	263.2	414.8	742.9	556	470	5.141	1011.9	1.504	.952
127	8	.950	.46	261.6	413.8	739.9	556	470	5.123	1010.6	1.500	.950
127	9	.950	.45	260.9	411.8	737.1	558	472	5.082	1013.2	1.486	.951
127	10	.950	.45	260.9	412.8	738.1	558	472	5.091	1012.4	1.490	.950
127	11	.950	.45	260.9	412.8	738.1	558	472	5.091	1012.4	1.490	.950
129	2	1.100	- 3.55	303.1	356.6	762.9	556	447	4.649	1141.9	1.601	1.102
129	3	1.100	- 2.53	303.9	357.6	765.0	558	449	4.645	1143.9	1.598	1.101
129	4	1.100	- 1.51	303.9	358.6	766.0	560	450	4.637	1144.9	1.595	1.100
129	5	1.100	- .49	303.9	358.6	766.0	560	450	4.637	1144.9	1.595	1.100
129	6	1.100	.53	303.9	357.6	765.0	560	450	4.628	1145.9	1.590	1.101
129	7	1.100	1.53	303.9	357.6	764.9	560	450	4.629	1145.8	1.590	1.101
129	8	1.100	2.54	304.0	357.6	765.1	560	450	4.629	1146.0	1.590	1.102
129	9	1.100	3.55	304.0	358.6	766.1	560	450	4.637	1145.0	1.595	1.100
129	10	1.100	4.56	303.9	357.6	765.0	560	450	4.628	1145.9	1.590	1.101
129	11	1.100	6.56	304.6	358.6	766.9	560	450	4.641	1145.7	1.595	1.101
129	12	1.100	8.56	304.0	358.6	766.1	560	450	4.637	1145.0	1.595	1.100
129	13	1.100	10.56	304.0	358.6	766.1	560	450	4.637	1145.0	1.595	1.100
129	14	1.100	10.57	304.0	358.6	766.1	560	450	4.637	1145.0	1.595	1.100
129	15	1.100	12.56	304.6	358.6	766.9	562	452	4.624	1147.7	1.587	1.101
129	16	1.100	14.57	304.0	358.6	766.1	562	452	4.621	1147.0	1.587	1.100
129	17	1.100	16.58	303.9	357.6	764.9	562	452	4.613	1147.9	1.583	1.101
129	18	1.100	20.57	302.4	355.6	760.9	562	452	4.588	1148.1	1.574	1.102
129	19	1.100	- 9.65	303.3	357.6	764.1	562	452	4.609	1147.2	1.583	1.100
129	20	1.100	- 5.58	303.2	357.6	764.0	562	452	4.608	1147.1	1.583	1.100
129	21	1.100	- 7.62	303.2	357.6	764.0	562	452	4.608	1147.1	1.583	1.100
129	22	1.100	.52	303.3	357.6	764.1	562	452	4.609	1147.2	1.583	1.100

UNCLASSIFIED

TABLE II
TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
130	2	1.050	2.59	288.7	373.6	751.0	550	450	4.835	1092.8	1.587	1.050
130	3	1.050	2.59	290.2	374.7	751.9	552	452	4.835	1095.6	1.584	1.051
130	4	1.050	4.55	290.9	376.7	756.9	554	453	4.838	1096.6	1.585	1.050
130	5	1.050	6.55	291.8	376.7	758.0	556	455	4.826	1099.6	1.577	1.051
130	6	1.050	8.56	290.9	376.7	756.9	558	457	4.803	1100.5	1.570	1.050
130	7	1.050	10.56	290.9	375.7	755.9	558	456	4.795	1101.5	1.566	1.051
130	8	1.050	12.55	290.5	375.7	755.3	560	458	4.776	1102.9	1.558	1.051
130	9	1.050	14.56	288.7	372.6	750.0	560	458	4.740	1103.6	1.546	1.052
130	10	1.050	16.58	288.9	374.7	752.2	560	458	4.759	1101.9	1.554	1.050
130	11	1.050	.51	290.2	373.6	752.9	560	458	4.758	1104.5	1.550	1.053
131	1	1.000	.46	278.0	394.2	748.9	560	466	4.936	1061.2	1.523	1.003
131	2	1.000	2.48	276.4	395.3	747.9	560	466	4.935	1058.3	1.527	1.000
131	3	1.000	4.51	276.6	395.3	748.1	560	466	4.937	1058.5	1.527	1.000
131	4	1.000	6.53	277.3	395.3	749.1	560	466	4.940	1059.5	1.527	1.001
131	5	1.000	8.54	277.6	395.3	749.4	560	466	4.942	1059.8	1.527	1.001
131	6	1.000	10.55	277.6	396.3	750.4	560	466	4.951	1058.9	1.531	1.000
131	7	1.000	12.55	277.6	394.2	748.4	560	466	4.934	1060.7	1.523	1.002
131	8	1.000	14.56	275.8	393.2	745.1	560	466	4.915	1059.3	1.519	1.001
131	9	1.000	16.58	275.8	393.2	745.1	560	466	4.915	1059.3	1.519	1.001
131	10	1.000	.46	275.8	394.2	746.1	560	466	4.923	1058.4	1.523	1.000
132	2	.950	-9.74	260.8	410.8	735.9	550	465	5.147	1006.6	1.511	.952
132	3	.950	-7.72	260.8	411.8	736.9	552	467	5.138	1007.6	1.507	.951
132	4	.950	-5.68	261.7	411.8	738.0	554	468	5.125	1010.6	1.500	.952
132	5	.950	-3.66	260.8	411.8	736.9	554	469	5.113	1009.4	1.500	.951
132	6	.950	-2.64	261.7	412.8	739.0	556	470	5.115	1011.5	1.497	.951
132	7	.950	-1.63	262.4	413.8	740.9	556	470	5.127	1011.6	1.500	.951
132	8	.950	-.62	261.7	413.8	740.1	556	470	5.122	1010.8	1.500	.950
132	9	.950	.40	262.4	413.8	740.9	558	472	5.109	1013.5	1.493	.951
132	10	.950	1.41	262.4	413.8	740.9	558	472	5.109	1013.5	1.493	.951
132	11	.950	2.42	262.4	414.8	741.9	558	472	5.118	1012.6	1.497	.950
132	12	.950	3.44	263.2	414.8	743.0	558	472	5.121	1013.8	1.497	.952
132	14	.950	5.47	263.2	413.8	741.9	560	473	5.095	1016.4	1.486	.953
132	15	.950	8.47	259.4	410.8	734.2	560	474	5.047	1013.8	1.475	.950
132	16	.950	10.49	260.2	411.8	735.9	560	474	5.059	1013.7	1.479	.950
132	17	.950	12.50	260.1	411.8	736.1	560	474	5.059	1014.0	1.479	.950
132	18	.950	14.52	260.1	411.8	736.1	560	474	5.059	1014.0	1.479	.950
132	19	.950	16.53	260.5	411.8	736.5	560	474	5.062	1014.5	1.479	.951

UNCLASSIFIED

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
132	20	.950	20.54	260.8	411.8	736.9	560	474	5.064	1014.8	1.479	.951
132	21	.950	.40	261.6	411.8	737.9	560	474	5.069	1015.8	1.479	.952
133	1	.950	.43	261.0	411.8	737.2	560	474	5.065	1015.2	1.479	.951
133	2	.950	.43	261.1	411.8	737.3	560	474	5.066	1015.3	1.479	.951
133	3	.950	.43	262.4	412.8	739.9	560	474	5.082	1016.1	1.483	.952
133	4	.950	.43	261.7	412.8	739.0	560	474	5.078	1015.2	1.483	.951
133	5	.950	.43	261.6	412.8	738.9	560	474	5.077	1015.1	1.483	.951
133	6	.950	.43	260.9	411.8	737.1	560	474	5.064	1015.1	1.479	.951
133	7	.950	.43	260.1	410.8	735.1	560	474	5.051	1014.8	1.475	.951
133	8	.950	.43	260.2	411.8	736.2	560	474	5.060	1014.1	1.479	.950
133	9	.950	.44	261.6	411.8	737.9	560	474	5.069	1015.9	1.479	.952
133	10	.950	.42	260.0	411.8	735.9	560	474	5.059	1013.7	1.479	.950
134	2	.950	8.48	264.0	415.8	744.9	552	467	5.192	1008.4	1.522	.952
134	3	.950	8.48	263.2	415.8	744.0	554	469	5.167	1009.3	1.515	.951
134	4	.950	8.47	263.2	416.8	745.0	556	471	5.157	1010.3	1.511	.950
134	5	.950	8.48	263.2	416.8	745.0	556	471	5.157	1010.3	1.511	.950
134	6	.950	8.48	262.6	414.8	742.2	556	470	5.137	1011.1	1.504	.951
134	7	.950	8.47	260.8	411.8	736.9	558	472	5.082	1013.0	1.486	.951
134	8	.950	8.47	260.8	411.8	736.9	558	472	5.082	1013.0	1.486	.951
134	9	.950	8.47	259.3	411.8	735.1	558	472	5.073	1011.1	1.486	.949
134	10	.950	8.48	260.8	411.8	736.9	558	472	5.082	1013.0	1.486	.951
134	11	.950	8.48	261.7	411.8	738.0	558	472	5.088	1014.2	1.486	.952
135	1	.950	16.50	261.6	411.8	737.9	560	474	5.069	1015.9	1.479	.952
135	2	.950	16.51	261.6	410.8	736.9	560	473	5.060	1016.8	1.475	.953
135	3	.950	16.52	260.9	410.8	736.1	560	474	5.055	1015.9	1.475	.952
135	4	.950	16.53	261.6	411.8	737.9	560	474	5.069	1015.9	1.479	.952
135	5	.950	16.53	260.9	411.8	737.1	560	474	5.064	1015.1	1.479	.951
135	6	.950	16.53	260.9	411.8	737.0	560	474	5.065	1014.9	1.479	.951
135	7	.950	16.53	262.4	412.8	739.9	560	474	5.082	1016.1	1.483	.952
135	8	.950	16.51	262.4	412.8	739.9	560	474	5.082	1016.1	1.483	.952
135	9	.950	16.51	261.7	412.8	739.1	560	474	5.077	1015.3	1.483	.951
135	10	.950	16.54	261.7	412.8	739.1	560	474	5.077	1015.3	1.483	.951
136	2	.750	- 9.83	194.3	491.9	715.1	548	492	5.824	816.8	1.328	.751

UNCLASSIFIED

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M		α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
136	3	.750	-	7.81	194.6	491.9	715.5	550	494	5.803	818.9	1.321	.752
136	4	.750	-	5.85	194.6	491.9	715.5	550	494	5.803	818.9	1.321	.752
136	5	.750	-	3.79	194.6	491.9	715.5	550	494	5.803	818.9	1.321	.752
136	6	.750	-	2.77	194.6	491.9	715.5	550	494	5.803	818.9	1.321	.752
136	7	.750	-	1.75	194.6	491.9	715.5	550	494	5.803	818.9	1.321	.752
136	8	.750	-	.75	194.6	491.9	715.5	550	494	5.803	818.9	1.321	.752
136	9	.750		.25	194.6	492.9	716.5	550	494	5.813	818.2	1.324	.751
136	10	.750		1.26	194.6	494.9	718.5	552	496	5.810	818.4	1.323	.750
136	11	.750		2.27	194.6	493.9	717.5	552	496	5.801	819.1	1.320	.750
136	12	.750		3.28	194.6	493.9	717.5	552	496	5.801	819.1	1.320	.750
136	13	.750		4.29	194.6	492.9	716.5	552	496	5.792	819.7	1.318	.751
136	15	.750		6.30	194.6	493.9	717.5	552	496	5.801	819.1	1.320	.750
136	16	.750		8.31	194.6	494.9	718.5	552	496	5.810	818.4	1.323	.750
136	17	.750		10.31	194.6	493.9	717.5	552	496	5.801	819.1	1.320	.750
136	18	.750		12.33	194.6	493.9	717.5	552	496	5.801	819.1	1.320	.750
136	19	.750		16.35	195.0	493.9	717.9	552	496	5.805	819.6	1.320	.751
136	20	.750		20.37	195.0	494.9	718.9	552	496	5.814	819.0	1.323	.750
136	21	.750		.25	195.0	494.9	718.9	552	496	5.814	819.0	1.323	.750
139	3	1.100	-	3.50	304.6	359.6	767.9	552	444	4.716	1136.5	1.630	1.100
139	4	1.100	-	1.47	304.8	359.6	768.1	552	444	4.718	1136.6	1.630	1.100
139	5	1.100		.53	304.6	359.6	767.9	554	446	4.699	1138.5	1.622	1.100
138	6	1.100		2.54	303.9	358.6	766.0	554	446	4.687	1138.7	1.618	1.100
138	7	1.100		4.56	303.7	358.6	765.7	554	446	4.686	1138.5	1.618	1.100
138	8	1.100		6.55	303.8	358.6	765.8	554	446	4.687	1138.6	1.618	1.100
139	9	1.100		8.55	303.8	358.6	765.8	554	446	4.687	1138.6	1.618	1.100
138	10	1.100		10.55	303.9	358.6	765.9	554	446	4.687	1138.7	1.618	1.100
138	11	1.100		12.57	303.9	358.6	766.0	554	446	4.687	1138.7	1.618	1.100
138	12	1.100		.53	303.9	358.6	766.0	554	446	4.687	1138.7	1.618	1.100
139	3	.950	-	3.64	260.7	411.8	736.8	548	464	5.174	1003.8	1.522	.951
139	4	.950	-	1.62	261.5	411.8	737.8	550	465	5.160	1006.7	1.515	.952
139	5	.950		.43	261.3	412.8	738.5	550	465	5.169	1005.5	1.518	.951
139	6	.950		2.45	261.4	412.8	738.7	550	465	5.168	1005.7	1.518	.951
139	7	.950		4.46	260.3	411.8	736.3	550	465	5.153	1005.1	1.515	.950
139	8	.950		6.47	261.3	412.8	738.5	550	465	5.168	1005.5	1.518	.951
139	9	.950		8.48	261.7	412.8	739.0	550	465	5.171	1006.1	1.518	.951
139	10	.950		10.48	261.4	412.8	738.7	550	465	5.168	1005.7	1.518	.951
139	11	.950		12.47	261.4	412.8	738.7	550	465	5.177	1004.9	1.522	.950

UNCLASSIFIED

TABLE II
TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
139	12	.950	14.48	261.7	413.8	740.1	550	465	5.178	1005.3	1.522	.950
139	13	.950	16.49	261.3	413.8	739.6	550	465	5.176	1004.8	1.522	.950
139	14	.950	18.48	262.5	413.8	741.1	550	465	5.183	1006.4	1.522	.952
139	15	.950	20.47	261.7	413.8	740.0	550	465	5.179	1005.2	1.522	.950
139	16	.950	.43	261.7	414.8	741.0	550	466	5.188	1004.3	1.526	.949
139	17	.950	.43	262.2	414.8	741.7	550	465	5.190	1005.1	1.526	.950
140	1	.950	- 3.57	263.3	414.8	743.1	550	465	5.197	1006.6	1.526	.952
140	2	.950	- 1.58	262.5	414.8	742.0	550	465	5.193	1005.4	1.526	.951
140	3	.950	.43	262.8	414.8	742.4	550	465	5.195	1005.8	1.526	.951
140	4	.950	2.42	262.7	415.8	743.3	550	465	5.203	1004.9	1.529	.950
140	5	.950	4.41	263.3	414.8	743.1	550	465	5.197	1006.6	1.526	.952
140	6	.950	6.38	262.6	415.8	743.2	550	465	5.202	1004.8	1.529	.950
140	7	.950	8.37	264.3	416.8	746.3	550	465	5.221	1006.2	1.533	.951
140	8	.950	10.33	263.4	415.8	744.2	550	465	5.206	1005.8	1.529	.951
140	9	.950	12.30	263.0	415.8	743.7	550	465	5.204	1005.3	1.529	.950
140	10	.950	14.28	264.2	416.8	746.2	552	467	5.201	1007.9	1.526	.951
140	11	.950	16.24	263.3	416.8	745.1	552	467	5.195	1006.7	1.526	.950
140	12	.950	18.22	262.6	415.8	743.2	552	467	5.183	1006.6	1.522	.950
140	13	.950	20.19	263.2	414.8	743.0	552	467	5.177	1008.3	1.518	.952
140	14	.950	.44	262.9	413.8	741.6	552	467	5.167	1008.7	1.515	.952
141	2	.950	- 3.40	262.6	414.8	742.2	546	462	5.231	1002.0	1.540	.951
141	3	.950	- 1.49	263.0	415.8	743.7	546	462	5.242	1001.7	1.544	.950
141	4	.950	.44	264.1	415.8	745.1	548	463	5.229	1005.0	1.537	.952
141	5	.950	2.34	264.5	416.8	746.6	548	463	5.241	1004.7	1.540	.952
141	6	.950	4.23	264.3	416.8	746.3	548	464	5.240	1004.3	1.540	.951
141	7	.950	6.11	264.1	416.8	746.1	550	465	5.219	1006.0	1.533	.951
141	8	.950	7.99	263.5	417.8	746.3	550	466	5.225	1004.3	1.537	.949
141	9	.950	9.89	264.8	417.8	748.0	550	465	5.232	1006.1	1.537	.951
141	10	.950	11.78	264.4	417.8	747.5	550	465	5.229	1005.5	1.537	.951
141	11	.950	13.66	264.4	417.8	747.4	550	465	5.231	1005.4	1.537	.951
141	12	.950	15.54	265.3	417.8	748.6	550	465	5.235	1006.7	1.537	.952
141	14	.950	17.43	261.1	412.8	738.3	550	465	5.167	1005.3	1.518	.950
141	15	.950	19.33	260.7	413.8	739.8	550	466	5.173	1003.9	1.522	.949
141	16	.950	.44	262.0	412.8	739.4	550	465	5.172	1006.5	1.518	.952
142	1	.950	- 3.06	261.4	413.8	739.7	550	465	5.177	1004.9	1.522	.950

UNCLASSIFIED

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
142	2	.950	- 1.32	262.1	414.8	741.6	552	467	5.171	1006.8	1.518	.950
142	3	.950	.44	263.0	414.8	742.7	552	467	5.176	1008.0	1.518	.951
142	4	.950	2.19	262.6	414.8	742.2	552	467	5.174	1007.5	1.518	.951
142	5	.950	3.92	262.6	414.8	742.2	552	467	5.174	1007.5	1.518	.951
142	6	.950	5.67	262.2	414.8	741.7	552	467	5.172	1006.9	1.518	.950
142	7	.950	7.41	262.4	414.8	741.9	552	467	5.173	1007.1	1.518	.950
142	8	.950	9.16	263.0	415.8	743.7	552	467	5.185	1007.1	1.522	.950
142	9	.950	10.91	262.8	415.8	743.4	552	467	5.185	1006.8	1.522	.950
142	10	.950	12.65	262.9	415.8	743.6	552	467	5.184	1007.0	1.522	.950
142	11	.950	14.39	262.2	415.8	742.7	552	467	5.180	1006.1	1.522	.949
142	12	.950	16.15	262.6	415.8	743.2	552	467	5.183	1006.6	1.522	.950
142	13	.950	17.92	262.7	415.8	743.3	552	467	5.184	1006.7	1.522	.950
142	14	.950	.44	264.6	416.8	746.7	552	467	5.203	1008.4	1.526	.952
143	1	.950	.46	261.2	410.8	736.4	552	467	5.131	1009.0	1.504	.952
143	2	.950	.46	260.3	410.8	735.3	552	467	5.126	1007.8	1.504	.951
143	3	.950	.46	260.9	411.8	737.1	552	467	5.137	1007.8	1.507	.951
143	4	.950	.46	261.1	411.8	737.3	552	467	5.139	1008.0	1.507	.951
143	5	.950	.47	261.3	412.8	738.6	552	467	5.148	1007.5	1.511	.951
143	6	.950	.46	261.4	411.8	737.7	552	467	5.141	1008.4	1.507	.952
143	7	.950	.46	261.2	412.8	738.4	552	467	5.149	1007.2	1.511	.951
143	8	.950	.46	261.0	412.8	738.2	552	467	5.147	1007.0	1.511	.950
143	9	.950	.46	261.4	413.8	739.7	552	467	5.158	1006.7	1.515	.950
143	10	.950	.46	261.2	412.0	738.4	552	467	5.149	1007.2	1.511	.951
144	3	.950	8.47	260.3	412.8	737.3	546	462	5.200	1000.6	1.533	.949
144	4	.950	8.47	261.3	412.8	738.5	546	462	5.206	1001.9	1.533	.951
144	5	.950	8.47	262.5	413.8	741.1	548	463	5.202	1004.5	1.529	.952
144	6	.950	8.47	261.1	413.8	739.3	548	464	5.194	1002.6	1.529	.949
144	7	.950	8.47	262.5	413.8	741.0	550	465	5.184	1006.3	1.522	.952
144	8	.950	8.47	262.6	413.8	741.2	550	465	5.184	1006.5	1.522	.952
144	9	.950	8.47	262.3	414.8	741.8	550	465	5.191	1005.2	1.526	.950
144	10	.950	8.47	263.3	415.8	744.1	550	465	5.206	1005.7	1.529	.951
144	11	.950	8.47	263.0	414.8	742.7	550	465	5.195	1006.2	1.526	.951
145	1	.950	16.46	262.5	414.8	742.2	550	465	5.193	1005.4	1.526	.951
145	2	.950	16.46	263.7	414.8	743.6	550	465	5.199	1007.1	1.526	.952
145	3	.950	16.47	263.4	414.8	743.2	550	465	5.198	1006.7	1.526	.952

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
145	4	.950	16.49	263.0	415.8	743.7	552	467	5.185	1007.1	1.522	.950
145	5	.950	16.49	263.4	415.8	744.2	552	467	5.188	1007.7	1.522	.951
145	6	.950	16.49	263.5	415.8	744.5	552	467	5.188	1008.0	1.522	.951
145	7	.950	16.48	264.1	415.8	745.1	552	467	5.191	1008.6	1.522	.952
145	8	.950	16.46	260.4	412.8	737.4	552	467	5.144	1006.2	1.511	.949
145	9	.950	16.46	262.1	412.8	739.6	552	467	5.153	1008.5	1.511	.952
145	10	.950	16.49	261.6	412.8	738.9	552	467	5.151	1007.8	1.511	.951
145	11	.950	16.49	261.3	412.8	738.6	552	467	5.148	1007.5	1.511	.951
146	1	.750	- 3.76	193.0	487.9	709.6	546	490	5.799	815.8	1.323	.752
146	2	.750	- 1.76	192.6	487.9	709.2	546	490	5.795	815.2	1.323	.751
146	3	.750	- .75	192.0	489.9	710.5	546	490	5.811	812.9	1.329	.749
146	4	.750	.25	191.9	488.9	709.4	546	490	5.800	813.4	1.326	.749
146	5	.750	2.27	192.7	488.9	710.3	546	490	5.806	814.7	1.326	.750
146	6	.750	4.28	192.8	489.9	710.4	546	490	5.807	814.8	1.326	.751
146	7	.750	6.28	192.4	488.9	709.9	546	490	5.805	814.1	1.326	.750
146	8	.750	8.28	193.1	489.9	711.7	546	490	5.819	814.6	1.329	.750
146	9	.750	10.28	193.1	489.9	711.7	546	490	5.819	814.6	1.329	.750
146	10	.750	12.29	192.7	490.9	712.3	546	490	5.825	81,3.4	1.331	.749
146	11	.750	14.29	192.8	488.9	710.4	546	490	5.807	814.8	1.326	.751
146	12	.750	16.32	194.0	488.9	711.8	546	490	5.814	816.9	1.326	.753
146	13	.750	20.33	193.0	488.9	710.6	546	490	5.809	815.1	1.326	.751
146	14	.750	.25	193.1	490.9	712.7	546	490	5.828	814.0	1.331	.750
147	4	.950	- 3.64	260.5	412.8	737.6	546	462	5.200	1000.9	1.533	.950
147	5	.950	- 1.62	262.2	413.8	740.7	546	462	5.220	1002.3	1.537	.951
147	6	.950	- .61	262.9	414.8	742.6	546	462	5.232	1002.4	1.540	.951
147	7	.950	.41	261.4	414.8	740.7	548	464	5.205	1002.2	1.533	.949
147	8	.950	2.44	262.7	414.8	742.3	548	464	5.213	1003.9	1.533	.951
147	9	.950	4.45	262.8	414.8	742.4	548	464	5.214	1004.0	1.533	.951
147	10	.950	6.46	262.0	414.8	741.4	548	464	5.209	1002.9	1.533	.950
147	11	.950	8.46	263.1	415.8	743.8	548	464	5.224	1003.6	1.537	.951
147	12	.950	10.46	263.2	415.8	743.9	548	464	5.225	1003.7	1.537	.951
147	13	.950	12.45	262.4	415.8	742.9	548	464	5.220	1002.6	1.537	.949
147	14	.950	14.46	264.0	415.8	745.0	550	465	5.209	1006.7	1.529	.952
147	15	.950	16.47	263.5	415.8	744.3	550	465	5.207	1006.0	1.529	.951
147	16	.950	20.45	262.4	415.8	742.9	550	465	5.201	1004.5	1.529	.949
147	17	.950	.42	263.5	416.8	745.3	550	465	5.216	1005.1	1.533	.950
147	18	.950	.42	263.8	416.8	745.7	550	465	5.218	1005.5	1.533	.951

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
148	3	.950	.43	262.5	413.8	741.1	546	462	5.221	1002.7	1.537	.952
148	4	.950	.44	262.3	414.8	741.8	546	462	5.229	1001.5	1.540	.950
148	5	.950	.45	263.0	414.8	742.7	548	464	5.214	1004.3	1.533	.951
148	6	.950	.45	263.4	414.8	743.2	548	463	5.217	1004.9	1.533	.952
148	7	.950	.45	262.3	415.8	742.8	548	464	5.219	1002.5	1.537	.949
148	8	.950	.45	262.7	415.8	743.3	548	464	5.221	1003.1	1.537	.950
148	9	.950	.45	262.9	415.8	743.6	548	464	5.222	1003.4	1.537	.950
148	10	.950	.45	263.6	415.8	744.5	550	465	5.207	1006.2	1.529	.951
148	11	.950	.44	262.7	415.8	743.3	550	465	5.203	1004.9	1.529	.950
148	12	.950	.45	264.3	416.8	746.3	550	465	5.221	1006.2	1.533	.951
149	3	.950	- 3.68	261.6	411.8	737.9	550	465	5.161	1006.8	1.515	.952
149	4	.950	- 1.66	261.3	411.8	737.6	552	467	5.140	1008.3	1.507	.952
149	5	.950	- .65	261.2	411.8	737.4	552	467	5.140	1008.1	1.507	.951
149	6	.950	.36	261.1	411.8	737.3	552	467	5.139	1008.0	1.507	.951
149	7	.950	2.39	261.5	411.8	737.8	552	467	5.141	1008.5	1.507	.952
149	8	.950	4.42	260.7	411.8	736.8	552	467	5.137	1007.4	1.507	.951
149	9	.950	6.47	260.5	412.8	737.5	552	467	5.145	1006.3	1.511	.949
149	10	.950	8.48	261.6	413.8	739.9	552	467	5.160	1006.9	1.515	.950
149	11	.950	10.48	261.8	412.8	737.9	552	467	5.146	1006.7	1.511	.950
149	12	.950	12.49	261.6	413.8	739.9	552	467	5.160	1006.9	1.515	.950
149	13	.950	14.50	261.3	412.8	738.5	552	467	5.150	1007.3	1.511	.951
149	14	.950	16.51	261.5	412.8	738.8	552	467	5.150	1007.7	1.511	.951
149	15	.950	20.53	262.5	414.8	742.1	554	469	5.154	1009.2	1.511	.951
149	16	.950	.37	262.6	414.8	742.2	554	469	5.155	1009.3	1.511	.951
150	1	1.050	- 3.58	288.7	373.6	751.0	552	452	4.817	1094.7	1.580	1.050
150	2	1.050	- 1.54	288.1	372.6	749.2	552	452	4.805	1095.0	1.575	1.051
150	3	1.050	- .53	288.3	371.6	748.5	552	451	4.798	1096.2	1.571	1.052
150	4	1.050	.48	288.7	372.6	750.0	552	452	4.809	1095.7	1.575	1.052
150	5	1.050	2.50	288.3	373.6	750.5	552	452	4.815	1094.3	1.580	1.050
150	6	1.050	4.50	288.9	373.6	751.3	552	452	4.818	1095.0	1.580	1.051
150	7	1.050	6.50	288.8	374.7	752.1	552	452	4.827	1093.2	1.584	1.049
150	8	1.050	8.52	290.3	375.7	755.1	552	452	4.844	1094.8	1.588	1.051
150	9	1.050	10.54	288.9	374.7	752.3	554	453	4.809	1096.0	1.576	1.050
150	10	1.050	12.56	290.0	375.7	754.7	554	453	4.824	1096.4	1.581	1.050
150	11	1.050	14.58	290.4	375.7	755.2	554	453	4.827	1096.0	1.581	1.051
150	12	1.050	16.59	289.9	375.7	754.6	554	453	4.824	1096.3	1.581	1.050
150	13	1.050	20.59	290.8	375.7	755.7	554	453	4.829	1097.3	1.581	1.051

UNCLASSIFIED

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TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
150	14	1.050	.49	291.2	376.7	757.3	554	453	4.840	1096.9	1.585	1.051
151	2	1.000	-3.62	276.4	394.2	746.9	550	458	5.016	1049.7	1.560	1.001
151	3	1.000	-1.58	276.8	394.2	747.4	552	459	5.000	1052.1	1.552	1.001
151	4	1.000	-.57	276.9	395.3	748.5	552	459	5.010	1051.3	1.556	1.000
151	5	1.000	.45	277.5	395.3	749.3	552	459	5.013	1052.1	1.556	1.001
151	6	1.000	2.47	277.8	396.3	750.7	552	459	5.023	1051.6	1.560	1.001
151	7	1.000	4.49	277.7	396.3	750.6	552	459	5.023	1051.5	1.560	1.000
151	8	1.000	6.50	278.3	396.3	751.3	554	461	5.009	1054.1	1.553	1.001
151	9	1.000	8.55	278.3	396.3	751.3	554	461	5.009	1054.1	1.553	1.001
151	10	1.000	10.54	277.7	397.3	751.5	554	461	5.014	1052.4	1.557	.999
151	11	1.000	12.55	278.3	396.3	751.3	554	461	5.009	1054.1	1.553	1.001
151	12	1.000	14.55	274.5	391.2	741.5	554	461	4.943	1053.9	1.533	1.001
151	13	1.000	16.56	275.9	392.2	744.3	554	461	4.959	1054.8	1.537	1.002
151	14	1.000	20.57	274.5	392.2	742.5	554	461	4.951	1052.9	1.537	1.000
151	15	1.000	.44	275.6	393.2	744.9	554	461	4.966	1053.4	1.541	1.001
152	1	.950	-3.68	261.7	412.8	739.1	554	469	5.132	1009.8	1.504	.951
152	2	.950	-1.65	261.4	412.8	738.7	554	469	5.131	1009.4	1.504	.951
152	3	.950	-.64	261.7	412.8	739.0	554	469	5.133	1009.7	1.504	.951
152	7	.950	.38	263.8	415.8	744.7	554	469	5.171	1010.0	1.515	.952
152	8	.950	2.39	260.9	413.8	739.0	554	469	5.137	1007.8	1.507	.949
152	9	.950	2.11	262.9	413.8	741.6	554	468	5.148	1010.6	1.507	.952
152	10	.950	4.42	262.6	413.8	741.2	554	469	5.147	1010.1	1.507	.952
152	11	.950	6.48	263.0	413.8	741.7	554	468	5.149	1010.7	1.507	.952
152	13	.950	10.48	262.8	414.8	742.5	554	469	5.156	1009.6	1.511	.951
152	17	.950	10.48	263.7	414.8	743.6	554	468	5.162	1010.8	1.511	.952
152	18	.950	12.49	263.2	415.8	744.0	554	469	5.167	1009.3	1.515	.951
152	19	.950	14.51	262.8	415.8	743.4	554	469	5.166	1008.6	1.515	.950
152	20	.950	16.52	263.2	416.8	744.9	554	469	5.177	1008.3	1.518	.950
152	21	.950	20.49	263.5	416.8	745.3	554	469	5.178	1008.8	1.518	.950
153	15	.950	.37	261.0	411.8	737.2	552	467	5.138	1007.9	1.507	.951
153	16	.950	-1.63	260.1	411.8	736.1	552	467	5.133	1006.7	1.507	.950
153	17	.950	-.63	261.3	412.8	738.5	552	467	5.150	1007.3	1.511	.951
153	18	.950	.37	262.0	412.8	739.4	552	467	5.153	1008.3	1.511	.952
153	19	.950	2.37	261.3	412.8	738.5	552	467	5.150	1007.3	1.511	.951
153	20	.950	4.36	262.8	413.8	741.5	552	467	5.166	1008.6	1.515	.952

UNCLASSIFIED

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
153	21	.950	6.39	263.1	413.8	740.5	552	467	5.163	1007.6	1.515	.951
153	22	.950	8.37	263.2	413.8	741.9	552	467	5.169	1009.1	1.515	.953
153	23	.950	10.33	262.1	413.8	740.5	552	467	5.163	1007.6	1.515	.951
153	24	.950	12.31	262.1	413.8	740.5	554	469	5.144	1009.4	1.507	.951
153	25	.950	14.28	262.1	413.8	740.5	554	469	5.144	1009.4	1.507	.951
153	26	.950	16.29	262.1	414.8	741.6	554	469	5.152	1008.6	1.511	.950
153	27	.950	20.24	263.6	414.8	743.5	554	468	5.161	1010.7	1.511	.952
153	28	.950	.37	262.5	414.8	742.1	554	469	5.154	1009.2	1.511	.951
154	1	.950	- 3.46	263.0	414.8	742.7	554	469	5.158	1009.8	1.511	.951
154	2	.950	- 1.53	264.0	415.8	745.0	554	468	5.172	1010.4	1.515	.952
154	3	.950	.37	262.4	415.8	742.9	554	469	5.163	1008.1	1.515	.949
154	4	.950	2.28	263.7	415.8	744.6	554	469	5.170	1009.9	1.515	.952
154	5	.950	4.19	263.8	415.8	744.7	554	469	5.171	1010.0	1.515	.952
154	6	.950	6.12	264.0	416.8	746.0	554	469	5.181	1009.5	1.518	.951
154	7	.950	8.01	264.1	415.8	745.1	554	468	5.173	1010.5	1.515	.952
154	8	.950	9.90	263.2	414.8	743.0	554	469	5.158	1010.1	1.511	.952
154	9	.950	11.78	262.3	414.8	741.8	554	469	5.154	1008.9	1.511	.950
154	10	.950	13.67	262.3	414.8	741.8	554	469	5.154	1008.9	1.511	.950
154	11	.950	15.57	261.8	414.8	741.2	554	469	5.151	1008.2	1.511	.950
154	12	.950	19.38	261.9	414.8	741.3	554	469	5.151	1008.3	1.511	.950
154	13	.950	- .58	263.3	415.8	744.1	554	469	5.168	1009.4	1.515	.951
154	14	.950	.37	263.3	415.8	744.1	554	469	5.168	1009.4	1.515	.951
155	1	.950	- 3.15	264.1	415.8	745.1	554	468	5.173	1010.5	1.515	.952
155	2	.950	- 1.39	262.6	413.8	742.2	554	469	5.155	1009.3	1.511	.951
155	3	.950	- .51	262.6	413.8	741.2	554	469	5.147	1010.1	1.507	.952
155	4	.950	.37	262.1	413.8	740.5	554	469	5.143	1009.5	1.507	.951
155	5	.950	2.13	261.2	411.8	737.4	554	469	5.121	1009.9	1.500	.951
155	6	.950	3.88	261.0	411.8	737.2	554	469	5.120	1009.7	1.500	.951
155	7	.950	5.67	260.2	410.8	735.2	554	469	5.106	1009.5	1.496	.951
155	8	.950	7.41	259.3	409.8	733.1	554	469	5.092	1009.2	1.493	.951
155	12	.950	14.41	256.6	404.8	724.7	554	469	5.032	1009.8	1.475	.951
155	13	.950	9.17	263.1	414.8	742.8	554	469	5.139	1009.2	1.511	.952
155	14	.950	10.91	263.3	414.8	743.1	554	469	5.139	1010.2	1.511	.952
155	15	.950	12.66	263.3	415.8	745.8	554	469	5.181	1009.3	1.518	.951
155	16	.950	14.42	262.6	414.8	742.2	554	469	5.155	1009.3	1.511	.951
155	17	.950	17.99	263.2	415.8	744.7	554	469	5.171	1010.2	1.515	.952
155	18	.950	.38	264.4	415.8	745.5	554	468	5.174	1010.2	1.515	.953

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
156	1	.950	.38	264.0	416.8	746.0	554	469	5.181	1009.5	1.518	.951
156	2	.950	.37	261.8	414.8	741.2	554	469	5.151	1008.2	1.511	.950
156	3	.950	.37	260.1	410.8	735.0	554	469	5.106	1009.3	1.496	.951
156	4	.950	.38	261.3	411.8	737.6	554	469	5.121	1010.1	1.500	.952
156	5	.950	.39	260.4	411.8	736.4	554	469	5.117	1008.8	1.500	.950
156	6	.950	.39	260.3	412.8	737.3	554	469	5.125	1007.9	1.504	.949
156	7	.950	.39	261.1	411.8	737.3	554	469	5.120	1009.8	1.500	.951
156	8	.950	.39	261.0	411.8	737.2	554	469	5.120	1009.7	1.500	.951
156	9	.950	.40	261.4	411.8	737.7	554	469	5.122	1010.2	1.500	.952
156	10	.950	.39	261.0	411.8	737.2	554	469	5.120	1009.7	1.500	.951
157	2	.950	8.49	260.6	410.8	735.7	548	463	5.164	1004.5	1.518	.952
157	3	.950	8.48	262.0	412.8	739.4	550	465	5.172	1006.5	1.518	.952
157	4	.950	8.47	262.1	412.8	739.5	550	465	5.173	1006.6	1.518	.952
157	5	.950	8.48	261.7	412.8	739.0	552	467	5.152	1007.9	1.511	.951
157	6	.950	8.48	262.8	414.8	742.5	552	467	5.175	1007.8	1.518	.951
157	7	.950	8.48	262.1	413.8	740.6	552	467	5.162	1007.7	1.515	.951
157	8	.950	8.47	262.3	413.8	740.8	552	467	5.164	1007.9	1.515	.951
157	9	.950	8.49	262.9	414.8	742.6	552	467	5.176	1007.9	1.518	.951
157	10	.950	8.48	262.7	414.8	742.3	552	467	5.175	1007.6	1.518	.951
157	11	.950	8.48	262.7	415.8	743.3	554	469	5.165	1008.5	1.515	.950
158	1	.950	16.50	262.4	415.8	742.9	554	469	5.163	1008.1	1.515	.949
158	2	.950	16.49	263.4	415.8	744.2	554	469	5.169	1009.5	1.515	.951
158	3	.950	16.51	263.4	415.8	744.2	554	469	5.169	1009.5	1.515	.951
158	4	.950	16.52	263.2	415.8	744.0	554	469	5.167	1009.3	1.515	.951
158	5	.950	16.53	264.2	416.8	746.2	554	469	5.182	1009.7	1.518	.951
158	6	.950	16.52	263.6	416.8	745.5	554	469	5.178	1009.0	1.518	.950
158	7	.950	16.51	261.4	412.8	738.7	554	469	5.131	1009.4	1.504	.951
158	8	.950	16.51	261.5	412.8	738.8	554	469	5.132	1009.5	1.504	.951
158	9	.950	16.49	261.1	412.8	738.3	554	469	5.129	1009.0	1.504	.950
158	10	.950	16.52	261.9	413.8	740.3	554	469	5.143	1009.2	1.507	.951
159	1	.850	- 3.74	230.1	452.9	727.7	552	482	5.479	916.4	1.424	.852
159	2	.850	- 1.72	229.8	452.9	727.3	552	482	5.478	915.9	1.424	.851
159	3	.850	- .72	229.4	452.9	726.8	552	482	5.476	915.3	1.424	.850
159	4	.850	.29	228.6	452.9	725.9	552	482	5.470	914.2	1.424	.849
159	5	.850	2.31	229.6	452.9	727.1	552	482	5.476	915.7	1.424	.851

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
159	6	.850	4.33	230.1	452.9	727.7	552	482	5.479	916.4	1.424	.852
159	7	.850	6.34	229.6	452.9	727.1	552	482	5.476	915.7	1.424	.851
159	8	.850	8.37	230.4	453.9	729.0	552	482	5.491	916.0	1.427	.851
159	9	.850	10.38	229.7	453.9	728.2	552	482	5.486	915.0	1.427	.850
159	10	.850	12.39	229.5	453.9	727.9	552	482	5.486	914.7	1.427	.850
159	11	.850	14.41	229.8	453.9	728.3	552	482	5.487	915.2	1.427	.850
159	12	.850	16.43	230.1	453.9	728.7	552	482	5.488	915.7	1.427	.851
159	13	.850	20.43	229.6	453.9	728.1	552	482	5.485	914.9	1.427	.850
159	14	.850	.29	229.9	453.9	728.4	552	482	5.488	915.3	1.427	.850
160	1	.750	- 3.78	193.8	491.9	714.5	550	494	5.800	817.4	1.321	.750
160	2	.750	- 1.77	194.6	490.9	714.5	550	494	5.794	819.6	1.319	.752
160	3	.750	- .76	193.5	490.9	713.2	550	494	5.788	817.7	1.319	.750
160	4	.750	.24	193.8	491.9	714.5	550	494	5.800	817.4	1.321	.750
160	5	.750	2.25	194.5	491.9	715.4	548	492	5.823	817.3	1.328	.752
160	6	.750	4.26	193.6	490.9	713.3	548	492	5.810	816.3	1.325	.751
160	7	.750	6.27	193.8	490.9	713.5	548	492	5.812	816.6	1.325	.751
160	8	.750	8.30	193.6	491.9	714.3	548	492	5.819	815.7	1.328	.750
160	9	.750	10.31	194.6	491.9	715.5	548	492	5.824	817.4	1.328	.752
160	10	.750	12.32	193.8	491.9	714.5	548	492	5.821	815.9	1.328	.750
160	11	.750	14.34	193.8	491.9	714.5	548	492	5.821	815.9	1.328	.750
160	12	.750	16.36	193.6	491.9	714.3	548	492	5.819	815.7	1.328	.750
160	13	.750	20.37	193.8	491.9	714.5	548	492	5.821	815.9	1.328	.750
160	14	.750	.24	193.9	491.9	714.6	548	492	5.822	816.1	1.328	.750
161	1	.600	- 3.85	133.3	527.4	673.2	542	505	6.081	662.1	1.101	.601
161	2	.600	- 1.85	133.1	527.4	672.9	542	505	6.082	661.5	1.101	.600
161	3	.600	- .84	132.8	527.4	672.6	542	505	6.079	660.9	1.101	.600
161	4	.600	.16	133.0	528.4	673.8	542	505	6.091	660.8	1.103	.600
161	5	.600	2.17	133.0	528.4	673.8	542	505	6.091	660.8	1.103	.600
161	6	.600	4.18	133.0	528.4	673.8	542	505	6.091	660.8	1.103	.600
161	7	.600	6.18	133.0	528.4	673.8	542	505	6.091	660.8	1.103	.600
161	8	.600	8.18	132.7	529.4	674.5	542	505	6.098	659.7	1.105	.599
161	9	.600	10.20	132.5	529.4	674.3	542	505	6.096	659.3	1.105	.598
161	10	.600	12.21	132.6	529.4	674.4	542	505	6.097	659.5	1.105	.598
161	11	.600	14.23	132.6	529.4	674.4	542	505	6.107	658.0	1.107	.598
161	12	.600	16.24	133.5	530.4	676.7	542	505	6.115	661.5	1.107	.600
161	13	.600	20.26	132.9	529.4	674.7	542	505	6.120	659.2	1.109	.598
161	14	.600	.16	133.6	529.4	675.5	542	505	6.103	661.6	1.105	.600

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	..	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
162	3	1.100	- 3.56	303.9	357.6	764.9	556	447	4.662	1141.7	1.605	1.101
162	4	1.100	- 1.53	303.9	357.6	764.9	556	447	4.662	1141.7	1.605	1.101
162	5	1.100	- .51	303.9	357.6	764.9	556	447	4.662	1141.7	1.605	1.101
162	6	1.100	.50	303.2	357.6	764.0	558	449	4.641	1143.0	1.598	1.100
162	7	1.100	2.51	297.3	357.6	756.0	556	448	4.625	1133.8	1.605	1.092
162	8	1.100	4.52	303.1	356.6	762.9	556	447	4.649	1141.9	1.601	1.102
162	9	1.100	6.51	303.9	357.6	764.9	556	447	4.662	1141.7	1.605	1.101
162	10	1.100	8.53	303.9	357.6	764.9	556	447	4.662	1141.7	1.605	1.101
162	11	1.100	10.54	303.1	357.6	763.9	556	447	4.657	1140.8	1.605	1.100
162	12	1.100	12.55	303.6	357.6	764.6	556	447	4.660	1141.5	1.605	1.101
162	13	1.100	14.58	303.1	357.6	763.9	556	447	4.657	1140.8	1.605	1.100
162	14	1.100	16.57	304.1	358.6	766.2	556	447	4.672	1141.0	1.610	1.100
162	15	1.100	20.57	302.4	356.6	761.9	560	450	4.612	1145.1	1.586	1.100
162	16	1.100	.49	303.0	357.6	763.7	562	452	4.607	1146.8	1.583	1.100
163	3	1.100	- 3.62	300.8	355.6	758.8	564	454	4.562	1148.3	1.566	1.099
163	4	1.100	- 1.57	301.0	353.6	757.1	564	453	4.547	1150.6	1.558	1.102
163	5	1.100	- .55	300.8	354.6	757.7	564	454	4.555	1149.2	1.562	1.101
163	6	1.100	.47	300.5	354.6	757.4	564	454	4.552	1149.0	1.562	1.100
163	7	1.100	2.50	300.6	354.6	757.5	564	454	4.553	1149.1	1.562	1.100
163	8	1.100	4.54	301.5	355.6	759.7	566	455	4.550	1151.1	1.559	1.100
163	9	1.100	6.56	301.3	354.6	758.4	566	455	4.541	1151.9	1.555	1.101
163	10	1.100	8.59	301.3	354.6	758.4	566	455	4.541	1151.9	1.555	1.101
163	11	1.100	10.63	302.2	355.6	760.6	566	455	4.554	1152.0	1.559	1.101
163	12	1.100	12.64	301.3	355.6	759.4	566	455	4.549	1150.9	1.559	1.100
163	13	1.100	14.67	301.3	355.6	759.4	566	455	4.549	1150.9	1.559	1.100
163	14	1.100	16.68	302.2	355.6	760.7	566	455	4.554	1152.0	1.559	1.101
163	15	1.100	20.69	302.9	355.6	761.6	566	455	4.558	1152.8	1.559	1.102
163	16	1.100	- .55	303.4	356.6	763.3	566	455	4.568	1152.4	1.564	1.102
163	17	1.100	.47	303.9	358.6	766.0	566	455	4.587	1151.0	1.572	1.100
164	1	.950	- 3.72	260.4	411.8	736.4	564	477	5.026	1017.9	1.465	.950
164	2	.950	- 1.67	261.3	411.8	737.5	564	477	5.031	1019.1	1.465	.952
164	3	.950	- .65	260.5	412.8	737.5	564	477	5.035	1017.1	1.469	.949
164	4	.950	.37	261.2	413.8	739.4	564	477	5.048	1017.3	1.472	.950
164	5	.950	2.40	261.4	413.8	739.7	564	477	5.048	1017.6	1.472	.950
164	6	.950	4.43	260.5	412.8	737.5	564	477	5.035	1017.1	1.469	.949
164	7	.950	6.50	262.0	412.8	739.4	564	477	5.044	1019.2	1.469	.952
164	8	.950	8.51	261.4	412.8	738.7	564	477	5.040	1018.5	1.469	.951

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
164	9	.950	10.54	261.5	413.8	739.8	564	477	5.049	1017.7	1.472	.950
164	10	.950	12.56	261.7	413.8	740.0	564	477	5.051	1017.9	1.472	.950
164	11	.950	14.57	261.3	412.8	738.6	564	477	5.039	1018.3	1.469	.951
164	12	.950	16.59	262.4	413.8	740.9	564	477	5.055	1018.9	1.472	.951
164	13	.950	20.59	262.0	413.8	740.4	564	477	5.052	1018.3	1.472	.951
164	14	.950	.37	262.1	413.8	740.5	566	479	5.035	1020.3	1.466	.951
165	2	.950	.38	261.7	413.8	740.1	558	472	5.104	1012.6	1.493	.950
165	3	.950	.38	262.5	414.8	742.0	560	474	5.100	1014.5	1.490	.951
165	4	.950	.38	262.4	414.8	741.9	560	474	5.099	1014.4	1.490	.950
165	5	.950	.39	262.7	414.8	742.3	560	474	5.101	1014.8	1.490	.951
165	6	.950	.40	262.7	415.8	743.3	562	476	5.091	1015.8	1.487	.950
165	7	.950	.40	263.2	415.8	744.0	562	475	5.094	1016.5	1.487	.951
165	8	.950	.40	264.0	417.8	746.9	564	477	5.098	1017.6	1.487	.950
165	9	.950	.40	263.4	417.8	746.2	564	477	5.094	1016.9	1.487	.949
165	10	.950	.40	263.0	415.8	743.7	564	477	5.075	1018.0	1.480	.950
165	11	.950	.40	260.2	410.8	735.2	564	477	5.016	1018.6	1.462	.951
166	1	.950	8.52	261.3	413.8	739.5	564	477	5.049	1017.4	1.472	.950
166	2	.950	8.51	261.3	413.8	739.5	564	477	5.049	1017.4	1.472	.950
166	3	.950	8.51	262.7	413.8	741.3	564	477	5.056	1019.3	1.472	.952
166	4	.950	8.51	262.2	413.8	740.7	564	477	5.053	1018.7	1.472	.951
166	5	.950	8.51	262.0	413.8	740.4	564	477	5.052	1018.3	1.472	.951
166	6	.950	8.51	262.0	412.8	739.4	564	477	5.044	1019.2	1.469	.952
166	7	.950	8.51	262.4	414.8	741.9	566	479	5.045	1019.8	1.469	.950
166	8	.950	8.51	262.5	414.8	742.0	566	479	5.046	1019.9	1.469	.951
166	9	.950	8.51	262.5	414.8	742.1	566	479	5.045	1020.0	1.469	.951
166	10	.950	8.51	256.1	415.8	735.0	566	491	5.018	1010.3	1.473	.940
167	1	.950	16.56	261.8	414.8	741.2	564	477	5.059	1017.3	1.476	.950
167	2	.950	16.57	260.2	410.8	735.2	562	475	5.033	1016.8	1.469	.951
167	3	.950	16.57	259.2	410.8	733.9	562	476	5.028	1015.3	1.469	.949
167	4	.950	16.58	260.0	410.8	734.9	560	474	5.051	1014.6	1.475	.951
167	5	.950	16.57	259.2	409.8	732.9	560	474	5.037	1014.4	1.472	.950
167	6	.950	16.58	259.2	409.8	732.9	560	474	5.037	1014.4	1.472	.950
167	7	.950	16.58	259.6	409.8	733.4	558	472	5.058	1013.1	1.479	.951
167	8	.950	16.57	259.9	409.8	733.8	558	472	5.059	1013.6	1.479	.951
167	9	.950	16.56	260.1	409.8	734.0	558	472	5.061	1013.8	1.479	.952

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
167	10	.950	16.58	260.2	410.8	735.2	560	474	5.051	1014.9	1.475	.951
168	1	.750	- 3.81	193.7	491.9	714.4	556	499	5.736	821.7	1.303	.750
168	2	.750	- 1.78	194.1	491.9	714.9	554	497	5.759	821.0	1.309	.751
168	3	.750	- .77	193.9	490.9	713.7	554	497	5.748	821.4	1.306	.751
168	4	.750	.25	193.9	490.9	713.7	554	497	5.748	821.4	1.306	.751
168	5	.750	2.26	193.9	491.9	714.7	554	497	5.757	820.7	1.309	.750
168	6	.750	4.28	193.7	491.9	714.4	554	497	5.757	820.3	1.309	.750
168	7	.750	6.30	193.9	491.9	714.6	554	497	5.759	820.6	1.309	.750
168	8	.750	8.33	193.7	492.9	715.4	554	498	5.766	819.6	1.312	.749
168	9	.750	10.35	195.2	491.9	716.2	554	497	5.765	822.9	1.309	.753
168	10	.750	12.36	193.9	492.9	715.7	554	498	5.766	820.0	1.312	.750
168	11	.750	14.38	193.1	492.9	714.7	554	498	5.763	818.6	1.312	.748
168	12	.750	16.40	193.9	492.9	715.7	554	498	5.766	820.0	1.312	.750
168	13	.750	20.41	194.7	492.9	716.6	554	497	5.772	821.3	1.312	.751
168	14	.750	.24	194.1	492.9	715.9	554	497	5.768	820.3	1.312	.750
169	3	1.100	- 3.64	300.7	354.6	757.6	568	457	4.522	1153.2	1.547	1.100
169	4	1.100	- 1.61	300.3	353.6	756.1	566	455	4.527	1151.8	1.550	1.101
169	5	1.100	.42	299.5	353.6	755.0	566	455	4.523	1150.8	1.550	1.100
169	6	1.100	- .59	302.7	357.6	763.3	564	454	4.589	1148.5	1.575	1.100
169	7	1.100	2.46	303.5	357.6	764.4	566	455	4.577	1151.5	1.568	1.101
169	8	1.100	4.50	304.0	357.6	765.1	566	455	4.580	1152.1	1.568	1.102
169	9	1.100	6.55	304.0	359.6	767.1	566	455	4.596	1150.1	1.577	1.099
169	10	1.100	8.60	303.9	358.6	766.0	566	455	4.587	1151.0	1.572	1.100
169	11	1.100	10.64	304.2	358.6	766.3	566	455	4.590	1151.3	1.572	1.101
169	12	1.100	12.65	304.2	358.6	766.4	566	455	4.589	1151.4	1.572	1.101
169	13	1.100	14.67	304.9	358.6	767.3	566	455	4.593	1152.2	1.572	1.102
169	14	1.100	16.68	304.5	358.6	766.7	566	455	4.591	1151.6	1.572	1.101
169	15	1.100	20.72	304.7	358.6	767.0	566	455	4.592	1151.9	1.572	1.101
169	16	1.100	.43	305.1	360.6	769.6	568	457	4.594	1152.4	1.574	1.099
170	2	1.050	- 3.64	290.8	375.7	755.7	562	460	4.761	1105.2	1.551	1.051
170	3	1.050	- 1.62	287.2	371.6	747.0	562	460	4.707	1104.7	1.534	1.051
170	4	1.050	- .60	287.7	371.6	747.7	562	460	4.709	1105.3	1.534	1.051
170	5	1.050	.41	288.0	371.6	748.0	562	460	4.712	1105.6	1.534	1.052
170	6	1.050	2.45	287.9	371.6	747.9	562	460	4.711	1105.5	1.534	1.052
170	7	1.050	4.49	287.5	372.6	748.4	562	460	4.717	1104.1	1.538	1.050

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
170	8	1.050	6.54	288.0	372.6	742.0	562	460	4.720	1104.6	1.538	1.050
170	9	1.050	8.58	288.2	372.6	749.3	562	460	4.721	1104.9	1.538	1.051
170	10	1.050	10.63	289.7	373.6	752.3	562	460	4.737	1105.9	1.543	1.052
170	11	1.050	12.64	289.4	374.7	752.9	562	460	4.744	1104.5	1.547	1.050
170	12	1.050	14.66	289.7	375.7	754.3	562	460	4.754	1103.9	1.551	1.050
170	13	1.050	16.68	289.4	373.6	751.9	562	460	4.736	1105.5	1.543	1.051
170	14	1.050	20.70	289.9	374.7	753.5	562	460	4.747	1105.1	1.547	1.051
170	15	1.050	.42	289.8	374.7	753.4	562	460	4.747	1105.0	1.547	1.051
171	1	1.000	- 3.67	273.8	391.2	740.5	562	468	4.869	1060.4	1.504	1.000
171	2	1.000	- 1.63	273.6	391.2	740.3	562	468	4.868	1060.2	1.504	1.000
171	3	1.000	- .61	274.1	391.2	740.8	562	468	4.870	1060.7	1.504	1.000
171	4	1.000	.40	274.5	391.2	741.5	562	468	4.872	1061.4	1.504	1.001
171	5	1.000	2.43	275.5	392.2	743.7	562	468	4.887	1061.7	1.508	1.001
171	6	1.000	4.47	275.2	392.2	743.3	562	468	4.886	1061.3	1.508	1.001
171	7	1.000	6.51	274.9	392.2	742.9	562	468	4.884	1060.9	1.508	1.000
171	8	1.000	8.55	275.2	392.2	743.3	562	468	4.886	1061.3	1.508	1.001
171	9	1.000	10.59	275.5	392.2	743.7	562	468	4.887	1061.7	1.508	1.001
171	10	1.000	12.60	275.6	392.2	743.8	562	468	4.888	1061.8	1.508	1.001
171	11	1.000	14.62	275.0	392.2	743.1	562	468	4.884	1061.1	1.508	1.001
171	12	1.000	16.64	274.9	392.2	742.9	562	468	4.884	1060.9	1.508	1.000
171	13	1.000	20.66	276.3	393.2	745.8	562	468	4.900	1061.9	1.512	1.002
171	14	1.000	.41	275.5	393.2	744.7	562	468	4.896	1060.8	1.512	1.000
172	1	.950	- 3.71	262.4	412.8	739.9	562	475	5.064	1017.9	1.476	.952
172	2	.950	- 1.68	261.7	412.8	739.1	562	475	5.059	1017.1	1.476	.951
172	3	.950	- .66	261.7	413.8	740.0	562	476	5.069	1016.1	1.479	.950
172	4	.950	.35	261.3	413.8	739.6	562	476	5.065	1015.7	1.479	.950
172	5	.950	2.38	261.7	413.8	740.0	562	476	5.069	1016.1	1.479	.950
172	6	.950	4.41	261.9	414.8	741.3	560	474	5.096	1013.8	1.490	.950
172	7	.950	6.45	262.1	413.8	740.5	560	474	5.089	1014.8	1.486	.951
172	8	.950	8.51	261.5	413.8	739.8	560	474	5.085	1014.1	1.486	.950
172	9	.950	10.53	261.7	413.8	740.0	562	476	5.069	1016.1	1.479	.950
172	10	.950	12.55	262.5	414.8	742.0	560	474	5.100	1014.5	1.490	.951
172	11	.950	14.56	262.2	413.8	740.7	560	474	5.089	1015.1	1.486	.951
172	12	.950	16.58	262.5	414.8	742.0	562	475	5.082	1016.3	1.483	.951
172	13	.950	20.60	262.8	414.8	742.5	560	474	5.101	1015.1	1.490	.951
172	14	.950	.36	262.8	414.8	742.5	560	474	5.101	1015.1	1.490	.951

UNCLASSIFIED

TABLE II

TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
173	3	.950	.38	262.0	413.8	740.4	552	467	5.162	1007.5	1.515	.951
173	4	.950	.39	262.3	414.8	741.8	552	467	5.172	1007.0	1.518	.950
173	5	.950	.39	262.8	415.8	743.5	554	469	5.165	1008.7	1.515	.950
173	6	.950	.39	262.7	414.8	742.3	556	470	5.138	1011.2	1.504	.951
173	7	.950	.39	263.5	415.8	744.3	556	470	5.151	1011.4	1.508	.951
173	8	.950	.39	263.2	416.8	745.0	556	471	5.157	1010.3	1.511	.950
173	9	.950	.38	263.2	416.8	745.0	558	472	5.139	1012.1	1.504	.950
173	10	.950	.38	262.4	414.8	741.9	558	472	5.118	1012.6	1.497	.950
173	11	.950	.38	262.0	414.8	741.4	558	472	5.115	1012.1	1.497	.950
173	12	.950	.39	261.7	412.8	739.0	558	472	5.097	1013.3	1.490	.951
174	1	.950	8.50	262.1	414.8	741.5	560	474	5.098	1014.0	1.490	.950
174	2	.950	8.51	262.5	414.8	742.0	560	474	5.100	1014.5	1.490	.951
174	3	.950	8.51	262.6	413.8	741.2	560	474	5.091	1015.6	1.486	.952
174	4	.950	8.51	262.5	413.8	741.0	560	474	5.092	1015.4	1.486	.952
174	5	.950	8.51	262.4	413.8	740.9	560	474	5.091	1015.3	1.486	.951
174	6	.950	8.51	262.7	414.8	742.3	560	474	5.101	1014.8	1.490	.951
174	7	.950	8.51	262.5	413.8	741.0	560	474	5.092	1015.4	1.486	.952
174	8	.950	8.51	262.5	413.8	741.0	560	474	5.092	1015.4	1.486	.952
174	9	.950	8.51	262.4	414.8	741.9	560	474	5.099	1014.4	1.490	.950
174	10	.950	8.51	263.1	415.8	743.8	560	474	5.112	1014.5	1.493	.951
175	1	.950	16.56	259.4	409.8	733.2	560	474	5.038	1014.7	1.472	.951
175	2	.950	16.57	260.6	412.8	737.7	560	474	5.071	1013.7	1.483	.950
175	3	.950	16.57	261.3	412.8	738.6	560	474	5.075	1014.7	1.483	.951
175	4	.950	16.57	261.3	412.8	738.6	560	474	5.075	1014.7	1.483	.951
175	5	.950	16.57	261.7	412.8	739.0	560	474	5.078	1015.2	1.483	.951
175	6	.950	16.57	261.7	412.8	739.0	560	474	5.078	1015.2	1.483	.951
175	7	.950	16.57	261.3	412.8	738.6	560	474	5.075	1014.7	1.483	.951
175	8	.950	16.57	261.7	412.8	739.0	560	474	5.078	1015.2	1.483	.951
175	9	.950	16.56	261.3	412.8	738.5	560	474	5.076	1014.6	1.483	.951
175	10	.950	16.58	261.7	412.8	739.0	560	474	5.078	1015.2	1.483	.951
176	1	.850	- 3.78	227.3	448.9	720.3	558	487	5.368	920.2	1.392	.850
176	2	.850	- 1.75	227.4	449.9	721.4	558	487	5.378	919.5	1.395	.850
176	3	.850	- .74	228.2	450.9	723.4	558	487	5.391	920.0	1.398	.850
176	4	.850	.27	228.6	449.9	722.9	558	487	5.385	921.4	1.395	.852
176	5	.850	2.30	228.1	449.9	722.3	558	487	5.382	920.7	1.395	.851

UNCLASSIFIED

TABLE II
TUNNEL OPERATING CONDITIONS

Run	Pt	M	α	q	p	H	T_o	T	$\rho \times 10^{-4}$	V	$N_R \times 10^{-6}$	M_c
176	6	.850	4.33	228.3	449.9	722.5	558	487	5.383	920.9	1.395	.851
176	7	.850	6.35	227.8	448.9	720.9	558	487	5.371	920.9	1.392	.851
176	8	.850	8.40	228.0	450.9	723.1	558	487	5.391	919.6	1.398	.850
176	9	.850	10.41	228.1	450.9	723.3	558	487	5.391	919.9	1.398	.850
176	10	.850	12.42	228.4	451.9	724.6	558	487	5.402	919.5	1.401	.850
176	11	.850	14.44	228.5	451.9	724.8	558	487	5.402	919.8	1.401	.850
176	12	.850	16.46	228.6	451.9	724.9	558	487	5.402	919.9	1.401	.850
176	13	.850	20.48	228.6	451.9	724.9	558	487	5.402	919.9	1.401	.850
176	14	.850	.27	229.4	450.9	724.8	558	487	5.399	921.8	1.398	.852
177	1	.750	-3.82	194.5	492.9	716.4	556	499	5.749	822.5	1.305	.751
177	2	.750	-1.79	194.9	492.9	716.8	556	499	5.753	823.1	1.305	.751
177	4	.750	-.75	194.2	492.9	716.0	556	499	5.748	821.9	1.305	.750
177	5	.750	.23	194.2	494.9	718.0	556	499	5.767	820.6	1.311	.749
177	6	.750	2.25	195.0	494.9	718.9	558	501	5.751	823.4	1.305	.750
177	7	.750	4.27	195.1	493.9	718.0	558	501	5.743	824.2	1.302	.751
177	8	.750	6.29	195.1	493.9	718.0	558	501	5.743	824.2	1.302	.751
177	9	.750	8.33	194.5	493.9	717.3	558	501	5.740	823.2	1.302	.750
177	10	.750	10.34	194.6	494.9	718.5	558	501	5.748	822.8	1.305	.750
177	11	.750	12.35	195.2	494.9	719.2	558	501	5.751	823.8	1.305	.751
177	12	.750	14.37	195.2	494.9	719.2	558	501	5.751	823.8	1.305	.751
177	13	.750	16.38	195.2	493.9	718.1	558	501	5.744	824.4	1.302	.751
177	14	.750	20.41	195.8	493.9	718.9	558	501	5.745	825.5	1.302	.752
177	15	.750	.23	195.4	494.9	719.4	558	501	5.753	824.1	1.305	.751
178	1	.600	-3.87	133.6	529.4	675.5	552	514	5.993	667.7	1.079	.600
178	2	.600	-1.86	134.4	529.4	676.4	552	514	5.997	669.4	1.079	.602
178	3	.600	-.85	133.7	529.4	675.6	552	514	5.994	667.9	1.079	.601
178	4	.600	.15	133.7	529.4	675.6	552	514	5.994	667.9	1.079	.601
178	5	.600	2.16	133.7	528.4	674.6	550	512	6.006	667.2	1.082	.601
178	6	.600	4.18	133.8	528.4	674.7	550	512	6.007	667.4	1.082	.601
178	7	.600	6.19	134.4	528.4	675.3	550	512	6.013	668.6	1.082	.602
178	8	.600	8.21	134.5	531.3	678.6	552	514	6.018	668.8	1.083	.601
178	9	.600	10.23	134.1	533.4	680.0	552	515	6.037	666.5	1.087	.599
178	10	.600	12.24	134.4	532.4	679.4	552	514	6.026	667.8	1.085	.601
178	11	.600	14.25	134.6	530.4	677.6	552	514	6.009	669.3	1.081	.602
178	12	.600	16.26	134.5	530.4	677.5	550	512	6.030	667.9	1.086	.602
178	13	.600	20.28	133.4	531.4	677.3	550	513	6.032	665.0	1.088	.599
178	14	.600	.15	134.4	531.4	678.4	550	512	6.038	667.1	1.088	.601

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	ϕ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
3	6	1.100	- 4.07	.00-	.00-	.136	.1774-	.0530-	.010-	.0021-	.0002	.3501-	.1727
3	7	1.100	- 3.05	.00-	.00-	.104	.1743-	.0401-	.009-	.0015-	.0005	.3451-	.1708
3	8	1.100	- 2.03	.00-	.00-	.062	.1763-	.0241-	.008-	.0013-	.0004	.3430-	.1667
3	9	1.100	- 1.01	.00-	.00-	.020	.1784-	.0121-	.011-	.0026-	.0004	.3432-	.1648
3	10	1.100	.00	.00-	.00-	.001	.1785-	.0000-	.007-	.0027-	.0003	.3436-	.1651
3	11	1.100	1.02	.00-	.00	.041	.1777	.0140-	.006-	.0021-	.0002	.3448-	.1671
3	12	1.100	2.04	.00-	.00	.072	.1783	.0270-	.003-	.0017-	.0006	.3449-	.1666
3	13	1.100	3.05	.00-	.00	.101	.1781	.0401-	.005-	.0019-	.0001	.3488-	.1707
3	14	1.100	4.08	.00-	.00	.164	.1788	.0562-	.004-	.0017-	.0004	.3528-	.1740
3	15	1.100	6.12	.00-	.00	.256	.1828	.0811-	.009-	.0021-	.0004	.3680-	.1852
3	16	1.100	8.15	.00-	.00	.349	.1885	.1023-	.012-	.0027-	.0004	.3884-	.1999
3	17	1.100	12.24-	.01-	.00	.643	.1828	.1383-	.016-	.0040-	.0004	.4036-	.2208
3	18	1.100	16.35-	.01-	.00	1.043	.1670	.1786-	.009-	.0067-	.0002	.4071-	.2401
3	19	1.100	19.98-	.01-	.00	1.528	.1426	.2187-	.003-	.0093	.0000	.4008-	.2582
3	21	1.100	.00	.00-	.00	.011	.1797	.0009-	.010-	.0014-	.0007	.3459-	.1662
4	2	.950	- 4.05	.00	.00-	.122	.0664-	.0486-	.007-	.0027	.0001	.1628-	.0964
4	3	.950	- 3.04	.00	.00-	.098	.0661-	.0370-	.014-	.0038	.0001	.1596-	.0935
4	4	.950	- 2.02	.00	.00-	.049	.0709-	.0208-	.006-	.0037	.0002	.1610-	.0901
4	5	.950	- 1.01-	.01	.00-	.025	.0675-	.0115-	.013-	.0049	.0002	.1583-	.0908
4	6	.950	.00	.00	.00-	.002	.0663	.0001-	.005-	.0041	.0003	.1566-	.0903
4	7	.950	1.01	.00-	.00	.034	.0677	.0127-	.012-	.0046-	.0002	.1589-	.0912
4	8	.950	2.03	.00-	.00	.082	.0642	.0266-	.004-	.0039-	.0001	.1566-	.0924
4	9	.950	3.05	.00-	.00	.117	.0684	.0416-	.003-	.0044-	.0000	.1603-	.0919
4	10	.950	4.06	.00	.00	.139	.0649	.0532-	.006-	.0040	.0005	.1624-	.0975
4	11	.950	6.09	.00	.00	.221	.0679	.0752-	.009-	.0048	.0005	.1761-	.1082
4	12	.950	8.12	.00-	.00	.331	.0724	.0925-	.011-	.0024-	.0000	.1917-	.1193
4	13	.950	12.19-	.01-	.00	.583	.0567	.1264-	.020-	.0050-	.0001	.2029-	.1462
4	14	.950	16.28	.00	.00	.944	.0336	.1659-	.009-	.0058	.0001	.1991-	.1655
4	15	.950	19.88-	.01	.00	1.367	.0061	.2042-	.006-	.0074	.0003	.1852-	.1791
4	16	.950	.00	.00	.00	.011	.0625	.0012-	.005-	.0041	.0003	.1543-	.0918
6	4	.750	- 4.04	.00	.00-	.115	.0658-	.0481-	.008-	.0034	.0006	.1501-	.0843
6	5	.750	- 3.03	.00	.00-	.082	.0654-	.0356-	.003-	.0037	.0006	.1458-	.0804
6	6	.750	- 2.02	.00-	.00-	.049	.0666-	.0234-	.007-	.0040-	.0000	.1473-	.0807
6	7	.750	- 1.01	.00	.00-	.018	.0676-	.0077-	.002-	.0043	.0007	.1448-	.0772
6	8	.750	.00	.00-	.00-	.001	.0669	.0000-	.006-	.0038-	.0000	.1465-	.0796
6	9	.750	1.01	.00	.00	.047	.0679	.0141-	.010-	.0033	.0007	.1465-	.0786
6	10	.750	2.02	.00	.00	.095	.0663	.0249-	.005-	.0045	.0007	.1446-	.0783

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
6	11	.750	3.03	.00	.00	.110	.0660	.0389-	.009-	.0039	.0001	.1456-	.0796
6	12	.750	4.05	.00	.00	.157	.0653	.0499-	.009-	.0039	.0008	.1487-	.0834
6	13	.750	6.06	.00	.00	.219	.0663	.0718-	.012-	.0033	.0007	.1611-	.0948
6	14	.750	8.09	.00-	.00	.296	.0673	.0917-	.016-	.0027-	.0006	.1726-	.1053
6	15	.750	12.14	.00	.00	.552	.0572	.1233-	.014-	.0041	.0005	.1873-	.1301
6	16	.750	16.19	.00	.00	.871	.0370	.1549-	.007-	.0068	.0005	.1846-	.1476
6	17	.750	19.75	.00	.00	1.168	.0051	.1817	.015-	.0107	.0005	.1695-	.1644
6	18	.750	.00	.00	.00	.015	.0645	.0016-	.001-	.0051	.0000	.1407-	.0762
9	2	1.100	- 4.08	.00-	.00-	.248	.2041-	.0429-	.019-	.0002-	.0002	.3818-	.1777
9	3	1.100	- 3.06-	.01-	.00-	.183	.2032-	.0349-	.025-	.0018-	.0002	.3799-	.1767
9	4	1.100	- 2.04	.00-	.00-	.117	.2042-	.0230-	.021-	.0003-	.0001	.3773-	.1731
9	5	1.100	- 1.02	.00-	.00-	.053	.2047-	.0110-	.017-	.0004-	.0000	.3748-	.1701
9	6	1.100	.00-	.01-	.00	.000	.2054-	.0001-	.023-	.0014-	.0005	.3744-	.1690
9	7	1.100	1.02	.00-	.00	.042	.2075	.0118-	.016-	.0013-	.0004	.3754-	.1679
9	8	1.100	2.04	.00-	.00	.116	.2102	.0248-	.015-	.0012-	.0003	.3810-	.1708
9	9	1.100	3.06	.00-	.00	.168	.2108	.0357-	.017-	.0014-	.0003	.3841-	.1733
9	10	1.100	4.09-	.01-	.00	.254	.2114	.0457-	.023-	.0013-	.0003	.3872-	.1758
9	11	1.100	6.13-	.01	.00	.426	.2185	.0559-	.028-	.0018	.0001	.3985-	.1800
9	12	1.100	8.18-	.01-	.00	.666	.2237	.0620-	.023-	.0008-	.0005	.4145-	.1908
9	13	1.100	12.29-	.01-	.00	1.267	.2177	.0494-	.027-	.0020-	.0001	.4322-	.2145
9	14	1.100	16.43-	.01-	.00	2.030	.1990	.0299-	.029-	.0015-	.0006	.4391-	.2401
9	15	1.100	20.08-	.01-	.00	2.780	.1804	.0314-	.028-	.0023-	.0013	.4524-	.2720
9	16	1.100	.00	.00-	.00-	.000	.2084	.0019-	.016-	.0008-	.0004	.3765-	.1681
10	2	1.100	- 2.63-	3.12-	50.00-	.141	.1982-	.0325-	.194-	.0372-	.0003	.3840-	.1858
10	3	1.100	- 1.97-	2.34-	50.00-	.084	.2015-	.0234-	.145-	.0291-	.0007	.3823-	.1808
10	4	1.100	- 1.30-	1.57-	30.00-	.050	.1983-	.0123-	.093-	.0203-	.0001	.3755-	.1772
10	5	1.100	- .66-	.78-	50.00-	.037	.2025-	.0073-	.052-	.0111-	.0005	.3724-	.1699
10	6	1.100	.01	.00-	50.00	.030	.2056	.0047-	.003-	.0011-	.0004	.3716-	.1660
10	7	1.100	.66	.77-	50.00	.064	.2081	.0117	.038	.0078-	.0003	.3718-	.1637
10	8	1.100	1.31	1.56-	50.00	.066	.2107	.0178	.089	.0181-	.0003	.3778-	.1671
10	9	1.100	1.98	2.34-	50.00	.144	.2099	.0268	.126	.0262-	.0002	.3812-	.1713
10	10	1.100	2.64	3.13-	50.00	.188	.2083	.0348	.173	.0345-	.0001	.3866-	.1783
10	11	1.100	.01-	.01-	50.00	.019	.2055	.0037-	.010-	.0022-	.0004	.3727-	.1672
11	1	.950	- 2.89-	2.97	45.00-	.178	.0883-	.0335	.152	.0312-	.0002	.1858-	.0975
11	2	.950	- 2.16-	2.16	45.00-	.119	.0912-	.0233	.109	.0235-	.0002	.1832-	.0920

UNCLASSIFIED

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
11	3	.950	1.45-	1.44	45.00-	.110	.0921-	.0177	.070	.0148-	.0002	.1804-	.0883
11	4	.950	.72-	.72	45.00-	.038	.0905-	.0062	.043	.0064-	.0002	.1776-	.0871
11	5	.950	.00-	.00	45.00-	.004	.0892-	.0004-	.000-	.0028-	.0003	.1756-	.0864
11	6	.950	.71	.72	45.00	.005	.0939	.0076-	.043-	.0119-	.0003	.1817-	.0878
11	7	.950	1.44	1.44	45.00	.064	.0894	.0180-	.074-	.0195-	.0003	.1826-	.0932
11	8	.950	2.16	2.16	45.00	.085	.0927	.0226-	.112-	.0277-	.0004	.1879-	.0952
11	9	.950	2.88	2.88	45.00	.144	.0930	.0329-	.153-	.0349-	.0005	.1921-	.0991
11	10	.950	.00-	.00	45.00-	.016	.0879-	.0016-	.000-	.0022-	.0003	.1757-	.0878
11	11	.950	.00-	.00	45.00-	.004	.0888-	.0004	.007-	.0021-	.0002	.1754-	.0866
12	2	1.100	2.90-	2.88	45.00-	.198	.2043-	.0356	.162	.0353-	.0003	.3835-	.1792
12	3	1.100	2.18-	2.16	45.00-	.156	.2046-	.0276	.114	.0275-	.0003	.3774-	.1728
12	4	1.100	1.44-	1.44	45.00-	.083	.2053-	.0165	.073	.0181	.0001	.3747-	.1694
12	5	1.100	.73-	.71	45.00-	.075	.2062-	.0095	.025	.0093	.0001	.3708-	.1646
12	6	1.100	.00-	.00	45.00-	.013	.2047	.0006	.000	.0003-	.0003	.3702-	.1655
12	7	1.100	.72	.72	45.00	.015	.2048	.0116-	.047-	.0085-	.0004	.3746-	.1698
12	8	1.100	1.44	1.45	45.00	.033	.2034	.0176-	.091-	.0182	.0000	.3781-	.1747
12	9	1.100	2.16	2.16	45.00	.084	.2051	.0266-	.130-	.0264-	.0000	.3835-	.1784
12	10	1.100	2.89	2.88	45.00	.157	.2071	.0355-	.176-	.0340-	.0005	.3903-	.1832
12	11	1.100	.01-	.00	45.00-	.035	.2058-	.0015-	.006	.0008-	.0004	.3716-	.1658
13	1	.950	4.07	.00-	.00-	.239	.0859-	.0404	.000-	.0020-	.0005	.1833-	.0974
13	2	.950	3.05	.00	.00-	.176	.0866-	.0323-	.011-	.0029	.0001	.1817-	.0951
13	3	.950	2.03	.00-	.00-	.113	.0866-	.0197-	.010-	.0027-	.0004	.1797-	.0931
13	4	.950	1.01	.00-	.00-	.051	.0882-	.0093-	.005-	.0029-	.0004	.1772-	.0890
13	5	.950	.00	.00-	.00-	.001	.0866	.0023-	.008-	.0031-	.0003	.1758-	.0892
13	6	.950	1.01	.00-	.00	.035	.0879	.0127-	.015-	.0031-	.0003	.1777-	.0898
13	7	.950	2.03	.00-	.00	.096	.0901	.0254-	.011-	.0033-	.0002	.1812-	.0911
13	8	.950	3.05-	.01-	.00	.157	.0892	.0358-	.018-	.0038-	.0002	.1829-	.0937
13	9	.950	4.07	.00-	.00	.219	.0882	.0417-	.010-	.0031-	.0002	.1851-	.0969
13	10	.950	6.10	.00-	.00	.393	.0925	.0532-	.015-	.0030-	.0003	.1941-	.1016
13	11	.950	8.15-	.01	.00	.620	.0978	.0581-	.021-	.0030	.0000	.2074-	.1096
13	12	.950	12.24	.00	.00	1.200	.0864	.0446-	.018-	.0018	.0000	.2171-	.1307
13	13	.950	16.35-	.01	.00	1.920	.0599	.0279-	.022-	.0025	.0001	.2144-	.1545
13	14	.950	19.98	.00-	.00	2.642	.0374	.0285-	.007-	.0058-	.0006	.2023-	.1649
13	15	.950	.00	.00-	.00-	.014	.0880	.0011-	.012-	.0029-	.0003	.1778-	.0898
14	2	.750	4.05	.00-	.00-	.223	.0776-	.0391-	.009-	.0034-	.0001	.1608-	.0832

UNCLASSIFIED

TABLE IIIa
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
14	3	.750	3.04	.00	.00	.171	.0801	.0313	.008	.0033	.0001	.1618	.0817
14	4	.750	2.03	.00	.00	.120	.0810	.0203	.008	.0041	.0001	.1595	.0785
14	5	.750	1.01	.00	.00	.069	.0807	.0094	.012	.0027	.0001	.1575	.0768
14	6	.750	.00	.00	.00	.002	.0793	.0000	.017	.0047	.0001	.1557	.0764
14	7	.750	1.01	.00	.00	.049	.0815	.0110	.005	.0029	.0001	.1586	.0771
14	8	.750	2.03	.00	.00	.115	.0784	.0235	.010	.0041	.0000	.1584	.0800
14	9	.750	3.03	.00	.00	.112	.0819	.0298	.015	.0053	.0001	.1630	.0811
14	10	.750	4.05	.00	.00	.231	.0813	.0408	.014	.0035	.0001	.1650	.0837
14	11	.750	6.07	.00	.00	.381	.0805	.0521	.012	.0034	.0005	.1692	.0887
14	12	.750	8.10	.00	.00	.567	.0839	.0536	.021	.0025	.0005	.1784	.0945
14	13	.750	12.17	.00	.00	1.162	.0684	.0401	.012	.0013	.0004	.1836	.1152
14	14	.750	16.24	.01	.00	1.820	.0423	.0174	.029	.0032	.0004	.1754	.1331
14	15	.750	19.82	.00	.00	2.463	.0153	.0056	.011	.0053	.0007	.1622	.1469
14	16	.750	.00	.00	.00	.001	.0726	.0000	.006	.0039	.0000	.1503	.0777
16	4	.750	2.87	2.86	45.00	.148	.0872	.0334	.146	.0292	.0003	.1669	.0797
16	5	.750	2.14	2.14	45.00	.098	.0854	.0257	.103	.0223	.0002	.1634	.0780
16	6	.750	1.43	1.43	45.00	.066	.0882	.0194	.065	.0141	.0001	.1627	.0745
16	7	.750	.71	.71	45.00	.053	.0872	.0116	.037	.0052	.0001	.1603	.0731
16	8	.750	.00	.00	45.00	.005	.0855	.0006	.005	.0025	.0000	.1592	.0737
16	9	.750	.71	.71	45.00	.026	.0871	.0057	.042	.0116	.0001	.1613	.0742
16	10	.750	1.43	1.43	45.00	.056	.0883	.0120	.074	.0193	.0006	.1636	.0753
16	11	.750	2.14	2.14	45.00	.087	.0892	.0183	.111	.0276	.0004	.1686	.0794
16	12	.750	2.87	2.86	45.00	.134	.0894	.0261	.151	.0353	.0003	.1725	.0831
16	13	.750	.00	.00	45.00	.013	.0864	.0022	.010	.0030	.0000	.1589	.0725
18	2	1.100	4.10	.01	.00	.340	.2210	.0410	.023	.0016	.0002	.3929	.1719
18	3	1.100	3.08	.00	.00	.239	.2224	.0360	.016	.0001	.0002	.3919	.1695
18	4	1.100	2.05	.01	.00	.151	.2238	.0240	.024	.0001	.0003	.3902	.1664
18	5	1.100	1.03	.00	.00	.075	.2257	.0130	.020	.0002	.0001	.3899	.1642
18	6	1.100	.00	.01	.00	.000	.2242	.0000	.022	.0004	.0004	.3872	.1630
18	7	1.100	1.02	.00	.00	.075	.2243	.0109	.019	.0011	.0000	.3881	.1638
18	8	1.100	2.05	.01	.00	.139	.2231	.0229	.021	.0012	.0000	.3903	.1672
18	9	1.100	3.07	.01	.00	.22	.2244	.0329	.024	.0020	.0000	.3945	.1701
18	10	1.100	4.10	.01	.00	.332	.2250	.0408	.023	.0019	.0001	.3964	.1714
18	11	1.100	6.15	.01	.00	.559	.2337	.0519	.025	.0031	.0000	.4104	.1767
18	12	1.100	8.21	.01	.00	.841	.2408	.0560	.019	.0022	.0003	.4246	.1838
18	13	1.100	12.36	.01	.00	1.627	.2297	.0365	.019	.0048	.0006	.4386	.2089
18	14	1.100	16.51	.01	.00	2.545	.2115	.0013	.024	.0048	.0004	.4424	.2309

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_ℓ	C_{A_u}	ΔC_A
18	15	1.100	20.19-	.01-	.00	3.507	.1950-	.0241-	.022-	.0040-	.0005	.4475-	.2525
18	16	1.100	.00-	.01-	.00	.000	.2252-	.0001-	.019-	.0011-	.0001	.3902-	.1650
19	3	.950	4.08	.00	.00-	.317	.0906-	.0404-	.012-	.0036	.0000	.1845-	.0939
19	4	.950	3.06	.00	.00-	.201	.0948-	.0322-	.011-	.0035	.0000	.1853-	.0905
19	5	.950	2.04-	.01	.00-	.139	.0940-	.0218-	.021-	.0031	.0006	.1835-	.0895
19	6	.950	1.02	.00	.00-	.076	.0958-	.0115-	.013-	.0036	.0001	.1828-	.0870
19	7	.950	.00	.00	.00-	.002	.0966	.0000-	.009-	.0044	.0001	.1826-	.0860
19	8	.950	1.02	.00	.00	.047	.0968	.0115-	.012-	.0046	.0002	.1843-	.0875
19	9	.950	2.04	.00	.00	.146	.0970	.0254-	.011-	.0045	.0002	.1873-	.0903
19	10	.950	3.06-	.01	.00	.207	.0993	.0334-	.014-	.0048	.0002	.1888-	.0895
19	11	.950	4.08-	.01	.00	.293	.0968	.0439-	.020-	.0041	.0008	.1905-	.0937
19	12	.950	6.12-	.01	.00	.518	.1007	.0507-	.015-	.0049	.0001	.1974-	.0967
19	13	.950	8.17-	.01	.00	.794	.1061	.0532-	.021-	.0042	.0005	.2098-	.1037
19	14	.950	12.29-	.01	.00	1.540	.0929	.0364-	.017-	.0043	.0005	.2147-	.1218
19	15	.950	16.44-	.01	.00	2.525	.0661-	.0043-	.016-	.0055	.0003	.2065-	.1404
19	16	.950	20.09	.00	.00	3.468	.0435-	.0300-	.011-	.0050	.0003	.1962-	.1527
19	17	.950	.00	.00	.00	.011	.0948	.0012-	.009-	.0046	.0002	.1818-	.0870
20	1	.950	2.89-	2.88	45.00-	.206	.0947-	.0335	.197	.0315	.0004	.1892-	.0945
20	2	.950	2.17-	2.16	45.00-	.158	.0933-	.0267	.132	.0230	.0003	.1850-	.0917
20	3	.950	1.44-	1.44	45.00-	.098	.0949-	.0187	.089	.0139	.0003	.1828-	.0879
20	4	.950	.72-	.72	45.00-	.038	.0929-	.0085	.042	.0057-	.0002	.1800-	.0871
20	5	.950	.00-	.00	45.00-	.017	.0923-	.0016	.003-	.0037-	.0003	.1800-	.0877
20	6	.950	.72	.72	45.00	.030	.0948	.0053-	.043-	.0126	.0002	.1831-	.0883
20	7	.950	1.44	1.44	45.00	.063	.0950	.0157-	.086-	.0217	.0001	.1864-	.0914
20	8	.950	2.16	2.16	45.00	.135	.0985	.0249-	.134-	.0290	.0006	.1927-	.0942
20	9	.950	2.89	2.88	45.00	.169	.0986	.0328-	.190-	.0369-	.0000	.1958-	.0972
20	10	.950	.01	.01	45.00-	.030	.0942-	.0027	.003-	.0037	.0002	.1817-	.0875
21	3	.750	4.06	.00	.00-	.311	.0880-	.0374-	.009-	.0034	.0006	.1697-	.0817
21	4	.750	3.04	.00	.00-	.190	.0872-	.0297-	.014-	.0046	.0006	.1671-	.0799
21	5	.750	2.03	.00-	.00-	.137	.0904-	.0219-	.013-	.0037-	.0001	.1679-	.0775
21	6	.750	1.01	.00	.00-	.069	.0878-	.0125-	.017-	.0040	.0006	.1656-	.0778
21	7	.750	.00	.00	.00	.015	.0897	.0016-	.011-	.0035	.0006	.1652-	.0755
21	8	.750	1.01	.00	.00	.066	.0895	.0095-	.005-	.0038	.0006	.1661-	.0766
21	9	.750	2.02	.00	.00	.098	.0927	.0188-	.015-	.0037	.0006	.1694-	.0767
21	10	.750	3.05	.00	.00	.233	.0885	.0346-	.009-	.0040	.0006	.1684-	.0799

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
21	11	.750	4.06	.00	.00	.283	.0876	.0393-	.018-	.0040	.0006	.1694-	.0818
21	12	.750	6.09	.00	.00	.504	.0877	.0473-	.017-	.0039	.0004	.1728-	.0851
21	13	.750	8.12-	.01	.00	.757	.0899	.0490-	.025-	.0039	.0009	.1812-	.0913
21	14	.750	12.21-	.01	.00	1.477	.0724	.0339-	.027-	.0052	.0003	.1832-	.1108
21	15	.750	16.30	.00	.00	2.331	.0410-	.0059-	.013-	.0054	.0009	.1712-	.1302
21	16	.750	19.89	.00	.00	3.257	.0165-	.0521-	.013-	.0053	.0008	.1569-	.1404
21	17	.750	.00	.00-	.00-	.001	.0858-	.0000-	.011-	.0043-	.0001	.1630-	.0772
23	2	.950	- 4.06	.00	.00-	.368	.1374	.0098-	.010-	.0025	.0001	.2734-	.1360
23	3	.950	- 3.04	.00-	.00-	.262	.1335	.0049-	.017-	.0026-	.0005	.2697-	.1362
23	4	.950	- 2.02	.00-	.00-	.144	.1359	.0014-	.006-	.0029-	.0001	.2692-	.1333
23	5	.950	- 1.01-	.01-	.00-	.066	.1356-	.0011-	.028-	.0042-	.0002	.2674-	.1318
23	6	.950	.00	.00-	.00	.012	.1350	.0011-	.008-	.0025-	.0002	.2669-	.1319
23	7	.950	1.01	.00-	.00	.064	.1368	.0010-	.015-	.0032-	.0003	.2690-	.1322
23	8	.950	2.02	.00-	.00	.154	.1373-	.0025-	.011-	.0029-	.0005	.2709-	.1336
23	9	.950	3.05-	.01-	.00	.283	.1369-	.0049-	.022-	.0039-	.0000	.2721-	.1352
23	10	.950	4.06-	.01-	.00	.398	.1406-	.0107-	.018-	.0042-	.0002	.2775-	.1369
23	11	.950	6.09	.00-	.00	.673	.1409-	.0421-	.010-	.0044-	.0002	.2843-	.1434
23	12	.950	8.12	.00-	.00	1.055	.1394-	.0965-	.016-	.0030-	.0000	.2988-	.1594
23	13	.950	12.17-	.01-	.00	2.007	.1363-	.2544-	.022-	.0024-	.0006	.3321-	.1958
23	14	.950	16.24	.00-	.00	3.188	.1226-	.4552-	.007-	.0040-	.0000	.3399-	.2173
23	15	.950	19.82	.00-	.00	4.381	.0869-	.6437-	.003-	.0076-	.0007	.3193-	.2304
23	16	.950	.00-	.01-	.00	.025	.1394-	.0000-	.016-	.0038-	.0003	.2714-	.1320
24	2	.950	- .01-	4.06	90.00-	.031	.1301	.0002	.274	.0273-	.0001	.2716-	.1415
24	3	.950	.00-	3.05	90.00-	.005	.1346	.0022	.187	.0242-	.0002	.2701-	.1355
24	4	.950	.00-	2.03	90.00-	.018	.1363-	.0015	.121	.0187	.0001	.2684-	.1321
24	5	.950	- .01-	1.02	90.00-	.058	.1345-	.0029	.058	.0097-	.0005	.2650-	.1305
24	6	.950	- .01-	.00	90.00-	.022	.1353-	.0019	.004	.0007-	.0002	.2640-	.1287
24	7	.950	- .01	1.02	90.00-	.037	.1361-	.0032-	.058-	.0090-	.0004	.2662-	.1301
24	8	.950	.00	2.03	90.00-	.014	.1318-	.0011-	.116-	.0177-	.0005	.2661-	.1343
24	9	.950	.00	3.05	90.00-	.003	.1323-	.0001-	.184-	.0242-	.0001	.2695-	.1372
24	10	.950	- .01	4.06	90.00-	.053	.1324-	.0028-	.272-	.0271	.0002	.2732-	.1408
24	11	.950	- .01-	.00	90.00-	.022	.1359-	.0019-	.000	.0003-	.0002	.2635-	.1276
26	2	1.100	- 4.06	.00-	.00-	.543	.3521	.0579-	.020	.0020-	.0002	.5974-	.2453
26	3	1.100	- 3.04	.00-	.00-	.372	.3535	.0388-	.023	.0016-	.0005	.5971-	.2436
26	4	1.100	- 2.03	.00-	.00-	.246	.3553	.0219-	.023	.0020-	.0003	.5969-	.2416

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
26	5	1.100	1.01-	.00-	.00-	.111	.3536	.0099-	.019	.0016-	.0004	.5924-	.2388
26	6	1.100	.00	.00-	.00	.001	.3552-	.0001-	.022	.0008-	.0006	.5927-	.2375
26	7	1.100	1.01	.00	.00	.114	.3568-	.0120-	.018	.0015	.0001	.5936-	.2368
26	9	1.100	3.04-	.01	.00	.394	.3597-	.0428-	.034	.0009	.0000	.6003-	.2406
26	10	1.100	4.06-	.01-	.00	.564	.3613-	.0657-	.030	.0021-	.0003	.6057-	.2444
26	11	1.100	6.08-	.01	.00	.973	.3650-	.1407-	.033	.0012	.0000	.6104-	.2454
26	12	1.100	8.10-	.01-	.00	1.475	.3709-	.2418-	.030	.0012-	.0004	.6234-	.2525
26	13	1.100	12.15-	.01-	.00	2.602	.3775-	.4701-	.039	.0012-	.0002	.6606-	.2831
26	14	1.100	16.21-	.01-	.00	3.973	.3829-	.7373-	.039	.0007-	.0004	.7063-	.3234
26	15	1.100	20.31-	.01-	.00	5.561	.3700-	1.0097-	.026-	.0010	.0001	.7082-	.3382
26	16	1.100	.00	.00-	.00-	.009	.3537	.0008-	.025	.0021-	.0006	.5933-	.2396
27	2	.950	4.05	.00	.00-	.542	.1961	.0572-	.016	.0016	.0003	.3482-	.1521
27	3	.950	3.04	.00	.00-	.393	.1974	.0394-	.023	.0008-	.0000	.3466-	.1492
27	4	.950	2.02	.00-	.00-	.235	.1971	.0232-	.019	.0011-	.0002	.3453-	.1482
27	5	.950	1.01	.00-	.00-	.130	.1986	.0115-	.015	.0007-	.0004	.3449-	.1463
27	6	.950	.00	.00-	.00-	.012	.1966	.0011-	.026	.0002-	.0001	.3436-	.1470
27	7	.950	1.01-	.01-	.00	.105	.2023-	.0094-	.029	.0005-	.0003	.3492-	.1469
27	8	.950	2.02	.00-	.00	.235	.2018-	.0231-	.010	.0007-	.0000	.3493-	.1475
27	9	.950	3.03	.00-	.00	.352	.2026-	.0381-	.021-	.0004-	.0003	.3517-	.1491
27	10	.950	4.05	.00-	.00	.534	.1992-	.0611-	.021-	.0005-	.0001	.3520-	.1528
27	11	.950	6.07	.00-	.00	.942	.2058-	.1377-	.024	.0004-	.0001	.3635-	.1577
27	12	.950	8.09	.00	.00	1.419	.2042-	.2320-	.031	.0015	.0002	.3749-	.1707
27	13	.950	12.13-	.01-	.00	2.579	.1887-	.4627-	.042	.0018-	.0001	.4016-	.2129
27	14	.950	16.18-	.01-	.00	3.976	.1947-	.7472-	.031	.0005-	.0001	.4451-	.2504
27	15	.950	20.24	.00-	.00	5.570	.1800-	1.0528-	.034	.0033-	.0006	.4655-	.2855
27	17	.950	.00	.00-	.00	.000	.2028-	.0000-	.004-	.0003-	.0001	.3492-	.1464
28	2	.950	2.87-	2.86	45.00-	.352	.2013	.0358	.364-	.0443-	.0001	.3538-	.1525
28	3	.950	2.14-	2.14	45.00-	.226	.2027	.0247	.267-	.0318	.0002	.3526-	.1499
28	4	.950	1.44-	1.44	45.00-	.165	.2014	.0125	.173-	.0220-	.0001	.3504-	.1490
28	5	.950	2.15-	2.15	45.00-	.263	.2042	.0235	.259-	.0317	.0002	.3537-	.1495
28	6	.950	.71-	.71	45.00-	.054	.2005	.0051	.080-	.0128	.0003	.3485-	.1480
28	7	.950	.00-	.00	45.00	.030	.1997-	.0046	.001-	.0056	.0005	.3480-	.1483
28	8	.950	.72	.72	45.00	.127	.1976-	.0132-	.085	.0023	.0003	.3473-	.1497
28	9	.950	1.43	1.44	45.00	.186	.1993-	.0230-	.174	.0110	.0001	.3499-	.1506
28	10	.950	2.15	2.15	45.00	.283	.2025-	.0315-	.262	.0216	.0003	.3541-	.1516
28	11	.950	2.87	2.87	45.00	.396	.2032-	.0438-	.378	.0359	.0000	.3588-	.1556
28	12	.950	.00-	.00	45.00	.030	.1979-	.0046	.005-	.0059	.0000	.3473-	.1494

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
29	1	.750	4.03	.00	.00	.431	.1673	.0414-	.021	.0011	.0001	.2924-	.1251
29	2	.750	3.02	.00	.00	.304	.1718	.0270-	.021	.0010-	.0001	.2933-	.1215
29	3	.750	2.01	.00	.00	.161	.1688	.0144-	.016	.0005	.0004	.2914-	.1226
29	4	.750	1.00	.00	.00	.054	.1700	.0048-	.015	.0005	.0002	.2917-	.1217
29	5	.750	.00	.00	.00	.054	.1735	.0048-	.015	.0012-	.0000	.2921-	.1186
29	6	.750	1.01	.00	.00	.160	.1743	.0142-	.014	.0003	.0004	.2951-	.1208
29	7	.750	2.02	.00	.00	.301	.1725	.0268-	.009	.0002	.0002	.2927-	.1202
29	8	.750	3.03	.00	.00	.407	.1721	.0394-	.019	.0004-	.0001	.2933-	.1212
29	9	.750	4.04	.00	.00	.548	.1725	.0551-	.014	.0009	.0004	.2969-	.1244
29	10	.750	6.06	.00	.00	.909	.1703	.1181-	.028	.0015	.0001	.2972-	.1269
29	11	.750	8.07	.00	.00	1.356	.1710	.1981-	.028	.0009	.0004	.3087-	.1377
29	12	.750	12.11	.00	.00	2.425	.1544	.4011-	.027	.0010-	.0002	.3185-	.1641
29	13	.750	16.15	.00	.00	3.735	.1455	.6541-	.031	.0028-	.0005	.3284-	.1829
29	14	.750	20.20	.00	.00	5.237	.1215	.9324-	.031	.0022-	.0004	.3298-	.2083
29	15	.750	.00	.00	.00	.035	.1662	.0031-	.015	.0005	.0007	.2879-	.1217
32	2	1.100	3.98	.00	.01	.954	.7156	.2692-	.046	.0108-	.0039	1.0649-	.3493
32	3	1.100	2.99	.00	.01	.679	.7220	.1879-	.034	.0102-	.0039	1.0725-	.3505
32	4	1.100	1.99	.00	.00	.441	.7269	.1194-	.038	.0099-	.0033	1.0755-	.3486
32	5	1.100	1.00	.00	.00	.203	.7304	.0534-	.041	.0113-	.0032	1.0787-	.3483
32	6	1.100	.00	.00	.00	.008	.7321	.0045-	.042	.0103-	.0029	1.0823-	.3502
32	7	1.100	.99	.00	.00	.232	.7339	.0674-	.036	.0098-	.0028	1.0840-	.3501
32	8	1.100	1.99	.00	.00	.467	.7306	.1312-	.043	.0098-	.0031	1.0806-	.3500
32	9	1.100	2.98	.00	.00	.7[illegible]	.7273	.2029-	.044	.0092-	.0031	1.0768-	.3495
32	10	1.100	[illegible]	.00	.00	1.009	.7243	.2867-	.048	.0093-	.0027	1.0727-	.3484
32	11	1.100	[illegible]6	.00	.00	1.643	.7185	.4638-	.052	.0114-	.0029	1.0535-	.3350
32	12	1.100	[illegible]95	.00	.00	2.263	.7133	.6358-	.056	.0136-	.0026	1.0440-	.3307
32	13	1.100	11.96	.00	.00	3.581	.7088	.9500-	.055	.0119-	.0023	1.0602-	.3514
32	14	1.100	16.01	.00	.00	5.032	.6997	1.2500-	.049	.0089-	.0013	1.0710-	.3713
32	15	1.100	.00	.00	.00	.007	.7328	.0006-	.042	.0092-	.0034	1.0824-	.3496
33	2	.950	3.97	.00	.01	.967	.5991	.2919-	.046	.0118-	.0052	.7903-	.2012
33	3	.950	2.98	.00	.01	.691	.5848	.2038-	.036	.0108-	.0046	.7856-	.2008
33	4	.950	1.99	.00	.01	.468	.5864	.1252-	.040	.0110-	.0044	.7852-	.1988
33	5	.950	1.00	.00	.00	.224	.5811	.0629-	.041	.0112-	.0035	.7823-	.2012
33	6	.950	.00	.00	.00	.004	.5835	.0040-	.037	.0116-	.0033	.7837-	.2002
33	7	.950	.99	.00	.00	.241	.5844	.0709-	.045	.0116-	.0030	.7844-	.2000
33	8	.950	1.99	.00	.00	.485	.5843	.1377-	.042	.0108-	.0028	.7846-	.2003
33	9	.950	2.98	.00	.00	.718	.5891	.2149-	.043	.0108-	.0032	.7894-	.2003

UNCLASSIFIED

TABLE IIIa
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_ℓ	C_{A_u}	ΔC_A
33	10	.950	3.96	.00-	.00	1.033	.5943-	.3149-	.044	.0113-	.0039	.7972-	.2029
33	11	.950	5.95	.00-	.00	1.656	.5859-	.4851-	.049	.0127-	.0029	.8011-	.2152
33	12	.950	7.94	.00-	.00	2.279	.5786-	.6623-	.050	.0138-	.0029	.8066-	.2280
33	13	.950	11.95	.00-	.00	3.671	.5753-	.9983-	.052	.0143-	.0023	.8437-	.2684
33	14	.950	16.00	.00-	.00	4.998	.5460-	1.2536-	.052	.0116-	.0019	.8617-	.3157
33	15	.950	.00	.00-	.00	.021	.5790	.0006-	.041	.0119-	.0032	.7820-	.2030
34	2	.950	- 2.82-	2.83	45.00-	.718	.5851	.2087	.648-	.1911-	.0038	.7934-	.2083
34	3	.950	- 2.11-	2.12	45.00-	.526	.5858	.1562	.474-	.1386-	.0034	.7910-	.2052
34	4	.950	- 1.41-	1.42	45.00-	.360	.5819	.1017	.296-	.0867-	.0030	.7859-	.2040
34	5	.950	- .71-	.71	45.00-	.185	.5875	.0529	.132-	.0384-	.0021	.7889-	.2014
34	6	.950	- .01	.01	45.00-	.061	.5861	.0066-	.032	.0079-	.0027	.7889-	.2028
34	7	.950	.70	.71	45.00	.112	.5832-	.0373-	.184	.0545-	.0028	.7869-	.2037
34	8	.950	1.40	1.41	45.00	.275	.5869-	.0869-	.353	.1044-	.0019	.7911-	.2042
34	9	.950	2.12	2.13	45.00	.476	.5781-	.1287-	.525	.1555-	.0024	.7865-	.2084
34	10	.950	2.82	2.83	45.00	.670	.5753-	.1855-	.717	.2143-	.0021	.7860-	.2107
34	11	.950	.00-	.00	45.00-	.038	.5854	.0136-	.028	.0064-	.0021	.7884-	.2030
35	1	.750	- 3.98	.00-	.00-	1.023	.3385	.2984-	.066	.0221-	.0023	.4792-	.1407
35	2	.750	- 2.97	.00-	.00-	.840	.3392	.2668-	.055	.0220-	.0034	.4766-	.1374
35	3	.750	- 1.97	.00-	.00-	.583	.3400	.1954-	.056	.0206-	.0036	.4776-	.1376
35	4	.750	- .98	.00-	.00-	.250	.3497	.0986-	.062	.0210-	.0040	.4883-	.1386
35	5	.750	.00	.00-	.00	.015	.3599-	.0070-	.068	.0231-	.0038	.4976-	.1377
35	6	.750	.98	.00-	.00	.313	.3529-	.1158-	.070	.0206-	.0037	.4908-	.1379
35	7	.750	1.97	.00-	.00	.625	.3451-	.2071-	.061	.0207-	.0034	.4807-	.1356
35	8	.750	2.98	.00-	.00	.877	.3437-	.2661-	.052	.0185-	.0020	.4808-	.1371
35	9	.750	3.98	.00-	.00	1.058	.3397-	.3065-	.061	.0216-	.0019	.4798-	.1401
35	10	.750	5.98	.00-	.00	1.584	.3230-	.4415-	.072	.0222-	.0021	.4676-	.1446
35	11	.750	7.98	.00-	.00	2.111	.3210-	.5619-	.085	.0293-	.0016	.4783-	.1573
35	12	.750	12.02	.00	.00	3.127	.3610-	.7427-	.094	.0286	.0006	.5406-	.1796
35	13	.750	16.05	.00-	.00	4.523	.3740-	1.0360-	.081	.0262-	.0032	.5832-	.2092
35	14	.750	20.09	.00-	.00	6.102	.3636-	1.3636-	.054	.0170-	.0045	.6083-	.2447
35	15	.750	.00	.00-	.00	.014	.3585-	.0039-	.058	.0232-	.0038	.4976-	.1391
37	2	1.100	- 4.03	.00-	.00-	.843	.4749	.1726-	.051	.0112-	.0001	.7339-	.2590
37	3	1.100	- 3.02	.00-	.00-	.610	.4757	.1284-	.045	.0104-	.0006	.7339-	.2582
37	4	1.100	- 2.01	.00-	.00-	.401	.4801	.0825-	.048	.0097-	.0003	.7385-	.2584
37	5	1.100	- 1.01	.00-	.00-	.192	.4814	.0386-	.042	.0083-	.0004	.7368-	.2554

UNCLASSIFIED

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
37	6	1.100	.00	.00-	.00	.006	.4829-	.0042-	.042	.0085-	.0004	.7375-	.2546
37	7	1.100	1.01	.00-	.00	.225	.4829-	.0470-	.045	.0084-	.0000	.7379-	.2550
37	8	1.100	2.02	.00-	.00	.455	.4823-	.0927-	.042	.0078-	.0002	.7384-	.2561
37	9	1.100	3.02	.00-	.00	.663	.4780-	.1365-	.042	.0075-	.0003	.7351-	.2571
37	10	1.100	4.03-	.01-	.00	.893	.4811-	.1861-	.052	.0079	.0000	.7396-	.2585
37	11	1.100	6.05	.00	.00	1.364	.4814-	.2823-	.046	.0082	.0001	.7434-	.2620
37	12	1.100	8.07-	.01-	.00	1.868	.4853-	.3777-	.055	.0094-	.0002	.7523-	.2670
37	13	1.100	12.14	.00	.00	2.971	.4790-	.5768-	.051	.0092	.0003	.7825-	.3035
37	14	1.100	16.22-	.01	.00	4.182	.4865-	.7817-	.056	.0097	.0003	.8267-	.3402
37	15	1.100	20.34	.00-	.00	5.554	.4773-	.9788-	.050	.0112-	.0003	.8476-	.3703
37	16	1.100	.00	.00-	.00	.016	.4795-	.0032-	.036	.0080-	.0004	.7398-	.2603
38	2	.950	4.03	.00-	.00-	.814	.2919	.1602-	.039	.0083-	.0002	.4495-	.1576
38	3	.950	3.02	.00-	.00-	.598	.2950	.1184-	.039	.0074-	.0007	.4497-	.1547
38	4	.950	2.01	.00-	.00-	.383	.2985	.0746-	.039	.0058-	.0007	.4526-	.1541
38	5	.950	1.01	.00-	.00-	.183	.2999	.0366-	.039	.0061-	.0007	.4518-	.1519
38	6	.950	.00	.00-	.00	.016	.2982-	.0013-	.035	.0055-	.0001	.4517-	.1535
38	7	.950	1.01	.00-	.00	.230	.2991-	.0427-	.039	.0055-	.0001	.4522-	.1531
38	8	.950	2.02	.00-	.00	.429	.3005-	.0851-	.035	.0049-	.0001	.4524-	.1519
38	9	.950	3.02-	.01-	.00	.628	.2973-	.1253-	.039	.0042-	.0001	.4519-	.1546
38	10	.950	4.03	.00-	.00	.841	.2953-	.1689-	.039	.0045-	.0002	.4512-	.1559
38	11	.950	6.05	.00-	.00	1.332	.2912-	.2642-	.042	.0060-	.0004	.4556-	.1644
38	12	.950	8.07-	.01-	.00	1.828	.2843-	.3596-	.042	.0046-	.0001	.4656-	.1813
38	13	.950	12.13	.00	.00	2.900	.2587-	.5445-	.041	.0057	.0001	.4772-	.2185
38	14	.950	16.21-	.01	.00	4.128	.2560-	.7419-	.054	.0072	.0007	.4933-	.2373
38	15	.950	20.30	.00-	.00	5.493	.2403-	.9579-	.045	.0088-	.0004	.5131-	.2728
38	16	.950	.00	.00-	.00	.016	.2962-	.0013-	.032	.0046-	.0006	.4511-	.1549
39	2	.950	2.85-	2.86	45.00-	.619	.3007	.1263	.586-	.1212	.0007	.4567-	.1560
39	3	.950	2.14-	2.15	45.00-	.439	.3006	.0929	.430-	.0877-	.0003	.4556-	.1550
39	4	.950	1.43-	1.43	45.00-	.312	.3065	.0595	.270-	.0551-	.0003	.4585-	.1520
39	5	.950	.71-	.71	45.00-	.174	.3043	.0275	.120-	.0260-	.0002	.4566-	.1523
39	6	.950	.01	.01	45.00-	.039	.3102	.0024-	.022	.0025-	.0001	.4593-	.1491
39	7	.950	.71	.71	45.00	.149	.3060-	.0250-	.160	.0313-	.0006	.4581-	.1521
39	8	.950	1.43	1.43	45.00	.310	.3093-	.0546-	.304	.0605-	.0005	.4582-	.1489
39	9	.950	2.14	2.15	45.00	.435	.3044-	.0853-	.455	.0928-	.0005	.4570-	.1526
39	10	.950	2.85	2.86	45.00	.614	.3033-	.1210-	.621	.1273-	.0005	.4570-	.1537
39	11	.950	.00-	.00	45.00-	.014	.3081	.0024-	.015	.0019-	.0001	.4577-	.1494

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
40	1	.750	4.02	.00	.00	.740	.24[illegible]	.1420-	.043	.0090	.0001	.3701-	.1248
40	2	.750	3.01	.00	.00	.521	.2537	.1012-	.033	.0078-	.0004	.3757-	.1220
40	3	.750	2.01	.00	.00	.323	.2542	.0654-	.038	.0072-	.0009	.3777-	.1235
40	4	.750	1.01	.00	.00	.158	.2615	.0294-	.028	.0069-	.0007	.3814-	.1199
40	5	.750	.00	.00	.00	.021	.2597-	.0048-	.028	.0058	.0002	.3799-	.1202
40	6	.750	1.01	.00	.00	.236	.2611-	.0360-	.028	.0056-	.0002	.3803-	.1192
40	7	.750	2.01	.00	.00	.417	.2601-	.0766-	.033	.0057-	.0001	.3796-	.1195
40	8	.750	3.02	.00	.00	.614	.2575-	.1123-	.033	.0063-	.0006	.3772-	.1197
40	9	.750	4.03	.00	.00	.811	.2521-	.1482-	.033	.0052-	.0004	.3760-	.1239
40	10	.750	6.04	.00	.00	1.223	.2469-	.2277-	.038	.0050-	.0007	.3736-	.1267
40	11	.750	8.06	.00	.00	1.670	.2362-	.3012-	.047	.0070	.0003	.3756-	.1394
40	12	.750	12.11	.00	.00	2.578	.2208-	.4428-	.045	.0085-	.0003	.3873-	.1665
40	13	.750	16.17	.00	.00	3.609	.2094-	.5747-	.057	.0114-	.0001	.4031-	.1937
40	14	.750	20.26	.00	.00	4.676	.1955-	.6794-	.053	.0124-	.0003	.4009-	.2054
40	15	.750	.00	.00	.00	.039	.2610-	.0033-	.033	.0054-	.0004	.3799-	.1189
41	3	.950	4.00	.00	.00	.775	.5796	.1915-	.017	.0019-	.0027	.8062-	.2266
41	4	.950	3.00	.00	.00	.542	.5835	.1321-	.014	.0011-	.0023	.8060-	.2225
41	5	.950	2.00	.00	.00	.338	.5818	.0822-	.018	.0016-	.0023	.8035-	.2217
41	6	.950	1.00	.00	.00	.174	.5823	.0381-	.015	.0009-	.0018	.8025-	.2202
41	7	.950	.00	.00	.00	.002	.5878-	.0025-	.015	.0012-	.0013	.8064-	.2186
41	8	.950	.99	.00	.00	.168	.5864-	.0513-	.019	.0011-	.0019	.8061-	.2197
41	9	.950	1.99	.00	.00	.356	.5909-	.0975-	.015	.0011-	.0014	.8086-	.2177
41	10	.950	2.99	.00	.00	.534	.5902-	.1473-	.019	.0010-	.0021	.8108-	.2206
41	11	.950	3.99	.00	.00	.766	.5857-	.2110-	.016	.0014-	.0023	.8102-	.2245
41	12	.950	5.98	.00	.00	1.281	.5866-	.3541-	.028	.0031-	.0020	.8240-	.2374
41	13	.950	7.98	.00	.00	1.805	.5737-	.4886-	.029	.0038-	.0016	.8282-	.2545
41	14	.950	12.00	.00	.00	2.970	.5487-	.7559-	.029	.0048-	.0018	.8466-	.2979
41	15	.950	16.05	.00	.00	4.252	.5249-1	.0064-	.026	.0025-	.0012	.8588-	.3339
41	16	.950	20.17	.00	.00	5.373	.4653-1	.1164-	.006-	.0030-	.0025	.8272-	.3619
41	17	.950	.00	.00	.00	.003	.5869-	.0026-	.011	.0016-	.0018	.8067-	.2198
42	2	.950	.00	4.04	90.00	-.022	.5748	.0062	.512-	.0912-	.0010	.7965-	.2217
42	3	.950	.00	3.03	90.00	-.034	.5790	.0075	.367-	.0648-	.0012	.8016-	.2226
42	4	.950	.01	2.02	90.00	-.060	.5868	.0055	.250-	.0439-	.0014	.8050-	.2182
42	5	.950	.00	1.01	90.00	-.037	.5869	.0081	.133-	.0243-	.0015	.8060-	.2191
42	6	.950	.01	.00	90.00	-.089	.5858	.0039	.017-	.0049-	.0017	.8053-	.2195
42	7	.950	.01	1.01	90.00	-.066	.5887	.0065-	.091	.0159-	.0018	.8094-	.2207
42	8	.950	.00	2.02	90.00	-.042	.5889	.0069-	.214	.0353-	.0014	.8099-	.2210

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_ℓ	C_{A_u}	ΔC_A
42	9	.950	.00	3.03	90.00-	.029	.5829	.0082-	.338	.0581-	.0020	.8048-	.2219
42	10	.950	.00	4.03	90.00-	.016	.5743	.0096-	.477	.0834-	.0021	.7981-	.2238
42	11	.950	.01-	.00	90.00-	.051	.5861	.0050	.020-	.0052-	.0017	.8070-	.2209
43	3	.950	4.04	.00	.00-	.576	.2274	.0830-	.020	.0009	.0004	.3709-	.1435
43	4	.950	3.03	.00	.00-	.402	.2316	.0585-	.012	.0001	.0006	.3722-	.1406
43	5	.950	2.02	.00	.00-	.254	.2339	.0385-	.012-	.0001	.0003	.3722-	.1383
43	6	.950	1.01	.00	.00-	.120	.2369	.0175-	.019-	.0003	.0000	.3738-	.1369
43	7	.950	.00	.00	.00	.026	.2351-	.0023-	.015-	.0007	.0003	.3720-	.1369
43	8	.950	1.01	.00-	.00	.172	.2373-	.0222-	.007-	.0008-	.0000	.3746-	.1373
43	9	.950	2.02	.00-	.00	.306	.2374-	.0454-	.011-	.0007-	.0004	.3749-	.1375
43	10	.950	3.03	.00	.00	.464	.2382-	.0685-	.014-	.0012	.0003	.3768-	.1386
43	11	.950	4.05	.00	.00	.635	.2347-	.0883-	.014-	.0014	.0000	.3771-	.1424
43	12	.950	.00	.00	.00	.026	.2362-	.0023-	.011-	.0010	.0003	.3731-	.1369
44	2	.950	.01-	4.06	90.00-	.039	.2235-	.0026	.481-	.0434-	.0000	.3695-	.1460
44	3	.950	.01-	3.04	90.00-	.044	.2266-	.0045	.347-	.0335-	.0002	.3695-	.1429
44	4	.950	.01-	2.03	90.00-	.026	.2297-	.0039	.241-	.0252	.0001	.3712-	.1415
44	5	.950	.01-	1.01	90.00-	.033	.2300-	.0033	.139-	.0173	.0005	.3714-	.1414
44	6	.950	.00-	.00	90.00-	.001	.2300-	.0039	.027-	.0091-	.0002	.3705-	.1405
44	7	.950	.01	1.01	90.00-	.046	.2300-	.0069-	.079-	.0015-	.0004	.3711-	.1411
44	8	.950	.01	2.03	90.00-	.015	.2290-	.0051-	.186	.0070	.0000	.3701-	.1411
44	9	.950	.01	3.04	90.00-	.034	.2297-	.0058-	.305	.0158-	.0002	.3722-	.1425
44	10	.950	.00	4.05	90.00-	.015	.2280-	.0029-	.415	.0252-	.0003	.3731-	.1451
44	11	.950	.01-	.00	90.00-	.027	.2319-	.0016	.030-	.0093-	.0002	.3721-	.1402
44	12	.950	.01-	.00	90.00-	.027	.2304-	.0039	.030-	.0093-	.0002	.3719-	.1415
45	3	.950	3.99	.00	.00-	.812	.2165	.2206-	.016	.0027	.0008	.3712-	.1547
45	4	.950	2.99	.00	.00-	.603	.2230	.1606-	.017	.0022	.0006	.3770-	.1540
45	5	.950	1.99	.00	.00-	.384	.2244	.1048-	.021	.0020	.0010	.3778-	.1534
45	6	.950	1.00	.00	.00-	.179	.2233	.0477-	.018	.0013	.0003	.3773-	.1540
45	7	.950	.00	.00	.00	.028	.2211-	.0069-	.015	.0011	.0008	.3740-	.1529
45	8	.950	1.00	.00	.00	.246	.2266-	.0628-	.022	.0013	.0006	.3781-	.1515
45	9	.950	2.00	.00	.00	.465	.2252-	.1187-	.019	.0005	.0004	.3772-	.1520
45	10	.950	2.99	.00	.00	.656	.2272-	.1765-	.012	.0007	.0007	.3773-	.1501
45	11	.950	4.00	.00	.00	.912	.2240-	.2357-	.017-	.0001	.0005	.3758-	.1518
45	12	.950	5.99	.00	.00	1.372	.2197-	.3582-	.021-	.0002	.0006	.3758-	.1541
45	14	.950	.00	.00	.00	.014	.2265-	.0035-	.022	.0018	.0008	.3786-	.1521

TABLE IIIa
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
46	1	.950	.00-	4.04	90.00-	.028	.2243	.0113	.569-	.0967	.0005	.3799-	.1556
46	2	.950	.00-	3.03	90.00-	.028	.2271	.0115	.416-	.0729	.0009	.3800-	.1529
46	3	.950	.00-	2.02	90.00-	.053	.2319	.0093	.281-	.0498	.0002	.3819-	.1500
46	4	.950	.00-	1.01	90.00-	.040	.2302	.0108	.144-	.0266	.0006	.3802-	.1500
46	5	.950	.00-	.00	90.00-	.053	.2301	.0098	.017-	.0042-	.0001	.3784-	.1483
46	7	.950	.00	1.01	90.00-	.040	.2275	.0090-	.116	.0186	.0003	.3801-	.1526
46	8	.950	.00	2.02	90.00-	.028	.2290	.0104-	.245	.0419	.0002	.3820-	.1530
46	9	.950	.00	3.03	90.00-	.053	.2257	.0106-	.385	.0654	.0000	.3804-	.1547
46	10	.950 -	.01	4.04	90.00-	.078	.2189	.0084-	.529	.0892-	.0001	.3771-	.1582
46	11	.950	.00-	.00	90.00-	.041	.2324	.0110	.021-	.0052-	.0001	.3819-	.1495
48	2	1.100 -	3.94	.00-	.00-	1.164	.4689	.3705-	.061	.0191-	.0003	.7252-	.2563
48	3	1.100 -	2.95	.00-	.00-	.832	.4702	.2747-	.064	.0202-	.0004	.7261-	.2559
48	4	1.100 -	1.97	.00-	.00-	.547	.4724	.1792-	.065	.0188-	.0001	.7285-	.2561
48	5	1.100 -	.98	.00	.00-	.240	.4770	.0821-	.057	.0183	.0001	.7351-	.2581
48	6	1.100	.00	.00-	.00	.045	.4767-	.0093-	.067	.0194-	.0004	.7347-	.2580
48	7	1.100	.99	.00-	.00	.363	.4762-	.1093-	.065	.0194-	.0002	.7335-	.2573
48	8	1.100	1.96	.00-	.00	.660	.4785-	.2133-	.067	.0185-	.0001	.7356-	.2571
48	9	1.100	2.95	.00-	.00	.974	.4778-	.3031-	.061	.0173-	.0003	.7325-	.2547
48	10	1.100	3.94	.00-	.00	1.282	.4794-	.3987-	.066	.0173-	.0000	.7322-	.2528
48	11	1.100	4.93	.00-	.00	1.608	.4790-	.4879-	.060	.0166-	.0002	.7320-	.2530
48	12	1.100	5.92	.00	.00	1.888	.4775-	.5727-	.067	.0180	.0001	.7305-	.2530
48	13	1.100	7.91	.00-	.00	2.493	.4694-	.7356-	.072	.0159	.0001	.7325-	.2631
48	14	1.100	11.93	.00	.00	3.793	.4852-	1.0453-	.067	.0160	.0007	.7733-	.2881
48	15	1.100	.00	.00-	.00	.057	.4795-	.0103-	.063	.0213-	.0004	.7375-	.2580
49	2	1.100 -	2.78-	2.82	45.00-	.892	.4610	.2833	.830-	.2615	.0009	.7205-	.2595
49	3	1.100 -	2.09-	2.11	45.00-	.666	.4659	.2157	.608-	.1934	.0001	.7239-	.2580
49	4	1.100 -	1.39-	1.41	45.00-	.486	.4714	.1462	.394-	.1270	.0006	.7272-	.2558
49	5	1.100 -	.69-	.71	45.00-	.248	.4740	.0777	.171-	.0539	.0003	.7302-	.2562
49	6	1.100	.00-	.00	45.00-	.046	.4745	.0105-	.041	.0133	.0004	.7306-	.2561
49	7	1.100	.69	.71	45.00	.170	.4709-	.0599-	.261	.0844-	.0005	.7288-	.2579
49	8	1.100	1.39	1.41	45.00	.406	.4663-	.1300-	.475	.1533-	.0000	.7254-	.2591
49	9	1.100	2.09	2.11	45.00	.626	.4649-	.1940-	.699	.2221-	.0000	.7266-	.2617
49	10	1.100	2.79	2.81	45.00	.823	.4609-	.2583-	.903	.2874-	.0002	.7247-	.2638
49	11	1.100	4.20	4.23	45.00	1.270	.4536-	.3842-	1.327	.4123-	.0002	.7224-	.2688
49	12	1.100	.00-	.00	45.00-	.046	.4725	.0104-	.044	.0135	.0003	.7328-	.2603
50	2	.950 -	3.95	.00	.00-	1.156	.3518	.3604-	.055	.0158-	.0000	.5142-	.1624

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
50	3	.950	- 2.97	.00-	.00-	.863	.3552	.2641-	.056	.0176-	.0006	.5192-	.1640
50	4	.950	- 1.98	.00-	.00-	.585	.3593	.1732-	.057	.0161-	.0000	.5236-	.1643
50	5	.950	- .99	.00	.00-	.255	.3590	.0801-	.054	.0163-	.0000	.5240-	.1650
50	6	.950	.00	.00-	.00	.036	.3627-	.0096-	.055	.0156-	.0005	.5261-	.1634
50	7	.950	.99	.00-	.00	.340	.3628-	.1027-	.060	.0158-	.0005	.5247-	.1619
50	8	.950	1.97	.00-	.00	.629	.3614-	.1962-	.061	.0149-	.0001	.5223-	.1609
50	9	.950	2.96	.00-	.00	.920	.3581-	.2865-	.054	.0155-	.0006	.5201-	.1620
50	10	.950	3.96	.00-	.00	1.259	.3567-	.3817-	.059	.0150-	.0001	.5196-	.1629
50	11	.950	5.93	.00	.00	1.852	.3413-	.5708-	.064	.0169	.0003	.5086-	.1673
50	12	.950	7.92	.00-	.00	2.570	.3294-	.7661-	.059	.0141	.0001	.5112-	.1818
50	13	.950	11.90	.00	.00	3.980	.3464-	1.1483-	.061	.0159	.0011	.5646-	.2182
50	14	.950	15.92	.00	.00	5.410	.3412-	1.4757-	.052	.0142	.0013	.5936-	.2524
50	15	.950	.00	.00-	.00	.022	.3628-	.0038-	.051	.0159-	.0004	.5267-	.1639
51	1	.950	- 2.79-	2.82	45.00-	.876	.3500	.2733	.825-	.2595	.0005	.5156-	.1656
51	2	.950	- 2.10-	2.11	45.00-	.673	.3561	.2086	.603-	.1907	.0007	.5198-	.1637
51	3	.950	- 1.40-	1.41	45.00-	.459	.3591	.1412	.394-	.1242	.0004	.5229-	.1638
51	4	.950	- .70-	.70	45.00-	.258	.3624	.0767	.186-	.0586	.0002	.5258-	.1634
51	5	.950	.00-	.00	45.00-	.070	.3604	.0112-	.025	.0071-	.0001	.5241-	.1637
51	6	.950	.69	.71	45.00	.158	.3599-	.0555-	.235	.0735-	.0004	.5238-	.1639
51	7	.950	1.39	1.41	45.00	.356	.3534-	.1173-	.431	.1373-	.0001	.5192-	.1658
51	8	.950	2.09	2.12	45.00	.593	.3537-	.1839-	.644	.2033-	.0005	.5183-	.1646
51	9	.950	2.79	2.82	45.00	.806	.3481-	.2509-	.869	.2745-	.0003	.5157-	.1676
51	10	.950	4.20	4.23	45.00	1.239	.3282-	.3813-	1.295	.4042	.0004	.5041-	.1759
51	11	.950	5.61	5.64	45.00	1.685	.3008-	.5106-	1.733	.5370	.0007	.4835-	.1827
51	12	.950	.00-	.00	45.00-	.058	.3626	.0147-	.028	.0074	.0004	.5265-	.1639
54	2	.750	- 3.98	.00	.00-	1.020	.2805	.2971-	.049	.0130	.0009	.3998-	.1193
54	3	.750	- 2.99	.00	.00-	.776	.2956	.2201-	.040	.0115	.0006	.4120-	.1164
54	4	.750	- 1.99	.00	.00-	.497	.2976	.1459-	.040	.0117	.0012	.4147-	.1171
54	5	.750	- 1.00	.00	.00-	.236	.3037	.0673-	.037	.0098	.0009	.4185-	.1148
54	6	.750	.00	.00	.00	.024	.3044-	.0110-	.037	.0108	.0007	.4198-	.1154
54	7	.750	1.00	.00	.00	.301	.3059-	.0846-	.037	.0111	.0005	.4209-	.1144
54	8	.750	1.99	.00	.00	.566	.3025-	.1630-	.039	.0096	.0010	.4174-	.1149
54	9	.750	2.99	.00	.00	.820	.3019-	.2352-	.044	.0120	.0001	.4154-	.1135
54	10	.750	3.98	.00	.00	1.074	.2888-	.3066-	.035	.0088	.0011	.4026-	.1146
54	11	.750	5.98	.00	.00	1.628	.2656-	.4575-	.050	.0123	.0003	.3802-	.1146
54	12	.750	7.97	.00	.00	2.231	.2615-	.6218-	.052	.0126	.0011	.3843-	.1228
54	13	.750	11.97	.00	.00	3.628	.2507-	.9850-	.049	.0118	.0016	.3929-	.1422

TABLE IIIa
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_ℓ	C_{A_u}	ΔC_A
54	14	.750	15.98	.00	.00	5.099	.2305-	1.3244-	.055	.0119	.0010	.3965-	.1660
54	15	.750	20.03-	.01-	.01	6.470	.2008-	1.5732	.003-	.0137-	.0113	.3941-	.1933
54	16	.750	.00	.00	.00	.042	.3043-	.0126-	.042	.0112	.0007	.4195-	.1152
55	1	.750	- 2.82-	2.83	45.00-	.759	.2860	.2236	.737-	.2178	.0019	.4055-	.1195
55	2	.750	- 2.11-	2.12	45.00-	.597	.2964	.1702	.537-	.1621	.0012	.4102-	.1138
55	3	.750	- 1.41-	1.41	45.00-	.400	.2994	.1138	.347-	.1063	.0019	.4140-	.1146
55	4	.750	- .71-	.71	45.00-	.205	.3005	.0607	.168-	.0524	.0012	.4162-	.1157
55	5	.750	.00-	.00	45.00-	.046	.2999	.0077-	.021	.0022	.0019	.4157-	.1158
55	6	.750	.71	.71	45.00	.170	.2990-	.0502-	.208	.0594	.0004	.4145-	.1155
55	7	.750	1.41	1.41	45.00	.362	.2996-	.1000-	.382	.1120	.0004	.4162-	.1166
55	8	.750	2.12	2.13	45.00	.556	.2913-	.1558-	.568	.1672	.0011	.4094-	.1181
55	9	.750	2.82	2.83	45.00	.733	.2847-	.2075-	.762	.2217	.0011	.4043-	.1196
55	10	.750	4.23	4.25	45.00	1.093	.2620-	.3124-	1.129	.3291	.0016	.3853-	.1233
55	11	.750	5.65	5.65	45.00	1.489	.2212-	.4156-	1.509	.4301	.0013	.3484-	.1272
55	12	.750	8.53	8.48	45.00	2.309	.1873-	.6187-	2.274	.6284	.0004	.3228-	.1355
55	13	.750	.00-	.00	45.00-	.028	.3024	.0092-	.010	.0040	.0012	.4172-	.1148
57	3	1.100	- 4.06-	.01-	.00-	.501	.5767	.0542-	.030	.0017-	.0002	.8662-	.2895
57	4	1.100	- 3.04	.00	.00-	.364	.5756	.0382-	.023	.0015	.0000	.8674-	.2918
57	5	1.100	- 2.03	.00	.00-	.227	.5770	.0221-	.020	.0006	.0003	.8681-	.2911
57	6	1.100	- 1.01	.00	.00-	.112	.5766	.0100-	.019	.0005	.0001	.8655-	.2889
57	7	1.100	.00-	.01-	.00	.001	.5773-	.0001-	.022-	.0004-	.0001	.8658-	.2885
57	8	1.100	1.01	.00	.00	.125	.5781-	.0130-	.019-	.0002	.0001	.8671-	.2890
57	9	1.100	2.03-	.01-	.00	.238	.5814-	.0251-	.022-	.0005-	.0001	.8694-	.2880
57	10	1.100	3.04	.00	.00	.385	.5830-	.0420-	.021-	.0001	.0001	.8724-	.2894
57	11	1.100	4.06-	.01	.00	.520	.5842-	.0580-	.024-	.0006	.0003	.8743-	.2901
57	12	1.100	6.09-	.01	.00	.823	.5813-	.0967-	.021-	.0011	.0002	.8706-	.2893
57	13	1.100	8.12-	.01-	.00	1.199	.5769-	.1518-	.023-	.0018-	.0005	.8674-	.2905
57	14	1.100	12.19-	.01-	.00	2.162	.5626-	.3079-	.026-	.0022-	.0011	.8564-	.2938
57	15	1.100	16.29-	.01-	.00	3.231	.5704-	.4460-	.046	.0053-	.0002	.8734-	.3030
57	16	1.100	19.90-	.01-	.00	4.433	.5926-	.6157-	.030-	.0001-	.0001	.9039-	.3113
57	17	1.100	.00	.00-	.00	.023	.5757-	.0021-	.022	.0002-	.0001	.8642-	.2885
58	2	1.100	- .01-	4.07	90.00-	.022	.5762-	.0028	.399-	.0115-	.0003	.8643-	.2881
58	3	1.100	- .01-	3.05	90.00-	.030	.5706-	.0022	.292-	.0082-	.0001	.8640-	.2934
58	4	1.100	- .01-	2.03	90.00-	.026	.5708-	.0027	.193-	.0060-	.0002	.8618-	.2910
58	5	1.100	- .01-	1.02	90.00-	.024	.5708-	.0031	.103-	.0057	.0001	.8610-	.2902

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
58	6	1.100	-.01	.00	90.00	.022	.5717	.0034	.020	.0065	.0000	.8601	.2884
58	7	1.100	.01	1.02	90.00	.032	.5733	.0028	.069	.0067	.0003	.8622	.2884
58	8	1.100	.01	3.24	90.00	.018	.5745	.0022	.151	.0054	.0001	.8647	.2902
58	9	1.100	.01	3.05	90.00	.026	.5741	.0037	.248	.0032	.0000	.8668	.2927
58	10	1.100	.01	4.07	90.00	.022	.5739	.0041	.348	.0003	.0007	.8683	.2944
58	11	1.100	.01	5.09	90.00	.017	.5719	.0047	.466	.0047	.0001	.8678	.2959
58	12	1.100	.01	6.11	90.00	.011	.5682	.0053	.593	.0110	.0004	.8657	.2975
58	13	1.100	.01	8.16	90.00	.009	.5634	.0057	.857	.0258	.0000	.8655	.3021
58	14	1.100	.01	12.26	90.00	.007	.5497	.0068	1.615	.1014	.0000	.8571	.3074
58	15	1.100	.00	16.39	90.00	.029	.5122	.0025	2.556	.1966	.0005	.8485	.3363
58	16	1.100	.01	20.02	90.00	.000	.4762	.0068	3.627	.3226	.0001	.8157	.3395
58	17	1.100	-.01	.00	90.00	.022	.5695	.0034	.023	.0062	.0000	.8599	.2904
59	1	.950	-.01	4.06	90.00	.023	.4015	.0057	.379	.0143	.0003	.6315	.2300
59	2	.950	-.01	3.04	90.00	.033	.4055	.0050	.281	.0112	.0000	.6338	.2283
59	3	.950	-.01	2.03	90.00	.017	.4109	.0043	.193	.0089	.0001	.6371	.2262
59	4	.950	-.01	1.01	90.00	.028	.4137	.0059	.104	.0085	.0003	.6401	.2264
59	5	.950	-.01	.00	90.00	.026	.4117	.0063	.027	.0091	.0004	.6389	.2272
59	6	.950	.01	1.02	90.00	.012	.4133	.0054	.062	.0094	.0005	.6386	.2253
59	7	.950	.01	2.03	90.00	.022	.4102	.0070	.146	.0081	.0003	.6367	.2265
59	8	.950	.01	3.04	90.00	.018	.4034	.0074	.237	.0049	.0007	.6323	.2289
59	9	.950	.01	4.06	90.00	.027	.4015	.0068	.335	.0011	.0005	.6327	.2312
59	10	.950	.01	6.09	90.00	.017	.3917	.0080	.568	.0103	.0007	.6270	.2353
59	11	.950	.01	9.13	90.00	.004	.3818	.0093	.829	.0248	.0009	.6183	.2365
59	12	.950	.01	12.21	90.00	.022	.3779	.0045	1.555	.1020	.0004	.6259	.2481
59	13	.950	.01	16.32	90.00	.029	.3196	.0047	2.468	.2009	.0003	.6359	.3163
59	14	.950	.01	19.92	90.00	.021	.2655	.0055	3.484	.3243	.0001	.5885	.3230
59	15	.950	-.01	.00	90.00	.027	.4123	.0039	.023	.0094	.0001	.6378	.2255
60	2	.950	4.04	.00	.00	.476	.4112	.0558	.029	.0000	.0004	.6313	.2201
60	3	.950	3.03	.00	.00	.356	.4155	.0406	.023	.0002	.0007	.6367	.2212
60	4	.950	2.02	.01	.00	.224	.4150	.0267	.023	.0012	.0005	.6373	.2223
60	5	.950	1.01	.00	.00	.106	.4169	.0117	.015	.0013	.0008	.6405	.2236
60	6	.950	.00	.00	.00	.013	.4173	.0013	.013	.0017	.0011	.6410	.2237
60	7	.950	1.01	.00	.00	.117	.4750	.0104	.012	.0017	.0004	.6411	.1661
60	8	.950	2.02	.01	.00	.231	.4749	.0243	.026	.0025	.0007	.6376	.1625
60	9	.950	3.04	.01	.00	.377	.4755	.0404	.022	.0023	.0004	.6351	.1596
60	10	.950	4.05	.01	.00	.508	.4772	.0588	.022	.0024	.0007	.6337	.1565
60	11	.950	5.03	.01	.00	.820	.4715	.0957	.021	.0021	.0007	.6234	.1519

TABLE IIIa
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
60	12	.950	8.10-	.01-	.00	1.199	.4660-	.1521-	.020-	.0025-	.0000	.6104-	.1444
60	13	.950	12.16-	.01-	.00	2.124	.4595-	.2999-	.026-	.0019	.0000	.6327-	.1732
60	14	.950	16.24-	.01-	.00	3.194	.4737-	.4610-	.042	.0028-	.0001	.6581-	.1844
60	15	.950	19.82	.00-	.00	4.383	.4551-	.6435-	.029	.0004-	.0002	.6422-	.1871
60	16	.950	.00	.00	.00	.012	.4735	.0012-	.019-	.0017	.0006	.6401-	.1666
62	2	.750	- 4.03	.00	.00-	.433	.4566	.0416-	.017-	.0011	.0016	.5800-	.1234
62	3	.750	- 3.02	.00	.00-	.305	.4588	.0272-	.017-	.0012	.0013	.5821-	.1233
62	4	.750	- 2.01	.00	.00-	.179	.4590	.0160-	.021-	.0017	.0011	.5827-	.1237
62	5	.750	- 1.01	.00	.00-	.090	.4571	.0080-	.011-	.0017	.0009	.5810-	.1239
62	6	.750	.00	.00	.00	.015	.4548	.0017-	.021-	.0027	.0015	.5787-	.1239
62	7	.750	1.01	.00	.00	.104	.4580-	.0063-	.016-	.0031	.0006	.5815-	.1235
62	8	.750	2.02	.00	.00	.227	.4595-	.0173-	.015-	.0032	.0010	.5820-	.1225
62	9	.750	3.03	.00	.00	.334	.4606-	.0299-	.015-	.0024	.0008	.5826-	.1220
62	10	.750	4.04	.00	.00	.473	.4621-	.0424-	.019-	.0030	.0012	.5829-	.1208
62	11	.750	6.06	.00	.00	.755	.4555-	.0739-	.024-	.0028	.0007	.5772-	.1217
62	12	.750	8.08	.00	.00	1.106	.4416-	.1175-	.018-	.0027	.0008	.5628-	.1212
62	13	.750	12.13	.00	.00	1.970	.4002-	.2474-	.017-	.0046	.0004	.5411-	.1409
62	14	.750	16.19	.00	.00	2.984	.4094-	.3936-	.024-	.0024	.0003	.5737-	.1643
62	15	.750	19.74	.00-	.00	4.042	.4012-	.5626-	.013-	.0036-	.0004	.5636-	.1624
62	16	.750	.00	.00	.00	.016	.4505	.0016-	.016-	.0031	.0008	.5757-	.1252
62	17	.750	.00	.00	.00	.016	.4495-	.0014-	.011-	.0027	.0015	.5759-	.1264
63	1	.750	.00-	4.04	90.00	.011	.4429-	.0114	.365-	.0085	.0008	.5748-	.1319
63	2	.750	.00-	3.03	90.00	.031	.4472-	.0104	.270-	.0075	.0006	.5766-	.1294
63	3	.750	.00-	2.02	90.00	.014	.4483-	.0091	.188-	.0085	.0011	.5780-	.1297
63	4	.750	.00-	1.01	90.00	.016	.4461-	.0126	.117-	.0104	.0009	.5741-	.1280
63	5	.750	.00-	.00	90.00	.016	.4472-	.0099	.041-	.0127	.0008	.5732-	.1260
63	6	.750	- .01	1.01	90.00-	.001	.4481-	.0117-	.035-	.0160	.0013	.5749-	.1268
63	7	.750	.00	2.02	90.00	.017	.4486-	.0105-	.110-	.0175	.0018	.5786-	.1300
63	8	.750	.00	3.03	90.00	.038	.4479-	.0126-	.198-	.0178	.0009	.5793-	.1314
63	9	.750	.00	4.05	90.00	.023	.4457-	.0114-	.296-	.0164	.0014	.5803-	.1346
63	10	.750	.00	6.07	90.00	.031	.4381-	.0125-	.498-	.0087	.0017	.5755-	.1374
63	11	.750	- .01	8.10	90.00	.008	.4267-	.0139-	.750	.0048	.0014	.5684-	.1417
63	12	.750	- .01	12.15	90.00-	.002	.3814-	.0129-	1.404	.0670	.0013	.5470-	.1656
63	13	.750	.00	16.23	90.00-	.000	.3698-	.0087-	2.272	.1589	.0013	.5656-	.1958
63	14	.750	.00	19.80	90.00	.012	.3311-	.0111-	3.172	.2668	.0002	.5202-	.1981
63	15	.750	.00-	.00	90.00	.016	.4456-	.0098	.036-	.0132	.0015	.5725-	.1269

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
66	2	1.100	- 4.03-	.00	.00-	.569	1.0355	.0911-	.021	.0023	.0002	1.3349-	.2994
66	3	1.100	- 3.03-	.00-	.00-	.416	1.0384	.0622-	.025	.0032-	.0002	1.3363-	.2979
66	4	1.100	- 2.02-	.00	.00-	.252	1.0384	.0377-	.024	.0036	.0006	1.3356-	.2972
66	5	1.100	- 1.01-	.00	.00-	.117	1.0406	.0156-	.028	.0038	.0009	1.3352-	.2946
66	6	1.100	.00-	.00	.00	.017	1.0461-	.0065-	.020	.0037	.0006	1.3398-	.2937
66	7	1.100	1.01-	.00	.00	.166	1.0466-	.0299-	.020	.0035	.0002	1.3423-	.2957
66	8	1.100	2.02-	.00	.00	.314	1.0422-	.0531-	.027	.0040	.0004	1.3369-	.2947
66	9	1.100	3.03-	.00	.00	.477	1.0427-	.0776-	.027	.0038	.0012	1.3385-	.2958
66	10	1.100	4.04-	.00	.00	.654	1.0414-	.1061-	.031	.0033	.0008	1.3385-	.2971
66	11	1.100	6.05-	.00-	.00	1.010	1.0289-	.1731-	.027	.0032-	.0000	1.3238-	.2949
66	12	1.100	8.07-	.00	.00	1.452	1.0145-	.2481-	.019	.0012	.0002	1.3023-	.2878
66	13	1.100	12.11-	.00-	.00	2.498	.9278-	.4449-	.023-	.0006-	.0008	1.2260-	.2982
66	14	1.100	16.19	.01	.00	3.526	.9138-	.5817-	.041	.0028	.0003	1.2163-	.3025
66	15	1.100	19.79-	.00-	.00	4.620	.9452-	.7044-	.042	.0044-	.0015	1.2592-	.3140
66	16	1.100	.00-	.00	.00	.032	1.0481-	.0078-	.024	.0033	.0005	1.3419-	.2938
67	1	1.100	.00-	4.05	90.00-	.044	1.0352	.0065	.452-	.0387-	.0009	1.3327-	.2975
67	2	1.100	.00-	3.04	90.00-	.037	1.0437	.0059	.336-	.0267-	.0005	1.3404-	.2967
67	3	1.100	.00-	2.03	90.00-	.044	1.0461	.0066	.219-	.0154-	.0006	1.3411-	.2950
67	4	1.100	.00-	1.01	90.00-	.038	1.0469	.0061	.113-	.0065-	.0002	1.3415-	.2946
67	5	1.100	.00-	.00	90.00-	.031	1.0501	.0055-	.000	.0031-	.0004	1.3433-	.2932
67	6	1.100	- .01	1.01	90.00-	.053	1.0499	.0050-	.105	.0127-	.0000	1.3431-	.2932
67	7	1.100	.00	2.02	90.00-	.032	1.0485	.0056-	.214	.0226-	.0001	1.3420-	.2935
67	8	1.100	- .01	3.03	90.00-	.054	1.0458	.0050-	.321	.0332-	.0003	1.3407-	.2949
67	9	1.100	.00	4.05	90.00-	.045	1.0400	.0043-	.453	.0465-	.0005	1.3367-	.2967
67	10	1.100	.00	6.07	90.00-	.039	1.0234	.0040-	.725	.0784-	.0002	1.3241-	.3007
67	11	1.100	.00	8.10	90.00-	.031	.9965	.0036-	1.044	.1150	.0001	1.3085-	.3120
67	12	1.100	.00	12.18	90.00-	.030	.8827	.0055-	1.851	.2199-	.0006	1.2299-	.3472
67	13	1.100	.00	16.27	90.00-	.023	.8619	.0044-	2.815	.3301	.0000	1.2206-	.3587
67	14	1.100	.00	19.88	90.00-	.050	.8529	.0032-	3.809	.4250-	.0006	1.2220-	.3691
67	15	1.100	.00-	.00	90.00-	.045	1.0482	.0067	.004	.0035-	.0004	1.3475-	.2993
68	4	.950	.00-	3.04	90.00-	.038	.7922	.0033	.339-	.0350-	.0003	1.0547-	.2625
68	5	.950	- .01-	2.02	90.00-	.044	.8006	.0039	.227-	.0239	.0001	1.0576-	.2591
68	6	.950	.00-	1.01	90.00-	.036	.8071	.0033	.110-	.0118-	.0001	1.0583-	.2513
68	7	.950	- .01-	.00	90.00-	.041	.8053	.0038	.007	.0009-	.0002	1.0586-	.2534
68	8	.950	.00	1.01	90.00-	.034	.8055	.0033-	.105	.0135	.0001	1.0582-	.2611
68	9	.950	.00	2.02	90.00-	.035	.8043	.0036-	.213	.0264-	.0000	1.0576-	.2623
68	10	.950	- .01	3.04	90.00-	.043	.7967	.0040-	.332	.0390-	.0001	1.0576-	.2698

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
68	11	.950	.01	4.05	90.00	.048	.7799	.0024	.451	.0507	.0002	1.0410	.2611
68	12	.950	.01	6.07	90.00	.044	.7435	.0027	.760	.1055	.0000	1.0210	.2775
68	13	.950	.01	8.10	90.00	.045	.6956	.0037	1.095	.1496	.0005	1.0012	.3056
68	14	.950	.00	12.19	90.00	.030	.6350	.0033	1.799	.2138	.0000	.9736	.3386
68	15	.950	.00	16.30	90.00	.027	.6587	.0022	2.692	.3023	.0002	1.0078	.3491
68	16	.950	.00	19.90	90.00	.003	.5974	.0019	3.726	.4304	.0009	.9444	.3470
68	17	.950	.01	.00	90.00	.041	.8053	.0038	.006	.0009	.0002	1.0609	.2556
69	1	.950	4.03	.00	.00	.630	.8003	.1148	.022	.0026	.0006	1.0520	.2517
69	2	.950	3.02	.00	.00	.455	.8051	.0811	.022	.0024	.0002	1.0581	.2530
69	3	.950	2.02	.00	.00	.293	.8070	.0510	.018	.0025	.0002	1.0612	.2542
69	4	.950	1.01	.00	.00	.145	.8062	.0197	.022	.0025	.0004	1.0614	.2552
69	5	.950	.00	.00	.00	.003	.8050	.0070	.015	.0018	.0001	1.0616	.2566
69	6	.950	1.00	.00	.00	.163	.8072	.0348	.022	.0015	.0002	1.0619	.2547
69	7	.950	2.01	.00	.00	.337	.8081	.0661	.022	.0019	.0003	1.0621	.2540
69	8	.950	3.02	.00	.00	.496	.8072	.0960	.022	.0017	.0004	1.0583	.2511
69	9	.950	4.02	.00	.00	.670	.8008	.1319	.018	.0017	.0005	1.0518	.2510
69	10	.950	6.04	.00	.00	1.071	.7816	.2174	.029	.0032	.0005	1.0305	.2489
69	11	.950	8.05	.00	.00	1.508	.7564	.3015	.025	.0023	.0006	1.0033	.2469
69	12	.950	12.12	.00	.00	2.444	.7044	.4464	.028	.0009	.0001	.9727	.2683
69	13	.950	16.21	.00	.00	3.475	.7338	.5768	.036	.0046	.0005	1.0226	.2888
69	14	.950	19.79	.01	.00	4.593	.7055	.7354	.031	.0006	.0003	1.0122	.3067
69	15	.950	.00	.00	.00	.016	.8103	.0058	.022	.0024	.0001	1.0644	.2541
70	2	.750	4.03	.00	.00	.562	.7955	.0867	.016	.0018	.0008	1.0093	.2138
70	3	.750	3.02	.00	.00	.433	.8011	.0630	.016	.0016	.0004	1.0142	.2131
70	4	.750	2.01	.00	.00	.270	.8000	.0394	.020	.0027	.0007	1.0136	.2136
70	5	.750	1.01	.00	.00	.143	.8005	.0189	.015	.0022	.0004	1.0157	.2152
70	6	.750	.00	.00	.00	.002	.8052	.0062	.015	.0020	.0007	1.0172	.2120
70	7	.750	1.00	.00	.00	.145	.8027	.0281	.020	.0014	.0011	1.0161	.2134
70	8	.750	2.01	.00	.00	.306	.7989	.0516	.014	.0017	.0007	1.0113	.2124
70	9	.750	3.02	.00	.00	.433	.7938	.0783	.015	.0006	.0003	1.0081	.2143
70	10	.750	4.02	.00	.00	.593	.7927	.1048	.015	.0004	.0007	1.0028	.2101
70	11	.750	6.04	.00	.00	.952	.7755	.1644	.024	.0016	.0013	.9787	.2032
70	12	.750	8.05	.00	.00	1.361	.7441	.2376	.014	.0011	.0005	.9349	.1908
70	13	.750	12.09	.00	.00	2.310	.6686	.4014	.014	.0018	.0007	.8554	.1868
70	14	.750	16.16	.00	.00	3.258	.6685	.5204	.030	.0024	.0002	.8748	.2063
70	15	.750	19.72	.00	.00	4.152	.7063	.6127	.023	.0004	.0000	.9334	.2271
70	16	.750	.00	.00	.00	.002	.7965	.0062	.015	.0020	.0008	1.0100	.2135

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_ℓ	C_{A_u}	ΔC_A
71	2	.750	-.01-	4.04	90.00-	.048	.7963	.0014	.436-	.0385	.0010	1.0046-	.2083
71	3	.750	.00-	3.03	90.00-	.040	.7987	.0038	.319-	.0277	.0001	1.0135-	.2148
71	4	.750	.00-	2.02	90.00-	.052	.8054	.0048	.205-	.0180	.0006	1.0169-	.2115
71	5	.750	.00-	1.01	90.00-	.045	.8048	.0042	.106-	.0088	.0004	1.0164-	.2116
71	6	.750	-.01-	.00	90.00-	.056	.8068	.0052	.004	.0007	.0002	1.0179-	.2111
71	7	.750	.00	1.01	90.00-	.050	.8061	.0047-	.094	.0099	.0001	1.0180-	.2119
71	8	.750	.00	2.02	90.00-	.043	.8033	.0041-	.210	.0197	.0006	1.0152-	.2119
71	9	.750	.01	3.03	90.00-	.072	.8028	.0035-	.306	.0288	.0004	1.0115-	.2087
71	10	.750	.01	4.04	90.00-	.065	.7986	.0029-	.427	.0390	.0009	1.0055-	.2069
71	11	.750	.00	6.06	90.00-	.031	.7678	.0031-	.675	.0637	.0007	.9793-	.2115
71	12	.750	.00	8.08	90.00-	.046	.7256	.0045-	.964	.0936	.0004	.9494-	.2238
71	13	.750	.00	12.14	90.00-	.035	.6592	.0045-	1.650	.1672-	.0000	.8930-	.2338
71	14	.750	.00	16.22	90.00-	.052	.6262	.0075-	2.496	.2560	.0001	.8831-	.2569
71	15	.750	.00	19.79	90.00-	.001	.6115	.0011-	3.341	.3343	.0000	.8823-	.2708
71	16	.750	-.01-	.00	90.00-	.056	.8036	.0021	.004	.0007	.0002	1.0160-	.2124
72	4	1.100	-4.02-	.00	.00-	.741	1.1605	.1450-	.036	.0077	.0001	1.4778-	.3173
72	5	1.100	-3.02-	.00	.00-	.527	1.1679	.1030-	.040	.0070	.0001	1.4827-	.3148
72	6	1.100	-2.01-	.00-	.00-	.329	1.1732	.0624-	.036	.0071-	.0004	1.4885-	.3153
72	7	1.100	-1.01-	.00	.00-	.132	1.1737	.0247-	.044	.0081	.0003	1.4884-	.3147
72	8	1.100	.00-	.00	.00	.035	1.1750-	.0105-	.035	.0072	.0004	1.4906-	.3156
72	9	1.100	1.00-	.00	.00	.231	1.1735-	.0508-	.040	.0072	.0005	1.4877-	.3142
72	10	1.100	2.01-	.00	.00	.426	1.1710-	.0885-	.036	.0066	.0006	1.4854-	.3144
72	11	1.100	3.02-	.00	.00	.622	1.1718-	.1289-	.036	.0063	.0006	1.4877-	.3159
72	12	1.100	4.02-	.00	.00	.833	1.1715-	.1732-	.036	.0066	.0006	1.4871-	.3156
72	13	1.100	6.03-	.00-	.00	1.314	1.1522-	.2744-	.044	.0059	.0000	1.4671-	.3149
72	14	1.100	8.05-	.00	.00	1.852	1.1347-	.3884-	.037	.0043	.0004	1.4412-	.3065
72	15	1.100	12.06-	.00-	.00	3.204	1.0621-	.7066-	.046	.0060-	.0013	1.3720-	.3099
72	16	1.100	16.12-	.00	.00	4.397	1.0522-	.9051-	.033	.0019	.0003	1.3625-	.3103
72	17	1.100	19.71-	.00-	.00	5.514	1.1034-	1.0497-	.050	.0075-	.0001	1.4259-	.3225
72	18	1.100	.00-	.00-	.00	.035	1.1793-	.0132-	.036	.0065-	.0002	1.4902-	.3109
73	2	1.050	-4.02-	.00	.00-	.744	1.1151	.1534-	.022-	.0016	.0006	1.4345-	.3194
73	3	1.050	-3.02-	.00	.00-	.552	1.1132	.1098-	.023-	.0019	.0006	1.4356-	.3224
73	4	1.050	-2.01-	.00	.00-	.346	1.1122	.0650-	.014-	.0022	.0001	1.4342-	.3220
73	5	1.050	-1.01-	.00	.00-	.156	1.1198	.0271-	.018-	.0014	.0002	1.4416-	.3218
73	6	1.050	.00-	.00-	.00	.032	1.1165-	.0109-	.022-	.0020-	.0003	1.4384-	.3218
73	7	1.050	1.01-	.00-	.00	.235	1.1245-	.0499-	.014-	.0016-	.0002	1.4456-	.3211
73	8	1.050	2.01-	.00	.00	.437	1.1178-	.0915-	.018-	.0023	.0004	1.4412-	.3225

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
73	9	1.050	3.01-	.00	.00	.625	1.1169-	.1345-	.014-	.0023	.0005	1.4400-	.3231
73	10	1.050	4.02-	.00	.00	.843	1.1118-	.1803-	.014-	.0026	.0005	1.4345-	.3227
73	11	1.050	.00-	.00	.00	.047	1.1126-	.0121-	.018-	.0024	.0003	1.4342-	.3216
74	1	1.000 -	4.02-	.00	.00-	.744	1.0853	.1576-	.026	.0042	.0003	1.4252-	.3399
74	2	1.000 -	3.01-	.00-	.00	.526	1.0898	.1136-	.026	.0046-	.0002	1.4332-	.3434
74	3	1.000 -	2.01-	.00-	.00	.345	1.0801	.0696-	.030	.0054-	.0001	1.4278-	.3477
74	4	1.000 -	1.01-	.00-	.00	.145	1.0940	.0268-	.022	.0043-	.0001	1.4360-	.3420
74	5	1.000	.00-	.00-	.00	.021	1.0909-	.0102-	.031	.0048-	.0005	1.4348-	.3439
74	6	1.000	1.00-	.00-	.00	.235	1.0882-	.0513-	.026	.0057-	.0004	1.4328-	.3446
74	7	1.000	2.01-	.00	.00	.448	1.0871-	.0950-	.026	.0053	.0002	1.4322-	.3451
74	8	1.000	3.01-	.00	.00	.628	1.0927-	.1387-	.022	.0046	.0003	1.4335-	.3408
74	9	1.000	4.02-	.00	.00	.860	1.0826-	.1874-	.035	.0046	.0003	1.4274-	.3448
74	10	1.000	.00-	.00-	.00	.021	1.0874-	.0101-	.030	.0048-	.0005	1.4323-	.3449
75	2	.950 -	4.02-	.00-	.00-	.826	.8938	.1830-	.017	.0054-	.0003	1.1727-	.2789
75	3	.950 -	3.01-	.00	.00-	.586	.9011	.1306-	.031	.0056	.0001	1.1789-	.2778
75	4	.950 -	2.01-	.00	.00-	.385	.9024	.0815-	.035	.0067	.0000	1.1806-	.2782
75	5	.950 -	1.01-	.00-	.00-	.170	.9012	.0332-	.028	.0058-	.0005	1.1786-	.2774
75	6	.950	.00-	.00	.00	.017	.9018-	.0082-	.032	.0051	.0000	1.1785-	.2767
75	7	.950	1.00-	.00-	.00	.221	.9036-	.0579-	.032	.0054-	.0001	1.1818-	.2782
75	8	.950	2.00-	.00-	.00	.448	.9089-	.1050-	.032	.0050-	.0002	1.1853-	.2764
75	9	.950	3.01-	.00-	.00	.677	.9022-	.1549-	.036	.0049-	.0003	1.1797-	.2775
75	10	.950	4.01-	.00-	.00	.892	.9050-	.2100-	.033	.0048-	.0004	1.1797-	.2747
75	11	.950	6.01-	.00	.00	1.401	.8873-	.3319-	.036	.0066	.0002	1.1608-	.2735
75	12	.950	8.02-	.00	.00	1.947	.8492-	.4546-	.040	.0078	.0004	1.1220-	.2728
75	13	.950	12.06-	.00-	.00	3.234	.8002-	.7270-	.031	.0029-	.0000	1.0802-	.2800
75	14	.950	16.13-	.00-	.00	4.483	.8186-	.9451-	.033	.0053-	.0008	1.1115-	.2929
75	15	.950	19.71-	.00-	.00	5.660	.8295-	1.1187-	.032	.0021-	.0004	1.1388-	.3093
75	16	.950	.00-	.00	.00	.017	.9052-	.0082-	.025	.0045-	.0000	1.1820-	.2768
76	1	.950 -	2.85-	2.86	45.00-	.599	.8979	.1281	.584-	.1313-	.0006	1.1762-	.2783
76	2	.950 -	2.14-	2.13	45.00-	.461	.9007	.0984	.438-	.0994-	.0000	1.1796-	.2789
76	3	.950 -	1.42-	1.42	45.00-	.308	.9026	.0649	.296-	.0670-	.0005	1.1804-	.2778
76	4	.950 -	.71-	.71	45.00-	.180	.9070	.0336	.143-	.0330-	.0010	1.1833-	.2763
76	5	.950	.00-	.00	45.00-	.027	.9060-	.0020	.001-	.0006	.0001	1.1826-	.2766
76	6	.950	.70	.71	45.00	.126	.9068-	.0332-	.145	.0328-	.0004	1.1830-	.2762
76	7	.950	1.41	1.43	45.00	.277	.9060-	.0665-	.283	.0636	.0001	1.1838-	.2778

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
76	8	.950	2.13	2.14	45.00	.416	.9051-	.0987-	.425	.0248-	.0003	1.1828-	.2777
76	9	.950	2.84	2.85	45.00	.568	.9022-	.1298-	.577	.1281-	.0003	1.1797-	.2775
76	10	.950	4.27	4.27	45.00	.881	.8819-	.1897-	.884	.1951	.0002	1.1609-	.2790
76	11	.950	5.70	5.70	45.00	1.182	.8656-	.2576-	1.211	.2652-	.0001	1.1416-	.2760
76	12	.950	8.59	8.54	45.00	2.044	.8191-	.4587-	2.035	.4613	.0009	1.0983-	.2792
76	13	.950	11.53	11.37	45.00	2.911	.7180-	.6448-	2.882	.6494	.0002	1.0128-	.2948
76	14	.950	14.17	13.93	45.00	3.666	.6554-	.7791-	3.630	.7889-	.0003	.9733-	.3179
76	15	.950	.01	.01	45.00	.039	.9128-	.0009-	.007	.0007	.0000	1.1904-	.2776
77	2	.850	4.02-	.00	.00	.768	.8466	.1536-	.024	.0054-	.0002	1.0838-	.2372
77	3	.850	3.02-	.00	.00	.552	.8547	.1086-	.029	.0046	.0003	1.0932-	.2385
77	4	.850	2.01-	.00	.00	.350	.8558	.0673-	.032	.0054	.0004	1.0957-	.2399
77	5	.950	1.01-	.00	.00	.149	.8555	.0263-	.032	.0066-	.0001	1.0977-	.2422
77	6	.850	.00	.00	.00	.035	.8565-	.0107-	.028	.0059	.0000	1.0969-	.2404
77	7	.850	1.00	.00	.00	.219	.8569-	.0503-	.037	.0048	.0001	1.0976-	.2407
77	8	.850	2.01	.00	.00	.432	.8558-	.0898-	.032	.0056	.0001	1.0950-	.2392
77	9	.850	3.01	.00	.00	.616	.8563-	.1320-	.032	.0053	.0002	1.0949-	.2386
77	10	.850	4.02	.00	.00	.814	.8521-	.1752-	.037	.0060	.0002	1.0871-	.2350
77	11	.850	.00	.00	.00	.035	.8565-	.0106-	.036	.0066	.0006	1.0973-	.2408
78	1	.750	4.02-	.00	.00	.744	.8509	.1425-	.030	.0035	.0003	1.0726-	.2217
78	2	.750	3.01-	.00	.00	.507	.8579	.1032-	.034	.0045-	.0002	1.0806-	.2227
78	3	.750	2.01-	.00	.00	.343	.8604	.0642-	.029	.0046	.0006	1.0640-	.2236
78	4	.750	1.00-	.00	.00	.125	.8589	.0266-	.024	.0048	.0002	1.0823-	.2234
78	5	.750	.00	.00	.00	.021	.8616-	.0079-	.029	.0049	.0004	1.0859-	.2243
78	6	.750	1.00	.00	.00	.221	.8649-	.0471-	.024	.0051-	.0001	1.0870-	.2221
78	7	.750	2.01	.00	.00	.402	.8610-	.0846-	.029	.0043	.0000	1.0849-	.2239
78	8	.750	3.01	.00	.00	.600	.8606-	.1235-	.034	.0036	.0002	1.0820-	.2214
78	9	.750	4.02	.00	.00	.816	.8554-	.1641-	.039	.0048	.0004	1.0746-	.2192
78	10	.750	6.03	.00	.00	1.249	.8389-	.2577-	.039	.0055	.0006	1.0532-	.2143
78	11	.750	8.04	.00	.00	1.911	.8004-	.3814-	.043	.0075	.0007	1.0062-	.2058
78	12	.750	12.06	.00	.00	3.086	.7124-	.6663-	.040	.0058-	.0003	.9089-	.1965
78	13	.750	16.11	.00	.00	4.296	.6997-	.8743-	.035	.0028	.0005	.9035-	.2038
78	14	.750	19.68	.00	.00	5.253	.7485-	.9854-	.029	.0017-	.0014	.9609-	.2214
78	15	.750	.00	.00	.00	.021	.8608-	.0079-	.029	.0041	.0004	1.0851-	.2243
79	2	.600	4.01-	.00	.00	.735	.8821	.1371-	.022	.0008	.0003	1.0900-	.2029
79	3	.600	3.01-	.00	.00	.511	.8921	.0946-	.022	.0001	.0002	1.1016-	.2095

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_ℓ	C_{A_u}	ΔC_A
79	4	.600	2.01-	.00	.00-	.315	.8915	.0589-	.022-	.0003	.0007	1.1047-	.2132
79	5	.600	1.00-	.00	.00-	.105	.8952	.0226-	.021	.0007	.0002	1.1078-	.2126
79	6	.600	.00-	.00	.00	.029	.8974-	.0113-	.028	.0022	.0007	1.1100-	.2126
79	7	.600	1.00-	.00	.00	.209	.8981-	.0405-	.029	.0008	.0012	1.1102-	.2121
79	8	.600	2.01-	.00	.00	.391	.8975-	.0787-	.043	.0005	.0006	1.1095-	.2120
79	9	.600	3.01-	.00	.00	.573	.8897-	.1125-	.035	.0033	.0001	1.1022-	.2125
79	10	.600	4.02-	.00	.00	.804	.8915-	.1550-	.035	.0018	.0005	1.1025-	.2110
79	11	.600	.00-	.00-	.00	.029	.8959-	.0114-	.021	.0017-	.0003	1.1096-	.2137
81	3	1.100	4.05-	.00-	.00-	.333	1.0279-	.0014-	.034	.0055-	.0007	1.3305-	.3026
81	4	1.100	3.04-	.00-	.00-	.230	1.0401-	.0028-	.037	.0058-	.0008	1.3392-	.2991
81	5	1.100	2.03-	.00-	.00-	.171	1.0438-	.0028-	.033	.0062-	.0004	1.3434-	.2996
81	6	1.100	1.01-	.00-	.00-	.068	1.0423-	.0015-	.036	.0073-	.0004	1.3426-	.3003
81	7	1.100	.00-	.00-	.00	.004	1.0454-	.0002-	.031	.0077-	.0005	1.3437-	.2983
81	8	1.100	1.01-	.00-	.00	.090	1.0439-	.0002-	.035	.0073-	.0000	1.3436-	.2997
81	9	1.100	2.03-	.00	.00	.176	1.0397-	.0000-	.038	.0076	.0004	1.3414-	.3017
81	10	1.100	3.04-	.00-	.00	.233	1.0416-	.0001-	.034	.0066-	.0002	1.3436-	.3020
81	11	1.100	4.05-	.00-	.00	.332	1.0343-	.0012-	.030	.0056-	.0003	1.3329-	.2986
81	12	1.100	6.08-	.00-	.00	.574	1.0225-	.0075-	.033	.0045-	.0005	1.3193-	.2968
81	13	1.100	8.11-	.00-	.00	.815	1.0212-	.0188-	.020	.0006-	.0008	1.3063-	.2851
81	14	1.100	12.20-	.00-	.00	1.473	.9738-	.0517-	.021	.0022-	.0007	1.2658-	.2920
81	15	1.100	16.28-	.00	.00	2.282	.9071-	.1187-	.026	.0023	.0001	1.2080-	.3009
81	16	1.100	19.89-	.00-	.00	3.162	.8704-	.1667-	.027	.0003-	.0005	1.1721-	.3017
81	17	1.100	.00-	.00-	.00	.004	1.0500-	.0002-	.027	.0080-	.0006	1.3496-	.2996
82	3	.950	4.08-	.00-	.00-	.261	.7712-	.0477-	.031	.0064-	.0004	1.0327-	.2615
82	4	.950	3.06-	.00-	.00-	.155	.7749-	.0478-	.037	.0076-	.0010	1.0336-	.2587
82	5	.950	2.02-	.00-	.00-	.138	.7970-	.0014-	.029	.0062-	.0012	1.0533-	.2563
82	6	.950	1.01-	.00-	.00-	.074	.7964	.0021-	.036	.0062-	.0007	1.0577-	.2613
82	7	.950	.00-	.00-	.00-	.010	.7952	.0009-	.028	.0056-	.0008	1.0578-	.2626
82	8	.950	1.01-	.00-	.00	.067	.7951	.0010-	.035	.0056-	.0004	1.0555-	.2604
82	9	.950	2.04-	.00-	.00	.070	.7820	.0415-	.023	.0031-	.0005	1.0404-	.2584
82	10	.950	3.06-	.00-	.00	.132	.7755	.0473-	.027	.0029-	.0005	1.0340-	.2585
82	11	.950	4.07-	.00-	.00	.234	.7734	.0451-	.022	.0026-	.0006	1.0330-	.2596
82	12	.950	6.10-	.00-	.00	.453	.7670	.0373-	.032	.0035-	.0008	1.0255-	.2585
82	13	.950	8.13-	.00-	.00	.709	.7484	.0168-	.017	.0021-	.0001	1.0023-	.2549
82	14	.950	12.20-	.00-	.00	1.448	.7177-	.0737-	.029	.0064-	.0002	.9801-	.2624
82	15	.950	16.31-	.00-	.00	2.224	.6951-	.1109-	.033	.0049-	.0004	.9642-	.2691
82	16	.950	19.92	.01-	.00	3.075	.5998-	.1664-	.017-	.0036-	.0014	.8675-	.2677

UNCLASSIFIED

UNCLASSIFIED

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
82	17	.950	.00-	.00-	.00-	.009	.7999	.0010-	.031	.0065-	.0003	1.0606-	.2607
83	1	.950	2.89-	2.86	45.00-	.183	.7774-	.0445	.562-	.1229	.0030	1.0379-	.2605
83	2	.950	2.17-	2.14	45.00-	.112	.7766-	.0434	.413-	.0901	.0013	1.0390-	.2624
83	3	.950	.01-	4.04	90.00-	.034	.7797	.0003	.882-	.2027	.0002	1.0575-	.2778
83	4	.950	.01-	3.03	90.00-	.031	.7918-	.0013	.653-	.1490	.0005	1.0527-	.2709
83	5	.950	.00-	2.02	90.00-	.018	.7942	.0006	.436-	.0978	.0004	1.0619-	.2677
83	6	.950	.00-	1.01	90.00-	.017	.7998-	.0009	.217-	.0482	.0002	1.0635-	.2637
83	7	.950	.01-	.00	90.00-	.044	.8018-	.0001	.010-	.0005	.0001	1.0649-	.2631
83	8	.950	.00	1.01	90.00-	.006	.8010-	.0003-	.193	.0476-	.0001	1.0629-	.2619
83	9	.950	.00	2.02	90.00-	.018	.7973-	.0007-	.410	.0962-	.0002	1.0611-	.2638
83	10	.950	.00	3.02	90.00-	.018	.7896	.0001-	.622	.1464-	.0004	1.0587-	.2691
83	11	.950	.00	4.03	90.00-	.003	.7761-	.0003-	.845	.1994	.0000	1.0533-	.2772
83	12	.950	.01	6.05	90.00-	.034	.7397	.0014-	1.365	.3231	.0003	1.0369-	.2972
83	13	.950	.00	8.08	90.00	.014	.6835	.0024-	1.916	.4490	.0004	.9960-	.3125
83	14	.950	.01	12.14	90.00	.035	.5823-	.0001-	3.168	.7173-	.0021	.9419-	.3596
83	16	.950	.00-	.00	90.00-	.019	.8048	.0024	.014-	.0008	.0006	1.0678-	.2630
83	17	.950	.01-	.00-	90.00	.045	.8069	.0013	.044-	.0101	.0001	1.0689-	.2620
85	2	.750	4.04-	.00	.00-	.295	.7939-	.0077-	.036	.0035	.0005	1.0023-	.2084
85	3	.750	3.03-	.00	.00-	.207	.8015-	.0062-	.025	.0044	.0004	1.0114-	.2099
85	4	.750	2.02-	.00	.00-	.137	.7995-	.0032-	.030	.0049	.0003	1.0131-	.2136
85	5	.750	1.01-	.00	.00-	.049	.8017-	.0048-	.034	.0053	.0001	1.0166-	.2149
85	6	.750	.00-	.00	.00	.021	.8021-	.0017-	.033	.0054	.0001	1.0157-	.2136
85	7	.750	1.01-	.00	.00	.071	.8027-	.0000-	.038	.0041	.0006	1.0138-	.2111
85	8	.750	2.02-	.00	.00	.140	.8006-	.0000-	.047	.0049	.0005	1.0126-	.2120
85	9	.750	3.03-	.00	.00	.224	.7967	.0018-	.032	.0037	.0012	1.0063-	.2096
85	10	.750	4.04-	.00	.00	.327	.7946	.0049-	.036	.0042	.0004	.9995-	.2049
85	11	.750	6.07-	.00	.00	.477	.7802	.0098-	.031	.0039	.0003	.9790-	.1988
85	12	.750	8.10-	.00	.00	.729	.7610	.0087-	.034	.0043	.0009	.9489-	.1879
85	13	.750	12.16-	.00	.00	1.336	.7143-	.0275-	.037	.0036	.0009	.9124-	.1981
85	14	.750	16.23-	.00	.00	2.055	.6613-	.0758-	.051	.0100	.0016	.8655-	.2042
85	15	.750	19.81-	.00	.00	2.781	.5810-	.1122-	.039	.0057	.0004	.7935-	.2125
85	16	.750	.00-	.00	.00	.003	.8000-	.0001-	.033	.0045	.0001	1.0117-	.2117
87	2	1.100	4.07-	.00-	.00-	.284	.5803-	.0239-	.039	.0078-	.0001	.8786-	.2977
87	3	1.100	3.06-	.00	.00-	.206	.5810-	.0189-	.042	.0076	.0003	.8778-	.2968
87	4	1.100	2.04-	.00	.00-	.140	.5800-	.0130-	.044	.0074	.0003	.8783-	.2983

UNCLASSIFIED

TABLE IIIa
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
87	5	1.100	1.02-	.00	.00-	.073	.5790-	.0051-	.043	.0080	.0004	.8756-	.2966
87	6	1.100	.00	.01	.00	.003	.5791-	.0001-	.046	.0067	.0004	.8760-	.2969
87	7	1.100	1.02-	.00	.00	.080	.5825	.0068-	.042	.0065	.0004	.8772-	.2947
87	8	1.100	2.04	.01	.00	.145	.5838	.0128-	.045	.0062	.0008	.8780-	.2942
87	9	1.100	3.06-	.00	.00	.221	.5846	.0198-	.041	.0060	.0003	.8805-	.2959
87	10	1.100	4.08-	.00	.00	.296	.5856	.0248-	.035	.0044	.0008	.8810-	.2954
87	11	1.100	.00-	.00	.00	.003	.5787-	.0001-	.040	.0067	.0004	.8754-	.2967
88	1	.950	4.06-	.00-	.00-	.264	.4247-	.0217-	.037	.0072-	.0004	.6396-	.2149
88	2	.950	3.04-	.00	.00-	.188	.4222-	.0171-	.041	.0063	.0001	.6390-	.2168
88	3	.950	2.03-	.00	.00-	.124	.4245-	.0115-	.036	.0060	.0001	.6423-	.2178
88	4	.950	1.01-	.00	.00-	.061	.4219-	.0058-	.036	.0048	.0001	.6425-	.2206
88	5	.950	.00-	.00	.00	.016	.4206	.0010-	.039	.0059	.0001	.6419-	.2213
88	6	.950	1.02-	.00	.00	.065	.4218	.0079-	.038	.0053	.0001	.6419-	.2201
88	7	.950	2.03-	.00	.00	.127	.4236	.0136-	.034	.0050	.0006	.6411-	.2175
88	8	.950	3.05-	.00	.00	.202	.4248	.0182-	.030	.0041	.0005	.6404-	.2156
88	9	.950	4.07-	.00	.00	.276	.4266	.0251-	.033	.0038	.0011	.6410-	.2144
88	10	.950	6.10-	.00	.00	.451	.4304	.0298-	.029	.0023	.0009	.6413-	.2109
88	11	.950	8.14-	.00	.00	.663	.4254	.0355-	.028	.0012	.0009	.6339-	.2085
88	12	.950	12.23-	.00	.00	1.286	.3859	.0044-	.038	.0053	.0002	.6263-	.2404
88	13	.950	16.33-	.00	.00	2.047	.3719-	.0344-	.043	.0044	.0006	.6171-	.2452
88	14	.950	19.95-	.00	.00	2.898	.3263-	.0767-	.038	.0073	.0002	.5421-	.2158
88	15	.950	.00-	.00	.00	.003	.4256	.0022-	.035	.0055	.0001	.6459-	.2203
89	2	.950	.01-	4.05	90.00-	.002	.3966-	.0096	.709-	.1269	.0018	.6279-	.2313
89	3	.950	.01-	3.04	90.00	.003	.4068-	.0096	.528-	.0936	.0021	.6343-	.2275
89	4	.950	.01-	2.02	90.00-	.006	.4124-	.0108	.351-	.0637	.0019	.6361-	.2237
89	5	.950	.00-	1.01	90.00	.010	.4117-	.0096	.189-	.0346	.0018	.6358-	.2241
89	6	.950	.01-	.00	90.00	.000	.4148-	.0107	.023-	.0076	.0016	.6375-	.2227
89	7	.950	.01	1.01	90.00	.002	.4135-	.0105-	.131	.0190	.0020	.6363-	.2228
89	8	.950	.01	2.02	90.00	.006	.4123-	.0106-	.303	.0484	.0013	.6375-	.2252
89	9	.950	.01	3.04	90.00-	.004	.4080-	.0094-	.467	.0772	.0012	.6349-	.2269
89	10	.950	.01	4.05	90.00	.001	.4014-	.0118-	.648	.1099	.0015	.6303-	.2289
89	11	.950	.01	6.08	90.00	.000	.3808-	.0123-	1.041	.1819	.0015	.6195-	.2387
89	12	.950	.01	8.10	90.00-	.006	.3529-	.0070-	1.589	.2990	.0005	.5975-	.2446
89	13	.950	.00	12.17	90.00	.013	.2731-	.0081-	2.744	.5391-	.0002	.6041-	.3310
89	14	.950	.01-	.00	90.00	.000	.4138-	.0107	.020-	.0073	.0016	.6359-	.2221
90	1	.750	4.05-	.00	.00-	.258	.4035-	.0262-	.036	.0043	.0002	.5803-	.1759

UNCLASSIFIED

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_ℓ	C_{A_u}	ΔC_A
90	3	.750	3.03-	.00	.00-	.187	.4063-	.0200-	.035	.0052	.0009	.5814-	.1751
90	3	.750	2.02-	.00	.00-	.118	.4062-	.0139-	.035	.0053	.0009	.5770-	.1768
90	4	.750	1.01-	.00	.00-	.032	.4013-	.0062-	.034	.0045	.0008	.5777-	.1764
90	5	.750	.00-	.00	.00	.001	.4022	.0031-	.029	.0042	.0008	.5773-	.1751
90	6	.750	1.01-	.00	.00	.069	.3975	.0093-	.023	.0038	.0008	.5746-	.1771
90	7	.750	2.03-	.00	.00	.136	.4030	.0186-	.023	.0039	.0007	.5804-	.1774
90	8	.750	3.04-	.00	.00	.185	.4049	.0263-	.027	.0035	.0014	.5813-	.1764
90	9	.750	4.05-	.00	.00	.269	.4042	.0309-	.031	.0031	.0006	.5811-	.1769
90	10	.750	.00-	.00	.00	.019	.3954	.0016-	.028	.0050	.0015	.5736-	.1782
91	1	1.100	4.04-	.00-	.00-	.624	.6870	.1045-	.044	.0072-	.0003	1.0113-	.3243
91	4	1.100	3.03-	.00-	.00-	.460	.6883	.0724-	.041	.0072-	.0003	1.0143-	.3260
91	5	1.100	2.02-	.00-	.00-	.274	.6888	.0421-	.037	.0067-	.0002	1.0134-	.3246
91	6	1.100	1.01-	.00-	.00-	.112	.6888	.0159-	.040	.0063-	.0000	1.0104-	.3216
91	8	1.100	1.01-	.00	.00	.177	.6873-	.0332-	.037	.0061	.0001	1.0141-	.3268
91	9	1.100	2.02-	.00-	.00	.349	.6917-	.0602-	.037	.0054-	.0002	1.0164-	.3247
91	10	1.100	.00-	.00-	.00	.028	.6876-	.0082-	.043	.0069-	.0004	1.0108-	.3232
91	11	1.100	3.03-	.00-	.00	.521	.6890-	.0891-	.040	.0055-	.0002	1.0158-	.3268
91	12	1.100	4.05	.01-	.00	.716	.6893-	.1200-	.039	.0052-	.0001	1.0160-	.3267
91	13	1.100	6.07-	.00	.00	1.116	.6889-	.1946-	.036	.0044	.0003	1.0132-	.3243
91	14	1.100	8.09	.01-	.00	1.659	.6910-	.3094-	.037	.0041-	.0007	1.0130-	.3220
91	15	1.100	12.13	.01-	.00	2.833	.6931-	.5506-	.043	.0043-	.0013	1.0174-	.3243
91	16	1.100	16.22-	.00-	.00	4.062	.6889-	.7496-	.055	.0118-	.0014	.9992-	.3103
91	17	1.100	.00-	.00-	.00	.050	.6908-	.0082-	.030	.0058-	.0004	1.0178-	.3270
92	2	.950	4.03-	.00-	.00-	.627	.4897	.1076-	.037	.0044-	.0000	.7411-	.2514
92	3	.950	3.02-	.00	.00-	.452	.4903	.0763-	.032	.0051	.0001	.7446-	.2543
92	4	.950	2.02-	.00	.00-	.291	.4954	.0462-	.033	.0043	.0002	.7511-	.2557
92	5	.950	1.01-	.00	.00-	.117	.4960	.0195-	.036	.0050	.0003	.7521-	.2561
92	6	.950	.00-	.00	.00	.029	.4978-	.0049-	.032	.0046-	.0000	.7550-	.2572
92	7	.950	1.01-	.00-	.00	.188	.4990-	.0301-	.032	.0044-	.0004	.7552-	.2562
92	8	.950	2.02-	.00	.00	.347	.4982-	.0577-	.028	.0039	.0003	.7531-	.2549
92	9	.950	3.03-	.00-	.00	.519	.4971-	.0889-	.032	.0039-	.0001	.7504-	.2533
92	10	.950	4.04-	.00	.00	.716	.4922-	.1220-	.028	.0027	.0005	.7447-	.2528
92	11	.950	6.06-	.00	.00	1.137	.4903-	.1978-	.028	.0022	.0001	.7370-	.2467
92	12	.950	8.07-	.00-	.00	1.572	.4811-	.3127-	.042	.0050-	.0008	.7214-	.2405
92	13	.950	12.11-	.00-	.00	2.799	.4561-	.5493-	.046	.0061-	.0016	.7284-	.2723
92	14	.950	16.17-	.00-	.00	4.086	.4722-	.7775-	.051	.0118-	.0014	.7649-	.2927
92	15	.950	.00-	.00-	.00	.042	.4900-	.0059-	.028	.0042-	.0010	.7567-	.2567

UNCLASSIFIED

UNCLASSIFIED

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
93	1	.950	.00-	4.05	90.00-	.003	.4826-	.0011	.687-	.1201-	.0002	.7494-	.2668
93	2	.950	.00-	3.04	90.00-	.011	.4872-	.0023	.511-	.0871-	.0004	.7500-	.2628
93	3	.950	.00-	2.02	90.00-	.008	.4924-	.0021	.337-	.0582-	.0001	.7537-	.2613
93	4	.950	.00-	1.01	90.00-	.005	.4967-	.0044	.178-	.0312-	.0002	.7565-	.2598
93	5	.950	.00-	.00	90.00	.010	.4973-	.0030	.023-	.0044-	.0004	.7563-	.2590
93	6	.950	.00	1.01	90.00-	.001	.5000-	.0040-	.139	.0222-	.0001	.7574-	.2574
93	7	.950	.00	2.02	90.00	.015	.4932-	.0028-	.297	.0499-	.0007	.7528-	.2596
93	8	.950	.00	3.03	90.00	.019	.4882-	.0050-	.465	.0803-	.0003	.7501-	.2619
93	9	.950	.00	4.05	90.00	.009	.4790-	.0038-	.636	.1104-	.0005	.7449-	.2659
93	10	.950	.00	6.07	90.00	.011	.4569-	.0029-	1.033	.1823-	.0007	.7336-	.2767
93	11	.950	.00	8.10	90.00	.004	.4394-	.0012-	1.582	.3038-	.0005	.7187-	.2793
93	12	.950	.00	12.17	90.00	.017	.3595-	.0019-	2.712	.5328-	.0012	.7154-	.3559
93	13	.950	.00-	.00	90.00-	.003	.4982-	.0042	.023-	.0044-	.0004	.7572-	.2590
94	3	.750	4.03-	.00	.00-	.574	.4567	.0844-	.025	.0034	.0003	.6478-	.1911
94	4	.750	3.02-	.00-	.00-	.412	.4584	.0579-	.020	.0020-	.0001	.6501-	.1917
94	5	.750	2.01-	.00	.00-	.250	.4600	.0344-	.025	.0022	.0003	.6522-	.1922
94	6	.750	1.00-	.00	.00-	.089	.4560	.0141-	.020	.0017	.0007	.6495-	.1935
94	7	.750	.00-	.00	.00	.037	.4579-	.0063-	.019	.0024	.0003	.6508-	.1929
94	8	.750	1.01-	.00	.00	.144	.4594-	.0249-	.014	.0019	.0007	.6515-	.1921
94	9	.750	2.02-	.00	.00	.323	.4634-	.0469-	.024	.0026	.0004	.6542-	.1908
94	10	.750	3.02-	.00	.00	.482	.4633-	.0731-	.019	.0019	.0007	.6533-	.1900
94	11	.750	4.03-	.00	.00	.642	.4597-	.0996-	.029	.0017	.0003	.6489-	.1892
94	12	.750	6.05-	.00	.00	1.033	.4562-	.1589-	.023	.0026	.0001	.6432-	.1870
94	13	.750	8.06-	.00-	.00	1.519	.4446-	.2632-	.028	.0040-	.0005	.6294-	.1848
94	14	.750	12.09-	.00-	.00	2.602	.3873-	.4756-	.037	.0057-	.0009	.5906-	.2033
94	15	.750	16.14-	.00-	.00	3.807	.4027-	.6842-	.045	.0084-	.0010	.6220-	.2193
94	16	.750	20.20-	.00	.00	5.154	.4074-	.9170-	.049	.0069	.0009	.6220-	.2146
94	17	.750	.00-	.00	.00	.037	.4595-	.0063-	.019	.0024	.0003	.6496-	.1901
95	1	.950	2.85-	2.86	45.00-	.462	.4871	.0793	.473-	.0806	.0004	.7423-	.2552
95	2	.950	2.14-	2.14	45.00-	.344	.4912	.0581	.342-	.0590-	.0005	.7453-	.2541
95	3	.950	1.43-	1.43	45.00-	.224	.4907	.0364	.221-	.0385-	.0003	.7463-	.2556
95	4	.950	.71-	.71	45.00-	.119	.4921	.0183	.105-	.0185-	.0001	.7493-	.2572
95	5	.950	.00-	.00	45.00-	.001	.4960-	.0010-	.001	.0000	.0000	.7506-	.2546
95	6	.950	.71	.71	45.00	.116	.4956-	.0179-	.117	.0181-	.0003	.7489-	.2533
95	7	.950	1.43	1.43	45.00	.234	.4928-	.0394-	.229	.0385-	.0001	.7480-	.2552
95	8	.950	2.14	2.14	45.00	.364	.4900-	.0597-	.344	.0584	.0001	.7449-	.2549
95	9	.950	2.85	2.86	45.00	.483	.4892-	.0813-	.469	.0805-	.0003	.7448-	.2556

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
95	10	.950	.00-	.00	45.00-	.001	.4988-	.0010-	.005-	.0003	.0000	.7519-	.2531
96	6	.950	4.05-	.00	.00-	.781	.1785	.1286-	.013	.0000	.0001	.3039-	.1254
96	7	.950	3.03-	.00	.00-	.578	.1807	.0946-	.012-	.0003	.0002	.3045-	.1238
96	8	.950	2.02-	.00	.00-	.350	.1834	.0584-	.012-	.0018	.0003	.3072-	.1238
96	9	.950	1.01-	.00-	.00-	.148	.1878	.0245-	.012-	.0021-	.0001	.3082-	.1204
96	10	.950	.00-	.00	.00	.053	.1846-	.0070-	.008-	.0020	.0000	.3073-	.1227
96	11	.950	1.01-	.00-	.00	.228	.1869-	.0431-	.008-	.0023-	.0005	.3082-	.1213
96	12	.950	2.02-	.00-	.00	.442	.1905-	.0757-	.011-	.0016-	.0004	.3110-	.1205
96	13	.950	3.03-	.00-	.00	.642	.1903-	.1116-	.011-	.0019-	.0009	.3115-	.1212
96	14	.950	4.05-	.00-	.00	.855	.1849-	.1465-	.015-	.0018-	.0008	.3087-	.1238
96	15	.950	6.08-	.00-	.00	1.319	.1854-	.2173-	.017-	.0008-	.0012	.3123-	.1269
96	16	.950	8.11-	.00-	.00	1.805	.1742-	.2877-	.024	.0005-	.0011	.3178-	.1436
96	17	.950	12.20-	.00-	.00	2.920	.1511-	.4370-	.029	.0012-	.0015	.3247-	.1736
96	18	.950	16.31-	.00-	.00	4.295	.1358-	.6253-	.033	.0022-	.0007	.3244-	.1886
96	19	.950	20.41-	.00-	.00	6.116	.1199-	.9421-	.022-	.0013-	.0003	.3380-	.2181
96	20	.950	.00-	.00-	.00	.040	.1942-	.0082-	.008-	.0026-	.0006	.3141-	.1199
97	2	.950	3.75-	1.54	22.50-	.776	.1715	.1265	.106-	.0053-	.0020	.2991-	.1276
97	3	.950	2.80-	1.16	22.50-	.557	.1771	.0933	.070-	.0025-	.0008	.3023-	.1252
97	4	.950	1.87-	.77	22.50-	.367	.1775	.0605	.044-	.0019-	.0002	.3011-	.1236
97	5	.950	.93-	.39	22.50-	.178	.1799	.0278	.014-	.0016	.0004	.3021-	.1222
97	6	.950	.00	.01	22.50-	.017	.1788-	.0025-	.008-	.0032	.0005	.3017-	.1229
97	7	.950	.93	.40	22.50	.157	.1794-	.0338-	.034-	.0030	.0006	.3020-	.1226
97	8	.950	1.87	.77	22.50	.346	.1797-	.0667-	.056-	.0035-	.0004	.3039-	.1242
97	9	.950	2.80	1.17	22.50	.535	.1796-	.0994-	.096-	.0017-	.0014	.3043-	.1247
97	10	.950	3.74	1.55	22.50	.764	.1762-	.1333-	.135	.0027-	.0029	.3042-	.1280
97	11	.950	4.68	1.93	22.49	.979	.1703-	.1706-	.173	.0077-	.0045	.3043-	.1340
97	12	.950	.00-	.00	22.50-	.004	.1797-	.0035-	.005-	.0029	.0010	.3024-	.1227
98	1	.950	.01-	4.05	90.00-	.069	.1803	.0052	.275-	.0008-	.0003	.3148-	.1345
98	2	.950	.01-	3.04	90.00-	.053	.1798	.0037	.204	.0019-	.0004	.3097-	.1299
98	3	.950	.01-	2.02	90.00-	.039	.1799	.0022	.134	.0014-	.0001	.3066-	.1267
98	4	.950	.01-	1.01	90.00-	.038	.1814	.0020	.07	.0007-	.0002	.3063-	.1249
98	5	.950	.01-	.00	90.00-	.051	.1821	.0028	.011	.0037-	.0003	.3057-	.1236
98	6	.950	.01	1.01	90.00-	.064	.1840	.0015-	.047-	.0072	.0002	.3077-	.1237
98	7	.950	.01	2.02	90.00-	.051	.1833	.0027-	.110-	.0038-	.0001	.3076-	.1243
98	8	.950	.01	3.04	90.00-	.062	.1833	.0009-	.172-	.0097	.0003	.3094-	.1261

TABLE IIIa
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M		α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
98	9	.950	-	.01	4.05	90.00-	.060	.1837	.0029-	.248-	.0077	.0006	.3143-	.1306
98	10	.950	-	.01	6.07	90.00-	.064	.1786	.0068-	.408	.0033	.0008	.3289-	.1503
98	11	.950	-	.01	8.09	90.00-	.052	.1778-	.0004-	.606	.0203	.0004	.3443-	.1665
98	12	.950	-	.01	12.15	90.00-	.058	.1700	.0021-	1.005	.0450	.0009	.3468-	.1768
98	13	.950	-	.01	16.23	90.00-	.072	.1548	.0066-	1.386	.0237	.0003	.3451-	.1903
98	14	.950	-	.01	20.33	90.00-	.061	.1371	.0040-	1.852-	.0093-	.0005	.3329-	.1958
98	15	.950	-	.01-	.00	90.00-	.064	.1837	.0017	.013-	.0040-	.0003	.3082-	.1245
99	2	.950		.00	4.05-	90.00	.090	.1742-	.0214-	.266-	.0009-	.0017	.3075-	.1333
99	3	.950		.00	3.03-	90.00	.086	.1791-	.0187-	.189-	.0032-	.0012	.3059-	.1268
99	4	.950		.00	2.02-	90.00	.072	.1804-	.0198-	.125-	.0028-	.0012	.3044-	.1240
99	5	.950		.00	1.01-	90.00	.071	.1790-	.0173-	.065-	.0007-	.0007	.3024-	.1234
99	6	.950		.00-	.00-	90.00	.057	.1818-	.0161-	.001	.0023-	.0002	.3045-	.1227
99	7	.950		.00-	1.01-	90.00	.071	.1788-	.0172	.056	.0060-	.0008	.3027-	.1239
99	8	.950		.00-	2.03-	90.00	.070	.1792-	.0171	.122	.0080	.0002	.3049-	.1257
99	9	.950		.00-	3.04-	90.00	.056	.1779-	.0181	.184	.0079	.0001	.3076-	.1297
99	10	.950		.00-	4.05-	90.00	.066	.1789-	.0168	.263	.0057	.0001	.3131-	.1342
99	11	.950		.00-	.00-	90.00	.071	.1789-	.0172-	.004	.0026-	.0008	.3016-	.1227
100	1	1.100	-	4.05-	.00	.00-	.862	.3153	.1495-	.014	.0016	.0010	.5395-	.2242
100	2	1.100	-	2.03-	.00	.00-	.406	.3167	.0694-	.014-	.0001	.0005	.5377-	.2210
100	3	1.100		.00-	.00	.00	.001	.3157-	.0060-	.007-	.0006	.0001	.5341-	.2184
100	4	1.100		2.02-	.00-	.00	.430	.3202-	.0833-	.013-	.0007-	.0005	.5414-	.2212
100	5	1.100		4.05-	.00-	.00	.879	.3185-	.1624-	.019	.0003-	.0001	.5435-	.2250
100	6	1.100		6.08-	.00-	.00	1.382	.3172-	.2459-	.021	.0010-	.0003	.5478-	.2306
100	7	1.100		8.12-	.00-	.00	1.885	.3170-	.3279-	.029	.0038-	.0005	.5586-	.2416
100	8	1.100		12.22-	.00-	.00	3.078	.3091-	.5024-	.034	.0035-	.0005	.5819-	.2728
100	9	1.100		16.32	.01-	.00	4.534	.3049-	.7337-	.050	.0076-	.0006	.6052-	.3003
100	10	1.100		20.43	.01-	.00	6.354	.2834-	1.0539-	.040	.0036	.0001	.6250-	.3416
100	11	1.100		.00-	.00	.00	.023	.3165-	.0060-	.010-	.0009	.0001	.5389-	.2224
101	2	.750	-	4.04-	.00	.00-	.741	.1581	.1087-	.012-	.0001	.0003	.2544-	.0963
101	3	.750	-	2.02-	.00	.00-	.361	.1620	.0535-	.016-	.0009	.0002	.2564-	.0944
101	4	.750		.00-	.00	.00	.017	.1669-	.0046-	.016-	.0023	.0008	.2589-	.0920
101	5	.750		2.02-	.00-	.00	.377	.1651-	.0613-	.015-	.0018-	.0000	.2583-	.0932
101	6	.750		4.04-	.00	.00	.751	.1632-	.1189-	.015-	.0014	.0005	.2568-	.0936
101	7	.750		6.06-	.00-	.00	1.161	.1520-	.1771-	.018	.0003-	.0010	.2514-	.0994
101	8	.750		8.09-	.00-	.00	1.637	.1430-	.2319-	.032	.0011-	.0018	.2526-	.1096

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
101	9	.750	12.16-	.00-	.00	2.562	.1160-	.3363-	.025-	.0201-	.0013	.2514-	.1354
101	10	.750	16.25-	.00-	.00	3.712	.0885-	.4546-	.045	.0027-	.0008	.2431-	.1546
101	11	.750	20.34-	.00-	.00	5.177	.0523-	.6349-	.033-	.0004-	.0002	.2181-	.1658
101	12	.750	.00-	.00-	.00	.019	.1633-	.0048-	.021-	.0018-	.0006	.2558-	.0925
104	2	.950	4.00-	.00	.00-	.749	1.2281	.1804-	.020	.0043	.0004	2.8117-1	.5836
104	6	.950	3.00-	.00-	.00-	.538	1.1925	.1313-	.024	.0055-	.0003	2.8102-1	.6177
104	7	.950	2.00-	.00	.00-	.347	1.2164	.0828-	.027	.0060	.0001	2.8145-1	.5981
104	8	.950	1.00-	.00	.00-	.158	1.2280	.0344-	.021	.0051	.0000	2.8117-1	.5837
104	9	.950	.00-	.00	.00	.043	1.2196-	.0104-	.024	.0051	.0006	2.8016-1	.5820
104	10	.950	1.00-	.00	.00	.231	1.2616-	.0563-	.025	.0048	.0004	2.8095-1	.5479
104	11	.950	2.00-	.00	.00	.420	1.2578-	.1044-	.025	.0051	.0002	2.8227-1	.5649
104	12	.950	3.00-	.00	.00	.621	1.2366-	.1513-	.028	.0063	.0001	2.8117-1	.5751
104	13	.950	4.01-	.00-	.00	.835	1.2054-	.2017-	.032	.0063	.0000	2.8185-1	.6131
104	14	.950	.00-	.00-	.00	.043	1.2719-	.0082-	.017	.0052-	.0000	2.8126-1	.5407
105	1	.950	.00-	4.03	90.00-	.031	1.2119	.0058	.651-	.1450	.0004	2.7994-1	.5875
105	2	.950	.00-	3.02	90.00-	.024	1.2318	.0058	.480-	.1079	.0002	2.8052-1	.5734
105	3	.950	.00-	2.01	90.00-	.018	1.2619	.0058	.318-	.0709	.0004	2.8216-1	.5597
105	4	.950	.00-	1.01	90.00-	.013	1.2666	.0058	.166-	.0362	.0002	2.8207-1	.5541
105	5	.950	.00-	.00	90.00-	.020	1.2748	.0070	.004-	.0006	.0001	2.8177-1	.5429
105	6	.950	.00	1.01	90.00-	.026	1.2973	.0059-	.154	.0359	.0004	2.8218-1	.5245
105	7	.950	.00	2.01	90.00-	.021	1.2693	.0060-	.306	.0709	.0003	2.8245-1	.5552
105	8	.950	.00	3.02	90.00-	.015	1.2424	.0083-	.471	.1080	.0002	2.8165-1	.5741
105	9	.950	.00	4.03	90.00-	.007	1.2133	.0060-	.650	.1464	.0006	2.8039-1	.5906
105	10	.950	.00-	.00	90.00-	.020	1.2972	.0071	.008-	.0009	.0002	2.8146-1	.5174
107	2	1.100	4.01-	.00-	.00-	.748	1.9602	.1781-	.017-	.0025-	.0005	4.0298-2	.0696
107	3	1.100	3.00-	.00	.00-	.519	1.9731	.1250-	.020	.0007	.0000	4.0237-2	.0506
107	4	1.100	2.01-	.00	.00-	.348	2.0057	.0743-	.024	.0031	.0006	4.0235-2	.0178
107	5	1.100	1.00-	.00	.00-	.133	2.0056	.0273-	.027	.0060	.0006	4.0189-2	.0133
107	6	1.100	.00-	.00	.00	.050	2.0033-	.0143-	.027	.0071	.0006	4.0171-2	.0138
107	7	1.100	1.00-	.00	.00	.246	2.0085-	.0570-	.019	.0076	.0012	4.0257-2	.0172
107	8	1.100	2.00-	.00	.00	.430	2.0561-	.1036-	.026	.0108	.0005	4.0302-1	.9741
107	9	1.100	3.00-	.00	.00	.628	1.9709-	.1514-	.038	.0157	.0004	4.0348-2	.0639
107	10	1.100	4.01-	.00-	.00	.855	1.9179-	.2019-	.037	.0168-	.0002	4.0314-2	.1135
107	11	1.100	.00-	.00	.00	.078	1.9840-	.0143-	.027	.0064	.0005	4.0332-2	.0402

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_ℓ	C_{A_u}	ΔC_A
108	2	.750	4.01-	.00	.00-	.718	.7139	.1641-	.025	.0041-	.0000	2.2653-1	.5514
108	3	.750	3.00-	.00	.00-	.500	.7408	.1205-	.030	.0066	.0002	2.2750-1	.5342
108	4	.750	2.00-	.00	.00-	.307	.7661	.0713-	.030	.0063	.0004	2.2651-1	.4990
108	5	.750	1.00-	.00	.00-	.141	.7177	.0326-	.031	.0039	.0008	2.2602-1	.5425
108	6	.750	.00-	.00	.00	.050	.7421-	.0122-	.031	.0058	.0010	2.2588-1	.5167
108	7	.750	1.00-	.00	.00	.263	.7653-	.0549-	.031	.0045	.0002	2.2818-1	.5165
108	8	.750	2.00-	.00	.00	.428	.7196-	.0973-	.019	.0043	.0006	2.2649-1	.5453
108	9	.750	3.01-	.00	.00	.640	.7159-	.1438-	.038	.0056	.0008	2.2607-1	.5448
108	10	.750	4.01-	.00	.00	.852	.6919-	.1903-	.038	.0065	.0010	2.2584-1	.5665
108	11	.750	.00-	.00	.00	.071	.7343-	.0101-	.019	.0026	.0010	2.2622-1	.5279
109	2	1.100	4.00-	.00	.00-	.901	2.0839	.2257-	.026	.0035	.0018	4.0048-1	.9209
109	3	1.100	3.00-	.00	.00-	.640	2.0774	.1595-	.025	.0066	.0028	4.0079-1	.9305
109	4	1.100	2.00-	.00	.00-	.410	2.0600	.1007-	.026	.0051	.0029	4.0294-1	.9694
109	5	1.100	1.00-	.00	.00-	.177	2.0927	.0416-	.012	.0048	.0020	4.0355-1	.9428
109	6	1.100	.00-	.00	.00	.075	2.1296-	.0106-	.013	.0021	.0022	4.0282-1	.8986
109	7	1.100	1.00-	.00	.00	.277	2.0793-	.0668-	.008-	.0013	.0034	4.0288-1	.9495
109	8	1.100	2.00-	.00	.00	.530	2.0881-	.1273-	.001-	.0010	.0035	4.0160-1	.9279
109	9	1.100	3.00-	.00	.00	.760	2.0865-	.1900-	.001	.0022	.0026	4.0224-1	.9359
109	10	1.100	4.00-	.00	.00	1.041	2.0502-	.2617-	.022	.0034	.0017	3.9967-1	.9465
109	11	1.100	6.00-	.00-	.00	1.590	1.9840-	.3981-	.022	.0062-	.0003	4.0082-2	.0242
109	12	1.100	8.00-	.00	.00	2.194	1.8995-	.5405-	.035	.0111	.0002	4.0798-2	.1803
109	13	1.100	12.01-	.00-	.00	3.677	1.7702-	.9018-	.037	.0109-	.0004	4.2209-2	.4507
109	14	1.100	16.02-	.00	.00	5.426	1.6115-1	.3244-	.026	.0066	.0012	4.3423-2	.7308
109	15	1.100	20.03-	.00	.00	7.389	1.3399-1	.7824-	.016	.0010	.0005	4.2849-2	.9450
109	16	1.100	.00-	.00	.00	.050	1.9912-	.0126-	.006	.0014	.0031	4.0261-2	.0349
110	2	.950	4.00-	.00	.00-	.913	1.2695	.2374-	.014	.0026	.0012	2.8231-1	.5536
110	3	.950	3.00-	.00	.00-	.621	1.3481	.1676	.002	.0022	.0013	2.8330-1	.4849
110	4	.950	2.00-	.00	.00-	.414	1.3207	.1055	.001	.0018	.0017	2.8173-1	.4966
110	5	.950	1.00-	.00	.00-	.149	1.3528	.0428-	.007	.0021	.0020	2.8137-1	.4609
110	6	.950	.00-	.00	.00	.088	1.3738-	.0173-	.007	.0045	.0022	2.8199-1	.4461
110	7	.950	1.00-	.00	.00	.324	1.3459-	.0776-	.007	.0042	.0013	2.8200-1	.4741
110	8	.950	2.00-	.00	.00	.558	1.3147-	.1375-	.008	.0024	.0016	2.8045-1	.4898
110	9	.950	3.00-	.00	.00	.822	1.3042-	.2050-	.008	.0034	.0006	2.8046-1	.5004
110	10	.950	4.00-	.00	.00	1.081	1.2527-	.2713-	.016	.0050	.0018	2.8088-1	.5561
110	11	.950	6.00-	.00	.00	1.630	1.1888-	.4075-	.017	.0041	.0009	2.8060-1	.6172
110	12	.950	8.00-	.00	.00	2.180	1.0823-	.5442-	.042	.0066	.0011	2.8335-1	.7512
110	13	.950	12.00-	.00-	.00	3.727	.8931-	.9279-	.043	.0109-	.0002	2.9655-2	.0724

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_ℓ	C_{A_u}	ΔC_A
110	14	.950	16.00-	.00	.00	5.488	.5691-	1.3731-	.038	.0110	.0010	3.0896-2	.5205
110	15	.950	28.01-	.00	.00	7.555	.2359-	1.8747-	.010	.0047	.0012	2.8720-2	.6561
110	16	.950	.00-	.00	.00	.116	1.2633-	.0199	.001	.0025	.0011	2.8058-1	.5425
111	2	.950	.00-	4.02	90.00	.007	1.3077	.0095	.595-	.1168	.0016	2.8044-1	.4967
111	3	.950	.00-	3.01	90.00-	.006	1.2729	.0108	.437-	.0886	.0012	2.8134-1	.5405
111	4	.950	.00-	2.01	90.00-	.019	1.3262	.0076	.306-	.0605	.0018	2.8239-1	.4977
111	5	.950	.00-	1.00	90.00	.024	1.3320	.0091	.161-	.0311	.0016	2.8081-1	.4761
111	6	.950	.00-	.00	90.00	.012	1.3406	.0105	.025-	.0026	.0012	2.8301-1	.4895
111	7	.950	.00	1.00	90.00-	.001	1.3277	.0123-	.118	.0276	.0021	2.8128-1	.4851
111	8	.950	.00	2.01	90.00	.015	1.3304	.0112-	.266	.0570	.0017	2.8253-1	.4949
111	9	.950	.00	3.01	90.00	.003	1.2765	.0079-	.399	.0848	.0026	2.8030-1	.5265
111	10	.950	.01	4.01	90.00	.018	1.2925	.0117-	.548	.1129	.0012	2.8129-1	.5204
111	11	.950	.00-	.00	90.00-	.016	1.3119	.0130	.017-	.0019	.0013	2.8192-1	.5073
112	1	.750	4.00-	.00	.00-	.882	.7582	.2243	.002	.0010	.0003	2.2927-1	.5345
112	2	.750	3.00-	.00	.00-	.680	.7514	.1603	.012	.0016	.0024	2.2905-1	.5391
112	3	.750	2.00-	.00	.00-	.362	.8115	.0988	.012	.0013	.0015	2.2899-1	.4784
112	4	.750	1.00-	.00	.00-	.086	.7708	.0412	.012	.0010	.0021	2.2962-1	.5254
112	5	.750	.00-	.00	.00	.078	.7841-	.0134	.011	.0008	.0012	2.3002-1	.5161
112	6	.750	1.00-	.00	.00	.316	.7922-	.0741	.000	.0013	.0017	2.2892-1	.4970
112	7	.750	2.00-	.00	.00	.552	.7673-	.1279	.001	.0048	.0007	2.2894-1	.5221
112	8	.750	3.00-	.00	.00	.785	.7654-	.1880	.021	.0008	.0012	2.2951-1	.5297
112	9	.750	4.00-	.00	.00	1.062	.7156-	.2522-	.000	.0042	.0002	2.2884-1	.5728
112	10	.750	6.00-	.00	.00	1.560	.7163-	.3807-	.001	.0052	.0011	2.2792-1	.5629
112	11	.750	8.01-	.00	.00	2.177	.4826-	.5079-	.012	.0055	.0005	2.2919-1	.8093
112	12	.750	12.01-	.00-	.00	3.579	.3631-	.8568-	.034	.0126	.0000	2.2914-1	.9283
112	13	.750	16.02-	.00	.00	5.267	.1070-	1.2764-	.064	.0256	.0015	2.3705-2	.2635
112	14	.750	20.03-	.00	.00	7.111-	.0870-	1.6793-	.016	.0109	.0014	2.3982-2	.4852
112	15	.750	.00-	.00	.00	.114	.7936-	.0100	.012	.0008	.0012	2.2948-1	.5042
114	2	1.100	3.49-	.00-	.00	.564	3.2396	1.2258-	.135	.0324-	.0024	3.5026-	.2630
114	3	1.100	2.48	.01-	.00	.809	3.3071	1.2088-	.150	.0285-	.0051	3.5617-	.2566
114	4	1.100	1.47	.01-	.00	1.056	3.3515	1.1654-	.144	.0227-	.0059	3.5994-	.2479
114	5	1.100	.47	.01-	.00	1.474	3.3717	1.0770-	.137	.0235-	.0071	3.6139-	.2422
114	6	1.100	.53	.01-	.00	1.812	3.4081	.9862-	.146	.0208-	.0055	3.6491-	.2410
114	7	1.100	1.54	.01-	.00	2.195	3.4784	.9225-	.156	.0332-	.0038	3.7164-	.2330
114	8	1.100	2.54-	.00-	.00	2.554	3.5568	.8264-	.140	.0348-	.0043	3.7879-	.2311

UNCLASSIFIED

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_ℓ	C_{A_u}	ΔC_A
114	9	1.100	3.54-	.00-	.00	3.058	3.6277	.7123-	.169	.0389-	.0041	3.8545-	.2268
114	10	1.100	4.54-	.00-	.00	3.514	3.7046	.5915-	.149	.0396-	.0059	3.9261-	.2215
114	11	1.100	6.54-	.00-	.00	4.550	3.8689	.3268-	.125	.0335-	.0070	4.0909-	.2220
114	12	1.100	8.54-	.00-	.00	5.643	4.0206	.0473-	.065	.0085-	.0033	4.2462-	.2256
114	13	1.100	12.53-	.00-	.01	7.622	4.2421-	.4633-	.119	.0221-	.0077	4.4853-	.2432
114	14	1.100	16.56-	.00-	.01	8.853	4.3146-	.7133-	.083	.0247-	.0125	4.5668-	.2522
114	15	1.100	20.55	.03	.01	10.226	4.1887-1	.0893-	.250-	.0219	.0180	4.4492-	.2605
114	16	1.100	.53	.01-	.00	1.844	3.4215	.9951-	.143	.0303-	.0065	3.6677-	.2462
115	2	.950	3.64-	.00-	.00	1.102	2.7837	.8650-	.108	.0371-	.0014	2.9440-	.1603
115	3	.950	2.62-	.00	.00	1.329	2.8472	.8570-	.083	.0375	.0004	2.9998-	.1526
115	4	.950	1.62-	.00	.00	1.580	2.9675	.8205-	.015	.0228	.0026	3.1092-	.1417
115	5	.950	.60-	.00-	.00	2.153	3.0506	.7083-	.042	.0128-	.0015	3.1930-	.1424
115	6	.950	.42-	.00-	.00	2.751	3.2264	.6359-	.056	.0133-	.0032	3.3462-	.1198
115	7	.950	1.43-	.00-	.00	3.090	3.2684	.5836-	.065	.0092-	.0019	3.3869-	.1185
115	8	.950	2.43-	.00-	.00	3.365	3.3386	.5317-	.058	.0065-	.0018	3.4504-	.1118
115	9	.950	3.44-	.00-	.00	3.624	3.3948	.4853-	.049	.0093-	.0016	3.5051-	.1103
115	10	.950	4.45-	.00-	.00	3.984	3.4811	.4360-	.056	.0107-	.0027	3.5882-	.1071
115	11	.950	6.45-	.00-	.00	4.587	3.5681	.3024-	.057	.0104-	.0016	3.6864-	.1183
115	12	.950	8.46-	.00	.00	5.236	3.6750	.1438-	.060	.0016	.0002	3.7932-	.1182
115	13	.950	12.46	.01	.00	6.681	3.8192-	.2177-	.129	.0173-	.0017	3.9422-	.1230
115	14	.950	16.47-	.00-	.00	7.746	3.8600-	.4758-	.082	.0157-	.0033	4.0045-	.1445
115	15	.950	20.47-	.00	.00	8.745	3.8358-	.7248	.022-	.0106	.0032	4.0061-	.1703
115	16	.950	.42-	.00-	.00	2.769	3.2184	.6298-	.049	.0113-	.0032	3.3428-	.1244
116	1	.950	4.45-	.00-	.00	3.984	3.4835	.4361-	.056	.0106-	.0016	3.5926-	.1091
116	2	.950	3.44-	.00-	.00	3.657	3.4006	.4823-	.057	.0085-	.0017	3.5121-	.1115
116	3	.950	2.44-	.00-	.00	3.370	3.3552	.5272-	.049	.0086-	.0030	3.4656-	.1104
116	4	.950	1.43-	.00-	.00	3.083	3.2832	.5824-	.049	.0092-	.0019	3.3961-	.1129
116	5	.950	.42-	.00-	.00	2.766	3.2276	.6344-	.057	.0106-	.0032	3.3446-	.1170
116	6	.950	.61-	.00-	.00	2.143	3.0735	.7113-	.036	.0123-	.0026	3.2109-	.1374
116	7	.950	1.61-	.00	.00	1.639	2.9741	.8175-	.024	.0194	.0026	3.1083-	.1342
116	9	.950	3.64-	.00-	.00	1.135	2.7921	.8663-	.100	.0365-	.0013	2.9440-	.1519
116	10	.950	.42-	.00-	.00	2.694	3.2100	.6359-	.057	.0106-	.0032	3.3389-	.1289
117	1	.950	8.46-	3.98-	26.65	5.382	3.6529	.0640	.748-	.2640	.0832	3.7795-	.1266
117	2	.950	8.46-	2.98-	20.57	5.391	3.6540	.0866	.489-	.1804	.0587	3.7823-	.1283
117	3	.950	8.45-	1.99-	14.08	5.301	3.6780	.1230	.268-	.1094	.0379	3.7979-	.1199

UNCLASSIFIED

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	ϕ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_ℓ	C_{A_u}	ΔC_A
117	4	.950	8.45-	.99-	7.19	5.255	3.6651	.1364	.090-	.0517	.0182	3.7862-	.1211
117	5	.950	8.46-	.00	.00	5.208	3.6746	.1515-	.053-	.0031	.0003	3.7957-	.1211
117	6	.950	8.45	1.00	7.19	5.253	3.6524	.1371-	.231	.0610-	.0212	3.7746-	.1222
117	7	.950	8.45	2.00	14.08	5.279	3.6460	.1165-	.438	.1276-	.0407	3.7685-	.1225
117	8	.950	8.45	2.99	20.57	5.316	3.6272	.0825-	.654	.2004-	.0603	3.7550-	.1278
117	9	.950	8.45	3.99	26.65	5.370	3.6233	.0638-	.897	.2707-	.0820	3.7521-	.1288
117	10	.950	8.46-	.00	.00	5.205	3.6677	.1463-	.052-	.0004	.0003	3.7923-	.1246
118	2	.950	16.44-	4.01-	14.19	7.700	3.7703-	.5414	.670-	.1556	.0128	3.9370-	.1667
118	3	.950	16.44-	3.01-	10.79	7.750	3.8119-	.5341	.565-	.1445	.0113	3.9699-	.1580
118	4	.950	16.45-	2.00-	7.20	7.764	3.8253-	.5145	.405-	.1116	.0075	3.9819-	.1566
118	5	.950	16.46-	.99-	3.60	7.728	3.8449-	.4860	.239-	.0712	.0005	3.9909-	.1460
118	6	.950	16.47-	.00-	.00	7.736	3.8484-	.4703-	.059	.0111-	.0043	3.9924-	.1440
118	7	.950	16.46	1.00	3.60	7.726	3.8348-	.4790-	.376	.0815-	.0060	3.9829-	.1481
118	8	.950	16.46	2.00	7.20	7.727	3.8241-	.4986-	.496	.1129-	.0078	3.9779-	.1538
118	9	.950	16.45	3.02	10.79	7.778	3.8117-	.5232-	.646	.1455-	.0120	3.9747-	.1630
118	10	.950	16.45	4.01	14.19	7.698	3.7995-	.5219-	.805	.1681-	.0113	3.9697-	.1702
118	11	.950	16.47-	.00-	.00	7.749	3.8435-	.4678-	.067	.0103-	.0045	3.9991-	.1556
119	1	.750	3.76-	.00	.00	.647	2.3737	.8624-	.117	.0472	.0032	2.5173-	.1436
119	2	.750	2.75-	.01	.00	.887	2.4625	.8326-	.111	.0667	.0100	2.5902-	.1277
119	3	.750	1.75-	.01	.00	1.126	2.5352	.7820-	.091	.0625	.0104	2.6514-	.1162
119	4	.750	.74-	.00	.00	1.469	2.5853	.7250-	.025	.0318	.0047	2.6889-	.1036
119	5	.750	.26-	.00-	.00	1.779	2.6531	.6570-	.031	.0109-	.0012	2.7477-	.0946
119	6	.750	1.26-	.00-	.00	2.098	2.7224	.6048-	.073	.0074-	.0039	2.8132-	.0908
119	7	.750	2.28-	.00-	.00	2.567	2.8288	.5369-	.048	.0239-	.0022	2.9090-	.0802
119	8	.750	3.29-	.00-	.00	2.915	2.8900	.4725-	.083	.0147-	.0035	2.9661-	.0761
119	9	.750	4.28-	.00-	.00	3.228	2.9437	.3915-	.094	.0126-	.0019	3.0190-	.0753
119	10	.750	6.28-	.00-	.00	3.939	3.0369	.2227-	.104	.0207-	.0031	3.1148-	.0779
119	11	.750	8.28-	.00-	.00	4.715	3.1452	.0270-	.096	.0137-	.0018	3.2276-	.0824
119	12	.750	12.29-	.00-	.00	6.173	3.3439-	.3364-	.118	.0147-	.0002	3.4445-	.1006
119	13	.750	16.31-	.00	.00	7.142	3.4649-	.4077-	.077	.0027	.0037	3.5936-	.1287
119	14	.750	20.33-	.00	.00	8.033	3.4998-	.5324-	.035-	.0071	.0040	3.6632-	.1634
119	15	.750	.26-	.00-	.00	1.819	2.6542	.6535-	.041	.0136-	.0012	2.7472-	.0930
121	3	1.100	3.59-	.00-	.00	.753	2.3313	1.0709-	.080	.0388-	.0031	2.5753-	.2743
121	3	1.100	2.57-	.00-	.00	.660	2.3793	1.0120-	.085	.0404-	.0018	2.6405-	.2613
121	4	1.100	1.55-	.00-	.00	.941	2.4564	.9084-	.084	.0417-	.0025	2.7132-	.2568

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
121	5	1.100	-.53-	.00-	.00	1.201	2.5192	.9835-	.084	.0345-	.0021	2.7598-	.2406
121	6	1.100	.48-	.00-	.00	1.497	2.5788	.9446-	.078	.0314-	.0029	2.8121-	.2333
121	7	1.100	1.49-	.00-	.00	1.871	2.6256	.8734-	.072	.0280-	.0041	2.8556-	.2300
121	8	1.100	2.50-	.00-	.00	2.322	2.6732	.7753-	.061	.0192-	.0036	2.9013-	.2281
121	9	1.100	3.51-	.00-	.00	2.716	2.7261	.7063-	.035	.0129-	.0038	2.9523-	.2262
121	10	1.100	4.51-	.00-	.00	3.144	2.8000	.6043-	.056	.0128-	.0054	3.0218-	.2218
121	11	1.100	6.50-	.00-	.01	4.185	2.9297	.3299-	.064	.0150-	.0094	3.1508-	.2211
121	13	1.100	8.50-	.00-	.00	5.429	3.0748-	.0021-	.059	.0177-	.0072	3.3023-	.2275
121	14	1.100	8.50-	.00-	.00	5.452	3.0751	.0001-	.060	.0154-	.0072	3.3022-	.2271
121	15	1.100	12.51-	.00-	.01	7.388	3.3116-	.4624-	.113	.0501-	.0101	3.5606-	.2490
121	16	1.100	16.55-	.01-	.01	9.073	3.4874-	.7908	.009	.0440-	.0212	3.7506-	.2632
121	17	1.100	20.56-	.02-	.01	10.677	3.5167-1	.1663	.111	.0225-	.0104	3.7982-	.2815
121	18	1.100	.49-	.00-	.00	1.563	2.5850	.9441-	.077	.0301-	.0020	2.8277-	.2427
122	2	.950	3.67-	.00	.00	.807	2.0380	.8252-	.095	.0353	.0007	2.1895-	.1515
122	3	.950	2.66-	.00-	.00	1.123	2.1313	.7875-	.067	.0332-	.0015	2.2745-	.1432
122	4	.950	1.66-	.00-	.00	1.453	2.1764	.7365-	.080	.0324-	.0002	2.3197-	.1433
122	5	.950	.64-	.00-	.00	1.786	2.2714	.6970-	.095	.0307-	.0001	2.4066-	.1352
122	6	.950	.37-	.00-	.00	2.128	2.3335	.6318-	.066	.0195-	.0013	2.4650-	.1315
122	7	.950	1.37-	.00-	.00	2.478	2.4044	.5517-	.066	.0104-	.0016	2.5323-	.1279
122	8	.950	2.38-	.00-	.00	2.823	2.4404	.5073-	.066	.0189-	.0024	2.5676-	.1272
122	9	.950	3.41-	.00-	.00	3.077	2.5303	.5095-	.058	.0129-	.0019	2.6463-	.1160
122	10	.950	4.42-	.00-	.00	3.368	2.5494	.4762-	.050	.0121-	.0025	2.6657-	.1163
122	11	.950	6.43-	.00-	.00	4.117	2.6829	.3422-	.050	.0114-	.0026	2.7907-	.1078
122	12	.950	8.45-	.00-	.00	5.186	2.8709	.1207-	.018	.0113-	.0040	2.9753-	.1044
122	13	.950	12.45-	.00-	.00	7.237	3.0862-	.3792-	.077	.0137-	.0023	3.2110-	.1248
122	14	.950	16.49-	.00	.00	8.399	3.1565-	.5679-	.018-	.0091	.0011	3.2949-	.1384
122	15	.950	20.50	.01	.00	9.558	3.1781-	.8294	.017-	.0238	.0052	3.3400-	.1619
122	16	.950	.37-	.00-	.00	2.119	2.3570	.6284-	.066	.0208-	.0026	2.4807-	.1237
123	2	.950	.39-	4.00-	89.97	2.427	2.3305	.5784	1.273-	.3795	.0588	2.4682-	.1377
123	3	.950	.39-	3.00-	89.98	2.390	2.3385	.5852	.954-	.2921	.0375	2.4723-	.1338
123	4	.950	.39-	2.00-	89.99	2.333	2.3534	.5869	.638-	.2021	.0208	2.4853-	.1319
123	5	.950	.40-	1.00-	90.00	2.349	2.3755	.6038	.310-	.0980	.0076	2.5048-	.1293
123	6	.950	.39-	.00-	90.00	2.317	2.3641	.6041	.018-	.0063-	.0010	2.4936-	.1295
123	7	.950	.39	1.00-	90.01	2.313	2.3452	.5967-	.274	.0854-	.0109	2.4809-	.1357
123	8	.950	.40	2.00-	90.01	2.380	2.3961	.6044-	.564	.1766-	.0208	2.5218-	.1257
123	11	.950	.40-	.00-	90.00	2.334	2.3979	.6098	.034-	.0089-	.0011	2.5224-	.1245
123	12	.950	.39	1.00-	90.01	2.310	2.3446	.5964-	.251	.0833-	.0109	2.4796-	.1350

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
123	13	.950	.40	3.00-	90.01	2.388	2.3602	.5063-	.543	.1751-	.0208	2.4935-	.1333
123	14	.950	.38	5.00-	90.03	2.419	2.3657	.4854-	.874	.2730-	.0376	2.4948-	.1291
123	15	.950	.39	4.00-	90.02	2.409	2.3541	.5722-	1.193	.3520-	.0606	2.4933-	.1392
123	16	.950	.39-	.00-	90.00	2.323	2.3642	.6062	.034-	.0090-	.0010	2.4981-	.1339
124	1	.950	8.45-	3.97-	26.64	5.661	2.9438-	.0050	1.019-	.3683	.1113	3.0715-	.1277
124	2	.950	8.45-	2.97-	20.56	5.520	2.8832	.0258	.699-	.2520	.0794	3.0153-	.1321
124	3	.950	8.44-	1.99-	14.07	5.362	2.8757	.0704	.436-	.1461	.0496	2.9999-	.1242
124	4	.950	8.45-	1.00-	7.19	5.257	2.8495	.1118	.204-	.0615	.0203	2.9712-	.1217
124	5	.950	8.45-	.00-	.00	5.202	2.8482	.1228-	.026	.0120-	.0052	2.9715-	.1233
124	6	.950	8.44	1.00	7.18	5.230	2.8392	.1003-	.278	.0885-	.0301	2.9636-	.1244
124	7	.950	8.44	1.99	14.07	5.288	2.8495	.0790-	.542	.1777-	.0562	2.9735-	.1240
124	8	.950	8.44	2.98	20.55	5.392	2.8448	.0405-	.838	.2697-	.0812	2.9769-	.1321
124	9	.950	8.45	3.98	26.64	5.501	2.8823	.0166-	1.157	.3677-	.1048	3.0145-	.1322
124	10	.950	8.45-	.00-	.00	5.201	2.8304	.1229-	.026	.0120-	.0039	2.9552-	.1248
125	2	.950	16.47-	3.97-	14.17	8.636	3.1933-	.7031	.871-	.3123	.0498	3.3764-	.1831
125	3	.950	16.48-	2.99-	10.77	8.648	3.2020-	.6622	.643-	.2496	.0499	3.3793-	.1773
125	4	.950	16.48-	1.98-	7.18	8.506	3.1621-	.6132	.369-	.1463	.0342	3.3319-	.1698
125	5	.950	16.49-	.98-	3.59	8.477	3.1676-	.5761	.142-	.0681	.0180	3.3266-	.1590
125	6	.950	16.49-	.00	.00	8.400	3.1494-	.5586-	.024-	.0057	.0022	3.3045-	.1551
125	7	.950	16.49	.99	3.59	8.461	3.1694-	.5733-	.215	.0571-	.0142	3.3279-	.1585
125	8	.950	16.49	1.98	7.18	8.618	3.2097-	.6161-	.417	.1539-	.0355	3.3768-	.1671
125	11	.950	16.48	2.99	10.77	8.596	3.1887-	.6616-	.700	.2564-	.0464	3.3663-	.1776
125	12	.950	16.48	3.98	14.18	8.712	3.2057-	.7069-	.854	.2708-	.0396	3.3941-	.1884
125	13	.950	16.49-	.00	.00	8.424	3.1492-	.5658-	.025-	.0071	.0021	3.3070-	.1578
126	1	.750	- 3.79-	.00	.00	.406	1.6696	.8059-	.115	.0353	.0013	1.8307-	.1611
126	2	.750	- 2.78-	.00	.00	.720	1.7433	.7638-	.114	.0351	.0003	1.8940-	.1507
126	3	.750	- 1.78-	.00-	.00	1.001	1.8105	.7068-	.115	.0349-	.0009	1.9477-	.1372
126	4	.750	- .77-	.00-	.00	1.318	1.8773	.6456-	.103	.0356-	.0005	2.0040-	.1267
126	5	.750	.23-	.00-	.00	1.633	1.9324	.5834-	.103	.0371-	.0017	2.0521-	.1197
126	6	.750	1.24-	.00-	.00	1.928	1.9593	.5316-	.103	.0330-	.0027	2.0796-	.1203
126	7	.750	2.25-	.00-	.00	2.193	2.0081	.5013-	.104	.0256-	.0035	2.1232-	.1151
126	8	.750	3.25-	.00-	.00	2.429	2.0628	.4765-	.094	.0229-	.0028	2.1761-	.1133
126	9	.750	4.26-	.00-	.00	2.766	2.1371	.4218-	.083	.0218-	.0023	2.2426-	.1056
126	10	.750	6.27-	.00-	.00	3.496	2.2659	.2935-	.105	.0210-	.0035	2.3709-	.1050
126	11	.750	8.29-	.00-	.00	4.542	2.4161	.0814-	.092	.0262-	.0055	2.5122-	.1021

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
126	12	.750	10.29-	.00-	.00	5.677	2.5512-	.2043-	.079	.0398-	.0051	2.6562-	.1050
126	13	.750	12.30-	.00-	.00	6.473	2.6796-	.3547-	.101	.0389-	.0019	2.8055-	.1259
126	14	.750	16.34-	.00-	.00	7.528	2.8265-	.4702-	.072	.0176-	.0005	2.9790-	.1525
126	15	.750	20.36-	.00	.00	8.734	2.9222-	.6856-	.044-	.0010	.0015	3.0975-	.1753
126	16	.750	.23-	.00-	.00	1.657	1.9188	.5831-	.102	.0350-	.0001	2.0381-	.1193
127	2	.950	.45-	3.98-	89.96	3.028	3.2781	.5925	1.071-	.3940	.0676	3.3954-	.1173
127	3	.950	.46-	2.98-	89.97	3.002	3.2736	.6204	.755-	.2894	.0447	3.3902-	.1166
127	4	.950	.46-	1.99-	89.98	2.978	3.2459	.6194	.477-	.1872	.0272	3.3681-	.1222
127	5	.950	.46-	.99-	89.99	2.974	3.2793	.6164	.210-	.0985	.0128	3.3887-	.1104
127	6	.950	.46	.01-	90.00	3.024	3.2478	.6091-	.029-	.0180-	.0004	3.3634-	.1156
127	7	.950	.46	1.00-	90.01	3.041	3.2575	.6092-	.252	.0613-	.0125	3.3744-	.1169
127	8	.950	.46	2.00-	90.01	3.054	3.2596	.6151-	.516	.1517-	.0258	3.3808-	.1212
127	9	.950	.45	3.00-	90.03	3.010	3.2515	.6080-	.811	.2519-	.0460	3.3783-	.1268
127	10	.950	.45	4.00-	90.04	3.101	3.2643	.5819-	1.115	.3469-	.0654	3.3891-	.1248
127	11	.950	.45	.01-	90.00	2.996	3.2531	.6093-	.029-	.0168-	.0003	3.3681-	.1150
129	2	1.100	- 3.55-	.00	.00	.326	2.1202	1.1543-	.142	.0478	.0004	2.3313-	.2111
129	3	1.100	- 2.53-	.00	.00	.592	2.2121	1.1404-	.134	.0471	.0006	2.4325-	.2204
129	4	1.100	- 1.51-	.00-	.00	.860	2.2970	1.1209-	.120	.0459-	.0002	2.5156-	.2186
129	5	1.100	- .49-	.00-	.00	1.156	2.3808	1.0907-	.117	.0504-	.0001	2.6094-	.2286
129	6	1.100	.53-	.00-	.00	1.438	2.4388	1.0736-	.089	.0276-	.0009	2.6768-	.2380
129	7	1.100	1.53-	.00	.00	1.756	2.4980	1.0204-	.070	.0208	.0010	2.7394-	.2414
129	8	1.100	2.54-	.00	.00	2.200	2.5681	.9339-	.072	.0142	.0015	2.8006-	.2325
129	9	1.100	3.55-	.00	.00	2.599	2.6326	.8480-	.059	.0124	.0021	2.8636-	.2310
129	10	1.100	4.56-	.00	.00	3.046	2.7021	.7536-	.067	.0088	.0025	2.9279-	.2258
129	11	1.100	6.56-	.00	.00	3.965	2.8315	.5393-	.067	.0107	.0002	3.0469-	.2154
129	12	1.100	8.56-	.00	.00	4.972	2.9843	.2869-	.043	.0042	.0004	3.1906-	.2063
129	13	1.100	10.56-	.00-	.00	6.095	3.0999	.0054-	.006-	.0048-	.0006	3.3161-	.2162
129	14	1.100	10.57-	.00	.00	6.066	3.0887	.0165-	.007-	.0083	.0004	3.3136-	.2249
129	15	1.100	12.56-	.00-	.00	7.034	3.1899-	.2391-	.006	.0027-	.0022	3.4174-	.2275
129	16	1.100	14.57-	.00-	.00	7.990	3.2846-	.4541-	.011	.0099-	.0014	3.5314-	.2468
129	17	1.100	16.58-	.00-	.00	8.755	3.3509-	.6194-	.044	.0150	.0000	3.6080-	.2571
129	18	1.100	20.57-	.01-	.01	10.596	3.4049-	1.1059	.099	.0197-	.0080	3.6725-	.2676
129	19	1.100	- 9.65-	.00-	.00-	1.629	1.5933	1.3559-	.126	.0475-	.0017	1.8017-	.2084
129	20	1.100	- 5.58-	.00-	.00-	.308	1.9502	1.2192-	.127	.0508-	.0004	2.1551-	.2049
129	21	1.100	- 7.62-	.00-	.00-	.956	1.7642	1.2802-	.125	.0459-	.0006	1.9672-	.2030
129	22	1.100	.52-	.00-	.00	1.441	2.4471	1.0717-	.069	.0247-	.0009	2.6837-	.2366

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
130	3	1.050	.50-	.00-	.00	1.550	2.4645	1.0512-	.034	.0156-	.0012	2.6989-	.2344
130	5	1.050	2.53-	.00	.00	2.286	2.5833	.9314-	.021	.0073	.0016	2.8278-	.2445
130	4	1.050	4.55-	.00-	.00	3.161	2.7389	.7625-	.023	.0012-	.0003	2.9700-	.2311
130	5	1.050	6.55-	.00-	.00	4.061	2.8745	.5565-	.016	.0004-	.0004	3.0923-	.2178
130	6	1.050	8.56-	.00-	.00	5.094	3.0274	.3086-	.011	.0004-	.0020	3.2359-	.2085
130	7	1.050	10.56-	.00-	.00	6.190	3.1868	.0305-	.006-	.0024-	.0001	3.3978-	.2110
130	8	1.050	12.55-	.00-	.00	7.240	3.3227-	.2390	.025-	.0136	.0001	3.5495-	.2268
130	9	1.050	14.56-	.00-	.00	8.282	3.4483-	.4713	.000	.0043-	.0003	3.6976-	.2493
130	10	1.050	16.58-	.00	.00	8.886	3.5015-	.5649-	.024	.0170	.0031	3.7575-	.2560
130	11	1.050	.51-	.00-	.00	1.540	2.4713	1.0594-	.047	.0180-	.0012	2.7174-	.2461
131	1	1.000	.46-	.00	.00	1.965	2.4105	.8896-	.025	.0158	.0007	2.6026-	.1921
131	2	1.000	2.48-	.00	.00	2.760	2.5409	.7600	.002	.0021	.0015	2.7262-	.1853
131	3	1.000	4.51-	.00	.00	3.479	2.6959	.6584	.030-	.0114	.0026	2.8594-	.1635
131	4	1.000	6.53-	.00-	.00	4.152	2.8384	.5357	.003-	.0006-	.0018	2.9786-	.1402
131	5	1.000	8.54-	.00-	.00	5.085	2.9959	.3277-	.029	.0204-	.0040	3.1310-	.1351
131	6	1.000	10.55-	.00-	.00	6.142	3.1329	.0857-	.018	.0121-	.0023	3.2736-	.1407
131	7	1.000	12.55-	.00	.00	7.166	3.2609-	.1581	.021-	.0065	.0003	3.4229-	.1620
131	8	1.000	14.56-	.00-	.00	7.946	3.3578-	.3085	.032	.0049-	.0032	3.5401-	.1823
131	9	1.000	16.58-	.00	.00	8.724	3.4195-	.4710	.002	.0073	.0007	3.6178-	.1983
131	10	1.000	.46-	.00	.00	2.010	2.4085	.8755-	.010	.0157	.0017	2.5971-	.1886
132	2	.950	9.74-	.00	.00-	1.439	1.3557	1.1861-	.061	.0241	.0003	1.4872-	.1315
132	3	.950	7.72-	.00	.00-	.667	1.5059	1.0597-	.103	.0409	.0003	1.6269-	.1210
132	4	.950	5.68-	.00	.00	.077	1.6954	.9807-	.085	.0428	.0023	1.8199-	.1245
132	5	.950	3.66-	.00	.00	.798	1.8882	.8957-	.086	.0370	.0011	2.0157-	.1275
132	6	.950	2.64-	.00	.00	1.139	1.9930	.8526-	.093	.0345	.0011	2.1194-	.1264
132	7	.950	1.63-	.00	.00	1.479	2.0837	.8053-	.085	.0322	.0011	2.2164-	.1327
132	8	.950	.62-	.00	.00	1.766	2.1735	.7723-	.071	.0253	.0012	2.3129-	.1394
132	9	.950	.40-	.00	.00	2.046	2.2459	.7403-	.070	.0237	.0002	2.3927-	.1468
132	10	.950	1.41-	.00-	.00	2.359	2.3085	.7028-	.069	.0249-	.0007	2.4583-	.1498
132	11	.950	2.42-	.00-	.00	2.698	2.3864	.6630-	.061	.0227-	.0005	2.5324-	.1460
132	12	.950	3.44-	.00-	.00	3.084	2.4584	.6111-	.045	.0183-	.0016	2.5975-	.1391
132	14	.950	6.47-	.00-	.00	4.163	2.6395	.4276-	.046	.0143-	.0015	2.7472-	.1077
132	15	.950	8.47-	.00-	.00	5.065	2.8075	.2452-	.023	.0139-	.0011	2.9089-	.1014
132	16	.950	10.49-	.00-	.00	6.015	2.9743	.0359-	.045	.0227-	.0034	3.0783-	.1040
132	17	.950	12.50-	.00-	.00	6.781	3.0250-	.1266-	.047	.0145-	.0002	3.1437-	.1187
132	18	.950	14.52-	.00	.00	7.539	3.0861-	.2587-	.018	.0027	.0009	3.2193-	.1332
132	19	.950	16.53-	.00	.00	8.138	3.1533-	.3724-	.013-	.0085	.0046	3.2852-	.1319

TABLE IIIa
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
132	20	.950	20.54-	.00	.00	9.484	3.1877-	.6956	.007-	.0157	.0080	3.3374-	.1497
132	21	.950	.40-	.00	.00	2.110	2.2449	.7328-	.062	.0244	.0002	2.3876-	.1427
133	1	.950	.43	4.00-	89.97	2.308	2.3010	.7487	1.170-	.3687	.0518	2.4494-	.1484
133	2	.950	.43-	3.00-	89.98	2.279	2.2783	.7327	.869-	.2798	.0361	2.4281-	.1498
133	3	.950	.43-	2.00-	89.99	2.293	2.2756	.7336	.561-	.1812	.0239	2.4257-	.1501
133	4	.950	.43-	1.00-	89.99	2.274	2.2679	.7251	.241-	.0816	.0118	2.4187-	.1508
133	5	.950	.43-	.00-	90.00	2.264	2.2702	.7279-	.022	.0011	.0019	2.4188-	.1486
133	6	.950	.43	1.00-	90.00	2.288	2.2732	.7297-	.294	.0860-	.0080	2.4224-	.1492
133	7	.950	.43	2.00-	90.01	2.317	2.2710	.7367-	.590	.1790-	.0201	2.4260-	.1550
133	8	.950	.43	3.00-	90.02	2.337	2.2821	.7463-	.878	.2697-	.0323	2.4337-	.1516
133	9	.950	.44	4.00-	90.03	2.344	2.2873	.7473-	1.162	.3532-	.0444	2.4387-	.1514
133	10	.950	.42-	.00-	90.00	2.250	2.2511	.7299-	.023	.0011	.0021	2.4009-	.1498
134	2	.950	8.48-	3.98-	26.66	5.372	2.8873	.1470	.891-	.3210	.0666	2.9962-	.1089
134	3	.950	8.48-	2.98-	20.57	5.250	2.8274	.1798	.634-	.2247	.0458	2.9393-	.1119
134	4	.950	8.47-	1.99-	14.08	5.137	2.8381	.2139	.401-	.1394	.0299	2.9409-	.1028
134	5	.950	8.48-	1.01-	7.19	5.078	2.8277	.2517	.191-	.0595	.0130	2.9250-	.0973
134	6	.950	8.48-	.00-	.00	5.000	2.8227	.2571-	.031	.0118-	.0011	2.9175-	.0948
134	7	.950	8.47	1.00	7.19	5.054	2.8256	.2474-	.277	.0898-	.0147	2.9224-	.0968
134	8	.950	8.47	1.99	14.08	5.159	2.8289	.2222-	.529	.1703-	.0296	2.9307-	.1018
134	9	.950	8.47	2.99	20.57	5.181	2.8226	.1917-	.772	.2448-	.0447	2.9322-	.1096
134	10	.950	8.48	3.98	26.66	5.363	2.8600	.1488-	1.027	.3477-	.0643	2.9746-	.1146
134	11	.950	8.48-	.00-	.00	5.017	2.8257	.2631-	.022	.0126-	.0011	2.9235-	.0978
135	1	.950	16.50-	3.96-	14.17	8.436	3.1832-	.5430	.702-	.2626	.0594	3.3369-	.1537
135	2	.950	16.51-	2.99-	10.77	8.335	3.1725-	.4883	.537-	.2223	.0518	3.3282-	.1557
135	3	.950	16.52-	1.97-	7.18	8.271	3.1663-	.4457	.325-	.1465	.0373	3.3137-	.1474
135	4	.950	16.53-	.98-	3.59	8.215	3.1725-	.3959	.144-	.0670	.0193	3.3120-	.1395
135	5	.950	16.53-	.00	.00	8.185	3.1528-	.3771-	.020-	.0065	.0034	3.2923-	.1395
135	6	.950	16.53	.98	3.59	8.226	3.1769-	.3947-	.182	.0664-	.0154	3.3156-	.1387
135	7	.950	16.53	1.98	7.18	8.339	3.2005-	.4351-	.364	.1641-	.0389	3.3443-	.1438
135	8	.950	16.51	2.99	10.77	8.389	3.1946-	.4930-	.572	.2342-	.0478	3.3479-	.1533
135	9	.950	16.51	3.98	14.17	8.457	3.1911-	.5438-	.731	.2550-	.0547	3.3576-	.1665
135	10	.950	16.54-	.00	.00	8.187	3.1483-	.3734-	.004-	.0050	.0033	3.2936-	.1453
136	2	.750	9.83-	.00	.00-	1.254	1.1834	1.0232-	.073	.0347	.0040	1.2909-	.1105

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_ℓ	C_{A_u}	ΔC_A
136	3	.750	7.81-	.00	.00-	.622	1.3231	.8465-	.061	.0316	.0036	1.4304-	.1073
136	4	.750	5.80-	.00	.00-	.870	1.4729	.8784-	.070	.0340	.0032	1.5859-	.1130
136	5	.750	3.78-	.00	.00	.466	1.6157	.8239-	.071	.0282	.0019	1.7350-	.1193
136	6	.750	2.77-	.00	.00	.737	1.6820	.7934-	.071	.0262	.0010	1.8013-	.1193
136	7	.750	1.76-	.00	.00	1.008	1.7646	.7564-	.060	.0251	.0015	1.8847-	.1201
136	8	.750	.75-	.00	.00	1.279	1.8259	.7259-	.059	.0287	.0006	1.9504-	.1245
136	9	.750	.25-	.00-	.00	1.513	1.8838	.6920-	.068	.0313-	.0003	2.0120-	.1282
136	10	.750	1.26-	.00-	.00	1.700	1.9368	.6819-	.058	.0268-	.0010	2.0669-	.1301
136	11	.750	2.27-	.00-	.00	2.001	1.9914	.6518-	.057	.0268-	.0001	2.1155-	.1241
136	12	.750	3.28-	.00-	.00	2.305	2.0498	.6215-	.058	.0211-	.0011	2.1661-	.1163
136	13	.750	4.29-	.00-	.00	2.650	2.1212	.5644-	.057	.0226-	.0008	2.2337-	.1125
136	15	.750	6.30-	.00-	.00	3.416	2.2576	.4237-	.059	.0161-	.0004	2.3612-	.1036
136	16	.750	8.31-	.00-	.00	4.303	2.4246	.2392-	.058	.0204-	.0006	2.5185-	.0939
136	17	.750	10.31-	.01-	.00	5.319	2.5383-	.0026-	.033	.0371-	.0043	2.6400-	.1017
136	18	.750	12.33-	.00-	.00	6.227	2.6786-	.1829-	.057	.0265	.0001	2.7930-	.1144
136	19	.750	16.35-	.00	.00	7.429	2.8025-	.3845-	.018	.0088	.0020	2.9494-	.1469
136	20	.750	20.37-	.00	.00	8.640	2.9102-	.6330-	.022-	.0039	.0053	3.0657-	.1555
136	21	.750	.25-	.00-	.00	1.547	1.8772	.6942-	.068	.0313-	.0003	2.0078-	.1306
138	3	1.100	3.50	.01-	.00	.593	3.1760	1.2099	.037-	.0379-	.0001	3.4351-	.2591
139	4	1.100	1.47-	.00	.00	1.081	3.2686	1.1617	.063-	.0309	.0025	3.5158-	.2472
138	5	1.100	.53-	.00	.00	1.920	3.3776	.9698	.013	.0053	.0017	3.6169-	.2393
138	6	1.100	2.54-	.00-	.00	2.856	3.5618	.7701-	.082	.0250-	.0025	3.7901-	.2283
139	7	1.100	4.56	.01-	.00	4.269	3.8551	.4538-	.110	.0147-	.0009	4.0778-	.2227
138	8	1.100	6.55-	.00-	.00	5.138	3.9791	.2103-	.062	.0131-	.0014	4.2027-	.2236
138	9	1.100	8.55-	.00-	.00	6.055	4.1108-	.0288-	.034	.0121-	.0019	4.3401-	.2293
139	10	1.100	10.55-	.00-	.00	6.962	4.2439-	.2421-	.007	.0019-	.0052	4.4852-	.2413
138	11	1.100	12.57-	.00	.00	7.836	4.3646-	.4133-	.030	.0080	.0035	4.6200-	.2554
138	12	1.100	.53	.01-	.00	2.008	3.3942	.9512-	.083	.0063-	.0064	3.6335-	.2393
139	3	.950	3.64	.01-	.00	1.272	2.7448	.8139	.054-	.0629-	.0060	2.8669-	.1221
139	4	.950	1.62	.01-	.00	1.992	2.9606	.7129	.033-	.0366-	.0028	3.0836-	.1230
139	5	.950	.43-	.00-	.00	3.094	3.3209	.5015-	.034	.0134-	.0038	3.4306-	.1027
139	6	.950	2.45-	.00-	.00	3.722	3.4564	.4055-	.046	.0163-	.0037	3.5693-	.1029
139	7	.950	4.46-	.00-	.00	4.344	3.5685	.3020-	.068	.0198-	.0037	3.6687-	.1002
139	8	.950	6.47-	.00-	.00	4.978	3.7175	.2498-	.066	.0170-	.0028	3.8128-	.0953
139	9	.950	8.48-	.00-	.00	5.590	3.7821	.1098-	.035	.0074-	.0016	3.8886-	.1063
139	10	.950	10.48-	.00-	.00	6.188	3.8553-	.0472	.027-	.0008-	.0027	3.9687-	.1134
139	11	.950	12.47-	.00-	.00	6.783	3.9037-	.2099	.051-	.0043-	.0042	4.0305-	.1268

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
139	12	.950	14.48-	.00-	.01	7.335	3.9211-	.3249	.083-	.0079-	.0116	4.0647-	.1436
139	13	.950	16.49-	.00	.00	7.745	3.9081-	.4009	.051-	.0135	.0029	4.0673-	.1592
139	14	.950	18.48	.01	.01	8.251	3.8629-	.5902-	.177	.0047	.0139	4.0375-	.1746
139	15	.950	20.47	.02	.01	8.825	3.8930-	.7501-	.320	.0335	.0117	4.0819-	.1889
139	16	.950	.43-	.00-	.00	3.062	3.3040	.6081-	.032	.0175-	.0037	3.4205-	.1165
139	17	.950	.43-	.00-	.00	3.057	3.3063	.6066-	.040	.0182-	.0048	3.4170-	.1107
140	1	.950	- 3.57-	.68	10.00	1.294	2.8329	.8442	.291-	.1474	.0002	2.9571-	.1242
140	2	.950	- 1.58-	.34	10.00	1.996	2.9280	.7029	.156-	.0707	.0036	3.0620-	.1340
140	3	.950	.43-	.01	10.00	3.022	3.2900	.6065-	.036	.0153-	.0039	3.4086-	.1186
140	4	.950	2.42	.34	9.99	3.666	3.4391	.5052-	.136	.0455-	.0094	3.5435-	.1044
140	5	.950	4.41	.68	9.99	4.327	3.5675	.3853-	.243	.0773-	.0161	3.6663-	.0988
140	6	.950	6.38	1.04	9.99	4.924	3.6680	.2454-	.331	.0992-	.0219	3.7732-	.1052
140	7	.950	8.37	1.39	9.98	5.539	3.7943	.1218-	.350	.0939-	.0276	3.9019-	.1076
140	8	.950	10.33	1.73	9.98	6.110	3.8324-	.0412-	.224	.0570-	.0322	3.9517-	.1193
140	9	.950	12.30	2.07	9.98	6.723	3.8661-	.1793-	.202	.0356-	.0266	4.0081-	.1420
140	10	.950	14.28	2.42	9.99	7.233	3.8898-	.3051-	.287	.0284-	.0095	4.0434-	.1536
140	11	.950	16.24	2.77	10.00	7.625	3.8478-	.4417-	.445	.0510	.0044	4.0188-	.1710
140	12	.950	18.22	3.10	10.01	8.074	3.8441-	.5598-	.622	.0884	.0117	4.0314-	.1873
140	13	.950	20.19	3.43	10.01	6.601	3.8337-	.6857-	.765	.1413	.0122	4.0511-	.2174
140	14	.950	.44-	.00	10.00	3.074	3.3251	.6111-	.036	.0140-	.0040	3.4450-	.1199
141	2	.950	- 3.40-	1.38	20.01	1.258	2.7113	.8040	.314-	.0785	.0129	2.8323-	.1210
141	3	.950	- 1.49-	.69	20.00	2.027	2.9615	.7000	.123-	.0265	.0034	3.0842-	.1227
141	4	.950	.44-	.01	20.00	3.049	3.2901	.6103-	.042	.0137-	.0030	3.4009-	.1108
141	5	.950	2.34	.68	19.99	3.641	3.4355	.5075-	.214	.0666-	.0128	3.5334-	.0979
141	6	.950	4.23	1.36	19.98	4.275	3.5567	.3833-	.401	.1209-	.0274	3.6500-	.0933
141	7	.950	6.11	2.04	19.98	4.844	3.6604	.2495-	.530	.1589-	.0408	3.7576-	.0972
141	8	.950	7.99	2.72	19.97	5.437	3.7371	.1190-	.603	.1703-	.0543	3.8443-	.1072
141	9	.950	9.89	3.40	19.96	5.995	3.8019-	.0232-	.514	.1434-	.0675	3.9160-	.1141
141	10	.950	11.78	4.07	19.96	6.610	3.8584-	.1716-	.494	.1116-	.0734	3.9889-	.1305
141	11	.950	13.66	4.75	19.96	7.000	3.8153-	.2947-	.574	.1157-	.0672	3.9674-	.1521
141	12	.950	15.54	5.42	19.97	7.474	3.8057-	.4497-	.670	.1354-	.0501	3.9831-	.1774
141	14	.950	17.43	6.08	19.98	8.052	3.8291-	.6060-	.853	.1714-	.0326	4.0497-	.2206
141	15	.950	19.33	6.75	19.99	8.551	3.8310-	.7439-	1.079	.2199-	.0152	4.0724-	.2414
141	16	.950	.44-	.01	20.00	3.019	3.2988	.6104-	.044	.0124-	.0030	3.4085-	.1097
142	1	.950	- 3.06-	2.00	30.01	1.785	3.0469	.8216	.581-	.2163	.0222	3.1685-	.1216

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
142	2	.950	1.32-	1.00	30.01	2.455	3.1713	.6920	.242-	.0856	.0110	3.2879-	.1166
142	3	.950	.44-	.01	30.00	3.037	3.3206	.6134-	.025	.0082-	.0009	3.4216-	.1010
142	4	.950	2.19	.99	29.99	3.578	3.4294	.5177-	.277	.0910-	.0184	3.5236-	.0942
142	5	.950	3.92	1.98	29.98	4.170	3.5198	.3863-	.500	.1639-	.0373	3.6126-	.0928
142	6	.950	5.67	2.99	29.97	4.763	3.6204	.2552-	.712	.2196-	.0610	3.7171-	.0967
142	7	.950	7.41	3.98	29.95	5.293	3.6949	.1276-	.822	.2298-	.0801	3.8003-	.1054
142	8	.950	9.16	4.98	29.95	5.818	3.7552-	.0058-	.835	.2089-	.0934	3.8665-	.1113
142	9	.950	10.91	5.96	29.94	6.458	3.8026-	.1764-	.857	.2128-	.1038	3.9381-	.1355
142	10	.950	12.65	6.94	29.94	6.953	3.7933-	.3387-	.965	.2471-	.1047	3.9548-	.1615
142	11	.950	14.39	7.93	29.95	7.404	3.7666-	.5000-	1.138	.2771-	.0833	3.9639-	.1973
142	12	.950	16.15	8.90	29.96	7.870	3.7555-	.6442-	1.484	.3530-	.0664	4.0026-	.2471
142	13	.950	17.92	9.87	29.97	8.428	3.7222-	.8060-	1.823	.4259-	.0505	4.0047-	.2825
142	14	.950	.44-	.01	30.00	3.018	3.3123	.6097-	.025	.0068-	.0010	3.4168-	.1045
143	1	.950	.46-	3.99-	89.96	3.166	3.3755	.5927	1.030-	.3608	.0640	3.4715-	.0960
143	2	.950	.46-	2.99-	89.97	3.171	3.3547	.5910	.785-	.2839	.0488	3.4496-	.0949
143	3	.950	.46-	1.99-	89.98	3.165	3.3574	.5954	.515-	.1922	.0309	3.4493-	.0919
143	4	.950	.46-	1.00-	89.99	3.140	3.3618	.5983	.265-	.0914	.0132	3.4556-	.0938
143	5	.950	.47-	.00-	90.00	3.165	3.3573	.6013-	.004	.0009-	.0023	3.4532-	.0959
143	6	.950	.46	1.00-	90.01	3.163	3.3473	.5924-	.244	.0863-	.0167	3.4410-	.0937
143	7	.950	.46	1.99-	90.02	3.170	3.3295	.5790-	.499	.1786-	.0323	3.4241-	.0946
143	8	.950	.46	2.99-	90.03	3.227	3.3574	.5755-	.749	.2636-	.0481	3.4501-	.0927
143	9	.950	.46	3.99-	90.04	3.276	3.3699	.5708-	1.014	.3452-	.0638	3.4653-	.0954
143	10	.950	.46-	.00-	90.00	3.141	3.3276	.5942-	.004	.0036-	.0011	3.4358-	.0982
144	3	.950	8.47-	4.00-	26.66	5.691	3.7327	.0445	.781-	.2014	.0756	3.8590-	.1263
144	4	.950	8.47-	2.99-	20.57	5.625	3.7572	.0769	.560-	.1529	.0557	3.8743-	.1171
144	5	.950	8.47-	1.99-	14.08	5.563	3.7709	.1024	.348-	.0979	.0358	3.8806-	.1097
144	6	.950	8.47-	1.00-	7.19	5.533	3.7597	.1006	.161-	.0443	.0173	3.8693-	.1096
144	7	.950	8.47-	.00-	.00	5.517	3.7684	.1095-	.036	.0061-	.0016	3.8733-	.1049
144	8	.950	8.47	1.00	7.19	5.494	3.7745	.1105-	.255	.0620-	.0195	3.8821-	.1076
144	9	.950	8.47	2.00	14.08	5.539	3.7523	.0956-	.471	.1267-	.0384	3.8657-	.1134
144	10	.950	8.47	2.99	20.57	5.546	3.7489	.0893-	.602	.1693-	.0594	3.8619-	.1130
144	11	.950	8.47	4.00	26.65	5.591	3.7264	.0620-	.759	.2056-	.0726	3.8449-	.1185
145	1	.950	16.46-	4.02-	14.20	7.498	3.7394-	.4674	.605-	.0758	.0048	3.9147-	.1723
145	2	.950	16.46-	3.04-	10.80	7.671	3.8349-	.4772	.492-	.0538-	.0063	4.0114-	.1768
145	3	.950	16.47-	2.00-	7.20	7.761	3.8751-	.4648	.285-	.0330-	.0035	4.0510-	.1753

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
145	4	.950	16.49-	.99-	3.60	7.747	3.8761-	.4226	.096-	.0265	.0086	4.0461-	.1700
145	5	.950	16.49-	.00	.00	7.711	3.8970-	.4002	.050-	.0161	.0027	4.0633-	.1663
145	6	.950	16.49	1.00	3.60	7.695	3.9033-	.3940-	.108-	.0068	.0088	4.0693-	.1660
145	7	.950	16.48	2.02	7.21	7.655	3.8753-	.4301-	.324	.0224	.0113	4.0424-	.1671
145	8	.950	16.46	3.04	10.80	7.654	3.8239-	.4666-	.520	.0617	.0055	4.0024-	.1785
145	9	.950	16.46	4.02	14.20	7.530	3.7919-	.4684-	.667	.0850-	.0051	3.9734-	.1815
145	10	.950	16.49-	.00	.00	7.736	3.9003-	.4003	.050-	.0176	.0039	4.0720-	.1717
145	11	.950	16.49-	.00	.00	7.744	3.8993-	.4057	.050-	.0177	.0039	4.0681-	.1688
146	1	.750	- 3.76	.01-	.00	.920	2.3716	.7844	.093-	.0641-	.0086	2.4895-	.1179
146	2	.750	- 1.76-	.00-	.00	1.566	2.5219	.6556	.042-	.0214-	.0018	2.6241-	.1022
146	3	.750	- .75-	.00	.00	1.956	2.5878	.5695	.071-	.0383	.0028	2.6830-	.0952
146	4	.750	.25-	.00	.00	2.308	2.6593	.4981	.082-	.0420	.0044	2.7553-	.0960
146	5	.750	2.27-	.00-	.00	2.896	2.8451	.4291-	.001-	.0007-	.0038	2.9293-	.0842
146	6	.750	4.28-	.00-	.00	3.599	2.9558	.2854-	.038	.0125-	.0048	3.0301-	.0743
146	7	.750	6.28-	.00-	.00	4.267	3.0664	.1259-	.047	.0136-	.0045	3.1432-	.0768
146	8	.750	8.28-	.00-	.00	4.938	3.1744-	.0368-	.027	.0044-	.0028	3.2569-	.0825
146	9	.750	10.28-	.00-	.00	5.587	3.2572-	.2027-	.015	.0018-	.0025	3.3567-	.0995
146	10	.750	12.29-	.00-	.00	6.202	3.3438-	.3383-	.014	.0022-	.0005	3.4560-	.1122
146	11	.750	14.29-	.00-	.00	6.722	3.4344-	.4464-	.009	.0103-	.0011	3.5738-	.1394
146	12	.750	16.32-	.00	.00	7.097	3.4711-	.4357-	.018	.0016	.0009	3.6195-	.1484
146	13	.750	20.33-	.00-	.00	8.038	3.5327-	.6359	.025-	.0059-	.0011	3.7219-	.1892
146	14	.750	.25-	.00	.00	2.371	2.6629	.5018	.084-	.0361	.0044	2.7592-	.0963
147	4	.950	- 3.64-	.00-	.00	1.075	2.7528	.8633-	.058	.0202-	.0021	2.9241-	.1713
147	5	.950	- 1.62-	.01	.00	1.566	2.9336	.8186	.048	.0134	.0063	3.0900-	.1564
147	6	.950	- .61-	.00-	.00	2.135	3.0533	.7108	.023	.0050-	.0002	3.2004-	.1471
147	7	.950	.41-	.00-	.00	2.776	3.1899	.6193	.001	.0006-	.0020	3.3277-	.1378
147	8	.950	2.44-	.00-	.00	3.385	3.3506	.5260-	.028	.0009-	.0019	3.4641-	.1135
147	9	.950	4.45-	.00-	.00	3.926	3.4561	.4281-	.048	.0086-	.0027	3.5692-	.1131
147	10	.950	6.46-	.00-	.00	4.505	3.5691	.3094-	.047	.0074-	.0027	3.6859-	.1168
147	11	.950	8.46-	.00-	.00	5.164	3.6510	.1490-	.030	.0044-	.0019	3.7717-	.1207
147	12	.950	10.46-	.00-	.00	5.844	3.7447-	.0300-	.029	.0054-	.0023	3.8670-	.1223
147	13	.950	12.45-	.00-	.00	6.551	3.7949-	.2198-	.049	.0192-	.0038	3.9240-	.1291
147	14	.950	14.46-	.00-	.00	7.225	3.8595-	.3664	.028	.0016-	.0062	3.9964-	.1369
147	15	.950	16.47-	.00	.00	7.553	3.8356-	.4201-	.027-	.0004	.0062	3.9874-	.1518
147	16	.950	20.45	.02	.01	8.676	3.7990-	.7808-	.381	.0493	.0129	3.9927-	.1937
147	17	.950	.42-	.00-	.00	2.753	3.2130	.6193-	.016-	.0008-	.0021	3.3442-	.1312
147	18	.950	.42-	.00-	.00	2.748	3.2163	.6187-	.016-	.0022-	.0010	3.3443-	.1280

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
148	3	.950	.43-	3.99-	89.96	2.857	3.2403	.5956	1.151-	.3810	.0653	3.3695-	.1292
148	4	.950	.44-	2.99-	89.97	2.893	3.2465	.6139	.841-	.2825	.0456	3.3748-	.1283
148	5	.950	.45-	2.00-	89.98	2.892	3.2552	.6176	.536-	.1813	.0267	3.3800-	.1248
148	6	.950	.45-	1.00-	89.99	2.912	3.2549	.6156	.284-	.0951	.0135	3.3773-	.1224
148	7	.950	.45-	.00-	90.00	2.893	3.2291	.6073	.029-	.0146	.0005	3.3557-	.1266
148	8	.950	.45	1.00-	90.01	2.909	3.2479	.6105-	.219	.0628-	.0117	3.3710-	.1231
148	9	.950	.45	2.00-	90.01	2.877	3.2521	.6186-	.497	.1497-	.0260	3.3790-	.1269
148	10	.950	.45	3.00-	90.03	2.935	3.2658	.6122-	.809	.2516-	.0449	3.3954-	.1296
148	11	.950	.44	4.00-	90.04	2.986	3.2228	.5875-	1.120	.3529-	.0629	3.3646-	.1418
148	12	.950	.45-	.00-	90.00	2.926	3.2448	.6125	.022-	.0124	.0004	3.3724-	.1276
149	3	.950	3.68	.01-	.00	.795	2.0281	.8047	.088-	.0647-	.0014	2.1805-	.1524
149	4	.950	1.66	.01-	.00	1.427	2.1753	.7245	.076-	.0602-	.0011	2.3144-	.1391
149	5	.950	.65	.01-	.00	1.690	2.2423	.6818	.055-	.0559-	.0020	2.3700-	.1277
149	6	.950	.36	.01	.00	2.061	2.3197	.6342	.058-	.0511	.0003	2.4402-	.1205
149	7	.950	2.39-	.00	.00	2.740	2.4287	.5480	.089-	.0403	.0031	2.5395-	.1108
149	8	.950	4.42-	.00	.00	3.497	2.5599	.4435	.058-	.0190	.0033	2.6632-	.1033
149	9	.950	6.47-	.00-	.00	4.797	2.9391	.2986-	.092	.0211-	.0028	3.0450-	.1059
149	10	.950	8.48-	.00-	.00	5.663	3.0652	.0947-	.081	.0238-	.0026	3.1676-	.1024
149	11	.950	10.48-	.00-	.00	6.566	3.1349-	.1280-	.034	.0151-	.0034	3.2571-	.1222
149	12	.950	12.49-	.01-	.00	7.423	3.2491-	.3197	.015	.0133-	.0030	3.3771-	.1280
149	13	.950	14.50-	.00-	.00	8.016	3.3111-	.4226	.017	.0123-	.0048	3.4518-	.1407
149	14	.950	16.51-	.00	.00	8.551	3.3384-	.5305	.007-	.0023	.0045	3.4915-	.1531
149	15	.950	20.53	.01	.01	9.762	3.3718-	.8184-	.160-	.0067	.0103	3.5421-	.1703
149	16	.950	.77-	.01-	.00	2.076	2.3455	.6398-	.108	.0629-	.0073	2.4631-	.1176
150	1	1.050	3.58-	.01-	.00	.381	2.3958	1.1222-	.134	.0670-	.0047	2.6749-	.2791
150	2	1.050	1.54-	.01-	.01	.985	2.5323	1.0754-	.176	.0833-	.0083	2.8026-	.2703
150	3	1.050	.53-	.01-	.01	1.265	2.6223	1.0448-	.176	.0767-	.0092	2.8785-	.2562
150	4	1.050	.48-	.01-	.01	1.605	2.6782	.9906-	.195	.0829-	.0112	2.9201-	.2419
150	5	1.050	2.50-	.00-	.01	2.378	2.7424	.8333-	.164	.0598-	.0105	2.9798-	.2374
150	6	1.050	4.50-	.00-	.01	3.389	2.8933	.5934-	.178	.0536-	.0110	3.1199-	.2266
150	7	1.050	6.50-	.00-	.01	4.565	3.0855	.2923-	.150	.0458-	.0113	3.3062-	.2207
150	8	1.050	8.52	.01	.01	5.896	3.3555	.0102-	.089-	.0034	.0113	3.5746-	.2191
150	9	1.050	10.54-	.00	.00	7.220	3.5723-	.2468-	.054	.0057	.0012	3.8064-	.2341
150	10	1.050	12.56-	.00	.00	8.167	3.7032-	.4504	.035	.0026	.0031	3.9437-	.2405
150	11	1.050	14.58-	.00	.00	8.844	3.7602-	.5783-	.003	.0123	.0020	4.0104-	.2502
150	12	1.050	16.59-	.00	.00	9.515	3.7603-	.7232-	.032	.0083	.0021	4.0177-	.2574
150	13	1.050	20.59-	.00	.00	10.868	3.8089-	1.0521	.052-	.0058	.0007	4.0664-	.2575

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
150	14	1.050	.49-	.01-	.01	1.588	2.6838	.9957-	.193	.0822-	.0101	2.9257-	.2419
151	2	1.000	- 3.62-	.00	.00	.550	2.2449	1.0172	.101-	.0506	.0015	2.4517-	.2068
151	3	1.000	- 1.58	.01	.00	1.160	2.4125	.9708	.103-	.0552	.0062	2.5850-	.1725
151	4	1.000	- .57-	.00	.00	1.483	2.4859	.9276	.120-	.0569	.0052	2.6545-	.1686
151	5	1.000	.45-	.00	.00	1.856	2.5494	.8687	.128-	.0567	.0052	2.7113-	.1619
151	6	1.000	2.47-	.00	.00	2.586	2.6552	.7516	.098-	.0405	.0052	2.8032-	.1480
151	7	1.000	4.49-	.00	.00	3.433	2.7928	.5976	.056-	.0144	.0037	2.9343-	.1415
151	8	1.000	6.50-	.00	.00	4.436	2.9864	.3676-	.011	.0089	.0043	3.1211-	.1347
151	9	1.000	8.55-	.00	.00	6.097	3.3935	.0942-	.050	.0087	.0009	3.5456-	.1521
151	10	1.000	10.54-	.00-	.00	7.054	3.4554-	.1530-	.005	.0040-	.0012	3.6336-	.1782
151	11	1.000	12.55-	.00	.00	7.920	3.5247-	.3659	.033	.0000	.0010	3.7213-	.1966
151	12	1.000	14.55-	.00-	.00	8.535	3.5679-	.4875	.019	.0002-	.0007	3.7836-	.2157
151	13	1.000	16.56-	.00	.00	9.233	3.6403-	.6359-	.025-	.0004	.0043	3.8626-	.2223
151	14	1.000	20.57	.01	.00	10.486	3.6637-	.9270-	.193	.0190	.0037	3.8948-	.2311
151	15	1.000	.44-	.00-	.01	1.806	2.5462	.8722-	.162	.0667-	.0105	2.7088-	.1626
152	1	.950	- 3.68-	.01-	.00	.811	2.0136	.8057-	.177	.0939-	.0010	2.1763-	.1627
152	2	.950	- 1.65-	.01-	.00	1.466	2.1682	.7285-	.135	.0885-	.0018	2.3190-	.1508
152	3	.950	- .64-	.01-	.00	1.743	2.2541	.6976-	.123	.0718-	.0039	2.3923-	.1382
152	7	.950	.38-	.01-	.00	2.120	2.3548	.6518-	.105	.0654-	.0061	2.4736-	.1188
152	8	.950	2.39	.01-	.01	2.769	2.4223	.5382-	.177	.0387-	.0094	2.5379-	.1156
152	9	.950	2.11-	.00-	.00-	1.199	2.4581	.6455-	.172	.0448-	.0088	2.5695-	.1114
152	10	.950	4.42-	.00-	.01	3.506	2.5635	.4522-	.124	.0377-	.0102	2.6686-	.1031
152	11	.950	6.48-	.00-	.00	4.831	2.9514	.2984-	.075	.0182-	.0018	3.0583-	.1069
152	13	.950	10.48	.01	.06	6.495	3.1310-	.1145-	.019	.0123	.1085	3.2587-	.1277
152	17	.950	10.48	.01	.06	6.497	3.1411-	.1113-	.011	.0088	.1103	3.2637-	.1226
152	18	.950	12.49-	.01-	.00	7.346	3.2331-	.3102	.023	.0126-	.0030	3.3670-	.1339
152	19	.950	14.51-	.01-	.00	7.991	3.2876-	.4122	.033	.0095-	.0014	3.4392-	.1516
152	20	.950	16.52	.02	.07	8.446	3.2363-	.5070	.013-	.0070	.1176	3.4820-	.2457
152	21	.950	20.49	.02	.01	9.398	3.3567-	.8352-	.186-	.0064	.0123	3.5317-	.1750
153	15	.950	.37-	.01	10.00	2.057	2.4340	.6452-	.090	.0591-	.0051	2.4450-	.0110
153	16	.950	- 1.63-	.36	10.00	1.398	2.1497	.7220-	.032	.0477	.0014	2.2940-	.1443
153	17	.950	- .63-	.18	10.00	1.764	2.2313	.6905-	.060	.0527-	.0018	2.3688-	.1375
153	18	.950	.37-	.01	10.00	2.048	2.3128	.6479-	.082	.0569-	.0051	2.4477-	.1349
153	19	.950	2.37	.35	9.99	2.781	2.3983	.5448-	.228	.0689-	.0150	2.5232-	.1249
153	20	.950	4.36	.70	9.99	3.456	2.5585	.4599-	.342	.0948-	.0226	2.6685-	.1100

Unclassified

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_β}	C_Y	C_{n_β}	C_l	C_{A_u}	ΔC_A
153	21	.950	6.39	1.03	9.98	4.798	2.9518	.3129-	.377	.1112-	.0266	3.0666-	.1148
153	22	.950	8.37	1.38	9.98	6.426	3.0347	.1082-	.436	.1339-	.0374	3.1540-	.1193
153	23	.950	10.33	1.72	9.97	6.518	3.1132-	.1121-	.400	.1438-	.0403	3.2489-	.1357
153	24	.950	12.31	2.06	9.98	7.337	3.2068-	.3085-	.443	.1465-	.0390	3.3553-	.1485
153	25	.950	14.29	2.41	9.99	7.970	3.2467-	.4637-	.514	.1365-	.0334	3.4156-	.1689
153	26	.950	16.29	2.75	9.98	8.541	3.3089-	.5362-	.471	.1216-	.0339	3.4844-	.1755
153	27	.950	20.24	3.40	9.99	9.709	3.3305-	.8297-	.277	.0893-	.0244	3.5454-	.2149
153	28	.950	.37-	.01	10.00	2.046	2.2943	.6765-	.081	.0581-	.0051	2.4351-	.1408
154	1	.950	3.46-	1.37	20.00	.531	1.9530	.7527	.325-	.0703	.0083	2.1019-	.1489
154	2	.950	1.53-	.70	20.00	1.396	2.1649	.7196	.101	.0030	.0055	2.3022-	.1373
154	3	.950	.37-	.02	20.00	2.034	2.2945	.6388-	.072	.0553-	.0053	2.4313-	.1368
154	4	.950	2.29	.68	19.99	2.728	2.3974	.5578-	.303	.0927-	.0194	2.5251-	.1277
154	5	.950	4.19	1.36	19.98	3.439	2.5467	.4648-	.536	.1498-	.0338	2.6652-	.1185
154	6	.950	6.12	2.04	19.97	4.759	2.9226	.3124-	.644	.2086-	.0498	3.0410-	.1184
154	7	.950	8.01	2.71	19.96	5.561	3.0394	.1228-	.768	.2557-	.0717	3.1600-	.1206
154	8	.950	9.90	3.38	19.95	6.346	3.1064-	.0927-	.790	.2712-	.0882	3.2380-	.1316
154	9	.950	11.78	4.06	19.95	7.081	3.1531-	.2806-	.830	.2622-	.0926	3.3021-	.1490
154	10	.950	13.67	4.73	19.95	7.750	3.2023-	.4391-	.879	.2604-	.0838	3.3688-	.1665
154	11	.950	15.57	5.41	19.96	8.389	3.2620-	.5801-	.894	.2381-	.0704	3.4522-	.1902
154	12	.950	19.39	6.74	19.98	9.620	3.3005-	.8439-	1.005	.1978-	.0330	3.5768-	.2763
154	13	.950	.58-	.36	20.00	1.725	2.2299	.6880	.016	.0311	.0024	2.3703-	.1404
154	14	.950	.37-	.02	20.00	2.055	2.3115	.6439-	.087	.0579-	.0053	2.4411-	.1296
155	1	.950	3.15-	2.01	30.01	.988	1.9831	.7274	.597-	.1571	.0121	2.1261-	.1430
155	2	.950	1.39-	1.01	30.01	1.449	2.1479	.6977	.237-	.0352	.0097	2.2803-	.1324
155	3	.950	.51-	.51	30.00	1.720	2.2255	.6781	.085	.0128	.0034	2.3551-	.1296
155	4	.950	.37-	.02	30.00	2.041	2.3138	.6471-	.077	.0546-	.0043	2.4400-	.1262
155	5	.950	2.13	1.00	29.99	2.663	2.3931	.5648-	.394	.1140-	.0240	2.5183-	.1252
155	6	.950	3.88	1.99	29.97	3.321	2.5394	.4772-	.724	.2055-	.0452	2.6944-	.1150
155	7	.950	5.67	2.98	29.94	4.607	2.9201	.3355-	.882	.2970-	.0694	3.0379-	.1178
155	8	.950	7.41	3.97	29.95	5.425	2.9985	.1352-	1.007	.3563-	.0963	3.1257-	.1272
155	12	.950	14.41	7.93	29.95	8.116	3.1331-	.5798-	1.219	.2629-	.0884	3.3649-	.2318
155	13	.950	9.17	4.96	29.94	6.151	3.0046-	.0566-	1.197	.3768-	.1138	3.1854-	.1808
155	14	.950	10.91	5.95	29.93	6.881	3.0348-	.2517-	1.120	.3198-	.1175	3.2593-	.1645
155	15	.950	12.66	6.93	29.94	7.466	3.1196-	.4225-	1.126	.2759-	.1053	3.3012-	.1816
155	16	.950	14.42	7.94	29.95	8.104	3.1454-	.5819-	1.211	.2656-	.0870	3.3667-	.2213
155	17	.950	17.93	9.88	29.96	9.324	3.2183-	.8525-	1.425	.3605-	.0606	3.4959-	.2776
155	18	.950	.38-	.01	30.00	2.050	2.2987	.6489-	.268	.0540-	.0062	2.4371-	.1384

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_ℓ	C_{A_u}	ΔC_A
156	1	.950	.38-	4.01-	89.97	2.296	2.3091	.5635	1.213-	.3374	.0518	2.4268-	.1177
156	2	.950	.37-	3.01-	89.98	2.249	2.2755	.5510	.875-	.2248	.0358	2.3911-	.1156
156	3	.950	.37-	2.01-	89.99	2.238	2.2748	.5636	.558-	.1264	.0251	2.3941-	.1193
156	4	.950	.38-	1.01-	89.99	2.216	2.3081	.5973	.269-	.0417	.0130	2.4263-	.1182
156	5	.950	.39-	.01-	90.00	2.193	2.3380	.6181-	.033	.0453-	.0025	2.4591-	.1211
156	6	.950	.39	1.00-	90.01	2.273	2.3395	.6218-	.350	.1165-	.0205	2.4694-	.1299
156	7	.950	.39	2.00-	90.02	2.293	2.3303	.6183-	.663	.1968-	.0373	2.4626-	.1323
156	8	.950	.39	3.00-	90.03	2.324	2.3254	.6166-	.961	.2831-	.0563	2.4591-	.1337
156	9	.950	.40	4.00-	90.04	2.374	2.3568	.6119-	1.242	.3646-	.0709	2.4878-	.1310
156	10	.950	.39-	.01-	90.00	2.216	2.3264	.6142-	.040	.0471-	.0014	2.4531-	.1267
157	2	.950	8.49-	3.99-	26.64	5.923	3.0825	.0283	1.041-	.3201	.1034	3.2037-	.1212
157	3	.950	8.48-	2.99-	20.56	5.807	3.0718	.0546	.800-	.2468	.0789	3.1985-	.1267
157	4	.950	8.47-	1.99-	14.07	5.737	3.0393	.0690	.520-	.1583	.0527	3.1649-	.1256
157	5	.950	8.48-	1.01-	7.19	5.708	3.0455	.0846	.249-	.0659	.0229	3.1629-	.1174
157	6	.950	8.48-	.00-	.00	5.663	3.0571	.0868-	.058	.0176-	.0038	3.1690-	.1119
157	7	.950	8.48	1.00	7.18	5.683	3.0468	.0862-	.371	.1072-	.0306	3.1609-	.1141
157	8	.950	8.47	1.99	14.07	5.728	3.0419	.0753-	.590	.1835-	.0553	3.1599-	.1180
157	9	.950	8.49	2.98	20.55	5.798	3.0558	.0600-	.827	.2688-	.0809	3.1785-	.1227
157	10	.950	8.48	3.98	26.64	5.860	3.0387	.0318-	1.077	.3423-	.1012	3.1718-	.1331
157	11	.950	8.48-	.00-	.00	5.695	3.0402	.0796-	.057	.0202-	.0016	3.1594-	.1192
158	1	.950	16.50-	4.01-	14.19	8.523	3.2657-	.5921	.713-	.1254	.0159	3.4449-	.1792
158	2	.950	16.49-	3.02-	10.79	8.491	3.2843-	.5739	.589-	.1136	.0154	3.4617-	.1774
158	3	.950	16.51-	1.98-	7.18	8.586	3.3046-	.5409	.278-	.0915	.0375	3.4775-	.1729
158	4	.950	16.52-	.98-	3.59	8.573	3.3181-	.5291	.100-	.0448	.0249	3.4858-	.1677
158	5	.950	16.53-	.00	.00	8.578	3.3472-	.5109-	.053	.0072	.0021	3.5118-	.1646
158	6	.950	16.52	.99	3.59	8.564	3.3170-	.5192-	.200	.0526-	.0150	3.4892-	.1722
158	7	.950	16.51	1.98	7.18	8.599	3.3278-	.5407-	.304	.0949-	.0360	3.4995-	.1717
158	8	.950	16.51	3.01	10.78	8.584	3.3074-	.5595-	.536	.1243-	.0310	3.4840-	.1766
158	9	.950	16.49	4.01	14.19	8.484	3.2523-	.5905-	.741	.1361-	.0204	3.4402-	.1879
158	10	.950	16.52-	.00	.00	8.569	3.3235-	.5078-	.046	.0067	.0024	3.4994-	.1759
159	1	.850	3.74-	.01	.00	.593	1.7972	.8061-	.200	.1035	.0018	1.9423-	.1451
159	2	.850	1.72-	.01	.00	1.212	1.9336	.7185-	.189	.1034	.0049	2.0684-	.1348
159	3	.850	.72-	.01	.00	1.544	1.9968	.6395-	.163	.0975	.0023	2.1198-	.1230
159	4	.850	.29-	.01-	.00	1.909	2.0562	.5809-	.138	.0888-	.0026	2.1732-	.1170
159	5	.850	2.31-	.01-	.01	2.509	2.1583	.4947-	.096	.0622-	.0123	2.2630-	.1047

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
159	6	.850	4.33-	.01-	.01	3.244	2.2840	.3766-	.024	.0593-	.0133	2.3754-	.0914
159	7	.850	6.34-	.01-	.01	4.003	2.3950	.2146-	.126	.0686-	.0121	2.4879-	.0929
159	8	.850	8.37-	.00-	.00	5.140	2.7190	.0342-	.037	.0130-	.0032	2.8138-	.0948
159	9	.850	10.38-	.00-	.00	6.063	2.8129-	.1618-	.035	.0140-	.0013	2.9206-	.1077
159	10	.850	12.39-	.00-	.00	6.804	2.9105-	.3126	.003	.0110-	.0013	3.0317-	.1212
159	11	.850	14.41-	.00	.00	7.253	2.9637-	.3655-	.015	.0023	.0010	3.1015-	.1378
159	12	.850	16.43-	.00	.00	7.959	3.0107-	.4268-	.013-	.0015	.0009	3.1607-	.1500
159	13	.850	20.43-	.01-	.00	8.914	3.0432-	.7084	.055	.0077-	.0030	3.2208-	.1776
159	14	.850	.29	.01-	.00	1.857	2.0308	.5726	.079-	.0738-	.0018	2.1494-	.1186
160	1	.750	3.78	.01-	.00	.501	1.7104	.8123	.058-	.0572-	.0036	1.8699-	.1595
160	2	.750	1.77-	.01	.00	1.140	1.8601	.7080-	.135	.0827	.0036	2.0025-	.1424
160	3	.750	.76-	.01	.00	1.500	1.9248	.6337-	.113	.0825	.0008	2.0574-	.1326
160	4	.750	.24-	.00-	.00	1.785	1.9699	.5861-	.062	.0341-	.0003	2.0918-	.1219
160	5	.750	2.25	.01	.00	2.386	2.0589	.4813	.034-	.0528	.0064	2.1657-	.1068
160	6	.750	4.26	.01	.00	3.054	2.1687	.3647	.006-	.0442	.0057	2.2711-	.1024
160	7	.750	6.27	.01	.00	3.779	2.2925	.2056	.028-	.0513	.0059	2.3902-	.0977
160	8	.750	8.30-	.00-	.00	4.875	2.5950	.0683-	.024	.0093-	.0035	2.6973-	.1023
160	9	.750	10.31-	.00-	.00	5.765	2.7075-	.1470-	.022	.0107-	.0023	2.8179-	.1104
160	10	.750	12.32-	.00-	.00	6.502	2.8096-	.2655-	.019	.0113-	.0016	2.9381-	.1285
160	11	.750	14.34-	.00	.00	7.010	2.8819-	.3388-	.019	.0029	.0010	3.0266-	.1447
160	12	.750	16.36-	.00	.00	7.553	2.9310-	.3885	.014-	.0079	.0027	3.0882-	.1572
160	13	.750	20.37-	.01-	.00	8.777	3.0022-	.6678	.109	.0122-	.0106	3.1789-	.1767
160	14	.750	.24-	.01-	.00	1.767	1.9833	.5880-	.104	.0737-	.0033	2.1022-	.1189
161	1	.600	3.85-	.00	.00	.467	1.6828	.8010-	.021	.0472	.0026	1.8250-	.1422
161	2	.600	1.85	.01-	.00	1.052	1.8051	.6897	.047-	.0584-	.0025	1.9392-	.1341
161	3	.600	.84	.01-	.00	1.395	1.8734	.6412	.035-	.0524-	.0014	1.9941-	.1207
161	4	.600	.16	.01-	.00	1.565	1.9141	.5956	.026-	.0503-	.0003	2.0281-	.1140
161	5	.600	2.17	.01	.00	2.234	2.0057	.4870	.002-	.0438	.0062	2.1075-	.1018
161	6	.600	4.18-	.00	.00	2.970	2.1241	.3724-	.027-	.0160	.0037	2.2171-	.0930
161	7	.600	6.18	.01	.00	3.621	2.2326	.2254	.014-	.0442	.0074	2.3212-	.0886
161	8	.600	8.18	.01	.00	4.461	2.3336	.0239	.013-	.0519	.0084	2.4245-	.0909
161	9	.600	10.20	.01	.00	5.520	2.5806-	.1391-	.055-	.0338	.0113	2.6826-	.1020
161	10	.600	12.21-	.00-	.00	6.238	2.7207-	.2441-	.024	.0047-	.0023	2.8402-	.1195
161	11	.600	14.23-	.00	.00	6.813	2.8099-	.3067-	.021	.0036	.0023	2.9431-	.1332
161	12	.600	16.24-	.00-	.00	7.379	2.8851-	.3914-	.033	.0030-	.0000	3.0286-	.1429
161	13	.600	20.26-	.00-	.00	8.806	3.0317-	.6773-	.010	.0132-	.0052	3.1981-	.1664
161	14	.600	.16	.01-	.00	1.614	1.9194	.5878	.020-	.0488-	.0004	2.0262-	.1068

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
162	3	1.100	3.56-	.00-	.00	.324	2.3562	1.1160-	.123	.0517-	.0045	2.6482-	.2920
162	4	1.100	1.53-	.00-	.00	.889	2.4836	1.0698-	.132	.0559-	.0069	2.7622-	.2786
162	5	1.100	.51	.00-	.01	1.162	2.5564	1.0411-	.163	.0608-	.0087	2.8174-	.2610
162	6	1.100	.50-	.00-	.01	1.513	2.6088	.9912-	.167	.0658-	.0096	2.8637-	.2549
162	7	1.100	2.51-	.00-	.01	2.318	2.7513	.8458-	.169	.0444-	.0104	3.0039-	.2526
162	8	1.100	4.52-	.00-	.00	3.387	2.9095	.5723-	.033-	.0043-	.0016	3.1500-	.2405
162	9	1.100	6.51-	.00-	.00	4.537	3.0516	.2513-	.027	.0117-	.0049	3.2803-	.2287
162	10	1.100	8.53-	.00-	.00	5.893	3.2726-	.0475-	.026	.0074-	.0008	3.5060-	.2334
162	11	1.100	10.54-	.00	.00	6.857	3.4158-	.2346	.003	.0008	.0039	3.6593-	.2435
162	12	1.100	12.55-	.00	.00	7.685	3.4755-	.4198-	.054	.0111	.0032	3.7279-	.2524
162	13	1.100	14.58-	.00	.00	8.468	3.5426-	.5539-	.027	.0017	.0020	3.8089-	.2663
162	14	1.100	16.57	.01	.00	9.133	3.5302-	.7543-	.108	.0089	.0024	3.8048-	.2746
162	15	1.100	20.57-	.00	.00	10.789	3.6096-	1.1592-	.034-	.0048	.0031	3.9137-	.3041
162	16	1.100	.49-	.00	.00	1.448	2.6095	.9920	.123-	.0502	.0048	2.8660-	.2565
163	3	1.100	3.62-	.00	.01	.953	2.0512	.8062	.000-	.0036	.0095	2.3260-	.2748
163	4	1.100	1.57-	.00	.01	1.352	2.2156	.8379	.047-	.0253	.0078	2.4480-	.2324
163	5	1.100	.55-	.00	.01	1.569	2.2958	.8408	.055-	.0307	.0083	2.5161-	.2203
163	6	1.100	.47-	.00	.00	1.813	2.3621	.8411	.065-	.0290	.0078	2.5794-	.2173
163	7	1.100	2.50-	.00	.00	2.335	2.5148	.8071-	.024-	.0082	.0063	2.7231-	.2083
163	8	1.100	4.54-	.00-	.00	3.191	2.7107	.6808-	.098	.0316-	.0041	2.9075-	.1968
163	9	1.100	6.56-	.00-	.00	4.061	2.8663	.5223-	.095	.0325-	.0069	3.0652-	.1989
163	10	1.100	8.59-	.00-	.00	5.159	3.0674	.3381-	.056	.0106-	.0063	3.2738-	.2064
163	11	1.100	10.63-	.00	.00	6.005	3.1760	.2176	.013-	.0050	.0031	3.3976-	.2216
163	12	1.100	12.64	.00	.01	6.782	3.2621	.0647-	.019-	.0016	.0095	3.5008-	.2387
163	13	1.100	14.67-	.00	.00	7.586	3.3495-	.0723	.010-	.0097	.0023	3.6022-	.2527
163	14	1.100	16.68	.01	.01	8.341	3.3419-	.2483-	.071-	.0050	.0127	3.6017-	.2598
163	15	1.100	20.69-	.00	.00	9.705	3.3831-	.5732-	.022-	.0107	.0044	3.6627-	.2796
163	16	1.100	.55-	.00-	.00	1.594	2.3074	.8431-	.091	.0370-	.0063	2.5268-	.2194
163	17	1.100	.47-	.00-	.00	1.807	2.3791	.8435-	.109	.0385-	.0059	2.5902-	.2111
164	1	.950	3.72-	.01-	.00	1.311	1.7949	.5722-	.052	.0448-	.0043	1.9182-	.1233
164	2	.950	1.67-	.01-	.00	1.752	1.9876	.6044-	.054	.0482-	.0054	2.0990-	.1114
164	3	.950	.65-	.00-	.00	1.948	2.0984	.6235-	.070	.0415-	.0060	2.1968-	.0984
164	4	.950	.37-	.00-	.00	2.133	2.1641	.6341-	.053	.0360-	.0064	2.2580-	.0939
164	5	.950	2.40-	.00-	.00	2.655	2.3134	.6157-	.077	.0225-	.0067	2.3939-	.0805
164	6	.950	4.43-	.00-	.00	3.316	2.4615	.5398-	.097	.0251-	.0052	2.5355-	.0740
164	7	.950	6.50-	.00-	.00	4.634	2.8529	.4221-	.075	.0154-	.0021	2.9228-	.0699
164	8	.950	8.51-	.00-	.00	5.267	2.9234	.2978-	.049	.0163-	.0031	3.0037-	.0803

UNCLASSIFIED

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
164	9	.950	10.54-	.00-	.00	5.988	3.0038	.1882	.007	.0064-	.0028	3.0972-	.0934
164	10	.950	12.56-	.00	.00	6.589	3.0752	.1041	.041	.0013	.0022	3.1866-	.1114
164	11	.950	14.57-	.00	.00	7.123	3.1462	.0217	.003	.0010	.0004	3.2729-	.1267
164	12	.950	16.59-	.00	.00	7.668	3.1864-	.0847	.026-	.0076	.0020	3.3256-	.1392
164	13	.950	20.59	.01	.00	8.561	3.1470-	.3033-	.193	.0028	.0078	3.3137-	.1667
164	14	.950	.37-	.01-	.00	2.125	2.1708	.6370-	.044	.0366-	.0064	2.2658-	.0950
165	2	.950	.38-	4.03-	89.99	2.350	2.1208	.5630	.810-	.1416	.0222	2.2163-	.0955
165	3	.950	.38-	3.02-	89.99	2.289	2.1278	.5816	.593-	.0930	.0135	2.2197-	.0919
165	4	.950	.38-	2.02-	90.00	2.234	2.1313	.5972	.385-	.0456	.0071	2.2216-	.0903
165	5	.950	.39-	1.01-	90.00	2.224	2.1579	.6222	.198-	.0082	.0018	2.2508-	.0929
165	6	.950	.40-	.01-	90.00	2.244	2.1768	.6355-	.000	.0201-	.0048	2.2725-	.0957
165	7	.950	.40	1.01-	90.01	2.229	2.1821	.6352-	.194	.0395-	.0104	2.2803-	.0982
165	8	.950	.40	2.01-	90.01	2.329	2.1923	.6293-	.400	.0668-	.0171	2.2889-	.0966
165	9	.950	.40	3.02-	90.01	2.389	2.1767	.6066-	.594	.0971-	.0239	2.2749-	.0982
165	10	.950	.40	4.03-	90.02	2.471	2.2031	.5959-	.764	.1243-	.0318	2.2981-	.0950
165	11	.950	.40-	.01-	90.00	2.208	2.1913	.6467-	.000	.0203-	.0036	2.2819-	.0906
166	1	.950	8.52-	4.02-	26.68	5.462	2.8648	.2376	.473-	.0448	.0392	2.9916-	.1268
166	2	.950	8.51-	3.00-	20.58	5.394	2.8716	.2522	.370-	.0369	.0285	2.9875-	.1159
166	3	.950	8.51-	2.00-	14.09	5.360	2.9159	.2786	.244-	.0207	.0175	3.0197-	.1038
166	4	.950	8.51-	1.01-	7.20	5.287	2.8912	.2883	.094-	.0023	.0068	2.9918-	.1006
166	5	.950	8.51-	.00-	.00	5.256	2.8867	.2922-	.049	.0148-	.0030	2.9821-	.0954
166	6	.950	8.51	1.01	7.19	5.320	2.8854	.2857-	.170	.0257-	.0098	2.9835-	.0981
166	7	.950	8.51	2.00	14.09	5.314	2.9048	.2778-	.250	.0322-	.0166	3.0042-	.0994
166	8	.950	8.51	3.00	20.59	5.375	2.8983	.2590-	.344	.0435-	.0233	3.0083-	.1100
166	9	.950	8.51	4.01	26.68	5.391	2.8871	.2432-	.460	.0549-	.0334	3.0080-	.1209
166	10	.950	8.51-	.00-	.00	5.405	2.9645	.2966-	.042	.0144-	.0021	3.0712-	.1067
167	1	.950	16.56-	4.04-	14.20	7.410	3.0404-	.1132	.252	.1085-	.0033	3.2241-	.1837
167	2	.950	16.57-	3.05-	10.80	7.478	3.0832-	.0833	.255	.0522-	.0002	3.2570-	.1738
167	3	.950	16.57-	2.00-	7.19	7.604	3.0888-	.0209-	.006	.0390	.0137	3.2640-	.1752
167	4	.950	16.56-	1.00-	3.60	7.606	3.1188-	.0831	.010	.0128	.0085	3.2945-	.1657
167	5	.950	16.57-	.00	.00	7.596	3.1224-	.0958	.025-	.0078	.0023	3.2882-	.1658
167	6	.950	16.58	1.00	3.60	7.669	3.1413-	.0978-	.060-	.0172	.0004	3.3046-	.1633
167	7	.950	16.58	2.01	7.20	7.594	3.1239-	.0736-	.069-	.0440-	.0032	3.2929-	.1690
167	8	.950	16.57	3.04	10.80	7.492	3.1005-	.0767-	.172-	.0660-	.0027	3.2752-	.1747
167	9	.950	16.56	4.04	14.20	7.464	3.0699-	.1160-	.216-	.1117	.0052	3.2555-	.1856

UNCLASSIFIED

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
167	10	.950	16.58-	.00	.00	7.621	3.1171-	.0955	.041-	.0091	.0011	3.2908-	.1737
168	1	.750	3.81-	.00	.00	1.002	1.5721	.5699	.010-	.0239	.0070	1.7272-	.1551
168	2	.750	1.78	.01	.00	1.413	1.7220	.5778	.002-	.0268	.0073	1.8580-	.1360
168	3	.750	.77-	.01-	.00	1.637	1.8011	.5861	.005	.0437-	.0006	1.9271-	.1260
168	4	.730	.25-	.01-	.00	1.896	1.8763	.5925	.026	.0362-	.0012	1.9925-	.1162
168	5	.750	2.26-	.00	.00	2.281	1.9737	.5465	.009-	.0274	.0062	2.0793-	.1056
168	6	.750	4.28	.01	.00	2.888	2.1083	.4728-	.010-	.0322	.0087	2.2069-	.0986
168	7	.750	6.30	.01	.00	3.601	2.2212	.3611-	.001-	.0454	.0094	2.3174-	.0962
168	8	.750	8.33-	.00	.00	4.337	2.4649	.3090-	.003	.0003	.0011	2.5657-	.1008
168	9	.750	10.35-	.00-	.00	5.015	2.5521	.2021-	.009	.0057-	.0041	2.6625-	.1104
168	10	.750	12.36-	.00-	.00	5.713	2.6323	.1032	.057-	.0008-	.0015	2.7573-	.1250
168	11	.750	14.38-	.00	.00	6.284	2.6973	.0272	.024-	.0123	.0058	2.8391-	.1418
168	12	.750	16.40-	.00	.00	6.845	2.7643-	.0536	.029-	.0056	.0024	2.9191-	.1548
168	13	.750	20.41	.01	.00	7.937	2.8245-	.2758-	.068-	.0187	.0090	2.9977-	.1732
168	14	.750	.24-	.01-	.00	1.821	1.8635	.5818	.004	.0380-	.0012	1.9808-	.1173
169	3	1.100	3.64-	.00	.00	1.930	2.1583	.4967	.047-	.0089	.0004	2.3564-	.1981
169	4	1.100	1.61-	.00	.00	2.674	2.3214	.4010	.082-	.0188	.0001	2.5183-	.1969
169	5	1.100	.42-	.00	.00	3.275	2.4994	.3362	.086-	.0197	.0011	2.6992-	.1998
169	6	1.100	.59-	.00	.00	2.996	2.4108	.3631	.077-	.0185	.0009	2.6169-	.2061
169	7	1.100	2.46-	.00-	.00	3.684	2.6701	.3333	.053-	.0249-	.0004	2.8844-	.2143
169	8	1.100	4.50-	.00-	.00	4.112	2.8333	.3447-	.026-	.0022-	.0006	3.0568-	.2235
169	9	1.100	6.55-	.00-	.00	4.435	2.9466	.3789-	.028-	.0002-	.0012	3.1774-	.2308
169	10	1.100	8.60-	.00	.00	4.772	3.0509	.4248	.001-	.0094	.0012	3.2874-	.2365
169	11	1.100	10.64	.00	.01	5.523	3.1438	.3615	.052-	.0156	.0113	3.3825-	.2387
169	12	1.100	12.65-	.00	.00	6.198	3.1264	.2032-	.056	.0103	.0055	3.3734-	.2470
169	13	1.100	14.67-	.00-	.00	6.903	3.1617	.0658	.045-	.0028-	.0004	3.4178-	.2561
169	14	1.100	16.68-	.00	.00	7.614	3.2222-	.0604-	.072	.0117	.0063	3.4949-	.2727
169	15	1.100	20.72	.01	.00	9.004	3.2969-	.3306-	.189	.0204	.0030	3.6286-	.3317
169	16	1.100	.43-	.00-	.00	3.286	2.4672	.3369-	.107	.0272-	.0010	2.7021-	.2349
170	2	1.050	3.64-	.00-	.00	2.049	2.1950	.5091	.057-	.0049-	.0004	2.3871-	.1921
170	3	1.050	1.62-	.00-	.00	2.777	2.3725	.4078	.081-	.0104-	.0006	2.5731-	.2006
170	4	1.050	.60-	.00	.00	3.132	2.4640	.3704	.083-	.0108	.0003	2.6667-	.2027
170	5	1.050	.41-	.00	.00	3.411	2.5532	.3405	.076-	.0143	.0014	2.7573-	.2041
170	6	1.050	2.45-	.00	.00	3.946	2.7138	.3060	.073-	.0142	.0008	2.9261-	.2123
170	7	1.050	4.49-	.00-	.00	4.351	2.8687	.3150	.048-	.0131-	.0004	3.0864-	.2177

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
170	9	1.050	6.54-	.00-	.00	4.635	3.0186	.3775	.027-	.0002-	.0019	3.2522-	.2336
170	8	1.050	8.56-	.00	.00	4.944	3.1250	.4339-	.023-	.0098	.0006	3.3735-	.2485
170	10	1.050	10.63	.00	.01	5.794	3.2948	.3481	.126-	.0430	.0084	3.5431-	.2483
170	11	1.050	12.64-	.00	.00	6.567	3.3066	.1867	.011	.0035	.0045	3.5531-	.2466
170	12	1.050	14.66-	.00	.00	7.376	3.3793	.0375-	.021	.0087	.0032	3.6246-	.2453
170	13	1.050	16.68-	.00	.00	8.041	3.4335-	.0843-	.047	.0123	.0022	3.6962-	.2627
170	14	1.050	20.70-	.01	.00	9.243	3.5234-	.3461	.115-	.0126	.0012	3.8292-	.3058
170	15	1.050	.42-	.00	.00	3.439	2.5271	.3428	.084-	.0123	.0014	2.7497-	.2226
171	1	1.000	3.67-	.01-	.00	2.052	2.1001	.5002	.072-	.0054-	.0010	2.1688-	.0687
171	2	1.000	1.63-	.00-	.00	2.783	2.2974	.4163	.107-	.0180-	.0012	2.3661-	.0687
171	3	1.000	.61-	.00-	.00	3.156	2.4191	.3773	.120-	.0223-	.0014	2.4829-	.0638
171	4	1.000	.40-	.00-	.00	3.473	2.4958	.3477	.099-	.0195-	.0002	2.5669-	.0711
171	5	1.000	2.43-	.00-	.00	4.024	2.7025	.3008	.066-	.0156-	.0001	2.7798-	.0773
171	6	1.000	4.47-	.00-	.00	4.448	2.8417	.3004	.048-	.0125-	.0024	2.9414-	.0997
171	7	1.000	6.51-	.00-	.00	4.680	2.9680	.3598	.018	.0028-	.0029	3.0907-	.1227
171	8	1.000	8.55-	.00	.00	4.894	3.0509	.4279	.111-	.0353	.0063	3.1883-	.1374
171	9	1.000	10.59-	.00	.00	5.835	3.1669	.2960	.030-	.0120	.0039	3.3201-	.1532
171	10	1.000	12.60-	.00	.00	6.514	3.1792	.1650-	.021	.0151	.0043	3.3366-	.1574
171	11	1.000	14.62-	.00	.00	7.214	3.2463	.0420-	.006	.0048	.0023	3.4067-	.1604
171	12	1.000	16.64-	.00	.00	7.857	3.3027-	.0720-	.055	.0146	.0025	3.4781-	.1754
171	13	1.000	20.66	.01	.00	9.130	3.4078-	.3260-	.162	.0211	.0057	3.6108-	.2030
171	14	1.000	.41-	.00	.00	3.487	2.4748	.3490	.107-	.0188	.0008	2.5676-	.0928
172	1	.950	3.71-	.01-	.00	2.005	1.9029	.4015	.042	.0071-	.0053	1.9677-	.0648
172	2	.950	1.69-	.01-	.00	2.689	2.1214	.3320	.060	.0008-	.0041	2.1763-	.0549
172	3	.950	.66-	.00-	.00	3.084	2.2159	.2968	.069-	.0043-	.0052	2.2708-	.0549
172	4	.950	.35-	.01-	.00	3.343	2.3062	.2693	.071-	.0047-	.0050	2.3594-	.0532
172	5	.950	2.38-	.00-	.00	3.902	2.4804	.2283	.044	.0016-	.0057	2.5376-	.0572
172	6	.950	4.41-	.01-	.00	4.347	2.6192	.2172	.028	.0157-	.0081	2.6858-	.0666
172	7	.950	6.45-	.01-	.01	4.514	2.7022	.2757-	.076	.0546-	.0095	2.7878-	.0856
172	8	.950	8.51-	.00	.00	4.911	2.8893	.3687	.012	.0060	.0011	2.9041-	.1048
172	9	.950	10.53-	.00	.00	5.407	2.9193	.3087	.007	.0101	.0021	3.0223-	.1070
172	10	.950	12.55-	.00	.00	6.086	2.9529	.1863	.001	.0080	.0047	3.0528-	.0999
172	11	.950	14.56-	.00	.00	6.701	2.9878	.0768	.017	.0015	.0010	3.0967-	.1089
172	12	.950	16.58-	.00	.00	7.301	3.0512-	.0175-	.010	.0064	.0034	3.1818-	.1306
172	13	.950	20.60	.01	.00	8.509	3.1078-	.2753-	.212	.0123	.0072	3.2515-	.1437
172	14	.950	.36-	.00-	.00	3.405	2.3125	.2709	.071-	.0060-	.0051	2.3721-	.0602

UNCLASSIFIED

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
173	3	.950	.38-	4.02-	89.97	3.352	2.3190	.3027	.700-	.1371	.0510	2.4233-	.1043
173	4	.950	.39-	3.01-	89.98	3.403	2.3149	.2928	.527-	.1051	.0398	2.4102-	.0953
173	5	.950	.39-	2.01-	89.98	3.423	2.3220	.2850	.354-	.0718	.0286	2.4048-	.0828
173	6	.950	.39-	1.00-	89.99	3.423	2.3149	.2758	.173-	.0394	.0198	2.3910-	.0761
173	7	.950	.39	.00-	89.99	3.470	2.3167	.2654-	.007-	.0029	.0098	2.3808-	.0641
173	8	.950	.39	1.01-	90.00	3.499	2.3271	.2487-	.191	.0254-	.0003	2.3834-	.0563
173	9	.950	.38	2.01-	90.01	3.552	2.3289	.2345-	.343	.0551-	.0093	2.3869-	.0580
173	10	.950	.38	3.02-	90.01	3.558	2.3131	.2213-	.468	.0757-	.0183	2.3881-	.0750
173	11	.950	.38	4.02-	90.02	3.584	2.3166	.2198-	.625	.0991-	.0284	2.4069-	.0903
173	12	.950	.39	.00-	89.99	3.466	2.3349	.2648	.000-	.0036	.0098	2.3977-	.0628
174	1	.950	8.50-	4.03-	26.69	5.024	2.8094	.3156	.056	.1179	.0213	2.9134-	.1040
174	2	.950	8.51-	3.01-	20.59	4.967	2.8446	.3476-	.040	.1167	.0139	2.9513-	.1067
174	3	.950	8.51-	2.01-	14.09	5.022	2.8806	.3549-	.048	.0971	.0129	2.9950-	.1144
174	4	.950	8.51-	1.02-	7.19	4.933	2.8842	.3645	.008	.0573	.0110	3.0009-	.1167
174	5	.950	8.51-	.00	.00	4.894	2.8752	.3725	.028	.0075	.0011	2.9914-	.1162
174	6	.950	8.51	1.01	7.20	4.980	2.8953	.3615	.017-	.0469-	.0082	3.0109-	.1156
174	7	.950	8.51	2.02	14.10	4.960	2.8719	.3563	.058-	.0873-	.0080	2.9859-	.1140
174	8	.950	8.51	3.01	20.59	4.890	2.8227	.3489	.072-	.1133-	.0111	2.9322-	.1095
174	9	.950	8.51	4.02	26.69	4.956	2.8080	.3290-	.001-	.1183-	.0177	2.9125-	.1045
174	10	.950	8.51-	.00-	.00	4.935	2.8849	.3714	.035	.0041-	.0001	2.9969-	.1120
175	1	.950	16.56-	4.03-	14.19	7.342	3.0456-	.0850	.439	.0283	.0142	3.1749-	.1293
175	2	.950	16.57-	3.03-	10.79	7.323	3.0299-	.0402	.270	.0223	.0197	3.1665-	.1366
175	3	.950	16.57-	2.00-	7.19	7.180	3.0087-	.0086	.037	.0228	.0216	3.1472-	.1385
175	4	.950	16.57-	1.00-	3.59	7.214	3.0192-	.0118	.030	.0058	.0132	3.1537-	.1345
175	5	.950	16.57-	.00	.00	7.242	3.0257-	.0202-	.034	.0105	.0035	3.1600-	.1343
175	6	.950	16.57	1.00	3.60	7.267	3.0414-	.0231-	.171	.0143-	.0038	3.1775-	.1361
175	7	.950	16.57	2.00	7.19	7.230	3.0345-	.0201-	.215	.0074-	.0111	3.1707-	.1362
175	8	.950	16.57	3.03	10.79	7.275	3.0265-	.0362-	.299-	.0076-	.0141	3.1603-	.1338
175	9	.950	16.56	4.02	14.19	7.337	3.0369-	.0915-	.446-	.0206-	.0086	3.1714-	.1345
175	10	.950	16.58-	.00	.00	7.298	3.0296-	.0252-	.034	.0091	.0035	3.1639-	.1343
176	1	.850	3.78-	.01-	.00	1.692	1.6970	.3830	.032	.0130-	.0056	1.7714-	.0744
176	2	.850	1.75-	.01-	.00	2.317	1.8643	.3157	.037	.0170-	.0063	1.9303-	.0660
176	3	.850	.74-	.01-	.00	2.633	1.9483	.2911	.039	.0182-	.0072	2.0115-	.0632
176	4	.850	.27-	.01-	.00	2.887	2.0257	.2674	.042	.0210-	.0068	2.0914-	.0657
176	5	.850	2.30-	.01-	.00	3.380	2.1781	.2355	.049	.0332-	.0084	2.2523-	.0743

UNCLASSIFIED

TABLE IIIa

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_3}	C_Y	C_{n_3}	C_l	C_{A_u}	ΔC_A
176	6	.850	4.33-	.01-	.01	3.772	2.3125	.2393-	.002	.0605-	.0147	2.3982-	.0857
176	7	.850	6.35	.01	.01	4.214	2.3082	.2692	.075-	.0581	.0152	2.4899-	.0917
176	8	.850	8.40-	.00	.00	4.266	2.5791	.3860	.024-	.0034	.0009	2.6752-	.0961
176	9	.850	10.41-	.00	.00	4.775	2.5782	.2943	.037	.0042	.0034	2.6685-	.0907
176	10	.850	12.42-	.01	.00	5.409	2.6157	.1682	.057	.0030	.0028	2.7013-	.0856
176	11	.850	14.44-	.00	.00	6.004	2.6627	.0797	.031-	.0004	.0011	2.7559-	.0932
176	12	.850	16.46-	.00	.00	6.589	2.7248	.0035	.069-	.0075	.0033	2.8256-	.1008
176	13	.850	20.48	.01	.00	7.762	2.7778-	.2333-	.160	.0127	.0046	2.9036-	.1258
176	14	.850	.27-	.01-	.00	2.879	2.0258	.2664	.043	.0241-	.0068	2.0932-	.0674
177	1	.750	3.82-	.01-	.00	1.577	1.6510	.3905	.022	.0193-	.0053	1.7305-	.0795
177	2	.750	1.79-	.01-	.00	2.190	1.7953	.3281	.027	.0241-	.0072	1.8701-	.0748
177	4	.750	.79-	.01-	.00	2.503	1.8798	.3086	.031	.0276-	.0066	1.9534-	.0736
177	5	.750	.23-	.01-	.00	2.766	1.9622	.2851	.021	.0243-	.0030	2.0366-	.0744
177	6	.750	2.25-	.00	.00	3.173	2.1057	.2521	.028-	.0338	.0101	2.1821-	.0764
177	7	.750	4.27	.01	.00	3.567	2.2155	.2421	.059-	.0515	.0118	2.3031-	.0876
177	8	.750	6.29-	.00	.00	3.787	2.2943	.2679	.068-	.0310	.0066	2.3872-	.0929
177	9	.750	8.33	.01-	.00	4.018	2.4495	.3729	.085-	.0651	.0001	2.5449-	.0954
177	10	.750	10.34-	.00	.00	4.518	2.4931	.3148	.031-	.0007	.0035	2.5840-	.0909
177	11	.750	12.35-	.00	.00	5.063	2.5151	.2034	.034	.0036	.0017	2.6041-	.0890
177	12	.750	14.37-	.00	.00	5.646	2.5563	.1173	.005	.0051	.0075	2.6468-	.0905
177	13	.750	16.38-	.00	.00	6.227	2.6148	.0441	.049-	.0028	.0029	2.7142-	.0994
177	14	.750	20.41-	.00	.00	7.372	2.6912-	.1695-	.114	.0126	.0035	2.8083-	.1171
177	15	.750	.23-	.00	.00	2.743	1.9365	.2777	.029	.0139	.0014	2.0143-	.0778
178	1	.600	3.87-	.00-	.00	1.558	1.6158	.4030	.016	.0159-	.0030	1.6939-	.0781
178	2	.600	1.86-	.00-	.00	2.203	1.7357	.3404	.037	.0245-	.0050	1.8143-	.0786
178	3	.600	.85-	.00	.00	2.781	1.8174	.3091	.014-	.0099	.0069	1.8933-	.0759
178	4	.600	.15-	.01-	.00	2.569	1.8998	.2919	.041	.0232-	.0072	1.9713-	.0715
178	5	.600	2.16-	.00	.00	3.027	2.0216	.2498	.043-	.0324	.0105	2.1007-	.0791
178	6	.600	4.18-	.00	.00	3.443	2.1539	.2399	.074-	.0483	.0131	2.2373-	.0834
178	7	.600	6.19-	.01-	.00	3.631	2.2510	.2680	.045	.0562-	.0139	2.3439-	.0929
178	8	.600	8.21-	.00	.00	3.869	2.3074	.3006	.115-	.0376	.0068	2.4067-	.0993
178	9	.600	10.23-	.00	.00	4.289	2.4179	.3211	.057-	.0373	.0057	2.5132-	.0953
178	10	.600	12.24-	.00	.00	4.817	2.4830	.2521	.056-	.0091	.0040	2.5668-	.0808
178	11	.600	14.25-	.00	.00	5.332	2.4920	.1556	.058	.0017	.0064	2.5802-	.0882
178	12	.600	16.26-	.00	.00	5.900	2.5264	.0742	.045-	.0011	.0068	2.6213	.0948
178	13	.600	20.28-	.00-	.00	7.033	2.6174-	.0946	.065-	.0043-	.0013	2.7333-	.1121
178	14	.600	.15-	.00	.00	2.536	1.8742	.2221	.033-	.0007	.0060	1.9474-	.0732

UNCLASSIFIED

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TABLE IIIb

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
3	6	1.100	4.07	.00-	.00-	.136	.1774-	.0436-	.010-	.0014-	.0002	.3501-	.1727
3	7	1.100	3.05	.00-	.00-	.104	.1743-	.0329-	.009-	.0009-	.0005	.3451-	.1708
3	8	1.100	2.03	.00-	.00-	.062	.1763-	.0198-	.008-	.0007-	.0004	.3430-	.1667
3	9	1.100	1.01	.00-	.00-	.020	.1784-	.0107-	.011-	.0018-	.0004	.3432-	.1648
3	10	1.100	.00	.00-	.00-	.001	.1785	.0001-	.007-	.0022-	.0003	.3436-	.1651
3	11	1.100	1.02	.00-	.00	.041	.1777	.0112-	.006-	.0017-	.0002	.3448-	.1671
3	12	1.100	2.04	.00-	.00	.072	.1783	.0220-	.003-	.0015-	.0006	.3449-	.1666
3	13	1.100	3.05	.00-	.00	.101	.1781	.0331-	.005-	.0016-	.0001	.3488-	.1707
3	14	1.100	4.08	.00-	.00	.164	.1788	.0449-	.004-	.0014-	.0004	.3528-	.1740
3	15	1.100	6.12	.00-	.00	.256	.1828	.0634-	.009-	.0015-	.0004	.3680-	.1852
3	16	1.100	8.15	.00-	.00	.349	.1885	.0782-	.012-	.0019-	.0004	.3884-	.1999
3	17	1.100	12.24-	.01-	.00	.643	.1828	.0940-	.016-	.0029-	.0004	.4036-	.2208
3	18	1.100	16.35-	.01-	.00	1.043	.1670	.1067-	.009-	.0061-	.0002	.4071-	.2401
3	19	1.100	19.98-	.01-	.00	1.528	.1426	.1133-	.003-	.0091	.0000	.4008-	.2582
3	21	1.100	.00	.00-	.00	.011	.1797	.0001-	.010-	.0007-	.0007	.3459-	.1662
4	2	.950	4.05	.00	.00-	.122	.0664-	.0402-	.007-	.0022	.0001	.1628-	.0964
4	3	.950	3.04	.00	.00-	.098	.0661-	.0302-	.014-	.0028	.0001	.1596-	.0935
4	4	.950	2.02	.00	.00-	.049	.0709-	.0174-	.006-	.0033	.0002	.1610-	.0901
4	5	.950	1.01-	.01	.00-	.025	.0675-	.0098-	.013-	.0040	.0002	.1583-	.0908
4	6	.950	.00	.00	.00-	.002	.0663	.0002-	.005-	.0038	.0003	.1566-	.0903
4	7	.950	1.01	.00-	.00	.034	.0677	.0104-	.012-	.0038-	.0002	.1589-	.0912
4	8	.950	2.03	.00-	.00	.082	.0642	.0209-	.004-	.0036-	.0001	.1566-	.0924
4	9	.950	3.05	.00-	.00	.117	.0684	.0335-	.003-	.0042-	.0000	.1603-	.0919
4	10	.950	4.06	.00	.00	.139	.0649	.0436-	.006-	.0036	.0005	.1624-	.0975
4	11	.950	6.09	.00	.00	.221	.0679	.0600-	.009-	.0042	.0005	.1761-	.1082
4	12	.950	8.12	.00-	.00	.331	.0724	.0697-	.011-	.0016-	.0000	.1917-	.1193
4	13	.950	12.19-	.01-	.00	.583	.0567	.0862-	.020-	.0036-	.0001	.2029-	.1462
4	14	.950	16.28	.00	.00	.944	.0336	.1008-	.009-	.0052	.0001	.1991-	.1655
4	15	.950	19.88-	.01	.00	1.367	.0061	.1099-	.006-	.0070	.0003	.1852-	.1791
4	16	.950	.00	.00	.00	.011	.0625	.0004-	.005-	.0038	.0003	.1543-	.0918
6	4	.750	4.04	.00	.00-	.115	.0658-	.0402-	.008-	.0028	.0006	.1501-	.0843
6	5	.750	3.03	.00	.00-	.082	.0654-	.0299-	.003-	.0035	.0006	.1458-	.0804
6	6	.750	2.02	.00-	.00-	.049	.0666-	.0200-	.007-	.0035-	.0000	.1473-	.0807
6	7	.750	1.01	.00	.00-	.018	.0676-	.0065-	.002-	.0042	.0007	.1448-	.0772
6	8	.750	.00	.00-	.00-	.001	.0669	.0001-	.006-	.0034-	.0000	.1465-	.0796
6	9	.750	1.01	.00	.00	.047	.0679	.0109-	.010-	.0026	.0007	.1465-	.0786
6	10	.750	2.02	.00	.00	.095	.0663	.0183-	.005-	.0042	.0007	.1446-	.0783

UNCLASSIFIED

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_{l}	C_{A_u}	ΔC_A
6	11	.750	3.03	.00	.00	.110	.0660	.0313-	.009-	.0033	.0001	.1456-	.0796
6	12	.750	4.05	.00	.00	.157	.0653	.0391-	.009-	.0033	.0008	.1487-	.0834
6	13	.750	6.06	.00	.00	.219	.0663	.0567-	.012-	.0025	.0007	.1611-	.0948
6	14	.750	8.09	.00-	.00	.296	.0673	.0713-	.016-	.0016-	.0000	.1726-	.1053
6	15	.750	12.14	.00	.00	.552	.0572	.0852-	.014-	.0031	.0005	.1873-	.1301
6	16	.750	16.19	.00	.00	.871	.0370	.0948-	.007-	.0063	.0005	.1846-	.1476
6	17	.750	19.75	.00	.00	1.169	.0051	.1011	.015-	.0117	.0005	.1695-	.1644
6	18	.750	.00	.00	.00	.015	.0645	.0006-	.001-	.0050	.0000	.1407-	.0762
9	2	1.100	- 4.08	.00-	.00-	.248	.2041-	.0258-	.019	.0011-	.0002	.3818-	.1777
9	3	1.100	- 3.06-	.01-	.00-	.183	.2032-	.0223-	.025-	.0001-	.0002	.3799-	.1767
9	4	1.100	- 2.04	.00-	.00-	.117	.2042-	.0149-	.021	.0011-	.0001	.3773-	.1731
9	5	1.100	- 1.02	.00-	.00-	.053	.2047-	.0073-	.017	.0008-	.0000	.3748-	.1701
9	6	1.100	.00-	.01-	.00	.000	.2054-	.0001-	.023	.0002-	.0005	.3744-	.1690
9	7	1.100	1.02	.00-	.00	.042	.2075	.0089-	.016-	.0002-	.0004	.3754-	.1679
9	8	1.100	2.04	.00-	.00	.116	.2102	.0168-	.015-	.0002-	.0003	.3810-	.1708
9	9	1.100	3.06	.00-	.00	.168	.2108	.0241-	.017-	.0002-	.0003	.3841-	.1733
9	10	1.100	4.09-	.01-	.00	.254	.2114	.0282-	.023	.0003-	.0003	.3872-	.1758
9	11	1.100	6.13-	.01	.00	.426	.2185	.0265-	.028	.0001	.0001	.3985-	.1800
9	12	1.100	8.18-	.01-	.00	.666	.2237	.0161-	.023	.0008-	.0005	.4145-	.1908
9	13	1.100	12.29-	.01-	.00	1.267	.2177-	.0380-	.027-	.0001-	.0001	.4322-	.2145
9	14	1.100	16.43-	.01-	.00	2.030	.1990-	.1101-	.029	.0005-	.0006	.4391-	.2401
9	15	1.100	20.08-	.01-	.00	2.780	.1804-	.1603-	.028-	.0004-	.0013	.4524-	.2720
9	16	1.100	.00	.00-	.00-	.000	.2084	.0019-	.016	.0003-	.0004	.3765-	.1681
10	2	1.100	- 2.63-	3.12-	50.00-	.141	.1982-	.0228-	.194-	.0238-	.0003	.3840-	.1858
10	3	1.100	- 1.97-	2.34-	50.00-	.084	.2015-	.0176-	.145-	.0191-	.0007	.3823-	.1808
10	4	1.100	- 1.30-	1.57-	50.00-	.050	.1983-	.0089-	.093-	.0141-	.0001	.3755-	.1772
10	5	1.100	- .66-	.78-	50.00-	.037	.2025-	.0047-	.052-	.0075-	.0005	.3724-	.1699
10	6	1.100	.01	.00-	50.00	.030	.2056	.0026-	.003-	.0009-	.0004	.3716-	.1660
10	7	1.100	.66	.77-	50.00	.064	.2081	.0073	.038	.0052-	.0003	.3718-	.1637
10	8	1.100	1.31	1.56-	50.00	.066	.2107	.0132	.089	.0120-	.0003	.3778-	.1671
10	9	1.100	1.98	2.34-	50.00	.144	.2099	.0169	.126	.0175-	.0002	.3812-	.1713
10	10	1.100	2.64	3.13-	50.00	.188	.2083	.0218	.173	.0226-	.0001	.3866-	.1783
10	11	1.100	.01-	.01-	50.00	.019	.2055	.0024-	.010-	.0018-	.0004	.3727-	.1672
11	1	.950	- 2.89-	2.87	45.00-	.178	.0883-	.0212	.152	.0207-	.0002	.1858-	.0975
11	2	.950	- 2.16-	2.16	45.00-	.119	.0912-	.0151	.109	.0160-	.0002	.1832-	.0920

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
11	3	.950	1.45-	1.44	45.00-	.110	.0921-	.0101	.070	.0100-	.0002	.1804-	.0883
11	4	.950	.72-	.72	45.00-	.038	.0905-	.0036	.043	.0034-	.0002	.1776-	.0871
11	5	.950	.00-	.00	45.00-	.004	.0892-	.0001-	.000-	.0028-	.0003	.1756-	.0864
11	6	.950	.71	.72	45.00	.005	.0939	.0073-	.043-	.0089-	.0003	.1817-	.0878
11	7	.950	1.44	1.44	45.00	.064	.0994	.0136-	.074-	.0144-	.0003	.1826-	.0932
11	8	.950	2.16	2.16	45.00	.085	.0927	.0167-	.112-	.0200-	.0004	.1879-	.0952
11	9	.950	2.88	2.88	45.00	.144	.0930	.0230-	.153-	.0243-	.0005	.1921-	.0991
11	10	.950	.00-	.00	45.00-	.016	.0879-	.0005-	.000-	.0022-	.0003	.1757-	.0878
11	11	.950	.00-	.00	45.00-	.004	.0888-	.0001	.007-	.0026-	.0002	.1754-	.0866
12	2	1.100	2.90-	2.88	45.00-	.198	.2043-	.0219	.162	.0241-	.0003	.3835-	.1792
12	3	1.100	2.18-	2.16	45.00-	.156	.2046-	.0168	.114	.0196-	.0003	.3774-	.1728
12	4	1.100	1.44-	1.44	45.00-	.083	.2053-	.0108	.073	.0131	.0001	.3747-	.1694
12	5	1.100	.73-	.71	45.00-	.075	.2062-	.0043	.023	.0076	.0001	.3708-	.1646
12	6	1.100	.00-	.00	45.00-	.013	.2047	.0015	.000	.0003-	.0003	.3702-	.1655
12	7	1.100	.72	.72	45.00	.015	.2048	.0106-	.047-	.0053-	.0004	.3746-	.1698
12	8	1.100	1.44	1.45	45.00	.033	.2034	.0153-	.091-	.0119	.0000	.3781-	.1747
12	9	1.100	2.16	2.16	45.00	.084	.2051	.0208-	.130-	.0174-	.0000	.3835-	.1784
12	10	1.100	2.89	2.88	45.00	.157	.2071	.0247-	.176-	.0219-	.0005	.3903-	.1832
12	11	1.100	.01-	.00	45.00-	.035	.2058	.0009-	.006	.0012-	.0004	.3716-	.1658
13	1	.950	4.07	.00-	.00-	.239	.0859-	.0239	.000-	.0020-	.0005	.1833-	.0974
13	2	.950	3.05	.00	.00-	.176	.0866-	.0202-	.011-	.0021	.0001	.1817-	.0951
13	3	.950	2.03	.00-	.00-	.113	.0866-	.0119-	.010-	.0020-	.0004	.1797-	.0931
13	4	.950	1.01	.00-	.00-	.051	.0882-	.0058-	.005-	.0026-	.0004	.1772-	.0890
13	5	.950	.00	.00-	.00-	.001	.0866	.0024-	.008-	.0025-	.0003	.1758-	.0892
13	6	.950	1.01	.00-	.00	.035	.0879	.0103-	.015-	.0021-	.0003	.1777-	.0898
13	7	.950	2.03	.00-	.00	.096	.0901	.0188-	.011-	.0025-	.0002	.1812-	.0911
13	8	.950	3.05-	.01-	.00	.157	.0892	.0250-	.018-	.0026-	.0002	.1829-	.0937
13	9	.950	4.07	.00-	.00	.219	.0882	.0266-	.010-	.0024-	.0002	.1851-	.0969
13	10	.950	6.10	.00-	.00	.393	.0925	.0261-	.015-	.0020-	.0003	.1941-	.1016
13	11	.950	8.15-	.01	.00	.620	.0978	.0153-	.021-	.0016	.0000	.2074-	.1096
13	12	.950	12.24	.00	.00	1.200	.0864-	.0382-	.018-	.0006	.0000	.2171-	.1307
13	13	.950	16.35-	.01	.00	1.920	.0599-	.1045-	.022-	.0010	.0001	.2144-	.1545
13	14	.950	19.98	.00-	.00	2.642	.0374-	.1537-	.007-	.0053-	.0006	.2023-	.1649
13	15	.950	.00	.00-	.00-	.014	.0880	.0021-	.012-	.0021-	.0003	.1778-	.0899
14	2	.750	4.05	.00-	.00-	.223	.0776-	.0237-	.009-	.0028-	.0001	.1608-	.0832

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
14	3	.750	3.04	.00	.00	.171	.0801-	.0195-	.008-	.0027-	.0001	.1618-	.0817
14	4	.750	2.03	.00	.00	.120	.0810-	.0120-	.008-	.0035-	.0001	.1595-	.0785
14	5	.750	1.01	.00	.00	.069	.0807-	.0046-	.012-	.0019-	.0001	.1575-	.0768
14	6	.750	.00	.00	.00	.002	.0793	.0001-	.017-	.0035-	.0001	.1557-	.0764
14	7	.750	1.01	.00	.00	.049	.0815	.0076-	.005-	.0026-	.0001	.1586-	.0771
14	8	.750	2.03	.00	.00	.115	.0784	.0156-	.010-	.0034-	.0000	.1584-	.0800
14	9	.750	3.03	.00	.00	.112	.0819	.0221-	.015-	.0043-	.0001	.1630-	.0811
14	10	.750	4.05	.00	.00	.231	.0813	.0249-	.014-	.0025-	.0001	.1650-	.0837
14	11	.750	6.07	.00	.00	.381	.0805	.0259-	.012-	.0026	.0005	.1692-	.0887
14	12	.750	8.10	.00	.00	.567	.0839	.0145-	.021-	.0011-	.0005	.1784-	.0945
14	13	.750	12.17	.00	.00	1.162	.0684-	.0400-	.012-	.0005	.0004	.1836-	.1152
14	14	.750	16.24-	.01	.00	1.820	.0423-	.1081-	.029-	.0012	.0004	.1754-	.1331
14	15	.750	19.82	.00-	.00	2.463	.0153-	.1643-	.011-	.0045-	.0007	.1622-	.1469
14	16	.750	.00	.00-	.00-	.001	.0726	.0001-	.006-	.0035-	.0000	.1503-	.0777
16	4	.750	2.87-	2.86	45.00-	.148	.0872-	.0232	.146	.0191	.0003	.1669-	.0797
16	5	.750	2.14-	2.14	45.00-	.098	.0854-	.0189	.103	.0152	.0002	.1634-	.0780
16	6	.750	1.43-	1.43	45.00-	.066	.0882-	.0148	.065	.0096	.0001	.1627-	.0745
16	7	.750	.71-	.71	45.00-	.053	.0872-	.0079	.037	.0026	.0001	.1603-	.0731
16	8	.750	.00-	.00	45.00-	.005	.0855-	.0003-	.005-	.0022	.0000	.1592-	.0737
16	9	.750	.71	.71	45.00	.026	.0871	.0039-	.042-	.0087-	.0001	.1613-	.0742
16	10	.750	1.43	1.43	45.00	.056	.0883	.0081-	.074-	.0142	.0006	.1636-	.0753
16	11	.750	2.14	2.14	45.00	.087	.0892	.0123-	.111-	.0199	.0004	.1686-	.0794
16	12	.750	2.87	2.86	45.00	.134	.0894	.0169-	.151-	.0249	.0003	.1725-	.0831
16	13	.750	.00-	.00	45.00	.013	.0864-	.0031-	.010-	.0023	.0000	.1589-	.0725
18	2	1.100	4.10-	.01	.00-	.340	.2210-	.0176-	.023	.0000	.0002	.3929-	.1719
18	3	1.100	3.08	.00	.00-	.239	.2224-	.0195-	.016	.0012	.0002	.3919-	.1695
18	4	1.100	2.05-	.01	.00-	.151	.2238-	.0136-	.024	.0016	.0003	.3902-	.1664
18	5	1.100	1.03	.00-	.00-	.075	.2257-	.0078-	.020	.0012-	.0001	.3809-	.1642
18	6	1.100	.00-	.01	.00	.000	.2242-	.0000-	.022	.0011	.0004	.3872-	.1630
18	7	1.100	1.02	.00-	.00	.075	.2243	.0057-	.013	.0002-	.0000	.3881-	.1638
18	8	1.100	2.05-	.01	.00	.139	.2231	.0133-	.021	.0002	.0000	.3903-	.1672
18	9	1.100	3.07-	.01	.00	.224	.2244	.0175-	.024-	.0003	.0000	.3945-	.1701
18	10	1.100	4.10-	.01	.00	.332	.2250	.0172-	.023-	.0003	.0001	.3954-	.1714
18	11	1.100	6.15-	.01-	.00	.559	.2337	.0133-	.025-	.0014-	.0000	.4104-	.1757
18	12	1.100	8.21-	.01	.00	.841	.2408-	.0020-	.019-	.0009	.0003	.4246-	.1838
18	13	1.100	12.36-	.01	.00	1.627	.2297-	.0757-	.019-	.0035	.0006	.4336-	.2089
18	14	1.100	16.51-	.01	.00	2.545	.2115-	.1742-	.024-	.0031	.0004	.4424-	.2309

UNCLASSIFIED

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
18	15	1.100	20.19-	.01-	.00	3.507	.1950-	.2660-	.022-	.0025-	.0005	.4475-	.2525
18	16	1.100	.00-	.01-	.00	.000	.2252-	.0001-	.019	.0002-	.0001	.3902-	.1650
19	3	.950	4.08	.00	.00-	.317	.0906-	.0185-	.012-	.0028	.0000	.1845-	.0939
19	4	.950	3.06	.00	.00-	.201	.0948-	.0183-	.011-	.0027	.0000	.1853-	.0905
19	5	.950	2.04-	.01	.00-	.139	.0940-	.0122-	.021-	.0017	.0006	.1835-	.0895
19	6	.950	1.02	.00	.00-	.076	.0958-	.0063-	.013-	.0027	.0001	.1828-	.0870
19	7	.950	.00	.00	.00-	.002	.0966	.0001-	.009-	.0038	.0001	.1826-	.0860
19	8	.950	1.02	.00	.00	.047	.0968	.0083-	.012-	.0038	.0002	.1843-	.0875
19	9	.950	2.04	.00	.00	.146	.0970	.0153-	.011-	.0037	.0002	.1873-	.0903
19	10	.950	3.06-	.01	.00	.207	.0993	.0191-	.014-	.0038	.0002	.1888-	.0895
19	11	.950	4.08-	.01	.00	.293	.0968	.0237-	.020-	.0027	.0008	.1905-	.0937
19	12	.950	6.12-	.01	.00	.518	.1007	.0150-	.015-	.0039	.0001	.1974-	.0967
19	13	.950	8.17-	.01	.00	.794	.1061-	.0016-	.021-	.0028	.0005	.2098-	.1037
19	14	.950	12.29-	.01	.00	1.540	.0929-	.0698-	.017-	.0031	.0005	.2147-	.1218
19	15	.950	16.44-	.01	.00	2.525	.0661-	.1784-	.016-	.0044	.0003	.2065-	.1404
19	16	.950	20.09	.00	.00	3.468	.0435-	.2692-	.011-	.0042	.0003	.1962-	.1527
19	17	.950	.00	.00	.00	.011	.0948	.0004-	.009-	.0038	.0002	.1818-	.0870
20	1	.950	2.89-	2.88	45.00-	.206	.0947-	.0193	.197	.0179	.0004	.1892-	.0945
20	2	.950	2.17-	2.16	45.00-	.158	.0933-	.0158	.132	.0139	.0003	.1850-	.0917
20	3	.950	1.44-	1.44	45.00-	.098	.0949-	.0119	.089	.0078	.0003	.1828-	.0879
20	4	.950	.72-	.72	45.00-	.038	.0929-	.0059	.042	.0028-	.0002	.1800-	.0871
20	5	.950	.00-	.00	45.00-	.017	.0923-	.0004	.003-	.0039-	.0003	.1800-	.0877
20	6	.950	.72	.72	45.00	.030	.0948	.0032-	.043-	.0096	.0002	.1831-	.0883
20	7	.950	1.44	1.44	45.00	.063	.0950	.0114-	.086-	.0158	.0001	.1864-	.0914
20	8	.950	2.16	2.16	45.00	.135	.0985	.0156-	.134-	.0198	.0006	.1927-	.0942
20	9	.950	2.89	2.88	45.00	.169	.0986	.0211-	.190-	.0238-	.0000	.1958-	.0972
20	10	.950	.01	.01	45.00-	.030	.0942-	.0006	.003-	.0039	.0002	.1817-	.0875
21	3	.750	4.06	.00	.00-	.311	.0880-	.0160-	.009-	.0028	.0006	.1697-	.0817
21	4	.750	3.04	.00	.00-	.190	.0872-	.0166-	.014-	.0036	.0006	.1671-	.0799
21	5	.750	2.03	.00-	.00-	.137	.0904-	.0125-	.013-	.0028-	.0001	.1679-	.0775
21	6	.750	1.01	.00	.00-	.069	.0878-	.0077-	.017-	.0028	.0006	.1656-	.0778
21	7	.750	.00	.00	.00	.015	.0897	.0006-	.011-	.0027	.0006	.1652-	.0755
21	8	.750	1.01	.00	.00	.066	.0895	.0049-	.005-	.0035	.0006	.1661-	.0766
21	9	.750	2.02	.00	.00	.098	.0927	.0120-	.015-	.0027	.0006	.1694-	.0767
21	10	.750	3.05	.00	.00	.233	.0885	.0185-	.009-	.0034	.0006	.1684-	.0799

UNCLASSIFIED

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
21	11	.750	4.06	.00	.00	.283	.0876	.0198-	.018-	.0028	.0006	.1694-	.0818
21	12	.750	6.09	.00	.00	.504	.0877	.0125-	.017-	.0027	.0004	.1728-	.0851
21	13	.750	8.12-	.01	.00	.757	.0899-	.0032-	.025-	.0022	.0009	.1812-	.0913
21	14	.750	12.21-	.01	.00	1.477	.0724-	.0680-	.027-	.0033	.0003	.1832-	.1108
21	15	.750	16.30	.00	.00	2.331	.0410-	.1667-	.013-	.0045	.0009	.1712-	.1302
21	16	.750	19.89	.00	.00	3.257	.0165-	.2767-	.013-	.0044	.0008	.1569-	.1404
21	17	.750	.00	.00-	.00-	.001	.0858	.0001-	.011-	.0035-	.0001	.1630-	.0772
23	2	.950	- 4.06	.00	.00-	.368	.1374	.0352-	.010-	.0018	.0001	.2734-	.1360
23	3	.950	- 3.04	.00-	.00-	.262	.1335	.0230-	.017-	.0014-	.0005	.2697-	.1362
23	4	.950	- 2.02	.00-	.00-	.144	.1359	.0113-	.006-	.0025-	.0001	.2692-	.1333
23	5	.950	- 1.01-	.01-	.00-	.066	.1356	.0035-	.028-	.0023-	.0002	.2674-	.1318
23	6	.950	.00	.00-	.00	.012	.1350	.0003-	.008-	.0019-	.0002	.2669-	.1319
23	7	.950	1.01	.00-	.00	.064	.1368-	.0034-	.015-	.0022-	.0003	.2690-	.1322
23	8	.950	2.02	.00-	.00	.154	.1373-	.0131-	.011-	.0021-	.0005	.2709-	.1336
23	9	.950	3.05-	.01-	.00	.283	.1369-	.0244-	.022-	.0024-	.0000	.2721-	.1352
23	10	.950	4.06-	.01-	.00	.398	.1406-	.0382-	.018-	.0030-	.0002	.2775-	.1369
23	11	.950	6.09	.00-	.00	.673	.1409-	.0885-	.010-	.0037-	.0002	.2843-	.1434
23	12	.950	8.12	.00-	.00	1.055	.1394-	.1693-	.016-	.0019-	.0000	.2988-	.1594
23	13	.950	12.17-	.01-	.00	2.007	.1363-	.3928-	.022-	.0009-	.0006	.3321-	.1958
23	14	.950	16.24	.00-	.00	3.188	.1226-	.6751-	.007-	.0035-	.0000	.3399-	.2173
23	15	.950	19.82	.00-	.00	4.381	.0889-	.9459-	.003-	.0074-	.0007	.3193-	.2304
23	16	.950	.00-	.01-	.00	.025	.1394-	.0017-	.016-	.0027-	.0003	.2714-	.1320
24	2	.950	- .01-	4.06	90.00-	.031	.1301	.0023	.274	.0084-	.0001	.2716-	.1415
24	3	.950	.00-	3.05	90.00-	.005	.1346	.0025	.187	.0113-	.0002	.2701-	.1355
24	4	.950	.00-	2.03	90.00-	.018	.1363-	.0003	.121	.0104	.0001	.2684-	.1321
24	5	.950	- .01-	1.02	90.00-	.058	.1345	.0011	.058	.0057-	.0006	.2650-	.1305
24	6	.950	- .01-	.00	90.00-	.022	.1353-	.0004	.004	.0004-	.0002	.2640-	.1287
24	7	.950	- .01	1.02	90.00-	.037	.1361-	.0006-	.058-	.0050-	.0004	.2662-	.1301
24	8	.950	.00	2.03	90.00-	.014	.1318-	.0001-	.116-	.0097-	.0005	.2661-	.1343
24	9	.950	.00	3.05	90.00-	.003	.1323	.0001-	.184-	.0115-	.0001	.2695-	.1372
24	10	.950	- .01	4.06	90.00-	.053	.1324	.0009-	.272-	.0081	.0002	.2732-	.1408
24	11	.950	- .01-	.00	90.00-	.022	.1359-	.0004-	.000	.0003-	.0002	.2635-	.1276
26	2	1.100	- 4.06	.00-	.00-	.543	.3521	.0254-	.023	.0034-	.0002	.5274-	.2453
26	3	1.100	- 3.04	.00-	.00-	.372	.3535	.0645-	.023	.0032-	.0005	.5271-	.2436
26	4	1.100	- 2.03	.00-	.00-	.246	.3553	.0339-	.023	.0036-	.0003	.5269-	.2416

UNCLASSIFIED

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
26	5	1.100	1.01	.00-	.00-	.111	.3536	.0176-	.019	.0029-	.0004	.5924-	.2388
26	6	1.100	.00	.00-	.00	.001	.3552-	.0002-	.022	.0023-	.0006	.5927-	.2375
26	7	1.100	1.01	.00	.00	.114	.3568-	.0199-	.018	.0027	.0001	.5936-	.2368
26	9	1.100	3.04-	.01	.00	.394	.3597-	.0700-	.034	.0032	.0000	.6003-	.2406
26	10	1.100	4.06-	.01-	.00	.564	.3613-	.1046-	.030	.0042-	.0003	.6057-	.2444
26	11	1.100	6.08-	.01	.00	.973	.3650-	.2078-	.033	.0035	.0000	.6104-	.2454
26	12	1.100	8.10-	.01-	.00	1.475	.3709-	.3435-	.030	.0033-	.0004	.6234-	.2525
26	13	1.100	12.15-	.01-	.00	2.602	.3775-	.6496-	.039	.0039-	.0002	.6606-	.2831
26	14	1.100	16.21-	.01-	.00	3.973	.3829-1	.0113-	.039	.0034-	.0004	.7063-	.3234
26	15	1.100	20.31-	.01-	.00	5.561	.3700-1	.3932-	.026	.0008	.0001	.7082-	.3382
26	16	1.100	.00	.00-	.00-	.009	.3537	.0014-	.025	.0038-	.0006	.5933-	.2396
27	2	.950	4.05	.00	.00-	.542	.1961	.0946-	.016	.0027	.0003	.3482-	.1521
27	3	.950	3.04	.00	.00-	.393	.1974	.0665-	.023	.0024-	.0000	.3466-	.1492
27	4	.950	2.02	.00-	.00-	.235	.1971	.0394-	.019	.0024-	.0002	.3453-	.1482
27	5	.950	1.01	.00-	.00-	.130	.1986	.0205-	.015	.0017-	.0004	.3449-	.1463
27	6	.950	.00	.00-	.00-	.012	.1966	.0019-	.026	.0020-	.0001	.3436-	.1470
27	7	.950	1.01-	.01-	.00	.105	.2023-	.0166-	.029	.0025-	.0003	.3492-	.1469
27	8	.950	2.02	.00-	.00	.235	.2018-	.0393-	.010	.0014-	.0000	.3493-	.1475
27	9	.950	3.03	.00-	.00	.352	.2026-	.0624-	.021	.0010-	.0003	.3517-	.1491
27	10	.950	4.05	.00-	.00	.534	.1992-	.0979-	.021	.0009-	.0001	.3520-	.1528
27	11	.950	6.07	.00-	.00	.942	.2058-	.2027-	.024	.0021-	.0001	.3635-	.1577
27	12	.950	8.09	.00	.00	1.419	.2042-	.3299-	.031	.0036	.0002	.3749-	.1707
27	13	.950	12.13-	.01-	.00	2.579	.1887-	.6406-	.042	.0047-	.0001	.4016-	.2129
27	14	.950	16.18-	.01-	.00	3.976	.1947-1	.0214-	.031	.0026-	.0001	.4451-	.2504
27	15	.950	20.24	.00-	.00	5.570	.1800-1	.4370-	.034	.0056-	.0006	.4655-	.2855
27	17	.950	.00	.00-	.00	.000	.2028-	.0000-	.004	.0000-	.0001	.3492-	.1464
28	2	.950	2.87-	2.86	45.00-	.352	.2013	.0601	.364-	.0694-	.0001	.3538-	.1525
28	3	.950	2.14-	2.14	45.00-	.226	.2027	.0403	.267-	.0502	.0002	.3526-	.1499
28	4	.950	1.44-	1.44	45.00-	.165	.2014	.0239	.173-	.0339-	.0001	.3504-	.1490
28	5	.950	2.15-	2.15	45.00-	.263	.2042	.0416	.259-	.0496	.0002	.3537-	.1495
28	6	.950	.71-	.71	45.00-	.054	.2005	.0088	.080-	.0183	.0003	.3485-	.1480
28	7	.950	.00-	.00	45.00	.030	.1997-	.0067	.001-	.0057	.0005	.3480-	.1483
28	8	.950	.72	.72	45.00	.127	.1976-	.0220-	.085	.0082	.0003	.3473-	.1497
28	9	.950	1.43	1.44	45.00	.186	.1993-	.0358-	.174	.0230	.0001	.3499-	.1506
28	10	.950	2.15	2.15	45.00	.283	.2025-	.0510-	.262	.0397	.0003	.3541-	.1516
28	11	.950	2.87	2.87	45.00	.396	.2032-	.0711-	.378	.0620	.0000	.3588-	.1556
28	12	.950	.00-	.00	45.00	.030	.1979-	.0067	.005-	.0062	.0000	.3473-	.1494

UNCLASSIFIED

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
29	1	.750	- 4.03	.00	.00	.431	.1673	.0711-	.021	.0025	.0001	.2924-	.1251
29	2	.750	- 3.02	.00	.00	.304	.1718	.0480-	.021	.0024-	.0001	.2933-	.1215
29	3	.750	- 2.01	.00	.00	.161	.1688	.0255-	.016	.0016	.0004	.2914-	.1226
29	4	.750	- 1.00	.00	.00	.054	.1700	.0085-	.015	.0005	.0002	.2917-	.1217
29	5	.750	.00	.00	.00	.054	.1735-	.0085-	.015	.0022-	.0000	.2921-	.1186
29	6	.750	1.01	.00	.00	.160	.1743-	.0252-	.014	.0013	.0004	.2951-	.1208
29	7	.750	2.02	.00	.00	.301	.1725-	.0476-	.009	.0004	.0002	.2927-	.1202
29	8	.750	3.03	.00	.00	.407	.1721-	.0675-	.019	.0009-	.0001	.2933-	.1212
29	9	.750	4.04	.00	.00	.548	.1725-	.0929-	.014	.0001	.0004	.2969-	.1244
29	10	.750	6.06	.00	.00	.909	.1703-	.1808-	.028	.0034	.0001	.2972-	.1269
29	11	.750	8.07	.00	.00	1.356	.1710-	.2916-	.028	.0028	.0004	.3087-	.1377
29	12	.750	12.11	.00	.00	2.425	.1544-	.5684-	.027	.0029-	.0002	.3185-	.1641
29	13	.750	16.15	.00	.00	3.735	.1455-	.9117-	.031	.0049-	.0005	.3284-	.1829
29	14	.750	20.20	.00	.00	5.237	.1215-	1.2936-	.031	.0043-	.0004	.3298-	.2083
29	15	.750	.00	.00	.00	.035	.1662-	.0055-	.015	.0005	.0007	.2879-	.1217
32	2	1.100	- 3.98	.00	.01	.954	.7156	.2350-	.046	.0140-	.0039	1.0649-	.3493
32	3	1.100	- 2.99	.00	.01	.679	.7220	.2347-	.034	.0125-	.0039	1.0725-	.3505
32	4	1.100	- 1.99	.00	.00	.441	.7269	.1498-	.038	.0125-	.0033	1.0755-	.3486
32	5	1.100	- 1.00	.00	.00	.203	.7304	.0674-	.041	.0141-	.0032	1.0787-	.3483
32	6	1.100	.00	.00	.00	.008	.7321-	.0051-	.042	.0132-	.0029	1.0823-	.3502
32	7	1.100	.99	.00	.00	.232	.7339-	.0834-	.036	.0123-	.0028	1.0840-	.3501
32	8	1.100	1.99	.00	.00	.467	.7306-	.1634-	.043	.0128-	.0031	1.0806-	.3500
32	9	1.100	2.98	.00	.00	.725	.7273-	.2529-	.044	.0122-	.0031	1.0768-	.3495
32	10	1.100	3.97	.00	.00	1.009	.7243-	.3563-	.048	.0126-	.0027	1.0727-	.3484
32	11	1.100	5.96	.00	.00	1.643	.7185-	.5771-	.052	.0150-	.0029	1.0535-	.3350
32	12	1.100	7.95	.00	.00	2.263	.7133-	.7919-	.056	.0175-	.0026	1.0440-	.3307
32	13	1.100	11.96	.00	.00	3.581	.7088-	1.1970-	.055	.0157-	.0023	1.0602-	.3514
32	14	1.100	16.01	.00	.00	5.032	.6997-	1.5971-	.049	.0123-	.0013	1.0710-	.3713
32	15	1.100	.00	.00	.00	.007	.7328-	.0011-	.042	.0121-	.0034	1.0824-	.3496
33	2	.950	- 3.97	.00	.01	.967	.5891	.3586-	.046	.0150-	.0052	.7703-	.2012
33	3	.950	- 2.98	.00	.01	.691	.5848	.2515-	.036	.0133-	.0046	.7656-	.2008
33	4	.950	- .99	.00	.01	.468	.5864	.1575-	.040	.0138-	.0044	.7652-	.1988
33	5	.950	.00	.00	.00	.224	.5811	.0783-	.041	.0140-	.0035	.7623-	.2012
33	6	.950	.00	.00	.00	.004	.5835-	.0037-	.037	.0142-	.0033	.7637-	.2002
33	7	.950	.00	.00	.00	.241	.5844-	.0876-	.045	.0147-	.0030	.7644-	.2000
33	8	.950	1.00	.00	.00	.485	.5843-	.1712-	.042	.0137-	.0028	.7646-	.2003
33	9	.950	2.98	.00	.00	.719	.5891-	.2644-	.043	.0138-	.0032	.7704-	.2003

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_ℓ	C_{A_u}	ΔC_A
33	10	.950	3.96	.00-	.00	1.033	.5943-	.3861-	.044	.0143-	.0039	.7972-	.2029
33	11	.950	5.95	.00-	.00	1.656	.5859-	.5993-	.049	.0161-	.0029	.8011-	.2152
33	12	.950	7.94	.00-	.00	2.279	.5786-	.8195-	.050	.0172-	.0029	.8066-	.2280
33	13	.950	11.95	.00-	.00	3.671	.5753-	1.2515-	.052	.0179-	.0023	.8437-	.2684
33	14	.950	16.00	.00-	.00	4.998	.5460-	1.5983-	.052	.0152-	.0019	.8617-	.3157
33	15	.950	.00	.00-	.00	.021	.5790-	.0008-	.041	.0147-	.0032	.7820-	.2030
34	2	.950	- 2.82-	2.83	45.00-	.718	.5851	.2582	.648-	.2358-	.0038	.7934-	.2083
34	3	.950	- 2.11-	2.12	45.00-	.526	.5858	.1925	.474-	.1713-	.0034	.7910-	.2052
34	4	.950	- 1.41-	1.42	45.00-	.360	.5819	.1265	.296-	.1071-	.0030	.7859-	.2040
34	5	.950	- .71-	.71	45.00-	.185	.5875	.0657	.132-	.0475-	.0021	.7889-	.2014
34	6	.950	- .01	.01	45.00-	.061	.5861	.0108-	.032	.0101-	.0027	.7889-	.2028
34	7	.950	.70	.71	45.00	.112	.5832-	.0450-	.184	.0672-	.0028	.7869-	.2037
34	8	.950	1.40	1.41	45.00	.275	.5869-	.1059-	.353	.1287-	.0019	.7911-	.2042
34	9	.950	2.12	2.13	45.00	.476	.5781-	.1615-	.525	.1917-	.0024	.7865-	.2084
34	10	.950	2.82	2.83	45.00	.670	.5753-	.2317-	.717	.2638-	.0021	.7860-	.2107
34	11	.950	.00-	.00	45.00-	.038	.5854	.0162-	.028	.0083-	.0021	.7884-	.2030
35	1	.750	- 3.98	.00-	.00-	1.023	.3385	.3690-	.066	.0267-	.0023	.4792-	.1407
35	2	.750	- 2.97	.00-	.00-	.840	.3392	.3247-	.055	.0258-	.0034	.4766-	.1374
35	3	.750	- 1.97	.00-	.00-	.583	.3400	.2356-	.056	.0245-	.0036	.4776-	.1376
35	4	.750	- .98	.00-	.00-	.250	.3497	.1158-	.062	.0253-	.0040	.4883-	.1386
35	5	.750	.00	.00-	.00	.015	.3599-	.0080-	.068	.0278-	.0038	.4976-	.1377
35	6	.750	.98	.00-	.00	.313	.3529-	.1374-	.070	.0254-	.0037	.4908-	.1379
35	7	.750	1.97	.00-	.00	.625	.3451-	.2502-	.061	.0249-	.0034	.4807-	.1356
35	8	.750	2.98	.00-	.00	.877	.3437-	.3266-	.052	.0221-	.0020	.4808-	.1371
35	9	.750	3.98	.00-	.00	1.058	.3397-	.3795-	.061	.0258-	.0019	.4798-	.1401
35	10	.750	5.98	.00-	.00	1.584	.3230-	.5507-	.072	.0272-	.0021	.4676-	.1446
35	11	.750	7.98	.00-	.00	2.111	.3210-	.7075-	.085	.0352-	.0016	.4783-	.1573
35	12	.750	12.02	.00	.00	3.127	.3610-	.9584-	.094	.0351	.0006	.5406-	.1796
35	13	.750	16.05	.00-	.00	4.523	.3740-	1.3480-	.081	.0318-	.0032	.5832-	.2092
35	14	.750	20.09	.00-	.00	6.102	.3636-	1.7845-	.054	.0207-	.0045	.6083-	.2447
35	15	.750	.00	.00-	.00	.014	.3585-	.0049-	.058	.0272-	.0038	.4976-	.1391
37	2	1.100	- 4.03	.00-	.00-	.843	.4749	.2307-	.051	.0147-	.0001	.7339-	.2590
37	3	1.100	- 3.02	.00-	.00-	.610	.4757	.1705-	.045	.0135-	.0006	.7339-	.2582
37	4	1.100	- 2.01	.00-	.00-	.401	.4801	.1102-	.048	.0130-	.0003	.7385-	.2584
37	5	1.100	- 1.01	.00-	.00-	.192	.4814	.0518-	.042	.0112-	.0004	.7368-	.2554

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_{ℓ}	C_{A_u}	ΔC_A
37	6	1.100	.00	.00-	.00	.006	.4829-	.0046-	.042	.0114-	.0004	.7375-	.2546
37	7	1.100	1.01	.00-	.00	.225	.4829-	.0625-	.045	.0115-	.0000	.7379-	.2550
37	8	1.100	2.02	.00-	.00	.455	.4823-	.1241-	.042	.0107-	.0002	.7384-	.2561
37	9	1.100	3.02	.00-	.00	.663	.4780-	.1822-	.042	.0104-	.0003	.7351-	.2571
37	10	1.100	4.03-	.01-	.00	.893	.4811-	.2477-	.052	.0115	.0000	.7396-	.2585
37	11	1.100	6.05	.00	.00	1.364	.4814-	.3764-	.046	.0114	.0001	.7434-	.2620
37	12	1.100	8.07-	.01-	.00	1.868	.4853-	.5065-	.055	.0132-	.0002	.7523-	.2670
37	13	1.100	12.14	.00	.00	2.971	.4790-	.7817-	.051	.0127	.0003	.7825-	.3035
37	14	1.100	16.22-	.01	.00	4.182	.4865-	1.0701-	.056	.0136	.0003	.8267-	.3402
37	15	1.100	20.34	.00-	.00	5.554	.4773-	1.3619-	.050	.0146-	.0003	.8476-	.3703
37	16	1.100	.00	.00-	.00	.016	.4795-	.0043-	.036	.0105-	.0004	.7398-	.2603
38	2	.950	4.03	.00-	.00-	.814	.2919	.2163-	.039	.0110-	.0002	.4495-	.1576
38	3	.950	3.02	.00-	.00-	.598	.2950	.1596-	.039	.0101-	.0007	.4497-	.1547
38	4	.950	2.01	.00-	.00-	.383	.2985	.1010-	.039	.0085-	.0007	.4526-	.1541
38	5	.950	1.01	.00-	.00-	.183	.2999	.0492-	.039	.0088-	.0007	.4518-	.1519
38	6	.950	.00	.00-	.00	.016	.2982-	.0024-	.035	.0079-	.0001	.4517-	.1535
38	7	.950	1.01	.00-	.00	.230	.2991-	.0586-	.039	.0082-	.0001	.4522-	.1531
38	8	.950	2.02	.00-	.00	.429	.3005-	.1147-	.035	.0073-	.0001	.4524-	.1519
38	9	.950	3.02-	.01-	.00	.628	.2973-	.1686-	.039	.0069-	.0001	.4519-	.1546
38	10	.950	4.03	.00-	.00	.841	.2953-	.2269-	.039	.0072-	.0002	.4512-	.1559
38	11	.950	6.05	.00-	.00	1.332	.2912-	.3561-	.042	.0089-	.0004	.4556-	.1644
38	12	.950	8.07-	.01-	.00	1.828	.2843-	.4857-	.042	.0075-	.0001	.4656-	.1813
38	13	.950	12.13	.00	.00	2.900	.2587-	.7445-	.041	.0085	.0001	.4772-	.2185
38	14	.950	16.21-	.01	.00	4.128	.2560-	1.0266-	.054	.0109	.0007	.4933-	.2373
38	15	.950	20.30	.00-	.00	5.493	.2403-	1.3368-	.045	.0119-	.0004	.5131-	.2728
38	16	.950	.00	.00-	.00	.016	.2962-	.0024-	.032	.0068-	.0006	.4511-	.1549
39	2	.950	2.85-	2.86	45.00-	.619	.3007	.1690	.586-	.1616	.0007	.4567-	.1560
39	3	.950	2.14-	2.15	45.00-	.439	.3006	.1232	.430-	.1174-	.0003	.4556-	.1550
39	4	.950	1.43-	1.43	45.00-	.312	.3065	.0810	.270-	.0737-	.0003	.4585-	.1520
39	5	.950	.71-	.71	45.00-	.174	.3043	.0395	.120-	.0343-	.0002	.4566-	.1523
39	6	.950	.01	.01	45.00-	.039	.3102	.0051-	.022	.0040-	.0001	.4593-	.1491
39	7	.950	.71	.71	45.00	.149	.3060-	.0353-	.160	.0423-	.0006	.4581-	.1521
39	8	.950	1.43	1.43	45.00	.310	.3093-	.0760-	.304	.0815-	.0005	.4582-	.1489
39	9	.950	2.14	2.15	45.00	.435	.3044-	.1153-	.455	.1242-	.0005	.4570-	.1526
39	10	.950	2.85	2.86	45.00	.614	.3033-	.1633-	.621	.1701-	.0005	.4570-	.1537
39	11	.950	.00-	.00	45.00-	.014	.3081	.0034-	.015	.0029-	.0001	.4577-	.1496

UNCLASSIFIED

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
40	1	.750	4.02	.00	.00	.740	.2453	.1930-	.043	.0120	.0001	.3701-	.1248
40	2	.750	3.01	.00	.00	.521	.2537	.1371-	.033	.0101-	.0004	.3757-	.1220
40	3	.750	2.01	.00	.00	.323	.2542	.0877-	.038	.0098-	.0009	.3777-	.1235
40	4	.750	1.01	.00	.00	.158	.2615	.0403-	.028	.0088-	.0007	.3814-	.1199
40	5	.750	.00	.00	.00	.021	.2597-	.0062-	.028	.0077	.0002	.3799-	.1202
40	6	.750	1.01	.00	.00	.236	.2611-	.0523-	.028	.0075-	.0002	.3803-	.1192
40	7	.750	2.01	.00	.00	.417	.2601-	.1054-	.033	.0080-	.0001	.3796-	.1195
40	8	.750	3.02	.00	.00	.614	.2575-	.1546-	.033	.0086-	.0006	.3772-	.1197
40	9	.750	4.03	.00	.00	.811	.2521-	.2041-	.033	.0075-	.0004	.3760-	.1239
40	10	.750	6.04	.00	.00	1.223	.2469-	.3121-	.038	.0076-	.0007	.3736-	.1267
40	11	.750	8.06	.00	.00	1.670	.2362-	.4164-	.047	.0102	.0003	.3756-	.1394
40	12	.750	12.11	.00	.00	2.578	.2208-	.6206-	.045	.0116-	.0003	.3873-	.1665
40	13	.750	16.17	.00	.00	3.609	.2094-	.8236-	.057	.0153-	.0001	.4031-	.1937
40	14	.750	20.26	.00	.00	4.676	.1955-1	.0019-	.053	.0161-	.0003	.4009-	.2054
40	15	.750	.00	.00	.00	.039	.2610-	.0060-	.033	.0077-	.0004	.3799-	.1189
41	3	.950	4.00	.00	.00	.775	.5796	.2450-	.017	.0031-	.0027	.8062-	.2266
41	4	.950	3.00	.00	.00	.542	.5835	.1695-	.014	.0021-	.0023	.8060-	.2225
41	5	.950	2.00	.00	.00	.338	.5818	.1055-	.018	.0028-	.0023	.8035-	.2217
41	6	.950	1.00	.00	.00	.174	.5823	.0501-	.015	.0019-	.0018	.8025-	.2202
41	7	.950	.00	.00	.00	.002	.5878-	.0026-	.015	.0022-	.0013	.8064-	.2186
41	8	.950	.99	.00	.00	.168	.5864-	.0629-	.019	.0024-	.0019	.8061-	.2197
41	9	.950	1.99	.00	.00	.356	.5909-	.1221-	.015	.0021-	.0014	.8086-	.2177
41	10	.950	2.99	.00	.00	.534	.5902-	.1841-	.019	.0023-	.0021	.8108-	.2206
41	11	.950	3.99	.00	.00	.766	.5857-	.2638-	.016	.0025-	.0023	.8102-	.2245
41	12	.950	5.98	.00	.00	1.281	.5866-	.4425-	.028	.0050-	.0020	.8240-	.2374
41	13	.950	7.98	.00	.00	1.805	.5737-	.6131-	.029	.0058-	.0016	.8282-	.2545
41	14	.950	12.00	.00	.00	2.970	.5487-	.9607-	.029	.0068-	.0018	.8466-	.2979
41	15	.950	16.05	.00	.00	4.252	.5249-1	.2997-	.026	.0043-	.0012	.8588-	.3339
41	16	.950	20.17	.00	.00	5.373	.4653-1	.4870-	.006-	.0026-	.0025	.8272-	.3619
41	17	.950	.00	.00	.00	.003	.5869-	.0028-	.011	.0024-	.0018	.8067-	.2198
42	2	.950	.00-	4.04	90.00-	.022	.5748	.0077	.512-	.1265-	.0010	.7965-	.2217
42	3	.950	.00-	3.03	90.00-	.034	.5790	.0098	.367-	.0901-	.0012	.8016-	.2226
42	4	.950	.01-	2.02	90.00-	.060	.5868	.0096	.250-	.0611-	.0014	.8050-	.2182
42	5	.950	.00-	1.01	90.00-	.037	.5869	.0107	.133-	.0335-	.0015	.8060-	.2191
42	6	.950	.01-	.00	90.00-	.089	.5858	.0100	.017-	.0061-	.0017	.8053-	.2195
42	7	.950	.01	1.01	90.00-	.066	.5887	.0111-	.091	.0222-	.0018	.8094-	.2207
42	8	.950	.00	2.02	90.00-	.042	.5889	.0098-	.214	.0501-	.0014	.8099-	.2210

TABLE IIIb

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
42	9	.950	.88	3.83	90.00-	.029	.5829	.0182-	.338	.0814-	.0020	.8048-	.2219
42	10	.950	.88	4.83	90.00-	.016	.5743	.0187-	.477	.1163-	.0021	.7981-	.2238
42	11	.950 -	.01-	.00	90.00-	.051	.5861	.0085	.020-	.0066-	.0017	.8070-	.2209
43	3	.950 -	4.04	.00	.00-	.576	.2274	.1227-	.020	.0023	.0004	.3709-	.1435
43	4	.950 -	3.03	.00	.00-	.402	.2316	.0862-	.012	.0009	.0006	.3722-	.1406
43	5	.950 -	2.02	.00	.00-	.254	.2339	.0560-	.012	.0007	.0003	.3722-	.1383
43	6	.950 -	1.01	.00	.00-	.120	.2369	.0258-	.019	.0010	.0000	.3738-	.1369
43	7	.950	.00	.00	.00	.026	.2351-	.0041-	.015	.0003	.0003	.3720-	.1369
43	8	.950	1.01	.00-	.00	.172	.2373-	.0341-	.007-	.0003-	.0000	.3746-	.1373
43	9	.950	2.02	.00-	.00	.306	.2374-	.0665-	.011	.0001-	.0004	.3749-	.1375
43	10	.950	3.03	.00	.00	.464	.2382-	.1005-	.014-	.0002	.0003	.3768-	.1386
43	11	.950	4.05	.00	.00	.635	.2347-	.1321-	.014-	.0004	.0000	.3771-	.1424
43	12	.950	.00	.00	.00	.026	.2362-	.0041-	.011-	.0002	.0003	.3731-	.1369
44	2	.950 -	.01-	3.06	90.00-	.039	.2235	.0001	.481-	.0766-	.0000	.3695-	.1460
44	3	.950 -	.01-	3.04	90.00-	.044	.2266-	.0015	.347-	.0574-	.0002	.3695-	.1429
44	4	.950 -	.01-	2.03	90.00-	.026	.2297-	.0021	.241-	.0418	.0001	.3712-	.1415
44	5	.950 -	.01-	1.01	90.00-	.033	.2300-	.0010	.139-	.0269	.0005	.3714-	.1414
44	6	.950	.00-	.00	90.00-	.001	.2300-	.0038	.027-	.0110-	.0002	.3705-	.1405
44	7	.950 -	.01	1.01	90.00-	.046	.2300-	.0037-	.079	.0039-	.0004	.3711-	.1411
44	8	.950 -	.01	2.03	90.00-	.015	.2290-	.0041-	.186	.0198	.0000	.3701-	.1411
44	9	.950 -	.01	3.04	90.00-	.034	.2297-	.0035-	.305	.0368-	.0002	.3722-	.1425
44	10	.950	.00	4.06	90.00-	.015	.2280-	.0019-	.415	.0538-	.0003	.3731-	.1451
44	11	.950 -	.01-	.00	90.00-	.027	.2319	.0003	.030-	.0114-	.0002	.3721-	.1402
44	12	.950 -	.01-	.00	90.00-	.027	.2304-	.0020	.030-	.0114-	.0002	.3719-	.1415
45	3	.950 -	3.99	.00	.00-	.812	.2165	.2766-	.016	.0038	.0008	.3712-	.1547
45	4	.950 -	2.99	.00	.00-	.603	.2230	.2022-	.017	.0034	.0006	.3770-	.1540
45	5	.950 -	1.99	.00	.00-	.394	.2244	.1313-	.021	.0034	.0010	.3778-	.1524
45	6	.950 -	1.00	.00	.00-	.178	.2233	.0600-	.018	.0025	.0003	.3773-	.1540
45	7	.950	.00	.00	.00	.028	.2211-	.0088-	.018	.0021	.0008	.3740-	.1529
45	8	.950	1.00	.00	.00	.246	.2266-	.0799-	.022	.0028	.0006	.3781-	.1515
45	9	.950	2.00	.00	.00	.465	.2252-	.1508-	.019	.0018	.0004	.3772-	.1520
45	10	.950	2.99	.00	.00	.656	.2272-	.2217-	.012	.0015	.0007	.3773-	.1501
45	11	.950	4.00	.00	.00	.912	.2240-	.2986-	.017	.0011	.0005	.3758-	.1518
45	12	.950	5.99	.00	.00	1.372	.2197-	.4528-	.021	.0012	.0006	.3758-	.1541
45	14	.950	.00	.00	.00	.014	.2265-	.0045-	.022	.0033	.0008	.3786-	.1521

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
46	1	.950	.00-	4.04	90.00-	.028	.2243	.0132	.569-	.1359	.0005	.3799-	.1556
46	2	.950	.00-	3.03	90.00-	.028	.2271	.0134	.416-	.1016	.0009	.3800-	.1529
46	3	.950	.00-	2.02	90.00-	.053	.2319	.0130	.281-	.0692	.0002	.3819-	.1500
46	4	.950	.00-	1.01	90.00-	.040	.2302	.0136	.144-	.0365	.0006	.3802-	.1500
46	5	.950	.00-	.00	90.00-	.053	.2301	.0135	.017-	.0054-	.0001	.3784-	.1483
46	7	.950	.00	1.01	90.00-	.040	.2275	.0118-	.116	.0266	.0003	.3801-	.1526
46	8	.950	.00	2.02	90.00-	.028	.2290	.0123-	.245	.0588	.0002	.3820-	.1530
46	9	.950	.00	3.03	90.00-	.053	.2257	.0143-	.385	.0920	.0000	.3804-	.1547
46	10	.950 -	.01	4.04	90.00-	.078	.2189	.0138-	.529	.1257-	.0001	.3771-	.1582
46	11	.950	.00-	.00	90.00-	.041	.2324	.0138	.021-	.0066-	.0001	.3819-	.1495
48	2	1.100 -	3.94	.00-	.00-	1.164	.4689	.4508-	.061	.0233-	.0003	.7252-	.2563
48	3	1.100 -	2.95	.00-	.00-	.832	.4702	.3321-	.064	.0246-	.0004	.7261-	.2559
48	4	1.100 -	1.97	.00-	.00-	.547	.4724	.2169-	.065	.0233-	.0001	.7285-	.2561
48	5	1.100 -	.98	.00	.00-	.240	.4770	.0987-	.057	.0222	.0001	.7351-	.2581
48	6	1.100	.00	.00-	.00	.045	.4767-	.0124-	.067	.0240-	.0004	.7347-	.2580
48	7	1.100	.99	.00-	.00	.363	.4762-	.1343-	.065	.0239-	.0002	.7335-	.2573
48	8	1.100	1.96	.00-	.00	.660	.4785-	.2588-	.067	.0231-	.0001	.7356-	.2571
48	9	1.100	2.95	.00-	.00	.974	.4778-	.3703-	.061	.0215-	.0003	.7325-	.2547
48	10	1.100	3.94	.00-	.00	1.282	.4794-	.4871-	.066	.0219-	.0000	.7322-	.2528
48	11	1.100	4.93	.00-	.00	1.608	.4790-	.5988-	.060	.0207-	.0002	.7320-	.2530
48	12	1.100	5.92	.00	.00	1.888	.4775-	.7029-	.067	.0226	.0001	.7305-	.2530
48	13	1.100	7.91	.00-	.00	2.493	.4694-	.9075-	.072	.0209	.0001	.7325-	.2631
48	14	1.100	11.93	.00	.00	3.793	.4852-	1.3069-	.067	.0206	.0007	.7733-	.2881
48	15	1.100	.00	.00-	.00	.057	.4795-	.0142-	.063	.0256-	.0004	.7375-	.2580
49	2	1.100 -	2.78-	2.82	45.00-	.892	.4610	.3448	.830-	.3187	.0009	.7205-	.2595
49	3	1.100 -	2.09-	2.11	45.00-	.666	.4659	.2616	.608-	.2353	.0001	.7239-	.2580
49	4	1.100 -	1.39-	1.41	45.00-	.486	.4714	.1797	.394-	.1542	.0006	.7272-	.2558
49	5	1.100 -	.69-	.71	45.00-	.248	.4740	.0948	.171-	.0657	.0003	.7302-	.2562
49	6	1.100	.00-	.00	45.00-	.046	.4745	.0137-	.041	.0161	.0004	.7306-	.2561
49	7	1.100	.69	.71	45.00	.170	.4709-	.0716-	.261	.1024-	.0005	.7288-	.2579
49	8	1.100	1.39	1.41	45.00	.406	.4663-	.1580-	.475	.1861-	.0000	.7254-	.2591
49	9	1.100	2.09	2.11	45.00	.626	.4649-	.2372-	.699	.2703-	.0000	.7266-	.2617
49	10	1.100	2.79	2.81	45.00	.823	.4609-	.3151-	.903	.3497-	.0002	.7247-	.2638
49	11	1.100	4.20	4.23	45.00	1.270	.4536-	.4718-	1.327	.5038-	.0002	.7224-	.2688
49	12	1.100	.00-	.00	45.00-	.046	.4725	.0136-	.044	.0165	.0003	.7328-	.2603
50	2	.950 -	3.95	.00	.00-	1.156	.3518	.4401-	.055	.0196-	.0000	.5142-	.1624

UNCLASSIFIED

TABLE IIIb

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_{ℓ}	C_{A_u}	ΔC_A
50	3	.950	2.97	.00	.00	.863	.3552	.3236-	.056	.0215-	.0006	.5192-	.1640
50	4	.950	1.98	.00	.00	.585	.3593	.2138-	.057	.0200-	.0000	.5236-	.1643
50	5	.950	.99	.00	.00	.255	.3590	.0977-	.054	.0200-	.0000	.5240-	.1650
50	6	.950	.00	.00	.00	.036	.3627-	.0121-	.055	.0194-	.0005	.5261-	.1634
50	7	.950	.99	.00	.00	.340	.3628-	.1261-	.060	.0199-	.0005	.5247-	.1619
50	8	.950	1.97	.00	.00	.629	.3614-	.2396-	.061	.0191-	.0001	.5223-	.1609
50	9	.950	2.96	.00	.00	.920	.3581-	.3520-	.054	.0192-	.0006	.5201-	.1620
50	10	.950	3.96	.00	.00	1.259	.3567-	.4685-	.059	.0191-	.0001	.5196-	.1629
50	11	.950	5.93	.00	.00	1.852	.3413-	.6985-	.064	.0213	.0003	.5086-	.1673
50	12	.950	7.92	.00	.00	2.570	.3294-	.9434-	.059	.0182	.0001	.5112-	.1918
50	13	.950	11.90	.00	.00	3.980	.3464-1	.4228-	.061	.0201	.0011	.5646-	.2182
50	14	.950	15.92	.00	.00	5.410	.3412-1	.8489-	.052	.0178	.0013	.5936-	.2524
50	15	.950	.00	.00	.00	.022	.3628-	.0093-	.051	.0194-	.0004	.5267-	.1639
51	1	.950	2.79-	2.82	45.00-	.876	.3500	.3337	.825-	.3164	.0005	.5156-	.1656
51	2	.950	2.10-	2.11	45.00-	.673	.3561	.2550	.603-	.2323	.0007	.5198-	.1637
51	3	.950	1.40-	1.41	45.00-	.459	.3591	.1729	.394-	.1514	.0004	.5229-	.1638
51	4	.950	.70-	.70	45.00-	.258	.3624	.0945	.186-	.0714	.0002	.5258-	.1634
51	5	.950	.00-	.00	45.00-	.070	.3604	.0160-	.025	.0088-	.0001	.5241-	.1637
51	6	.950	.69	.71	45.00	.158	.3599-	.0664-	.235	.0897-	.0004	.5238-	.1639
51	7	.950	1.39	1.41	45.00	.356	.3534-	.1419-	.431	.1670-	.0001	.5192-	.1658
51	8	.950	2.09	2.12	45.00	.583	.3537-	.2241-	.644	.2477-	.0005	.5183-	.1646
51	9	.950	2.79	2.82	45.00	.806	.3481-	.3065-	.869	.3344-	.0003	.5157-	.1676
51	10	.950	4.20	4.23	45.00	1.239	.3282-	.4668-	1.295	.4935	.0004	.5041-	.1759
51	11	.950	5.61	5.64	45.00	1.685	.3008-	.6268-	1.733	.6565	.0007	.4835-	.1827
51	12	.950	.00-	.00	45.00-	.058	.3626	.0187-	.028	.0093	.0004	.5265-	.1639
54	2	.750	3.98	.00	.00	1.020	.2805	.3674-	.049	.0164	.0009	.3998-	.1193
54	3	.750	2.99	.00	.00	.776	.2956	.2736-	.040	.0143	.0006	.4120-	.1164
54	4	.750	1.99	.00	.00	.497	.2976	.1802-	.040	.0145	.0012	.4147-	.1171
54	5	.750	1.00	.00	.00	.236	.3037	.0836-	.037	.0124	.0009	.4185-	.1148
54	6	.750	.00	.00	.00	.024	.3044-	.0127-	.037	.0134	.0007	.4198-	.1154
54	7	.750	1.00	.00	.00	.301	.3059-	.1054-	.037	.0137	.0005	.4207-	.1144
54	8	.750	1.99	.00	.00	.560	.3025-	.2016-	.039	.0123	.0010	.4174-	.1149
54	9	.750	2.99	.00	.00	.820	.3019-	.2918-	.044	.0150	.0001	.4154-	.1135
54	10	.750	3.98	.00	.00	1.074	.2889-	.3807-	.035	.0112	.0013	.4034-	.1146
54	11	.750	5.98	.00	.00	1.628	.2656-	.5698-	.050	.0157	.0003	.3802-	.1146
54	12	.750	7.97	.00	.00	2.231	.2615-	.7757-	.052	.0162	.0011	.3843-	.1228
54	13	.750	11.97	.00	.00	3.628	.2507-1	.2352-	.049	.0152	.0016	.3929-	.1422

UNCLASSIFIED

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
54	14	.750	15.98	.00	.00	5.099	.2305-	1.6761-	.055	.0157	.0010	.3965-	.1660
54	15	.750	20.03-	.01-	.01	6.470	.2008-	2.0194	.003-	.0139-	.0113	.3941-	.1933
54	16	.750	.00	.00	.00	.042	.3043-	.0155-	.042	.0141	.0007	.4195-	.1152
55	1	.750	2.82-	2.83	45.00-	.759	.2860	.2759	.737-	.2686	.0019	.4055-	.1195
55	2	.750	2.11-	2.12	45.00-	.597	.2964	.2114	.537-	.1991	.0012	.4102-	.1138
55	3	.750	1.41-	1.41	45.00-	.400	.2994	.1414	.347-	.1302	.0019	.4140-	.1146
55	4	.750	.71-	.71	45.00-	.205	.3005	.0748	.168-	.0640	.0012	.4162-	.1157
55	5	.750	.00-	.00	45.00-	.046	.2999	.0109-	.021	.0036	.0019	.4157-	.1158
55	6	.750	.71	.71	45.00	.170	.2990-	.0619-	.208	.0737	.0004	.4145-	.1155
55	7	.750	1.41	1.41	45.00	.362	.2996-	.1250-	.382	.1383	.0004	.4162-	.1166
55	8	.750	2.12	2.13	45.00	.556	.2913-	.1941-	.568	.2064	.0011	.4094-	.1181
55	9	.750	2.82	2.83	45.00	.733	.2847-	.2581-	.762	.2743	.0011	.4043-	.1196
55	10	.750	4.23	4.25	45.00	1.093	.2620-	.3878-	1.129	.4070	.0016	.3853-	.1233
55	11	.750	5.65	5.65	45.00	1.489	.2212-	.5183-	1.509	.5342	.0013	.3484-	.1272
55	12	.750	8.53	8.48	45.00	2.309	.1873-	.7780-	2.274	.7852	.0004	.3228-	.1355
55	13	.750	.00-	.00	45.00-	.028	.3024	.0111-	.010	.0047	.0012	.4172-	.1148
57	3	1.100	4.06-	.01-	.00-	.501	.5767	.0888-	.030	.0038-	.0002	.8662-	.2895
57	4	1.100	3.04	.00	.00-	.364	.5756	.0633-	.023	.0031	.0000	.8674-	.2918
57	5	1.100	2.03	.00	.00-	.227	.5770	.0378-	.020	.0020	.0003	.8681-	.2911
57	6	1.100	1.01	.00	.00-	.112	.5766	.0177-	.019	.0018	.0001	.8655-	.2889
57	7	1.100	.00-	.01-	.00	.001	.5773-	.0002-	.022	.0011-	.0001	.8658-	.2885
57	8	1.100	1.01	.00	.00	.125	.5781-	.0216-	.019	.0011	.0001	.8671-	.2890
57	9	1.100	2.03-	.01-	.00	.238	.5814-	.0415-	.022	.0010-	.0001	.8694-	.2880
57	10	1.100	3.04	.00	.00	.385	.5830-	.0686-	.021	.0013	.0001	.8724-	.2894
57	11	1.100	4.06-	.01	.00	.520	.5842-	.0939-	.024	.0011	.0003	.8743-	.2901
57	12	1.100	6.09-	.01	.00	.823	.5813-	.1535-	.021	.0003	.0002	.8706-	.2893
57	13	1.100	8.12-	.01-	.00	1.199	.5769-	.2345-	.023-	.0002-	.0005	.8674-	.2905
57	14	1.100	12.19-	.01-	.00	2.162	.5626-	.4570-	.026-	.0004-	.0011	.8564-	.2938
57	15	1.100	16.29-	.01-	.00	3.231	.5704-	.6688-	.046	.0085-	.0002	.8734-	.3030
57	16	1.100	19.90-	.01-	.00	4.433	.5926-	.9214-	.030	.0020-	.0001	.9039-	.3113
57	17	1.100	.00	.00-	.00	.023	.5757-	.0037-	.022	.0017-	.0001	.8642-	.2885
58	2	1.100	.01-	4.07	90.00-	.022	.5762-	.0013	.399-	.0390-	.0003	.8643-	.2881
58	3	1.100	.01-	3.05	90.00-	.030	.5706-	.0001	.292-	.0283-	.0001	.8640-	.2934
58	4	1.100	.01-	2.03	90.00-	.026	.5708-	.0009	.193-	.0193-	.0002	.8618-	.2910
58	5	1.100	.01-	1.02	90.00-	.024	.5708-	.0014	.103-	.0128	.0001	.8610-	.2902

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
58	6	1.100 -	.01-	.00	90.00-	.023	.5717-	.0019	.020-	.0079-	.0000	.8601-	.2884
58	7	1.100 -	.01	1.02	90.00-	.022	.5733-	.0006-	.069-	.0010	.0003	.8622-	.2889
58	8	1.100 -	.01	3.24	90.00-	.018	.5745-	.0010-	.151	.0050	.0001	.8647-	.2902
58	9	1.100 -	.01	3.05	90.00-	.026	.5741-	.0019-	.248	.0139-	.0000	.8668-	.2927
58	10	1.100 -	.01	4.07	90.00-	.022	.5739-	.0026-	.348	.0237	.0007	.8683-	.2944
58	11	1.100 -	.01	5.09	90.00-	.017	.5719-	.0035-	.466	.0368	.0001	.8678-	.2959
58	12	1.100 -	.01	6.11	90.00-	.011	.5682-	.0045-	.593	.0519	.0004	.8657-	.2975
58	13	1.100 -	.01	8.16	90.00-	.009	.5634-	.0051-	.857	.0849	.0000	.8655-	.3021
58	14	1.100 -	.01	12.26	90.00-	.007	.5497-	.0063-	1.615	.2128	.0000	.8571-	.3074
58	15	1.100	.00	16.39	90.00-	.029	.5122	.0045-	2.556	.3729	.0005	.8485-	.3363
58	16	1.100 -	.01	20.02	90.00-	.009	.4762-	.0062-	3.627	.5728	.0001	.8157-	.3395
58	17	1.100 -	.01-	.00	90.00-	.022	.5695-	.0019	.023-	.0078-	.0000	.8599-	.2904
59	1	.950 -	.01-	4.06	90.00-	.023	.4015-	.0041	.379-	.0404-	.0003	.6315-	.2300
59	2	.950 -	.01-	3.04	90.00-	.017	.4055-	.0027	.281-	.0306	.0000	.6338-	.2283
59	3	.950 -	.01-	2.03	90.00-	.017	.4109-	.0031	.193-	.0222-	.0001	.6371-	.2262
59	4	.950 -	.01-	1.01	90.00-	.028	.4137-	.0040	.104-	.0157-	.0003	.6401-	.2264
59	5	.950 -	.01-	.00	90.00-	.026	.4117-	.0045	.027-	.0110-	.0004	.6389-	.2272
59	6	.950 -	.01	1.02	90.00-	.012	.4133-	.0046-	.062-	.0051	.0005	.6386-	.2253
59	7	.950 -	.01	2.03	90.00-	.022	.4102-	.0055-	.146	.0020	.0003	.6367-	.2265
59	8	.950 -	.01	3.04	90.00-	.018	.4034-	.0062-	.237	.0114	.0007	.6323-	.2289
59	9	.950 -	.01	4.06	90.00-	.027	.4015-	.0049-	.335	.0220	.0005	.6327-	.2312
59	10	.950 -	.01	6.09	90.00-	.017	.3917-	.0068-	.568	.0495	.0007	.6270-	.2353
59	11	.950 -	.01	8.13	90.00-	.004	.3818-	.0090-	.829	.0820	.0009	.6183-	.2365
59	12	.950 -	.01	12.21	90.00-	.022	.3378-	.0030-	1.555	.2101	.0004	.6259-	.2881
59	13	.950 -	.01	16.32	90.00-	.028	.3196-	.0028-	2.468	.3711	.0003	.6359-	.3163
59	14	.950 -	.01	19.92	90.00-	.021	.2655-	.0041-	3.484	.5646	.0001	.5885-	.3230
59	15	.950 -	.01-	.00	90.00-	.027	.4123-	.0020	.023-	.0110	.0001	.6378-	.2255
60	2	.950 -	4.04	.00	.00-	.476	.4112	.0886-	.020	.0014	.0006	.6313-	.2201
60	3	.950 -	3.03	.00	.00-	.356	.4155	.0652-	.023	.0018	.0007	.6367-	.2212
60	4	.950 -	2.02-	.01	.00-	.224	.4150	.0421-	.023	.0004	.0005	.6373-	.2223
60	5	.950 -	1.01	.00	.00-	.106	.4169	.0190-	.015-	.0003	.0008	.6405-	.2236
60	6	.950	.00	.00	.00	.012	.4173	.0004-	.019-	.0004	.0011	.6410-	.2237
60	7	.950	1.01	.00	.00	.117	.4150-	.0185-	.019-	.0004	.0004	.6411-	.1661
60	8	.950	2.02-	.01	.00	.231	.4149-	.0395-	.026-	.0007	.0007	.6374-	.1628
60	9	.950	3.04-	.01	.00	.377	.4155-	.0664-	.022-	.0008	.0004	.6331-	.1526
60	10	.950	4.05-	.01	.00	.508	.4172-	.0938-	.022-	.0003	.0007	.6337-	.1565
60	11	.950	6.09-	.01	.00	.820	.4715-	.1523-	.021-	.0007	.0007	.6234-	.1513

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
60	12	.950	8.10-	.01-	.00	1.199	.4660-	.2348-	.020-	.0011-	.0000	.6104-	.1444
60	13	.950	12.16-	.01-	.00	2.124	.4595-	.4464-	.026-	.0001	.0008	.6327-	.1732
60	14	.950	16.24-	.01-	.00	3.194	.4737-	.6813-	.042	.0057-	.0001	.6581-	.1844
60	15	.950	19.82	.00-	.00	4.383	.4551-	.9458-	.029	.0024-	.0002	.6422-	.1871
60	16	.950	.00	.00	.00	.012	.4735	.0004-	.019-	.0004	.0006	.6401-	.1666
62	2	.750	- 4.03	.00	.00-	.433	.4566	.0715-	.017	.0001	.0016	.5800-	.1234
62	3	.750	- 3.02	.00	.00-	.305	.4588	.0482-	.017	.0000	.0013	.5821-	.1233
62	4	.750	- 2.01	.00	.00-	.179	.4590	.0283-	.021-	.0003	.0011	.5827-	.1237
62	5	.750	- 1.01	.00	.00-	.090	.4571	.0142-	.011-	.0009	.0009	.5810-	.1239
62	6	.750	.00	.00	.00	.015	.4548	.0007-	.021-	.0013	.0015	.5787-	.1239
62	7	.750	1.01	.00	.00	.104	.4580-	.0135-	.016-	.0020	.0006	.5815-	.1235
62	8	.750	2.02	.00	.00	.227	.4595-	.0330-	.015-	.0022	.0010	.5820-	.1225
62	9	.750	3.03	.00	.00	.334	.4606-	.0529-	.015-	.0014	.0008	.5826-	.1220
62	10	.750	4.04	.00	.00	.473	.4621-	.0750-	.019-	.0017	.0012	.5829-	.1208
62	11	.750	6.06	.00	.00	.755	.4555-	.1260-	.024-	.0011	.0007	.5772-	.1217
62	12	.750	8.08	.00	.00	1.106	.4416-	.1938-	.018-	.0015	.0008	.5628-	.1212
62	13	.750	12.13	.00	.00	1.970	.4002-	.3833-	.017-	.0034	.0004	.5411-	.1409
62	14	.750	16.19	.00	.00	2.984	.4094-	.5994-	.024-	.0007	.0003	.5737-	.1643
62	15	.750	19.74	.00-	.00	4.042	.4012-	.8414-	.013-	.0027-	.0004	.5636-	.1624
62	16	.750	.00	.00	.00	.016	.4505	.0005-	.016-	.0020	.0008	.5757-	.1252
62	17	.750	.00	.00	.00	.016	.4495-	.0025-	.011-	.0019	.0015	.5759-	.1264
63	1	.750	.00-	4.04	90.00	.011	.4429-	.0122	.365-	.0337	.0008	.5748-	.1319
63	2	.750	.00-	3.03	90.00	.031	.4472-	.0125	.270-	.0261	.0006	.5766-	.1294
63	3	.750	.00-	2.02	90.00	.014	.4483-	.0101	.188-	.0215	.0011	.5780-	.1297
63	4	.750	.00-	1.01	90.00	.016	.4461-	.0137	.117-	.0185	.0009	.5741-	.1280
63	5	.750	.00-	.00	90.00	.016	.4472-	.0110	.041-	.0155	.0008	.5732-	.1260
63	6	.750	- .01	1.01	90.00-	.001	.4481-	.0116-	.035-	.0136	.0013	.5749-	.1268
63	7	.750	.00	2.02	90.00	.017	.4486-	.0117-	.110-	.0099	.0018	.5786-	.1300
63	8	.750	.00	3.03	90.00	.038	.4479-	.0152-	.198-	.0041	.0009	.5793-	.1314
63	9	.750	.00	4.05	90.00	.023	.4457-	.0130-	.296	.0040	.0014	.5803-	.1346
63	10	.750	.00	6.07	90.00	.031	.4381-	.0146-	.498	.0256	.0017	.5755-	.1374
63	11	.750	- .01	8.10	90.00	.008	.4267-	.0145-	.750	.0565	.0014	.5684-	.1417
63	12	.750	- .01	12.15	90.00-	.002	.3814-	.0128-	1.404	.1638	.0013	.5470-	.1656
63	13	.750	.00	16.23	90.00-	.000	.3698-	.0087-	2.272	.3156	.0013	.5656-	.1958
63	14	.750	.00	19.80	90.00	.012	.3311-	.0119-	3.172	.4856	.0002	.5292-	.1981
63	15	.750	.00-	.00	90.00	.016	.4456-	.0109	.036-	.0157	.0015	.5725-	.1269

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_{l_l}	C_{A_u}	ΔC_A
66	2	1.100	4.03-	.00	.00-	.569	1.0355	.1303-	.021	.0037	.0002	1.3349-	.2994
66	3	1.100	3.03-	.00-	.00-	.416	1.0384	.0909-	.025	.0049-	.0002	1.3363-	.2979
66	4	1.100	2.02-	.00	.00-	.252	1.0384	.0551-	.024	.0053	.0006	1.3356-	.2972
66	5	1.100	1.01-	.00	.00-	.117	1.0406	.0237-	.028	.0057	.0009	1.3352-	.2946
66	6	1.100	.00-	.00	.00	.017	1.0461-	.0077-	.020	.0051	.0006	1.3398-	.2937
66	7	1.100	1.01-	.00	.00	.166	1.0466-	.0413-	.020	.0049	.0002	1.3423-	.2957
66	8	1.100	2.02-	.00	.00	.314	1.0422-	.0748-	.027	.0059	.0004	1.3369-	.2947
66	9	1.100	3.03-	.00	.00	.477	1.0427-	.1105-	.027	.0057	.0012	1.3385-	.2958
66	10	1.100	4.04-	.00	.00	.654	1.0414-	.1512-	.031	.0054	.0008	1.3385-	.2971
66	11	1.100	6.05-	.00-	.00	1.010	1.0289-	.2428-	.027	.0051-	.0000	1.3238-	.2949
66	12	1.100	8.07-	.00	.00	1.452	1.0145-	.3482-	.019	.0025	.0002	1.3023-	.2878
66	13	1.100	12.11-	.00-	.00	2.499	.9278-	.6172-	.023	.0010-	.0008	1.2260-	.2982
66	14	1.100	16.19	.01	.00	3.526	.9138-	.8249-	.041	.0056	.0003	1.2163-	.3025
66	15	1.100	19.79-	.00-	.00	4.620	.9452-	1.0230-	.042	.0073-	.0015	1.2592-	.3140
66	16	1.100	.00-	.00	.00	.032	1.0481-	.0100-	.024	.0050	.0005	1.3419-	.2938
67	1	1.100	.00-	4.05	90.00-	.044	1.0352	.0095	.452-	.0699-	.0009	1.3327-	.2975
67	2	1.100	.00-	3.04	90.00-	.037	1.0437	.0085	.336-	.0499-	.0005	1.3404-	.2967
67	3	1.100	.00-	2.03	90.00-	.044	1.0461	.0096	.219-	.0305-	.0006	1.3411-	.2950
67	4	1.100	.00-	1.01	90.00-	.038	1.0469	.0087	.113-	.0143-	.0002	1.3415-	.2946
67	5	1.100	.00-	.00	90.00-	.031	1.0501	.0076-	.000	.0031-	.0004	1.3433-	.2932
67	6	1.100	.01	1.01	90.00-	.053	1.0499	.0087-	.105	.0199-	.0000	1.3431-	.2932
67	7	1.100	.00	2.02	90.00-	.032	1.0485	.0078-	.214	.0374-	.0001	1.3420-	.2935
67	8	1.100	.01	3.03	90.00-	.054	1.0458	.0087-	.321	.0553-	.0003	1.3407-	.2949
67	9	1.100	.00	4.05	90.00-	.045	1.0400	.0074-	.453	.0777-	.0005	1.3367-	.2967
67	10	1.100	.00	6.07	90.00-	.039	1.0234	.0067-	.725	.1284-	.0002	1.3241-	.3007
67	11	1.100	.00	8.10	90.00-	.031	.9965	.0057-	1.044	.1870	.0001	1.3085-	.3120
67	12	1.100	.00	12.18	90.00-	.030	.8827	.0076-	1.851	.3476-	.0006	1.2299-	.3472
67	13	1.100	.00	16.27	90.00-	.023	.8619	.0060-	2.815	.5243	.0000	1.2206-	.3587
67	14	1.100	.00	19.88	90.00-	.050	.8529	.0066-	3.809	.6877-	.0006	1.2220-	.3691
67	15	1.100	.00-	.00	90.00-	.045	1.0482	.0098	.004	.0032-	.0004	1.3475-	.2993
68	4	.950	.00-	4.04	90.00-	.038	.7922	.0059	.339-	.0584-	.0003	1.0547-	.2625
68	5	.950	.01-	3.03	90.00-	.044	.8005	.0069	.223-	.0393	.0001	1.0576-	.2571
68	6	.950	.00-	2.01	90.00-	.036	.8071	.0058	.110-	.0194-	.0001	1.0583-	.2512
68	7	.950	.01-	.00	90.00-	.041	.8052	.0066	.007	.0004-	.0002	1.0586-	.2534
68	8	.950	.00	1.01	90.00-	.034	.8055	.0055-	.105	.0207	.0001	1.0582-	.2527
68	9	.950	.00	3.02	90.00-	.025	.8043	.0043-	.219	.0415-	.0000	1.0572-	.2520
68	10	.950	.01-	4.04	90.00-	.043	.7967	.0069-	.337	.0622-	.0001	1.0526-	.2569

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
68	11	.950	.01	4.05	90.00-	.048	.7799	.0057-	.451	.0818-	.0002	1.0410-	.2611
68	12	.950	.01	6.07	90.00-	.044	.7435	.0057-	.760	.1579	.0000	1.0210-	.2775
68	13	.950	.01	8.10	90.00-	.045	.6956	.0068-	1.095	.2251	.0005	1.0012-	.3056
68	14	.950	.00	12.19	90.00-	.030	.6350	.0054-	1.799	.3379	.0000	.9736-	.3386
68	15	.950	.00	16.30	90.00-	.027	.6587	.0041-	2.692	.4880-	.0002	1.0078-	.3491
68	16	.950	.00	19.90	90.00-	.003	.5974-	.0017-	3.726	.6874-	.0009	.9444-	.3470
68	17	.950	.01-	.00	90.00-	.041	.8053	.0066	.006	.0005-	.0002	1.0609-	.2556
69	1	.950	4.03-	.00	.00-	.630	.8003	.1583-	.022	.0041	.0006	1.0520-	.2517
69	2	.950	3.02-	.00	.00-	.455	.8051	.1125-	.022	.0039	.0002	1.0581-	.2530
69	3	.950	2.02-	.00-	.00-	.293	.8070	.0712-	.018	.0037-	.0002	1.0612-	.2542
69	4	.950	1.01-	.00	.00-	.145	.8062	.0297-	.022	.0040	.0004	1.0614-	.2552
69	5	.950	.00-	.00	.00	.003	.8050-	.0072-	.015	.0028	.0001	1.0616-	.2566
69	6	.950	1.00-	.00	.00	.163	.8072-	.0460-	.022	.0030	.0002	1.0619-	.2547
69	7	.950	2.01-	.00	.00	.337	.8081-	.0893-	.022	.0034	.0003	1.0621-	.2540
69	8	.950	3.02-	.00	.00	.496	.8072-	.1302-	.022	.0032	.0004	1.0583-	.2511
69	9	.950	4.02-	.00	.00	.670	.8008-	.1781-	.018	.0029	.0005	1.0518-	.2510
69	10	.950	6.04-	.00	.00	1.071	.7816-	.2913-	.029	.0052	.0005	1.0305-	.2489
69	11	.950	8.05-	.00	.00	1.508	.7564-	.4055-	.025	.0040	.0006	1.0033-	.2469
69	12	.950	12.12-	.00-	.00	2.444	.7044-	.6150-	.028	.0028-	.0001	.9727-	.2683
69	13	.950	16.21-	.00	.00	3.475	.7338-	.8165-	.036	.0071	.0005	1.0226-	.2888
69	14	.950	19.79	.01-	.00	4.593	.7055-	1.0522-	.031	.0027-	.0003	1.0122-	.3067
69	15	.950	.00-	.00	.00	.016	.8103-	.0069-	.022	.0039	.0001	1.0644-	.2541
70	2	.750	4.03-	.00	.00-	.562	.7955	.1255-	.016	.0029	.0008	1.0093-	.2138
70	3	.750	3.02-	.00	.00-	.433	.8011	.0929-	.016	.0027	.0004	1.0142-	.2131
70	4	.750	2.01-	.00	.00-	.270	.8000	.0580-	.020	.0041	.0007	1.0136-	.2136
70	5	.750	1.01-	.00	.00-	.143	.8005	.0288-	.015	.0032	.0004	1.0157-	.2152
70	6	.750	.00-	.00	.00	.002	.8052-	.0063-	.015	.0030	.0007	1.0172-	.2120
70	7	.750	1.00-	.00	.00	.145	.8027-	.0381-	.020	.0028	.0011	1.0161-	.2134
70	8	.750	2.01-	.00	.00	.306	.7989-	.0727-	.014	.0027	.0007	1.0113-	.2124
70	9	.750	3.02-	.00	.00	.433	.7938-	.1082-	.015	.0016	.0003	1.0081-	.2143
70	10	.750	4.02-	.00	.00	.593	.7927-	.1457-	.015	.0014	.0007	1.0028-	.2101
70	11	.750	6.04-	.00	.00	.952	.7755-	.2301-	.024	.0033	.0013	.9787-	.2032
70	12	.750	8.05-	.00	.00	1.361	.7441-	.3315-	.014	.0021	.0005	.9349-	.1908
70	13	.750	12.09-	.00	.00	2.310	.6686-	.5607-	.014-	.0008	.0007	.8554-	.1868
70	14	.750	16.16-	.00	.00	3.258	.6685-	.7451-	.030	.0045	.0002	.8748-	.2063
70	15	.750	19.72-	.00-	.00	4.152	.7063-	.8991-	.023	.0012	.0000	.9334-	.2271
70	16	.750	.00-	.00	.00	.002	.7965-	.0063-	.015	.0030	.0008	1.0100-	.2135

TABLE IIIb

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
71	2	.750	-.01	4.04	90.00	.048	.7963	.0047	.436-	.0686	.0010	1.0046-	.2083
71	3	.750	.00	3.03	90.00	.040	.7987	.0066	.319-	.0497	.0001	1.0135-	.2148
71	4	.750	.00	2.02	90.00	.052	.8054	.0084	.205-	.0321	.0006	1.0169-	.2115
71	5	.750	.00	1.01	90.00	.045	.8048	.0073	.106-	.0161	.0004	1.0164-	.2116
71	6	.750	-.01	.00	90.00	.056	.8068	.0091	.004	.0004	.0002	1.0179-	.2111
71	7	.750	.00	1.01	90.00	.050	.8061	.0081-	.094	.0164	.0001	1.0180-	.2119
71	8	.750	.00	2.02	90.00	.043	.8033	.0071-	.210	.0342	.0006	1.0152-	.2119
71	9	.750	.01	3.03	90.00	.072	.8028	.0085-	.306	.0499	.0004	1.0115-	.2087
71	10	.750	.01	4.04	90.00	.065	.7986	.0074-	.427	.0685	.0009	1.0055-	.2069
71	11	.750	.00	6.06	90.00	.031	.7678	.0052-	.675	.1103	.0007	.9793-	.2115
71	12	.750	.00	8.08	90.00	.046	.7256	.0077-	.964	.1601	.0004	.9494-	.2238
71	13	.750	.00	12.14	90.00	.035	.6592	.0069-	1.650	.2810-	.0000	.8930-	.2338
71	14	.750	.00	16.22	90.00	.052	.6262	.0111-	2.496	.4281	.0001	.8831-	.2569
71	15	.750	.00	19.79	90.00	.001	.6115	.0012-	3.341	.5647	.0000	.8823-	.2708
71	16	.750	-.01	.00	90.00	.056	.8036	.0060	.004	.0004	.0002	1.0160-	.2124
72	4	1.100	-4.02	.00	.00	.741	1.1605	.1961-	.036	.0102	.0001	1.4778-	.3173
72	5	1.100	-3.02	.00	.00	.527	1.1679	.1393-	.040	.0098	.0001	1.4827-	.3148
72	6	1.100	-2.01	.00	.00	.329	1.1732	.0851-	.036	.0096-	.0004	1.4885-	.3153
72	7	1.100	-1.01	.00	.00	.132	1.1737	.0338-	.044	.0111	.0003	1.4884-	.3147
72	8	1.100	.00	.00	.00	.035	1.1750	.0129-	.035	.0096	.0004	1.4906-	.3156
72	9	1.100	1.00	.00	.00	.231	1.1735-	.0667-	.040	.0100	.0005	1.4877-	.3142
72	10	1.100	2.01	.00	.00	.426	1.1710-	.1179-	.036	.0091	.0006	1.4854-	.3144
72	11	1.100	3.02	.00	.00	.622	1.1718-	.1718-	.036	.0088	.0006	1.4877-	.3159
72	12	1.100	4.02	.00	.00	.833	1.1715-	.2307-	.036	.0091	.0006	1.4871-	.3156
72	13	1.100	6.03	.00	.00	1.314	1.1522-	.3650-	.044	.0089	.0000	1.4671-	.3149
72	14	1.100	8.05	.00	.00	1.852	1.1347-	.5161-	.037	.0068	.0004	1.4412-	.3065
72	15	1.100	12.06	.00	.00	3.204	1.0621-	.9276-	.046	.0092-	.0013	1.3720-	.3099
72	16	1.100	16.12	.00	.00	4.397	1.0522-	1.2084-	.033	.0042	.0003	1.3625-	.3103
72	17	1.100	19.71	.00	.00	5.514	1.1034-	1.4300-	.050	.0109-	.0001	1.4259-	.3225
72	18	1.100	.00	.00	.00	.035	1.1793-	.0156-	.036	.0090-	.0002	1.4902-	.3109
73	2	1.050	-4.02	.00	.00	.744	1.1151	.2047-	.022-	.0001	.0006	1.4345-	.3194
73	3	1.050	-3.02	.00	.00	.552	1.1132	.1479-	.023-	.0003	.0006	1.4356-	.3224
73	4	1.050	-2.01	.00	.00	.346	1.1122	.0883-	.014-	.0012	.0001	1.4342-	.3220
73	5	1.050	-1.01	.00	.00	.156	1.1198	.0372-	.018-	.0002	.0002	1.4416-	.3218
73	6	1.050	.00	.00	.00	.032	1.1165-	.0131-	.022-	.0005-	.0003	1.4383-	.3218
73	7	1.050	1.01	.00	.00	.235	1.1245-	.0661-	.014-	.0006-	.0002	1.4456-	.3211
73	8	1.050	2.01	.00	.00	.437	1.1178-	.1216-	.018-	.0011	.0004	1.4413-	.3225

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_ℓ	C_{A_u}	ΔC_A
73	9	1.050	3.01-	.00	.00	.625	1.1169-	.1776-	.014-	.0013	.0005	1.4400-	.3231
73	10	1.050	4.02-	.00	.00	.843	1.1118-	.2384-	.014-	.0016	.0005	1.4345-	.3227
73	11	1.050	.00-	.00	.00	.047	1.1126-	.0153-	.018-	.0012	.0003	1.4342-	.3216
74	1	1.000	- 4.02-	.00	.00-	.744	1.0853	.2089-	.026	.0060	.0003	1.4252-	.3399
74	2	1.000	- 3.01-	.00-	.00-	.528	1.0898	.1500-	.026	.0064-	.0002	1.4332-	.3434
74	3	1.000	- 2.01-	.00-	.00-	.345	1.0801	.0934-	.030	.0075-	.0001	1.4278-	.3477
74	4	1.000	- 1.01-	.00-	.00-	.145	1.0940	.0368-	.022	.0058-	.0001	1.4360-	.3420
74	5	1.000	.00-	.00-	.00	.021	1.0909-	.0116-	.031	.0069-	.0005	1.4348 -	.3439
74	6	1.000	1.00-	.00-	.00	.235	1.0882-	.0675-	.026	.0075-	.0004	1.4328-	.3446
74	7	1.000	2.01-	.00	.00	.448	1.0871-	.1259-	.026	.0071	.0002	1.4322-	.3451
74	8	1.000	3.01-	.00	.00	.628	1.0927-	.1820-	.022	.0061	.0003	1.4335-	.3408
74	9	1.000	4.02-	.00	.00	.860	1.0826-	.2467-	.035	.0070	.0003	1.4274-	.3448
74	10	1.000	.00-	.00-	.00	.021	1.0874-	.0115-	.030	.0069-	.0005	1.4323-	.3449
75	2	.950	- 4.02-	.00-	.00-	.826	.8938	.2400-	.017	.0066-	.0003	1.1727-	.2789
75	3	.950	- 3.01-	.00	.00-	.586	.9011	.1710-	.031	.0077	.0001	1.1789-	.2778
75	4	.950	- 2.01-	.00	.00-	.385	.9024	.1081-	.035	.0091	.0000	1.1806-	.2782
75	5	.950	- 1.01-	.00-	.00-	.170	.9012	.0449-	.028	.0077-	.0005	1.1786-	.2774
75	6	.950	.00-	.00	.00	.017	.9018-	.0094-	.032	.0073	.0000	1.1785-	.2767
75	7	.950	1.00-	.00-	.00	.221	.9036-	.0731-	.032	.0076-	.0001	1.1818-	.2782
75	8	.950	2.00-	.00-	.00	.448	.9089-	.1359-	.032	.0072-	.0002	1.1853-	.2764
75	9	.950	3.01-	.00-	.00	.677	.9022-	.2016-	.036	.0074-	.0003	1.1797-	.2775
75	10	.950	4.01-	.00-	.00	.892	.9050-	.2715-	.033	.0071-	.0004	1.1797-	.2747
75	11	.950	6.01-	.00	.00	1.401	.8873-	.4285-	.036	.0091	.0002	1.1608-	.2735
75	12	.950	8.02-	.00	.00	1.947	.8492-	.5889-	.040	.0106	.0004	1.1220-	.2728
75	13	.950	12.06-	.00-	.00	3.234	.8002-	.9500-	.031	.0050-	.0000	1.0802-	.2800
75	14	.950	16.13-	.00-	.00	4.483	.8186-	1.2543-	.033	.0076-	.0008	1.1115-	.2929
75	15	.950	19.71-	.00-	.00	5.660	.8295-	1.5091-	.032	.0043-	.0004	1.1388-	.3093
75	16	.950	.00-	.00	.00	.017	.9052-	.0094-	.025	.0062-	.0000	1.1820-	.2768
76	1	.950	- 2.85-	2.86	45.00-	.599	.8979	.1694	.584-	.1716-	.0006	1.1762-	.2783
76	2	.950	- 2.14-	2.13	45.00-	.461	.9007	.1302	.438-	.1296-	.0000	1.1796-	.2789
76	3	.950	- 1.42-	1.42	45.00-	.308	.9026	.0861	.296-	.0874-	.0005	1.1804-	.2778
76	4	.950	- .71-	.71	45.00-	.180	.9070	.0460	.143-	.0429-	.0010	1.1833-	.2763
76	5	.950	.00-	.00	45.00-	.027	.9060-	.0001	.001-	.0007	.0001	1.1826-	.2766
76	6	.950	.70	.71	45.00	.126	.9068-	.0419-	.145	.0428-	.0004	1.1830-	.2762
76	7	.950	1.41	1.43	45.00	.277	.9060-	.0856-	.283	.0831	.0001	1.1838-	.2778

TABLE IIIb

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
76	8	.950	2.13	2.14	45.00	.416	.9051-	.1274-	.425	.1241-	.0003	1.1828-	.2777
76	9	.950	2.84	2.85	45.00	.568	.9022-	.1690-	.577	.1679-	.0003	1.1797-	.2775
76	10	.950	4.27	4.27	45.00	.881	.8819-	.2505-	.884	.2561	.0002	1.1609-	.2790
76	11	.950	5.70	5.70	45.00	1.182	.8656-	.3391-	1.211	.3487-	.0001	1.1416-	.2760
76	12	.950	8.59	8.54	45.00	2.044	.8191-	.5997-	2.035	.6017	.0009	1.0983-	.2792
76	13	.950	11.53	11.37	45.00	2.911	.7180-	.8456-	2.882	.8482	.0002	1.0128-	.2948
76	14	.950	14.17	13.83	45.00	3.666	.6554-1	.0319-	3.630	1.0393-	.0003	.9733-	.3179
76	15	.950 -	.01	.01	45.00-	.039	.9128	.0018-	.007	.0012	.0000	1.1904-	.2776
77	2	.850 -	4.02-	.00-	.00-	.768	.8466	.2066-	.024	.0071-	.0002	1.0838-	.2372
77	3	.850 -	3.02-	.00	.00-	.552	.8547	.1467-	.029	.0066	.0003	1.0932-	.2385
77	4	.850 -	2.01-	.00	.00-	.350	.8558	.0914-	.032	.0076	.0004	1.0957-	.2399
77	5	.850 -	1.01-	.00-	.00-	.149	.8555	.0366-	.032	.0088-	.0001	1.0977-	.2422
77	6	.850	.00-	.00	.00	.035	.8565-	.0131-	.028	.0078	.0000	1.0969-	.2404
77	7	.850	1.00-	.00	.00	.219	.8569-	.0654-	.037	.0074	.0001	1.0976-	.2407
77	8	.850	2.01-	.00	.00	.432	.8558-	.1196-	.032	.0078	.0001	1.0950-	.2392
77	9	.850	3.01-	.00	.00	.616	.8563-	.1745-	.032	.0075	.0002	1.0949-	.2386
77	10	.850	4.02-	.00	.00	.814	.8521-	.2313-	.037	.0086	.0002	1.0871-	.2350
77	11	.850	.00-	.00	.00	.035	.8565-	.0130-	.036	.0091	.0006	1.0973-	.2408
78	1	.750 -	4.02-	.00	.00-	.744	.8509	.1938-	.030	.0056	.0003	1.0726-	.2217
78	2	.750 -	3.01-	.00-	.00-	.507	.8579	.1382-	.034	.0068-	.0002	1.0806-	.2227
78	3	.750 -	2.01-	.00	.00-	.343	.8604	.0879-	.029	.0066	.0006	1.0840-	.2236
78	4	.750 -	1.00-	.00	.00-	.125	.8589	.0352-	.024	.0065	.0002	1.0823-	.2234
78	5	.750	.00-	.00	.00	.021	.8616-	.0093-	.029	.0069	.0004	1.0859-	.2243
78	6	.750	1.00-	.00-	.00	.221	.8649-	.0623-	.024	.0068-	.0001	1.0870-	.2221
78	7	.750	2.01-	.00	.00	.402	.8610-	.1123-	.029	.0065	.0000	1.0849-	.2239
78	8	.750	3.01-	.00	.00	.600	.8606-	.1649-	.034	.0054	.0002	1.0820-	.2214
78	9	.750	4.02-	.00	.00	.816	.8554-	.2204-	.039	.0072	.0004	1.0746-	.2192
78	10	.750	6.03-	.00	.00	1.249	.8389-	.3438-	.039	.0082	.0006	1.0532-	.2143
78	11	.750	8.04-	.00	.00	1.811	.8004-	.5063-	.043	.0105	.0007	1.0062-	.2058
78	12	.750	12.06-	.00-	.00	3.086	.7124-	.8791-	.040	.0086-	.0003	.9089-	.1965
78	13	.750	16.11-	.00	.00	4.286	.6997-1	.1699-	.035	.0052	.0005	.9035-	.2038
78	14	.750	19.68-	.00-	.00	5.253	.7485-1	.3477-	.029	.0003-	.0014	.9699-	.2214
78	15	.750	.00-	.00	.00	.021	.8608-	.0093-	.029	.0061	.0004	1.0851-	.2243
79	2	.600 -	4.01-	.00	.00-	.705	.8821	.1857-	.022	.0028	.0009	1.0900-	.2079
79	3	.600 -	3.01-	.00	.00-	.521	.8921	.1305-	.022	.0014	.0002	1.1016-	.2095

UNCLASSIFIED

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
79	4	.600	2.01-	.00	.00-	.315	.8915	.0806-	.022	.0012	.0007	1.1047-	.2132
79	5	.600	1.00-	.00	.00-	.105	.8952	.0298-	.021	.0021	.0002	1.1078-	.2126
79	6	.600	.00-	.00	.00	.029	.8974-	.0133-	.028	.0041	.0007	1.1100-	.2126
79	7	.600	1.00-	.00	.00	.209	.8981-	.0549-	.029	.0028	.0012	1.1102-	.2121
79	8	.600	2.01-	.00	.00	.391	.8975-	.1057-	.043	.0035	.0006	1.1095-	.2120
79	9	.600	3.01-	.00	.00	.573	.8897-	.1520-	.035	.0009	.0001	1.1022-	.2125
79	10	.600	4.02-	.00	.00	.804	.8915-	.2105-	.035-	.0006	.0005	1.1025-	.2110
79	11	.600	.00-	.00-	.00	.029	.8959-	.0134-	.021	.0031-	.0003	1.1096-	.2137
81	3	1.100	4.05-	.00-	.00-	.333	1.0279	.0216-	.034	.0078-	.0007	1.3305-	.3026
81	4	1.100	3.04-	.00-	.00-	.230	1.0401	.0131-	.037	.0084-	.0008	1.3392-	.2991
81	5	1.100	2.03-	.00-	.00-	.171	1.0438	.0090-	.033	.0085-	.0004	1.3434-	.2996
81	6	1.100	1.01-	.00-	.00-	.068	1.0423	.0032-	.036	.0098-	.0004	1.3426-	.3003
81	7	1.100	.00-	.00-	.00	.004	1.0454-	.0005-	.031	.0098-	.0005	1.3437-	.2983
81	8	1.100	1.01-	.00-	.00	.090	1.0439-	.0064-	.035	.0097-	.0000	1.3436-	.2997
81	9	1.100	2.03-	.00	.00	.176	1.0397-	.0121-	.038	.0102	.0004	1.3414-	.3017
81	10	1.100	3.04-	.00-	.00	.233	1.0416-	.0162-	.034	.0089-	.0002	1.3436-	.3020
81	11	1.100	4.05-	.00-	.00	.332	1.0343-	.0241-	.030	.0077-	.0003	1.3329-	.2986
81	12	1.100	6.08-	.00-	.00	.574	1.0225-	.0471-	.033	.0068-	.0005	1.3193-	.2968
81	13	1.100	8.11-	.00-	.00	.815	1.0212-	.0750-	.020	.0020-	.0008	1.3063-	.2851
81	14	1.100	12.20-	.00-	.00	1.473	.9738-	.1533-	.021	.0036-	.0007	1.2658-	.2920
81	15	1.100	16.28-	.00	.00	2.282	.9071-	.2761-	.026	.0041	.0001	1.2080-	.3009
81	16	1.100	19.89-	.00-	.00	3.162	.8704-	.3848-	.027	.0022-	.0005	1.1721-	.3017
81	17	1.100	.00-	.00-	.00	.004	1.0500-	.0005-	.027	.0099-	.0006	1.3496-	.2996
82	3	.950	4.08-	.00-	.00-	.261	.7712-	.0297-	.031	.0085-	.0004	1.0327-	.2615
82	4	.950	3.06-	.00-	.00-	.155	.7749-	.0371-	.037	.0102-	.0010	1.0336-	.2587
82	5	.950	2.02-	.00-	.00-	.138	.7970	.0081-	.029	.0082-	.0012	1.0533-	.2563
82	6	.950	1.01-	.00-	.00-	.074	.7964	.0072-	.036	.0087-	.0007	1.0577-	.2613
82	7	.950	.00-	.00-	.00-	.010	.7952	.0016-	.028	.0075-	.0008	1.0578-	.2626
82	8	.950	1.01-	.00-	.00	.067	.7951-	.0036-	.035	.0080-	.0004	1.0555-	.2604
82	9	.950	2.04-	.00-	.00	.070	.7820	.0367-	.023	.0047-	.0005	1.0404-	.2584
82	10	.950	3.06-	.00-	.00	.132	.7755	.0382-	.027	.0048-	.0005	1.0340-	.2585
82	11	.950	4.07-	.00-	.00	.234	.7734	.0290-	.022	.0041-	.0006	1.0330-	.2596
82	12	.950	6.10-	.00-	.00	.453	.7670	.0061-	.032	.0057-	.0008	1.0255-	.2585
82	13	.950	8.13-	.00-	.00	.709	.7484-	.0321-	.017	.0033-	.0001	1.0033-	.2549
82	14	.950	12.20-	.00-	.00	1.448	.7177-	.1736-	.029	.0084-	.0002	.9801-	.2624
82	15	.950	16.31-	.00-	.00	2.224	.6951-	.2643-	.033	.0072-	.0004	.9642-	.2691
82	16	.950	19.92	.01-	.00	3.075	.5998-	.3785-	.017-	.0024-	.0014	.8675-	.2677

UNCLASSIFIED

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
82	17	.950	.00-	.00-	.00-	.009	.7999	.0016-	.031	.0086-	.0003	1.0606-	.2607
83	3	.950	.01-	4.04	90.00-	.034	.7797	.0026	.882-	.2635	.0002	1.0575-	.2778
83	4	.950	.01-	3.03	90.00-	.031	.7918	.0008	.653-	.1940	.0005	1.0627-	.2709
83	5	.950	.00-	2.02	90.00-	.018	.7942	.0018	.436-	.1279	.0004	1.0619-	.2677
83	6	.950	.00-	1.01	90.00-	.017	.7998	.0003	.217-	.0632	.0002	1.0635-	.2637
83	7	.950	.01-	.00	90.00-	.044	.8018	.0029	.010-	.0012	.0001	1.0649-	.2631
83	8	.950	.00	1.01	90.00-	.006	.8010	.0001-	.193	.0609-	.0001	1.0629-	.2619
83	9	.950	.00	2.02	90.00-	.018	.7973	.0005-	.410	.1245-	.0002	1.0611-	.2638
83	10	.950	.00	3.02	90.00-	.018	.7896	.0013-	.622	.1893-	.0004	1.0587-	.2691
83	11	.950	.00	4.03	90.00-	.003	.7761-	.0001-	.845	.2577	.0000	1.0533-	.2772
83	12	.950	.01	6.05	90.00-	.034	.7397	.0037-	1.365	.4172	.0003	1.0369-	.2972
83	13	.950	.00	8.08	90.00	.014	.6835	.0014-	1.916	.5811	.0004	.9960-	.3125
83	14	.950	.01	12.14	90.00	.035	.5823-	.0025-	3.168	.9358-	.0021	.9419-	.3596
83	16	.950	.00-	.00	90.00-	.019	.8048	.0037	.014-	.0018	.0006	1.0678-	.2630
83	17	.950	.01-	.00-	90.00	.045	.8069-	.0018	.044-	.0131	.0001	1.0689-	.2620
85	2	.750	4.04-	.00	.00-	.295	.7939	.0126-	.036	.0060	.0005	1.0023-	.2084
85	3	.750	3.03-	.00	.00-	.207	.8015	.0081-	.025	.0061	.0004	1.0114-	.2099
85	4	.750	2.02-	.00	.00-	.137	.7995	.0062-	.030	.0070	.0003	1.0131-	.2136
85	5	.750	1.01-	.00	.00-	.049	.8017-	.0014-	.034	.0076	.0001	1.0166-	.2149
85	6	.750	.00-	.00	.00	.021	.8021-	.0031-	.033	.0077	.0001	1.0157-	.2136
85	7	.750	1.01-	.00	.00	.071	.8027-	.0049-	.038	.0067	.0006	1.0138-	.2111
85	8	.750	2.02-	.00	.00	.140	.8006-	.0097-	.047	.0081	.0005	1.0126-	.2120
85	9	.750	3.03-	.00	.00	.224	.7967-	.0136-	.032	.0059	.0012	1.0063-	.2096
85	10	.750	4.04-	.00	.00	.327	.7946-	.0177-	.036	.0067	.0004	.9995-	.2049
85	11	.750	6.07-	.00	.00	.477	.7802-	.0231-	.031	.0060	.0003	.9790-	.1988
85	12	.750	8.10-	.00	.00	.729	.7610-	.0416-	.034	.0066	.0009	.9489-	.1879
85	13	.750	12.16-	.00	.00	1.306	.7143-	.1176-	.037	.0062	.0009	.9124-	.1981
85	14	.750	16.23-	.00	.00	2.055	.6613-	.2175-	.051	.0135	.0016	.8655-	.2042
85	15	.750	19.81-	.00	.00	2.781	.5810-	.3020-	.039	.0084	.0004	.7935-	.2125
85	16	.750	.00-	.00	.00	.003	.8000-	.0003-	.033	.0068	.0001	1.0117-	.2117
87	2	1.100	4.07-	.00-	.00-	.284	.5803-	.0043-	.039	.0105-	.0001	.8780-	.2977
87	3	1.100	3.06-	.00	.00-	.206	.5810-	.0047-	.042	.0105	.0003	.8778-	.2968
87	4	1.100	2.04-	.00	.00-	.140	.5800-	.0033-	.044	.0104	.0003	.8783-	.2983
87	5	1.100	1.02-	.00	.00-	.073	.5790-	.0001-	.043	.0110	.0004	.8756-	.2966
87	6	1.100	.00	.01	.00	.003	.5791-	.0003-	.046	.0099	.0004	.8760-	.2969

UNCLASSIFIED

TABLE IIIb

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
87	7	1.100	1.02-	.00	.00	.080	.5825	.0013-	.042	.0094	.0004	.8772-	.2947
87	8	1.100	2.04	.01	.00	.145	.5838	.0028-	.045	.0093	.0008	.8780-	.2942
87	9	1.100	3.06-	.00	.00	.221	.5846	.0046-	.041	.0088	.0003	.8805-	.2959
87	10	1.100	4.08-	.00	.00	.296	.5856	.0044-	.035	.0068	.0008	.8810-	.2954
87	11	1.100	.00-	.00	.00	.003	.5787-	.0003-	.040	.0095	.0004	.8754-	.2967
88	1	.950	4.06-	.00-	.00-	.264	.4247-	.0035-	.037	.0098-	.0004	.6396-	.2149
88	2	.950	3.04-	.00	.00-	.188	.4222-	.0041-	.041	.0091	.0001	.6390-	.2168
88	3	.950	2.03-	.00	.00-	.124	.4245-	.0029-	.036	.0085	.0001	.6423-	.2178
88	4	.950	1.01-	.00	.00-	.061	.4219-	.0016-	.036	.0073	.0001	.6425-	.2206
88	5	.950	.00-	.00	.00	.016	.4206-	.0001-	.039	.0086	.0001	.6419-	.2213
88	6	.950	1.02-	.00	.00	.065	.4218	.0034-	.038	.0079	.0001	.6419-	.2201
88	7	.950	2.03-	.00	.00	.127	.4236	.0048-	.034	.0073	.0006	.6411-	.2175
88	8	.950	3.05-	.00	.00	.202	.4248	.0043-	.030	.0062	.0005	.6404-	.2156
88	9	.950	4.07-	.00	.00	.276	.4266	.0061-	.033	.0061	.0011	.6410-	.2144
88	10	.950	6.10-	.00	.00	.451	.4304-	.0013-	.029	.0043	.0009	.6413-	.2109
88	11	.950	8.14-	.00	.00	.663	.4254-	.0102-	.028	.0031	.0009	.6339-	.2085
88	12	.950	12.23-	.00	.00	1.286	.3859-	.0843-	.038	.0079	.0002	.6263-	.2404
88	13	.950	16.33-	.00	.00	2.047	.3719-	.1756-	.043	.0074	.0006	.6171-	.2452
88	14	.950	19.95-	.00	.00	2.898	.3263-	.2766-	.038	.0099	.0002	.5421-	.2158
88	15	.950	.00-	.00	.00	.003	.4256	.0020-	.035	.0079	.0001	.6459-	.2203
89	2	.950	.01-	4.05	90.00-	.002	.3966-	.0095	.709-	.1758	.0018	.6279-	.2313
89	3	.950	.01-	3.04	90.00	.003	.4068-	.0098	.528-	.1300	.0021	.6343-	.2275
89	4	.950	.01-	2.02	90.00-	.006	.4124-	.0104	.351-	.0879	.0019	.6361-	.2237
89	5	.950	.00-	1.01	90.00	.010	.4117-	.0103	.189-	.0476	.0018	.6358-	.2241
89	6	.950	.01-	.00	90.00	.000	.4148-	.0107	.023-	.0092	.0016	.6375-	.2227
89	7	.950	.01	1.01	90.00	.002	.4135-	.0106-	.131	.0280	.0020	.6363-	.2228
89	8	.950	.01	2.02	90.00	.006	.4123-	.0110-	.303	.0693	.0013	.6375-	.2252
89	9	.950	.01	3.04	90.00-	.004	.4080-	.0091-	.467	.1094	.0012	.6349-	.2269
89	10	.950	.01	4.05	90.00	.001	.4014-	.0119-	.648	.1546	.0015	.6303-	.2289
89	11	.950	.01	6.08	90.00	.000	.3808-	.0123-	1.041	.2537	.0015	.6195-	.2387
89	12	.950	.01	8.10	90.00-	.006	.3529-	.0066-	1.589	.4086	.0005	.5975-	.2446
89	13	.950	.00	12.17	90.00	.013	.2731-	.0090-	2.744	.7284-	.0002	.6041-	.3310
89	14	.950	.01-	.00	90.00	.000	.4138-	.0107	.020-	.0087	.0016	.6359-	.2221
90	1	.750	4.05-	.00	.00-	.258	.4035-	.0084-	.036	.0068	.0002	.5803-	.1768
90	2	.750	3.03-	.00	.00-	.187	.4063-	.0071-	.035	.0076	.0009	.5814-	.1751

UNCLASSIFIED

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_{l_l}	C_{A_u}	ΔC_A
90	3	.750	2.02-	.00	.00-	.118	.4002-	.0058-	.035	.0077	.0009	.5770-	.1768
90	4	.750	1.01-	.00	.00-	.032	.4013-	.0040-	.034	.0068	.0008	.5777-	.1764
90	5	.750	.00-	.00	.00	.001	.4022	.0030-	.029	.0062	.0008	.5773-	.1751
90	6	.750	1.01-	.00	.00	.069	.3975	.0045-	.023	.0054	.0008	.5746-	.1771
90	7	.750	2.03-	.00	.00	.136	.4030	.0092-	.023	.0055	.0007	.5804-	.1774
90	8	.750	3.04-	.00	.00	.185	.4049	.0135-	.027	.0054	.0014	.5813-	.1764
90	9	.750	4.05-	.00	.00	.269	.4042	.0123-	.031	.0052	.0006	.5811-	.1769
90	10	.750	.00-	.00	.00	.019	.3954	.0003-	.028	.0069	.0015	.5736-	.1782
91	3	1.100	4.04-	.00-	.00-	.624	.6870	.1475-	.044	.0102-	.0003	1.0113-	.3243
91	4	1.100	3.03-	.00-	.00-	.460	.6883	.1041-	.041	.0100-	.0003	1.0143-	.3260
91	5	1.100	2.02-	.00-	.00-	.274	.6888	.0610-	.037	.0093-	.0002	1.0134-	.3246
91	6	1.100	1.01-	.00-	.00-	.112	.6888	.0236-	.040	.0091-	.0000	1.0104-	.3216
91	8	1.100	1.01-	.00	.00	.177	.6873-	.0454-	.037	.0087	.0001	1.0141-	.3268
91	9	1.100	2.02-	.00-	.00	.349	.6917-	.0843-	.037	.0080-	.0002	1.0164-	.3247
91	10	1.100	.00-	.00-	.00	.028	.6876-	.0101-	.043	.0099-	.0004	1.0108-	.3232
91	11	1.100	3.03-	.00-	.00	.521	.6890-	.1250-	.040	.0083-	.0002	1.0158-	.3268
91	12	1.100	4.05	.01-	.00	.716	.6893-	.1694-	.039	.0079-	.0001	1.0160-	.3267
91	13	1.100	6.07-	.00	.00	1.116	.6889-	.2716-	.036	.0069	.0003	1.0132-	.3243
91	14	1.100	8.09	.01-	.00	1.659	.6910-	.4238-	.037	.0067-	.0007	1.0130-	.3220
91	15	1.100	12.13	.01-	.00	2.833	.6931-	.7460-	.043	.0073-	.0013	1.0174-	.3243
91	16	1.100	16.22-	.00-	.00	4.062	.6889-	1.0298-	.055	.0156-	.0014	.9992-	.3103
91	17	1.100	.00-	.00-	.00	.050	.6908-	.0116-	.030	.0079-	.0004	1.0178-	.3270
92	2	.950	4.03-	.00-	.00-	.627	.4897	.1508-	.037	.0070-	.0000	.7411-	.2514
92	3	.950	3.02-	.00	.00-	.452	.4903	.1075-	.032	.0073	.0001	.7446-	.2543
92	4	.950	2.02-	.00	.00-	.291	.4954	.0663-	.033	.0066	.0002	.7511-	.2557
92	5	.950	1.01-	.00	.00-	.117	.4960	.0276-	.036	.0075	.0003	.7521-	.2561
92	6	.950	.00-	.00	.00	.029	.4978-	.0068-	.032	.0068-	.0000	.7550-	.2572
92	7	.950	1.01-	.00-	.00	.188	.4990-	.0431-	.032	.0066-	.0004	.7552-	.2562
92	8	.950	2.02-	.00	.00	.347	.4982-	.0816-	.028	.0058	.0003	.7531-	.2549
92	9	.950	3.03-	.00-	.00	.519	.4971-	.1246-	.032	.0061-	.0001	.7504-	.2533
92	10	.950	4.04-	.00	.00	.716	.4922-	.1714-	.028	.0046	.0005	.7447-	.2525
92	11	.950	6.06-	.00	.00	1.137	.4903-	.2759-	.028	.0041	.0001	.7370-	.2467
92	12	.950	8.07-	.00-	.00	1.672	.4811-	.4280-	.042	.0079-	.0008	.7216-	.2405
92	13	.950	12.11-	.00-	.00	2.799	.4561-	.7413-	.046	.0093-	.0016	.7284-	.2723
92	14	.950	16.17-	.00-	.00	4.086	.4722-	1.0593-	.051	.0153-	.0014	.7642-	.2927
92	15	.950	.00-	.00-	.00	.042	.4990-	.0088-	.028	.0061-	.0000	.7557-	.2567

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
93	1	.950	.00-	4.05	90.00-	.003	.4826-	.0009	.687-	.1675-	.0002	.7494-	.2668
93	2	.950	.00-	3.04	90.00-	.011	.4872-	.0015	.511-	.1223-	.0004	.7500-	.2628
93	3	.950	.00-	2.02	90.00-	.008	.4924-	.0015	.337-	.0814-	.0001	.7537-	.2613
93	4	.950	.00-	1.01	90.00-	.005	.4967-	.0041	.178-	.0435-	.0002	.7565-	.2598
93	5	.950	.00-	.00	90.00	.010	.4973-	.0037	.023-	.0060-	.0004	.7563-	.2590
93	6	.950	.00	1.01	90.00-	.001	.5000-	.0039-	.139	.0318-	.0001	.7574-	.2574
93	7	.950	.00	2.02	90.00	.015	.4932-	.0038-	.297	.0704-	.0007	.7528-	.2596
93	8	.950	.00	3.03	90.00	.019	.4882-	.0063-	.465	.1124-	.0003	.7501-	.2619
93	9	.950	.00	4.05	90.00	.009	.4790-	.0044-	.636	.1543-	.0005	.7449-	.2659
93	10	.950	.00	6.07	90.00	.011	.4569-	.0037-	1.033	.2535-	.0007	.7336-	.2767
93	11	.950	.00	8.10	90.00	.004	.4394-	.0015-	1.582	.4129-	.0005	.7187-	.2793
93	12	.950	.00	12.17	90.00	.017	.3595-	.0031-	2.712	.7198-	.0012	.7154-	.3559
93	13	.950	.00-	.00	90.00-	.003	.4982-	.0040	.023-	.0060-	.0004	.7572-	.2590
94	3	.750	- 4.03-	.00	.00-	.574	.4567	.1240-	.025	.0051	.0003	.6478-	.1911
94	4	.750	- 3.02-	.00-	.00-	.412	.4584	.0863-	.020	.0034-	.0001	.6501-	.1917
94	5	.750	- 2.01-	.00	.00-	.250	.4600	.0516-	.025	.0039	.0003	.6522-	.1922
94	6	.750	- 1.00-	.00	.00-	.089	.4560	.0202-	.020	.0031	.0007	.6495-	.1935
94	7	.750	.00-	.00	.00	.037	.4579-	.0089-	.019	.0037	.0003	.6508-	.1929
94	8	.750	1.01-	.00	.00	.144	.4594-	.0348-	.014	.0029	.0007	.6515-	.1921
94	9	.750	2.02-	.00	.00	.323	.4634-	.0692-	.024	.0043	.0004	.6542-	.1908
94	10	.750	3.02-	.00	.00	.482	.4633-	.1063-	.019	.0032	.0007	.6533-	.1900
94	11	.750	4.03-	.00	.00	.642	.4597-	.1439-	.029	.0037	.0003	.6489-	.1892
94	12	.750	6.05-	.00	.00	1.033	.4562-	.2301-	.023	.0042	.0001	.6432-	.1870
94	13	.750	8.06-	.00-	.00	1.519	.4446-	.3680-	.028	.0059-	.0005	.6294-	.1848
94	14	.750	12.09-	.00-	.00	2.602	.3873-	.6551-	.037	.0083-	.0009	.5906-	.2033
94	15	.750	16.14-	.00-	.00	3.807	.4027-	.9468-	.045	.0115-	.0010	.6220-	.2193
94	16	.750	20.20-	.00	.00	5.154	.4074-	1.2725-	.049	.0103	.0009	.6220-	.2146
94	17	.750	.00-	.00	.00	.037	.4595-	.0089-	.019	.0037	.0003	.6496-	.1901
95	1	.950	- 2.85-	2.86	45.00-	.462	.4871	.1112	.473-	.1132	.0004	.7423-	.2552
95	2	.950	- 2.14-	2.14	45.00-	.344	.4912	.0818	.342-	.0826-	.0005	.7453-	.2541
95	3	.950	- 1.43-	1.43	45.00-	.224	.4907	.0518	.221-	.0537-	.0003	.7463-	.2556
95	4	.950	- .71-	.71	45.00-	.119	.4921	.0265	.105-	.0257-	.0001	.7493-	.2572
95	5	.950	.00-	.00	45.00-	.001	.4960-	.0009-	.001	.0001	.0000	.7506-	.2546
95	6	.950	.71	.71	45.00	.116	.4956-	.0259-	.117	.0262-	.0003	.7489-	.2533
95	7	.950	1.43	1.43	45.00	.234	.4928-	.0555-	.229	.0543-	.0001	.7480-	.2552
95	8	.950	2.14	2.14	45.00	.364	.4900-	.0848-	.344	.0821	.0001	.7449-	.2549
95	9	.950	2.85	2.86	45.00	.483	.4892-	.1146-	.469	.1128-	.0003	.7448-	.2556

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
95	10	.950	.00-	.00	45.00-	.001	.4988-	.0009-	.005	.0000	.0000	.7519-	.2531
96	6	.950	4.05-	.00	.00-	.781	.1785	.1825-	.013	.0009	.0001	.3039-	.1254
96	7	.950	3.03-	.00	.00-	.578	.1807	.1345-	.012	.0005	.0002	.3045-	.1238
96	8	.950	2.02-	.00	.00-	.350	.1834	.0825-	.012-	.0010	.0003	.3072-	.1238
96	9	.950	1.01-	.00-	.00-	.148	.1878	.0341-	.012-	.0013-	.0001	.3082-	.1204
96	10	.950	.00-	.00	.00	.053	.1846-	.0107-	.008-	.0014	.0000	.3073-	.1227
96	11	.950	1.01-	.00-	.00	.228	.1869-	.0588-	.008-	.0017-	.0005	.3082-	.1213
96	12	.950	2.02-	.00-	.00	.442	.1905-	.1062-	.011-	.0008-	.0004	.3110-	.1205
96	13	.950	3.03-	.00-	.00	.642	.1903-	.1559-	.011-	.0011-	.0009	.3115-	.1212
96	14	.950	4.05-	.00-	.00	.855	.1849-	.2055-	.015-	.0008-	.0008	.3087-	.1238
96	15	.950	6.08-	.00-	.00	1.319	.1854-	.3083-	.017	.0004-	.0012	.3123-	.1269
96	16	.950	8.11-	.00-	.00	1.805	.1742-	.4122-	.024	.0022-	.0011	.3178-	.1436
96	17	.950	12.20-	.00-	.00	2.920	.1511-	.6384-	.029	.0032-	.0015	.3247-	.1736
96	18	.950	16.31-	.00-	.00	4.295	.1358-	.9215-	.033	.0045-	.0007	.3244-	.1886
96	19	.950	20.41-	.00-	.00	6.116	.1199-1	.3639-	.022	.0002-	.0003	.3380-	.2181
96	20	.950	.00-	.00-	.00	.040	.1942-	.0110-	.008-	.0020-	.0006	.3141-	.1199
97	2	.950	3.75-	1.54	22.50-	.776	.1715	.1800	.106-	.0126-	.0020	.2991-	.1276
97	3	.950	2.80-	1.16	22.50-	.557	.1771	.1317	.070-	.0073-	.0008	.3023-	.1252
97	4	.950	1.87-	.77	22.50-	.367	.1775	.0858	.044-	.0049-	.0002	.3011-	.1236
97	5	.950	.93-	.39	22.50-	.178	.1799	.0401	.014-	.0026	.0004	.3021-	.1222
97	6	.950	.00	.01	22.50-	.017	.1788-	.0013-	.008-	.0026	.0005	.3017-	.1229
97	7	.950	.93	.40	22.50	.157	.1794-	.0446-	.034-	.0016	.0006	.3020-	.1226
97	8	.950	1.87	.77	22.50	.346	.1797-	.0906-	.056	.0004-	.0004	.3039-	.1242
97	9	.950	2.80	1.17	22.50	.535	.1796-	.1363-	.096	.0049-	.0014	.3043-	.1247
97	10	.950	3.74	1.55	22.50	.764	.1762-	.1860-	.135	.0120-	.0029	.3042-	.1280
97	11	.950	4.68	1.93	22.49	.979	.1703-	.2381-	.173	.0196-	.0045	.3043-	.1340
97	12	.950	.00-	.00	22.50-	.004	.1797-	.0032-	.005-	.0026	.0010	.3024-	.1227
98	1	.950	.01-	4.05	90.00-	.069	.1803	.0100	.275-	.0198-	.0003	.3148-	.1345
98	2	.950	.01-	3.04	90.00-	.053	.1798	.0074	.204-	.0122-	.0004	.3097-	.1299
98	3	.950	.01-	2.02	90.00-	.039	.1799	.0049	.134-	.0078-	.0001	.3066-	.1267
98	4	.950	.01-	1.01	90.00-	.038	.1814	.0046	.074-	.0058-	.0002	.3063-	.1249
98	5	.950	.01-	.00	90.00-	.051	.1821	.0063	.010-	.0044-	.0003	.3057-	.1236
98	6	.950	.01	1.01	90.00-	.064	.1840	.0059-	.047-	.0041	.0000	.3077-	.1237
98	7	.950	.01	2.02	90.00-	.051	.1833	.0058-	.110-	.0022-	.0001	.3076-	.1243
98	8	.950	.01	3.04	90.00-	.062	.1833	.0052-	.172	.0022	.0003	.3096-	.1263

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
98	9	.950	.01	4.05	90.00	.060	.1837	.0070-	.248	.0094	.0006	.3143-	.1306
98	10	.950	.01	6.07	90.00	.064	.1786	.0052-	.408	.0314	.0008	.3289-	.1503
98	11	.950	.01	8.09	90.00	.052	.1778	.0032-	.606	.0621	.0004	.3443-	.1665
98	12	.950	.01	12.15	90.00	.058	.1700	.0061-	1.005	.1143	.0009	.3468-	.1768
98	13	.950	.01	16.23	90.00	.072	.1548	.0116-	1.386	.1193	.0003	.3451-	.1903
98	14	.950	.01	20.33	90.00	.061	.1371	.0082-	1.852	.1184-	.0005	.3329-	.1958
98	15	.950	.01-	.00	90.00	.064	.1837	.0061	.013-	.0049-	.0003	.3082-	.1245
99	2	.950	.00	4.05-	90.00	.090	.1742-	.0276-	.266	.0174-	.0017	.3075-	.1333
99	3	.950	.00	3.03-	90.00	.086	.1791-	.0246-	.189	.0098-	.0012	.3059-	.1268
99	4	.950	.00	2.02-	90.00	.072	.1804-	.0248-	.125	.0058-	.0012	.3044-	.1240
99	5	.950	.00	1.01-	90.00	.071	.1790-	.0222-	.065	.0038-	.0007	.3024-	.1234
99	6	.950	.00-	.00-	90.00	.057	.1818-	.0200-	.001	.0024-	.0002	.3045-	.1227
99	7	.950	.00-	1.01-	90.00	.071	.1788-	.0221	.056	.0021-	.0008	.3027-	.1239
99	8	.950	.00-	2.03-	90.00	.070	.1792-	.0219	.122-	.0004	.0002	.3049-	.1257
99	9	.950	.00-	3.04-	90.00	.056	.1779-	.0220	.184-	.0048	.0001	.3076-	.1297
99	10	.950	.00-	4.05-	90.00	.066	.1789-	.0214	.263-	.0124	.0001	.3131-	.1342
99	11	.950	.00-	.00-	90.00	.071	.1789-	.0221-	.004	.0029-	.0008	.3016-	.1227
100	1	1.100	4.05-	.00	.00-	.862	.3153	.2090-	.014	.0026	.0010	.5395-	.2242
100	2	1.100	2.03-	.00	.00-	.406	.3167	.0974-	.014	.0009	.0005	.5377-	.2210
100	3	1.100	.00-	.00	.00	.001	.3157-	.0061-	.007-	.0001	.0001	.5341-	.2184
100	4	1.100	2.02-	.00-	.00	.430	.3202-	.1130-	.013	.0002-	.0005	.5414-	.2212
100	5	1.100	4.05-	.00-	.00	.879	.3185-	.2230-	.019	.0016-	.0001	.5435-	.2250
100	6	1.100	6.08-	.00-	.00	1.382	.3172-	.3412-	.021	.0024-	.0003	.5478-	.2306
100	7	1.100	8.12-	.00-	.00	1.885	.3170-	.4579-	.029	.0058-	.0005	.5586-	.2416
100	8	1.100	12.22-	.00-	.00	3.078	.3091-	.7147-	.034	.0058-	.0005	.5819-	.2728
100	9	1.100	16.32	.01-	.00	4.534	.3049-1	.0464-	.050	.0110-	.0006	.6052-	.3003
100	10	1.100	20.43	.01-	.00	6.354	.2834-1	.4921-	.040	.0064	.0001	.6250-	.3416
100	11	1.100	.00-	.00	.00	.023	.3165-	.0076-	.010-	.0002	.0001	.5389-	.2224
101	2	.750	4.04-	.00	.00-	.741	.1581	.1598-	.012	.0007	.0003	.2544-	.0963
101	3	.750	2.02-	.00	.00-	.361	.1620	.0784-	.016	.0002	.0002	.2564-	.0944
101	4	.750	.00-	.00	.00	.017	.1669-	.0058-	.016-	.0012	.0008	.2589-	.0920
101	5	.750	2.02-	.00-	.00	.377	.1651-	.0873-	.015-	.0008-	.0000	.2583-	.0932
101	6	.750	4.04-	.00	.00	.751	.1632-	.1707-	.015-	.0004	.0005	.2568-	.0936
101	7	.750	6.06-	.00-	.00	1.161	.1520-	.2572-	.018	.0015-	.0010	.2514-	.0994
101	8	.750	8.09-	.00-	.00	1.637	.1430-	.3448-	.032	.0033-	.0018	.2526-	.1096

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
101	9	.750	12.16-	.00-	.00	2.562	.1160-	.5130-	.025	.0016-	.0013	.2514-	.1354
101	10	.750	16.25-	.00-	.00	3.712	.0885-	.7106-	.045	.0058-	.0008	.2431-	.1546
101	11	.750	20.34-	.00-	.00	5.177	.0523-	.9920-	.033	.0019-	.0002	.2181-	.1658
101	12	.750	.00-	.00-	.00	.019	.1633-	.0061-	.021-	.0004-	.0006	.2558-	.0925
104	6	.950	- 3.00-	.00-	.00-	.538	1.1925	.1684-	.024	.0072-	.0003	2.8102-1	.6177
104	7	.950	- 2.00-	.00	.00-	.347	1.2164	.1067-	.027	.0079	.0001	2.8145-1	.5981
104	8	.950	- 1.00-	.00	.00-	.158	1.2280	.0453-	.021	.0065	.0000	2.8117-1	.5837
104	9	.950	.00-	.00	.00	.043	1.2196-	.0134-	.024	.0068	.0006	2.8016-1	.5820
104	10	.950	1.00-	.00	.00	.231	1.2616-	.0722-	.025	.0065	.0004	2.8095-1	.5479
104	11	.950	2.00-	.00	.00	.420	1.2578-	.1334-	.025	.0068	.0002	2.8227-1	.5649
104	12	.950	3.00-	.00	.00	.621	1.2366-	.1941-	.028	.0082	.0001	2.8117-1	.5751
104	13	.950	4.01-	.00-	.00	.835	1.2054-	.2593-	.032	.0085	.0000	2.8185-1	.6131
104	14	.950	.00-	.00-	.00	.043	1.2719-	.0112-	.017	.0064-	.0000	2.8126-1	.5407
105	1	.950	.00-	4.03	90.00-	.031	1.2119	.0079	.651-	.1899	.0004	2.7994-1	.5875
105	2	.950	.00-	3.02	90.00-	.024	1.2318	.0075	.480-	.1410	.0002	2.8052-1	.5734
105	3	.950	.00-	2.01	90.00-	.018	1.2619	.0070	.318-	.0928	.0004	2.8216-1	.5597
105	4	.950	.00-	1.01	90.00-	.013	1.2666	.0067	.166-	.0476	.0002	2.8207-1	.5541
105	5	.950	.00-	.00	90.00-	.020	1.2748	.0084	.004-	.0009	.0001	2.8177-1	.5429
105	6	.950	.00	1.01	90.00-	.026	1.2973	.0077-	.154	.0465	.0004	2.8218-1	.5245
105	7	.950	.00	2.01	90.00-	.021	1.2693	.0074-	.306	.0920	.0003	2.8245-1	.5552
105	8	.950	.00	3.02	90.00-	.015	1.2424	.0093-	.471	.1405	.0002	2.8165-1	.5741
105	9	.950	.00	4.03	90.00-	.007	1.2133	.0065-	.650	.1912	.0006	2.8039-1	.5906
105	10	.950	.00-	.00	90.00-	.020	1.2972	.0085	.008-	.0015	.0002	2.8146-1	.5174
107	2	1.100	- 4.01-	.00-	.00-	.748	1.9602	.2297-	.017-	.0013-	.0005	4.0298-2	.0696
107	3	1.100	- 3.00-	.00	.00-	.519	1.9731	.1608-	.020	.0017	.0000	4.0237-2	.0506
107	4	1.100	- 2.01-	.00	.00-	.348	2.0057	.0983-	.024	.0048	.0006	4.0235-2	.0178
107	5	1.100	- 1.00-	.00	.00-	.133	2.0056	.0365-	.027	.0070	.0006	4.0189-2	.0133
107	6	1.100	.00-	.00	.00	.050	2.0033-	.0177-	.027	.0090	.0006	4.0171-2	.0138
107	7	1.100	1.00-	.00	.00	.246	2.0085-	.0740-	.019	.0089	.0012	4.0257-2	.0172
107	8	1.100	2.00-	.00	.00	.430	2.0561-	.1333-	.026	.0126	.0005	4.0302-1	.9741
107	9	1.100	3.00-	.00	.00	.628	1.9700-	.1947-	.038	.0183	.0004	4.0348-2	.0639
107	10	1.100	4.01-	.00-	.00	.855	1.9179-	.2600-	.037	.0194-	.0002	4.0314-2	.1135
107	11	1.100	.00-	.00	.00	.078	1.9840-	.0197-	.027	.0083	.0005	4.0332-2	.0402
108	2	.750	- 4.01-	.00	.00-	.718	.7139	.2136-	.025	.0058-	.0002	2.2653-1	.5514

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_ℓ	C_{A_u}	ΔC_A
108	3	.750	3.00-	.00	.00-	.500	.7408	.1550-	.030	.0087	.0002	2.2750-1	.5342
108	4	.750	2.00-	.00	.00-	.307	.7661	.0925-	.030	.0084	.0004	2.2651-1	.4990
108	5	.750	1.00-	.00	.00-	.141	.7177	.0423-	.031	.0060	.0008	2.2602-1	.5425
108	6	.750	.00-	.00	.00	.050	.7421-	.0156-	.031	.0079	.0010	2.2588-1	.5167
108	7	.750	1.00-	.00	.00	.263	.7653-	.0730-	.031	.0066	.0002	2.2818-1	.5165
108	8	.750	2.00-	.00	.00	.428	.7196-	.1268-	.019	.0056	.0006	2.2649-1	.5453
108	9	.750	3.01-	.00	.00	.640	.7159-	.1879-	.038	.0082	.0008	2.2607-1	.5448
108	10	.750	4.01-	.00	.00	.852	.6919-	.2491-	.038	.0091	.0010	2.2584-1	.5665
108	11	.750	.00-	.00	.00	.071	.7343-	.0150-	.019	.0039	.0010	2.2622-1	.5279
109	2	1.100	4.00-	.00	.00-	.901	2.0839	.2878-	.026	.0053	.0018	4.0048-1	.9209
109	3	1.100	3.00-	.00	.00-	.640	2.0774	.2036-	.025	.0083	.0028	4.0079-1	.9305
109	4	1.100	2.00-	.00	.00-	.410	2.0600	.1290-	.026	.0069	.0029	4.0294-1	.9694
109	5	1.100	1.00-	.00	.00-	.177	2.0927	.0538-	.012	.0056	.0020	4.0355-1	.9428
109	6	1.100	.00-	.00	.00	.075	2.1296-	.0158-	.013	.0030	.0022	4.0282-1	.8986
109	7	1.100	1.00-	.00	.00	.277	2.0793-	.0859-	.008-	.0007	.0034	4.0288-1	.9495
109	8	1.100	2.00-	.00	.00	.530	2.0881-	.1639-	.001-	.0009	.0035	4.0160-1	.9279
109	9	1.100	3.00-	.00	.00	.760	2.0865-	.2424-	.001	.0023	.0026	4.0224-1	.9359
109	10	1.100	4.00-	.00	.00	1.041	2.0502-	.3335-	.022	.0049	.0017	3.9967-1	.9465
109	11	1.100	6.00-	.00-	.00	1.590	1.9840-	.5078-	.022	.0077-	.0003	4.0082-2	.0242
109	12	1.100	8.00-	.00	.00	2.194	1.8995-	.6918-	.035	.0135	.0002	4.0798-2	.1803
109	13	1.100	12.01-	.00-	.00	3.677	1.7702-1	.1554-	.037	.0135-	.0004	4.2209-2	.4507
109	14	1.100	16.02-	.00	.00	5.426	1.6115-1	.6986-	.026	.0084	.0012	4.3423-2	.7308
109	15	1.100	20.03-	.00	.00	7.389	1.3399-2	.2920-	.016	.0021	.0005	4.2849-2	.9450
109	16	1.100	.00-	.00	.00	.050	1.9912-	.0160-	.006	.0018	.0031	4.0261-2	.0349
110	2	.950	4.00-	.00	.00-	.913	1.2695	.3004-	.014	.0036	.0012	2.8231-1	.5536
110	3	.950	3.00-	.00	.00-	.621	1.3481	.2104	.002	.0021	.0013	2.8330-1	.4849
110	4	.950	2.00-	.00	.00-	.414	1.3207	.1341	.001	.0017	.0017	2.8173-1	.4966
110	5	.950	1.00-	.00	.00-	.149	1.3528	.0531-	.007	.0026	.0020	2.8137-1	.4609
110	6	.950	.00-	.00	.00	.088	1.3738-	.0234-	.007	.0050	.0022	2.8199-1	.4461
110	7	.950	1.00-	.00	.00	.324	1.3459-	.0999-	.007	.0047	.0013	2.8200-1	.4741
110	8	.950	2.00-	.00	.00	.558	1.3147-	.1760-	.008	.0030	.0016	2.8045-1	.4898
110	9	.950	3.00-	.00	.00	.822	1.3042-	.2617-	.008	.0040	.0006	2.8046-1	.5004
110	10	.950	4.00-	.00	.00	1.081	1.2527-	.3459-	.016	.0061	.0018	2.8088-1	.5561
110	11	.950	6.00-	.00	.00	1.630	1.1888-	.5199-	.017	.0053	.0009	2.8060-1	.6172
110	12	.950	8.00-	.00	.00	2.180	1.0823-	.6946-	.042	.0095	.0011	2.8335-1	.7512
110	13	.950	12.00-	.00-	.00	3.727	.8931-1	.1850-	.043	.0139-	.0002	2.9655-2	.0724
110	14	.950	16.00-	.00	.00	5.488	.5691-1	.7516-	.038	.0136	.0010	3.0896-2	.5205

UNCLASSIFIED

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
118	15	.950	20.01-	.00	.00	7.555	.2359-2	.3358-	.010	.0054	.0012	2.8720-2	.6361
118	16	.950	.00-	.00	.00	.116	1.2633-	.0279	.001	.0024	.0011	2.8058-1	.5425
111	2	.950	.00-	4.02	90.00	.007	1.3077	.0090	.595-	.1578	.0016	2.8044-1	.4967
111	3	.950	.00-	3.01	90.00-	.006	1.2729	.0112	.437-	.1187	.0012	2.8134-1	.5405
111	4	.950	.00-	2.01	90.00-	.019	1.3262	.0089	.306-	.0816	.0018	2.8239-1	.4977
111	5	.950	.00-	1.00	90.00	.024	1.3320	.0074	.161-	.0422	.0016	2.8081-1	.4761
111	6	.950	.00-	.00	90.00	.012	1.3406	.0097	.025-	.0043	.0012	2.8301-1	.4895
111	7	.950	.00	1.00	90.00-	.001	1.3277	.0124-	.118	.0357	.0021	2.8128-1	.4851
111	8	.950	.00	2.01	90.00	.015	1.3304	.0102-	.266	.0753	.0017	2.8253-1	.4949
111	9	.950	.00	3.01	90.00	.003	1.2765	.0077-	.399	.1123	.0026	2.8030-1	.5265
111	10	.950	.01	4.01	90.00	.018	1.2925	.0105-	.548	.1507	.0012	2.8129-1	.5204
111	11	.950	.00-	.00	90.00-	.016	1.3119	.0141	.017-	.0031	.0013	2.8192-1	.5073
112	1	.750	4.00-	.00	.00-	.882	.7582	.2851	.002	.0009	.0003	2.2927-1	.5345
112	2	.750	3.00-	.00	.00-	.680	.7514	.2072	.012	.0008	.0024	2.2905-1	.5391
112	3	.750	2.00-	.00	.00-	.362	.8115	.1238	.012	.0005	.0015	2.2899-1	.4784
112	4	.750	1.00-	.00	.00-	.086	.7708	.0471	.012	.0002	.0021	2.2962-1	.5254
112	5	.750	.00-	.00	.00	.078	.7841-	.0188	.011-	.0000	.0012	2.3002-1	.5161
112	6	.750	1.00-	.00	.00	.316	.7922-	.0959	.000	.0013	.0017	2.2892-1	.4970
112	7	.750	2.00-	.00	.00	.552	.7673-	.1660	.001	.0047	.0007	2.2894-1	.5221
112	8	.750	3.00-	.00	.00	.785	.7654-	.2421	.021-	.0006	.0012	2.2951-1	.5297
112	9	.750	4.00-	.00	.00	1.062	.7156-	.3254-	.000	.0042	.0002	2.2884-1	.5728
112	10	.750	6.00-	.00	.00	1.560	.7163-	.4883-	.001	.0053	.0011	2.2792-1	.5629
112	11	.750	8.01-	.00	.00	2.177	.4826-	.6580-	.012	.0063	.0005	2.2919-1	.8093
112	12	.750	12.01-	.00-	.00	3.579	.3631-1	.1036-	.034	.0149	.0000	2.2914-1	.9283
112	13	.750	16.02-	.00	.00	5.267	.1070-1	.5997-	.064	.0300	.0015	2.3705-2	.2635
112	14	.750	20.03-	.00	.00	7.111-	.0870-2	.1687-	.016	.0120	.0014	2.3982-2	.4852
112	15	.750	.00-	.00	.00	.114	.7906-	.0179	.012-	.0000	.0012	2.2948-1	.5042
114	2	1.100	3.48-	.00-	.00	.564	3.2396	1.1969-	.125	.0417-	.0024	3.5026-	.2630
114	3	1.100	2.48	.01-	.00	.809	3.3071	1.1530-	.150	.0388-	.0051	3.5617-	.2546
114	4	1.100	1.47	.01-	.00	1.056	3.3515	1.0926-	.144	.0326-	.0059	3.5994-	.2479
114	5	1.100	.47	.01-	.00	1.434	3.3717	.9781-	.137	.0323-	.0071	3.6139-	.2422
114	6	1.100	.53	.01-	.00	1.812	3.4081	.8612-	.146	.0300-	.0055	3.6491-	.2410
114	7	1.100	1.54	.01-	.00	2.195	3.4784	.7711-	.156	.0437-	.0038	3.7164-	.2380
114	8	1.100	2.54-	.00-	.00	2.554	3.5568	.6483-	.142	.0451-	.0043	3.7879-	.2311
114	9	1.100	3.54-	.00-	.00	3.058	3.6277	.5014-	.169	.0506-	.0041	3.8545-	.2268

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
114	10	1.100	4.54-	.00-	.00	3.514	3.7046	.3491-	.149	.0499-	.0059	3.9261-	.2215
114	11	1.100	6.54-	.00-	.00	4.550	3.8689	.0130-	.125	.0421-	.0070	4.0909-	.2220
114	12	1.100	8.54-	.00-	.00	5.643	4.0206-	.3419-	.065	.0130-	.0033	4.2462-	.2256
114	13	1.100	12.53-	.00-	.01	7.622	4.2421-	.9890-	.119	.0303-	.0077	4.4853-	.2432
114	14	1.100	16.56-	.00-	.01	8.853	4.3146-1	.3239-	.083	.0304-	.0125	4.5668-	.2522
114	15	1.100	20.55	.03	.01	10.226	4.1887-1	.7946-	.250-	.0047	.0180	4.4492-	.2605
114	16	1.100	.53	.01-	.00	1.844	3.4215	.8679-	.143	.0402-	.0065	3.6677-	.2462
115	2	.950	3.64-	.00-	.00	1.102	2.7837	.7890-	.108	.0445-	.0014	2.9440-	.1603
115	3	.950	2.62-	.00	.00	1.329	2.8472	.7653-	.083	.0432	.0004	2.9998-	.1526
115	4	.950	1.62-	.00	.00	1.580	2.9675	.7115-	.015	.0238	.0026	3.1092-	.1417
115	5	.950	.60-	.00-	.00	2.153	3.0506	.5598-	.042	.0157-	.0015	3.1930-	.1424
115	6	.950	.42-	.00-	.00	2.751	3.2264	.4462-	.056	.0172-	.0032	3.3462-	.1198
115	7	.950	1.43-	.00-	.00	3.090	3.2684	.3705-	.065	.0137-	.0019	3.3869-	.1185
115	8	.950	2.43-	.00-	.00	3.365	3.3386	.2996-	.058	.0105-	.0018	3.4504-	.1118
115	9	.950	3.44-	.00-	.00	3.624	3.3948	.2354-	.049	.0127-	.0016	3.5051-	.1103
115	10	.950	4.45-	.00-	.00	3.984	3.4811	.1612-	.056	.0146-	.0027	3.5882-	.1071
115	11	.950	6.45-	.00-	.00	4.587	3.5681-	.0140-	.057	.0143-	.0016	3.6864-	.1183
115	12	.950	8.46-	.00	.00	5.236	3.6750-	.2173-	.060	.0057	.0002	3.7932-	.1182
115	13	.950	12.46	.01-	.00	6.681	3.8192-	.6785-	.129	.0262-	.0017	3.9422-	.1230
115	14	.950	16.47-	.00-	.00	7.746	3.8600-1	.0100-	.082	.0214-	.0033	4.0045-	.1445
115	15	.950	20.47-	.00	.00	8.745	3.8358-1	.3279	.022-	.0121	.0032	4.0061-	.1703
115	16	.950	.42-	.00-	.00	2.769	3.2184	.4388-	.049	.0147-	.0032	3.3428-	.1244
116	1	.950	4.45-	.00-	.00	3.984	3.4835	.1613-	.056	.0145-	.0016	3.5926-	.1091
116	2	.950	3.44-	.00-	.00	3.657	3.4006	.2301-	.057	.0124-	.0017	3.5121-	.1115
116	3	.950	2.44-	.00-	.00	3.370	3.3552	.3048-	.049	.0120-	.0030	3.4656-	.1104
116	4	.950	1.43-	.00-	.00	3.083	3.2832	.3698-	.049	.0126-	.0019	3.3961-	.1129
116	5	.950	.42-	.00-	.00	2.766	3.2276	.4436-	.057	.0145-	.0032	3.3446-	.1170
116	6	.950	.61-	.00-	.00	2.143	3.0735	.5635-	.034	.0146-	.0026	3.2109-	.1374
116	7	.950	1.61-	.00	.00	1.639	2.9741	.7045-	.024	.0211	.0026	3.1083-	.1342
116	9	.950	3.64-	.00-	.00	1.135	2.7921	.7880-	.100	.0434-	.0013	2.9440-	.1519
116	10	.950	.42-	.00-	.00	2.694	3.2100	.4501-	.057	.0145-	.0032	3.3389-	.1289
117	1	.950	8.46-	3.98-	26.65	5.382	3.6529-	.3072	.748-	.3156	.0832	3.7795-	.1266
117	2	.950	8.46-	2.98-	20.57	5.391	3.6540-	.2852	.489-	.2141	.0587	3.7823-	.1283
117	3	.950	8.45-	1.99-	14.08	5.301	3.6780-	.2426	.268-	.1279	.0379	3.7979-	.1160
117	4	.950	8.45-	.99-	7.19	5.255	3.6651-	.2260	.090-	.0579	.0182	3.7862-	.1211

TABLE IIIb

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
117	5	.950	8.46-	.00	.00	5.208	3.6746-	.2077-	.051	.0006	.0003	3.7957-	.1211
117	6	.950	8.48	1.00	7.19	5.253	3.6524-	.2252-	.231	.0769-	.0212	3.7746-	.1222
117	7	.950	8.45	2.00	14.08	5.279	3.6460-	.2476-	.438	.1578-	.0407	3.7685-	.1225
117	8	.950	8.45	2.99	20.57	5.316	3.6272-	.2841-	.654	.2455-	.0603	3.7550-	.1278
117	9	.950	8.45	3.99	26.65	5.370	3.6233-	.3066-	.897	.3326-	.0820	3.7521-	.1288
117	10	.950	8.46-	.00	.00	5.205	3.6677-	.2127-	.052	.0032	.0003	3.7923-	.1246
118	2	.950	16.44-	4.01-	14.19	7.700	3.7703-1	.0725	.670-	.2018	.0128	3.9370-	.1367
118	3	.950	16.44-	3.01-	10.79	7.750	3.8119-1	.0686	.565-	.1835	.0113	3.9699-	.1580
118	4	.950	16.45-	2.00-	7.20	7.764	3.8253-1	.0500	.405-	.1395	.0075	3.9819-	.1566
118	5	.950	16.46-	.99-	3.60	7.728	3.8449-1	.0100	.239-	.0877	.0005	3.9909-	.1460
118	6	.950	16.47-	.00-	.00	7.736	3.8484-1	.0039-	.050	.0152-	.0043	3.9924-	.1440
118	7	.950	16.46	1.00	3.60	7.726	3.8348-1	.0119-	.376	.1074-	.0060	3.9829-	.1481
118	8	.950	16.46	2.00	7.20	7.727	3.8241-1	.0315-	.496	.1471-	.0078	3.9779-	.1538
118	9	.950	16.45	3.02	10.79	7.778	3.8117-1	.0596-	.646	.1901-	.0120	3.9747-	.1630
118	10	.950	16.45	4.01	14.19	7.698	3.7995-1	.0528-	.805	.2236-	.0113	3.9697-	.1702
118	11	.950	16.47-	.00-	.00	7.749	3.8435-1	.0022-	.067	.0149-	.0045	3.9991-	.1556
119	1	.750	3.76-	.00	.00	.647	2.3737	.8178-	.117	.0553	.0032	2.5173-	.1436
119	2	.750	2.75-	.01	.00	.887	2.4625	.7716-	.111	.0744	.0100	2.5902-	.1277
119	3	.750	1.75-	.01	.00	1.126	2.5352	.7043-	.091	.0688	.0104	2.6514-	.1162
119	4	.750	.74-	.00	.00	1.469	2.5853	.6237-	.025	.0335	.0047	2.6889-	.1036
119	5	.750	.26-	.00-	.00	1.779	2.6531	.5343-	.031	.0130-	.0012	2.7477-	.0946
119	6	.750	1.26-	.00-	.00	2.098	2.7224	.4601-	.043	.0104-	.0039	2.8132-	.0908
119	7	.750	2.28-	.00-	.00	2.567	2.8288	.3599-	.048	.0272-	.0022	2.9090-	.0802
119	8	.750	3.28-	.00-	.00	2.915	2.8900	.2715-	.083	.0204-	.0035	2.9661-	.0761
119	9	.750	4.28-	.00-	.00	3.228	2.9437	.1689-	.094	.0191-	.0019	3.0190-	.0753
119	10	.750	6.28-	.00-	.00	3.939	3.0369-	.0490-	.104	.0279-	.0031	3.1148-	.0779
119	11	.750	8.28-	.00-	.00	4.715	3.1452-	.2982-	.096	.0203-	.0018	3.2276-	.0824
119	12	.750	12.29-	.00-	.00	6.173	3.3439-	.7622-	.118	.0228-	.0002	3.4445-	.1006
119	13	.750	16.31-	.00	.00	7.142	3.4649-	.9903-	.077	.0080	.0037	3.5936-	.1287
119	14	.750	20.33-	.00	.00	8.033	3.4998-1	.1864-	.035-	.0047	.0040	3.6632-	.1634
119	15	.750	.26-	.00-	.00	1.819	2.6542	.5280-	.041	.0164-	.0012	2.7472-	.0930
121	2	1.100	3.59-	.00-	.00	.353	2.3010	1.0066-	.082	.0447-	.0031	2.5753-	.2743
121	3	1.100	2.57-	.00-	.00	.669	2.3792	.9652-	.085	.0462-	.0018	2.6405-	.2613
121	4	1.100	1.55-	.00-	.00	.941	2.4564	.9235-	.084	.0475-	.0025	2.7132-	.2568
121	5	1.100	.53-	.00-	.00	1.231	2.5192	.8807-	.084	.0403-	.0021	2.7598-	.2406

UNCLASSIFIED

TABLE IIIb

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
121	6	1.100	.48-	.00-	.00	1.497	2.5788	.8414-	.078	.0368-	.0029	2.8121-	.2333
121	7	1.100	1.49-	.00-	.00	1.871	2.6256	.7444-	.072	.0330-	.0041	2.8556-	.2300
121	8	1.100	2.50-	.00-	.00	2.322	2.6732	.6152-	.061	.0234-	.0036	2.9013-	.2281
121	9	1.100	3.51-	.00-	.00	2.716	2.7261	.5190-	.035	.0153-	.0038	2.9523-	.2262
121	10	1.100	4.51-	.00-	.00	3.144	2.8000	.3875-	.056	.0167-	.0054	3.0218-	.2218
121	11	1.100	6.50-	.00-	.01	4.185	2.9297	.0413-	.064	.0194-	.0094	3.1508-	.2211
121	13	1.100	8.50-	.00-	.00	5.429	3.0748-	.3765-	.059	.0218-	.0072	3.3023-	.2275
121	14	1.100	8.50-	.00-	.00	5.452	3.0751-	.3759-	.060	.0195-	.0072	3.3022-	.2271
121	15	1.100	12.51-	.00-	.01	7.388	3.3116-	.9720-	.113	.0579-	.0101	3.5606-	.2490
121	16	1.100	16.55-	.01-	.01	9.073	3.4874-1	.4166	.009	.0434-	.0212	3.7506-	.2632
121	17	1.100	20.56-	.02-	.01	10.677	3.5167-1	.9027	.111	.0148-	.0104	3.7982-	.2815
121	18	1.100	.49-	.00-	.00	1.563	2.5650	.8363-	.077	.0354-	.0020	2.8277-	.2427
122	2	.950	3.67-	.00	.00	.807	2.0380	.7695-	.095	.0419	.0007	2.1895-	.1515
122	3	.950	2.66-	.00-	.00	1.123	2.1313	.7100-	.087	.0392-	.0015	2.2745-	.1432
122	4	.950	1.66-	.00-	.00	1.453	2.1764	.6363-	.080	.0379-	.0002	2.3197-	.1433
122	5	.950	.64-	.00-	.00	1.786	2.2714	.5738-	.095	.0373-	.0001	2.4066-	.1352
122	6	.950	.37-	.00-	.00	2.128	2.3335	.4850-	.066	.0241-	.0013	2.4650-	.1315
122	7	.950	1.37-	.00-	.00	2.478	2.4044	.3808-	.066	.0250-	.0016	2.5323-	.1279
122	8	.950	2.38-	.00-	.00	2.823	2.4404	.3126-	.066	.0235-	.0024	2.5676-	.1272
122	9	.950	3.41-	.00-	.00	3.077	2.5303	.2973-	.058	.0169-	.0019	2.6463-	.1160
122	10	.950	4.42-	.00-	.00	3.368	2.5494	.2439-	.050	.0155-	.0025	2.6657-	.1163
122	11	.950	6.43-	.00-	.00	4.117	2.6829	.0583-	.050	.0148-	.0026	2.7907-	.1078
122	12	.950	8.45-	.00-	.00	5.186	2.8709-	.2370-	.018	.0125-	.0040	2.9753-	.1044
122	13	.950	12.45-	.00-	.00	7.237	3.0862-	.8783-	.077	.0190-	.0023	3.2110-	.1248
122	14	.950	16.49-	.00	.00	8.399	3.1565-1	.1472-	.018-	.0079	.0011	3.2949-	.1384
122	15	.950	20.50	.01	.00	9.558	3.1781-1	.4886	.017-	.0250	.0052	3.3400-	.1619
122	16	.950	.37-	.00-	.00	2.119	2.3570	.4823-	.066	.0254-	.0026	2.4807-	.1237
123	2	.950	.39-	4.00-	89.97	2.427	2.3305	.4110	1.273-	.4673	.0588	2.4682-	.1377
123	3	.950	.39-	3.00-	89.98	2.390	2.3385	.4204	.954-	.3579	.0375	2.4723-	.1338
123	4	.950	.39-	2.00-	89.99	2.333	2.3534	.4260	.638-	.2461	.0208	2.4853-	.1319
123	5	.950	.40-	1.00-	90.00	2.349	2.3755	.4418	.310-	.1194	.0076	2.5048-	.1293
123	6	.950	.39-	.00-	90.00	2.317	2.3641	.4443	.018-	.0075-	.0010	2.4936-	.1295
123	7	.950	.39	1.00-	90.01	2.313	2.3452	.4372-	.274	.1043-	.0109	2.4809-	.1357
123	8	.950	.40	2.00-	90.01	2.380	2.3961	.4403-	.564	.2155-	.0208	2.5218-	.1257
123	11	.950	.40-	.00-	90.00	2.334	2.3979	.4488	.034-	.0112-	.0011	2.5224-	.1243
123	12	.950	.39	1.00-	90.01	2.310	2.3446	.4371-	.251	.1006-	.0109	2.4796-	.1350
123	13	.950	.40	2.00-	90.01	2.388	2.3602	.4316-	.543	.2126-	.0208	2.4935-	.1333

UNCLASSIFIED

TABLE IIIb

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
123	14	.950	.39	3.00-	90.02	2.419	2.3657	.4186-	.874	.3333-	.0376	2.4948-	.1291
123	15	.950	.39	4.00-	90.03	2.499	2.3541	.3998-	1.193	.4352-	.0606	2.4933-	.1392
123	16	.950	.39-	.00-	90.00	2.323	2.3642	.4460	.034-	.0113-	.0010	2.4981-	.1339
124	1	.950	8.45-	3.97-	26.64	5.661	2.9438-	.3954	1.019-	.4386	.1113	3.0715-	.1277
124	2	.950	8.45-	2.97-	20.56	5.520	2.8832-	.3549	.699-	.3002	.0794	3.0153-	.1321
124	3	.950	8.44-	1.99-	14.07	5.362	2.8757-	.2994	.436-	.1762	.0496	2.9999-	.1242
124	4	.950	8.45-	1.00-	7.19	5.257	2.8495-	.2508	.204-	.0756	.0203	2.9712-	.1217
124	5	.950	8.45-	.00-	.00	5.202	2.8482-	.2360-	.026	.0138-	.0052	2.9715-	.1233
124	6	.950	8.44	1.00	7.18	5.230	2.8392-	.2604-	.278	.1077-	.0301	2.9636-	.1244
124	7	.950	8.44	1.99	14.07	5.288	2.8495-	.2957-	.542	.2151-	.0562	2.9735-	.1240
124	8	.950	8.44	2.98	20.55	5.392	2.8448-	.3314-	.838	.3275-	.0812	2.9769-	.1321
124	9	.950	8.45	1.98	26.64	5.501	2.8823-	.3628-	1.157	.4475-	.1048	3.0145-	.1322
124	10	.950	8.45-	.00-	.00	5.201	2.8304-	.2358-	.026	.0138-	.0039	2.9552-	.1248
125	2	.950	16.47-	3.97-	14.17	8.636	3.1933-	1.2987	.871-	.3724	.0498	3.3764-	.1831
125	3	.950	16.48-	2.99-	10.77	8.648	3.2020-	1.2587	.643-	.2939	.0499	3.3793-	.1773
125	4	.950	16.48-	1.93-	7.18	8.506	3.1621-	1.1999	.369-	.1717	.0342	3.3319-	.1698
125	5	.950	16.49-	.99-	3.59	8.477	3.1676-	1.1608	.142-	.0779	.0180	3.3266-	.1590
125	6	.950	16.49-	.00	.00	8.400	3.1494-	1.1379-	.024-	.0040	.0022	3.3045-	.1551
125	7	.950	16.49	.99	3.59	8.461	3.1694-	1.1569-	.215	.0719-	.0142	3.3279-	.1585
125	8	.950	16.49	1.98	7.18	8.618	3.2097-	1.2105-	.417	.1827-	.0355	3.3768-	.1671
125	11	.950	16.48	2.99	10.77	8.596	3.1887-	1.2545-	.700	.3047-	.0464	3.3663-	.1776
125	12	.950	16.48	3.98	14.18	8.712	3.2057-	1.3078-	.854	.3297-	.0396	3.3941-	.1884
125	13	.950	16.49-	.00	.00	8.424	3.1492-	1.1468-	.025-	.0054	.0021	3.3070-	.1578
126	1	.750	3.79-	.00	.00	.406	1.6696	.7779-	.115	.0432	.0013	1.8307-	.1611
126	2	.750	2.79-	.00	.00	.720	1.7433	.7141-	.114	.0430	.0003	1.8040-	.1507
126	3	.750	1.78-	.00-	.00	1.001	1.8105	.6378-	.115	.0428-	.0009	1.9477-	.1372
126	4	.750	.77-	.00-	.00	1.318	1.8773	.5547-	.103	.0427-	.0005	2.0040-	.1267
126	5	.750	.23-	.00-	.00	1.633	1.9324	.4708-	.103	.0442-	.0017	2.0521-	.1197
126	6	.750	1.24-	.00-	.00	1.928	1.9593	.3986-	.103	.0401-	.0027	2.0796-	.1203
126	7	.750	2.25-	.00-	.00	2.193	2.0081	.3500-	.104	.0328-	.0035	2.1232-	.1151
126	8	.750	3.25-	.00-	.00	2.428	2.0628	.3090-	.094	.0294-	.0028	2.1761-	.1133
126	9	.750	4.26-	.00-	.00	2.766	2.1371	.2410-	.093	.0275-	.0023	2.2426-	.1055
126	10	.750	6.27-	.00-	.00	3.496	2.2659	.1524-	.105	.0282-	.0035	2.3709-	.1050
126	11	.750	8.29-	.00-	.00	4.542	2.4151-	.2210-	.093	.0325-	.0055	2.5102-	.1051
126	12	.750	10.33-	.00-	.00	5.677	2.5512-	.5258-	.079	.0453-	.0051	2.6562-	.1050

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
126	13	.750	12.30-	.30-	.00	6.473	2.6796-	.8011-	.101	.0459-	.0019	2.8055-	.1259
126	14	.750	16.34-	.00-	.00	7.528	2.8265-	.9894-	.072	.0226-	.0005	2.9790-	.1525
126	15	.750	20.36-	.00	.00	8.734	2.9222-1	.2880-	.044	.0020	.0015	3.0975-	.1753
126	16	.750	.23-	.00-	.00	1.657	1.9188	.4688-	.102	.0420-	.0001	2.0381-	.1193
127	2	.950	.45-	3.98-	89.96	3.028	3.2781	.3837	1.071-	.4679	.0676	3.3954-	.1173
127	3	.950	.46-	2.98-	89.97	3.002	3.2736	.4134	.755-	.3415	.0447	3.3902-	.1166
127	4	.950	.46-	1.99-	89.98	2.978	3.2459	.4140	.477-	.2201	.0272	3.3681-	.1222
127	5	.950	.46-	.99-	89.99	2.974	3.2783	.4113	.210-	.1130	.0128	3.3887-	.1104
127	6	.950	.46	.01-	90.00	3.024	3.2478	.4005-	.029-	.0160-	.0004	3.3634-	.1156
127	7	.950	.46	1.00-	90.01	3.041	3.2575	.3995-	.252	.0787-	.0125	3.3744-	.1169
127	8	.950	.46	2.00-	90.01	3.054	3.2596	.4045-	.516	.1873-	.0258	3.3808-	.1212
127	9	.950	.45	3.00-	90.03	3.010	3.2515	.4004-	.811	.3078-	.0460	3.3783-	.1268
127	10	.950	.45	4.00-	90.04	3.101	3.2643	.3680-	1.115	.4238-	.0654	3.3891-	.1248
127	11	.950	.45	.01-	90.00	2.996	3.2531	.4027-	.029-	.0148-	.0003	3.3681-	.1150
129	2	1.100	3.55-	.00	.00	.326	2.1202	1.1318-	.142	.0576	.0004	2.3313-	.2111
129	3	1.100	2.53-	.00	.00	.592	2.2121	1.0996-	.134	.0563	.0006	2.4325-	.2204
129	4	1.100	1.51-	.00-	.00	.860	2.2970	1.0616-	.120	.0542-	.0002	2.5156-	.2186
129	5	1.100	.49-	.00-	.00	1.156	2.3808	1.0110-	.117	.0585-	.0001	2.6094-	.2286
129	6	1.100	.53-	.00-	.00	1.438	2.4388	.9744-	.089	.0337-	.0009	2.6768-	.2380
129	7	1.100	1.53-	.00	.00	1.756	2.4980	.8993-	.070	.0256	.0010	2.7394-	.2414
129	8	1.100	2.54-	.00	.00	2.200	2.5681	.7822-	.072	.0192	.0015	2.8006-	.2325
129	9	1.100	3.55-	.00	.00	2.599	2.6326	.6687-	.059	.0165	.0021	2.8636-	.2310
129	10	1.100	4.56-	.00	.00	3.046	2.7021	.5435-	.067	.0134	.0025	2.9279-	.2258
129	11	1.100	6.56-	.00	.00	3.965	2.8315	.2658-	.067	.0153	.0002	3.0469-	.2154
129	12	1.100	8.56-	.00	.00	4.972	2.9843-	.0560-	.043	.0072	.0004	3.1906-	.2063
129	13	1.100	10.56-	.00-	.00	6.095	3.0999-	.4150-	.006-	.0044-	.0006	3.3161-	.2162
129	14	1.100	10.57-	.00	.00	6.066	3.0887-	.4019-	.007-	.0078	.0004	3.3136-	.2249
129	15	1.100	12.56-	.00-	.00	7.034	3.1899-	.7242-	.006	.0031-	.0022	3.4174-	.2275
129	16	1.100	14.57-	.00-	.00	7.990	3.2846-1	.0052-	.011	.0107-	.0014	3.5314-	.2468
129	17	1.100	16.58-	.00-	.00	8.755	3.3509-1	.2232-	.044	.0180	.0000	3.6080-	.2571
129	18	1.100	20.57-	.01-	.01	10.596	3.4049-1	.8367	.099	.0129-	.0080	3.6725-	.2676
129	19	1.100	9.65-	.00-	.00-	1.629	1.5933	1.4683-	.126	.0562-	.0017	1.8017-	.2084
129	20	1.100	5.58-	.00-	.00-	.308	1.9502	1.2404-	.127	.0595-	.0004	2.1551-	.2049
129	21	1.100	7.62-	.00-	.00-	.956	1.7642	1.3461-	.125	.0545-	.0006	1.9672-	.2030
129	22	1.100	.52-	.00-	.00	1.441	2.4471	.9723-	.069	.0295-	.0009	2.6837-	.2366
130	2	1.050	.50-	.00-	.00	1.550	2.4645	.9443-	.034	.0179-	.0012	2.6989-	.2344

UNCLASSIFIED

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
130	3	1.050	2.53-	.00	.00	2.286	2.5833	.7737-	.021	.0087	.0016	2.8278-	.2445
130	4	1.050	4.55-	.00-	.00	3.161	2.7389	.5445-	.023	.0028-	.0003	2.9700-	.2311
130	5	1.050	6.55-	.00-	.00	4.061	2.8745	.2764-	.016	.0015-	.0004	3.0923-	.2178
130	6	1.050	8.56-	.00-	.00	5.094	3.0274-	.0427-	.011	.0012-	.0020	3.2359-	.2085
130	7	1.050	10.56-	.00-	.00	6.190	3.1868-	.3964-	.006	.0020-	.0001	3.3978-	.2110
130	8	1.050	12.55-	.00-	.00	7.240	3.3227-	.7383	.025-	.0153	.0001	3.5495-	.2268
130	9	1.050	14.56-	.00-	.00	8.282	3.4483-1	.0425	.000	.0043-	.0003	3.6976-	.2493
130	10	1.050	16.58-	.00	.00	8.886	3.5015-1	.1778-	.024	.0187	.0031	3.7575-	.2560
130	11	1.050	.51-	.00-	.00	1.540	2.4713	.9532-	.047	.0212-	.0012	2.7174-	.2461
131	1	1.000	.46-	.00	.00	1.965	2.4105	.7541-	.025	.0175	.0007	2.6026-	.1921
131	2	1.000	2.48-	.00	.00	2.760	2.5409	.5696	.002	.0020	.0015	2.7262-	.1853
131	3	1.000	4.51-	.00	.00	3.479	2.6959	.4185	.030-	.0135	.0026	2.8594-	.1635
131	4	1.000	6.53-	.00-	.00	4.152	2.8384	.2493	.003-	.0008-	.0018	2.9786-	.1402
131	5	1.000	8.54-	.00-	.00	5.085	2.9959-	.0230-	.029	.0224-	.0040	3.1310-	.1351
131	6	1.000	10.55-	.00-	.00	6.142	3.1329-	.3379-	.018	.0133-	.0023	3.2736-	.1407
131	7	1.000	12.55-	.00	.00	7.166	3.2609-	.6523	.021-	.0079	.0003	3.4229-	.1620
131	8	1.000	14.56-	.00-	.00	7.946	3.3578-	.8565	.032	.0027-	.0032	3.5401-	.1823
131	9	1.000	16.58-	.00	.00	8.724	3.4195-1	.0727	.002	.0072	.0007	3.6178-	.1983
131	10	1.000	.46-	.00	.00	2.010	2.4085	.7369-	.010	.0164	.0017	2.5971-	.1886
132	2	.950	9.74-	.00	.00-	1.439	1.3557	1.2853-	.061	.0283	.0003	1.4872-	.1315
132	3	.950	7.72-	.00	.00-	.667	1.5059	1.105	.103	.0480	.0003	1.6269-	.1210
132	4	.950	5.68-	.00	.00	.077	1.6954	.97	.085	.0487	.0023	1.8199-	.1245
132	5	.950	3.66-	.00	.00	.798	1.8882	.84	.086	.0429	.0011	2.0157-	.1275
132	6	.950	2.64-	.00	.00	1.139	1.9930	.	.093	.0409	.0011	2.1194-	.1264
132	7	.950	1.63-	.00	.00	1.479	2.0837	.7033-	.085	.0381	.0011	2.2164-	.1327
132	8	.950	.62-	.00	.00	1.766	2.1735	.6505-	.071	.0302	.0012	2.3129-	.1394
132	9	.950	.40-	.00	.00	2.046	2.2459	.5992-	.070	.0285	.0002	2.3927-	.1469
132	10	.950	1.41-	.00-	.00	2.359	2.3085	.5401-	.069	.0297-	.0007	2.4582-	.1498
132	11	.950	2.42-	.00-	.00	2.698	2.3864	.4769-	.061	.0269-	.0005	2.5324-	.1460
132	12	.950	3.44-	.00-	.00	3.084	2.4584	.3994-	.045	.0214-	.0016	2.5975-	.1391
132	14	.950	6.47-	.00-	.00	4.163	2.6395	.1405-	.046	.0175-	.0015	2.7472-	.1077
132	15	.950	8.47-	.00-	.00	5.065	2.8075-	.1041-	.023	.0155-	.0011	2.9089-	.1014
132	16	.950	10.49-	.00-	.00	6.015	2.9743-	.3790-	.045	.0258-	.0034	3.0783-	.1040
132	17	.950	12.50-	.00-	.00	6.781	3.0250-	.5943-	.047	.0177-	.0002	3.1437-	.1187
132	18	.950	14.52-	.00	.00	7.539	3.0861-	.7787-	.018	.0039	.0009	3.2123-	.1332
132	19	.950	16.53-	.00	.00	8.138	3.1533-	.9337-	.013-	.0076	.0046	3.2852-	.1319
132	20	.950	20.54-	.00	.00	9.484	3.1877-1	.3497	.007-	.0162	.0080	3.3274-	.1497

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
132	21	.950	.40-	.00	.00	2.110	2.2449	.5871-	.062	.0287	.0002	2.3876-	.1427
133	1	.950	.43-	4.00-	89.97	2.308	2.3010	.5895	1.170-	.4494	.0518	2.4494-	.1484
133	2	.950	.43-	3.00-	89.98	2.279	2.2783	.5755	.869-	.3397	.0361	2.4281-	.1498
133	3	.950	.43-	2.00-	89.99	2.293	2.2756	.5755	.561-	.2199	.0239	2.4257-	.1501
133	4	.950	.43-	1.00-	89.99	2.274	2.2679	.5683	.241-	.0982	.0118	2.4187-	.1508
133	5	.950	.43-	.00-	90.00	2.264	2.2702	.5718-	.022	.0026	.0019	2.4188-	.1486
133	6	.950	.43	1.00-	90.00	2.288	2.2732	.5719-	.294	.1063-	.0080	2.4224-	.1492
133	7	.950	.43	2.00-	90.01	2.317	2.2710	.5769-	.590	.2197-	.0201	2.4260-	.1550
133	8	.950	.43	3.00-	90.02	2.337	2.2821	.5851-	.878	.3303-	.0323	2.4337-	.1516
133	9	.950	.44	4.00-	90.03	2.344	2.2873	.5856-	1.162	.4333-	.0444	2.4387-	.1514
133	10	.950	.42-	.00-	90.00	2.250	2.2511	.5747-	.023	.0027	.0021	2.4009-	.1498
134	2	.950	8.48-	3.98-	26.66	5.372	2.8873-	.2235	.891-	.3825	.0666	2.9962-	.1089
134	3	.950	8.48-	2.98-	20.57	5.250	2.8274-	.1823	.634-	.2684	.0458	2.9393-	.1119
134	4	.950	8.47-	1.99-	14.08	5.137	2.8381-	.1404	.401-	.1671	.0299	2.9409-	.1028
134	5	.950	8.48-	1.01-	7.19	5.078	2.8277-	.0985	.191-	.0727	.0130	2.9250-	.0973
134	6	.950	8.48-	.00-	.00	5.000	2.8227-	.0878-	.031	.0139-	.0011	2.9175-	.0948
134	7	.950	8.47	1.00	7.19	5.054	2.8256-	.1012-	.277	.1089-	.0147	2.9224-	.0968
134	8	.950	8.47	1.99	14.08	5.159	2.8289-	.1336-	.529	.2068-	.0296	2.9307-	.1018
134	9	.950	8.47	2.99	20.57	5.181	2.8226-	.1656-	.772	.2980-	.0447	2.9322-	.1096
134	10	.950	8.48	3.98	26.66	5.363	2.8600-	.2211-	1.027	.4185-	.0643	2.9746-	.1146
134	11	.950	8.48-	.00-	.00	5.017	2.8257-	.0829-	.022	.0141-	.0011	2.9235-	.0978
135	1	.950	16.50-	3.96-	14.17	8.436	3.1832-1	.1248	.702-	.3110	.0594	3.3369-	.1537
135	2	.950	16.51-	2.99-	10.77	8.335	3.1725-1	.0632	.537-	.2593	.0518	3.3282-	.1557
135	3	.950	16.52-	1.97-	7.18	8.271	3.1663-1	.0162	.325-	.1689	.0373	3.3137-	.1474
135	4	.950	16.53-	.98-	3.59	8.215	3.1725-	.9625	.144-	.0769	.0193	3.3120-	.1395
135	5	.950	16.53-	.00	.00	8.185	3.1528-	.9416-	.020-	.0051	.0034	3.2923-	.1395
135	6	.950	16.53	.98	3.59	8.226	3.1769-	.9620-	.182	.0790-	.0154	3.3156-	.1387
135	7	.950	16.53	1.98	7.18	8.339	3.2005-1	.0102-	.364	.1892-	.0389	3.3443-	.1438
135	8	.950	16.51	2.99	10.77	8.389	3.1946-1	.0716-	.572	.2737-	.0478	3.3479-	.1533
135	9	.950	16.51	3.98	14.17	8.457	3.1911-1	.1271-	.731	.3054-	.0547	3.3576-	.1665
135	10	.950	16.54-	.00	.00	8.187	3.1483-	.9381-	.004-	.0047	.0033	3.2936-	.1453
136	2	.750	- 9.83-	.00	.00-	1.254	1.1834	1.1097-	.073	.0397	.0040	1.2939-	.1105
136	3	.750	- 7.81-	.00	.00-	.622	1.3231	.9894-	.061	.0358	.0036	1.4304-	.1073

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
136	4	.750	5.80-	.00	.00-	.070	1.4729	.8832-	.070	.0388	.0032	1.5859-	.1130
136	5	.750	3.78-	.00	.00	.466	1.6157	.7918-	.071	.0331	.0019	1.7350-	.1193
136	6	.750	2.77-	.00	.00	.737	1.6820	.7426-	.071	.0311	.0010	1.8013-	.1193
136	7	.750	1.76-	.00	.00	1.008	1.7646	.6869-	.060	.0292	.0015	1.8847-	.1201
136	8	.750	.75-	.00	.00	1.279	1.8259	.6377-	.059	.0328	.0006	1.9504-	.1245
136	9	.750	.25-	.00-	.00	1.513	1.8838	.5876-	.068	.0360-	.0003	2.0120-	.1282
136	10	.750	1.26-	.00-	.00	1.700	1.9368	.5647-	.058	.0308-	.0010	2.0669-	.1301
136	11	.750	2.27-	.00-	.00	2.001	1.9914	.5238-	.057	.0307-	.0001	2.1155-	.1241
136	12	.750	3.28-	.00-	.00	2.305	2.0498	.4625-	.058	.0251-	.0011	2.1661-	.1163
136	13	.750	4.29-	.00-	.00	2.650	2.1212	.3816-	.057	.0265-	.0008	2.2337-	.1125
136	15	.750	6.30-	.00-	.00	3.416	2.2576	.1881-	.059	.0202-	.0004	2.3612-	.1036
136	16	.750	8.31-	.00-	.00	4.303	2.4246-	.0576-	.058	.0244-	.0006	2.5185-	.0939
136	17	.750	10.31-	.01-	.00	5.319	2.5383-	.3695-	.033	.0394-	.0043	2.6400-	.1017
136	18	.750	12.33-	.00-	.00	6.227	2.6786-	.6124-	.057	.0304	.0001	2.7930-	.1144
136	19	.750	16.35-	.00	.00	7.429	2.8025-	.8969-	.018	.0100	.0020	2.9494-	.1469
136	20	.750	20.37-	.00	.00	8.640	2.9102-	1.2289-	.022-	.0024	.0053	3.0657-	.1555
136	21	.750	.25-	.00-	.00	1.547	1.8772	.5875-	.068	.0360-	.0003	2.0078-	.1306
138	3	1.100	3.50	.01-	.00	.593	3.1760	1.1690	.037-	.0405-	.0001	3.4351-	.2591
138	4	1.100	1.47-	.00	.00	1.081	3.2686	1.0871	.063-	.0352	.0025	3.5158-	.2472
138	5	1.100	.53-	.00	.00	1.920	3.3776	.8374	.013	.0044	.0017	3.6169-	.2393
138	6	1.100	2.54-	.00-	.00	2.856	3.5618	.5731-	.082	.0307-	.0025	3.7901-	.2283
138	7	1.100	4.56	.01-	.00	4.269	3.8551	.1594-	.110	.0223-	.0009	4.0778-	.2227
138	8	1.100	6.55-	.00-	.00	5.138	3.9791-	.1441-	.062	.0174-	.0014	4.2027-	.2236
138	9	1.100	8.55-	.00-	.00	6.055	4.1108-	.4464-	.034	.0144-	.0019	4.3401-	.2293
138	10	1.100	10.55-	.00-	.00	6.962	4.2439-	.7223-	.007	.0024-	.0052	4.4852-	.2413
138	11	1.100	12.57-	.00	.00	7.836	4.3646-	.9537-	.030	.0101	.0035	4.6200-	.2554
138	12	1.100	.53	.01-	.00	2.008	3.3942	.8127-	.083	.0120-	.0064	3.6335-	.2393
139	3	.950	3.64	.01-	.00	1.272	2.7448	.7262	.054-	.0666-	.0060	2.8669-	.1221
139	4	.950	1.62	.01-	.00	1.992	2.9606	.5755	.033-	.0389-	.0028	3.0876-	.1230
139	5	.950	.43-	.00-	.00	3.094	3.3209	.3881-	.034	.0157-	.0038	3.4306-	.1097
139	6	.950	2.45-	.00-	.00	3.722	3.4564	.2388-	.046	.0195-	.0037	3.5593-	.1029
139	7	.950	4.46-	.00-	.00	4.344	3.5685	.0694-	.068	.0245-	.0037	3.6687-	.1002
139	8	.950	6.47-	.00-	.00	4.978	3.7175-	.0935-	.066	.0216-	.0028	3.8128-	.0953
139	9	.950	8.48-	.00-	.00	5.590	3.7821-	.2757-	.035	.0098-	.0016	3.8884-	.1063
139	10	.950	10.48-	.00-	.00	6.188	3.8553-	.4740	.027-	.0027-	.0007	3.9687-	.1134
139	11	.950	12.47-	.00-	.00	6.783	3.9037-	.6777	.051-	.0078-	.0042	4.0305-	.1268
139	12	.950	14.48-	.00-	.01	7.335	3.9211-	.8308	.083-	.0136-	.0116	4.0647-	.1436

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
139	13	.950	16.49-	.00	.00	7.745	3.9081-	.9351	.051-	.0170	.0029	4.0673-	.1592
139	14	.950	18.48	.01	.01	8.251	3.8629-1	.1593-	.177	.0169	.0139	4.0375-	.1746
139	15	.950	20.47	.02	.01	8.825	3.8930-1	.3588-	.320	.0556	.0117	4.0819-	.1889
139	16	.950	.43-	.00-	.00	3.062	3.3040	.3969-	.032	.0197-	.0037	3.4205-	.1165
139	17	.950	.43-	.00-	.00	3.057	3.3063	.3958-	.040	.0210-	.0048	3.4170-	.1107
140	1	.950	- 3.57-	.68	10.00	1.294	2.8329	.7550	.291-	.1675	.0002	2.9571-	.1242
140	2	.950	- 1.58-	.34	10.00	1.996	2.9280	.5652	.156-	.0815	.0036	3.0620-	.1340
140	3	.950	.43-	.01	10.00	3.022	3.2900	.3981-	.036	.0178-	.0039	3.4086-	.1186
140	4	.950	2.42	.34	9.99	3.666	3.4391	.2524-	.136	.0549-	.0094	3.5435-	.1044
140	5	.950	4.41	.68	9.99	4.327	3.5675	.0869-	.243	.0941-	.0161	3.6663-	.0988
140	6	.950	6.38	1.04	9.99	4.924	3.6680-	.0942-	.331	.1220-	.0219	3.7732-	.1052
140	7	.950	8.37	1.39	9.98	5.539	3.7943-	.2602-	.350	.1180-	.0276	3.9019-	.1076
140	8	.950	10.33	1.73	9.98	6.110	3.8324-	.4626-	.224	.0724-	.0322	3.9517-	.1193
140	9	.950	12.30	2.07	9.98	6.723	3.8661-	.6430-	.202	.0495-	.0266	4.0081-	.1420
140	10	.950	14.28	2.42	9.99	7.233	3.8898-	.8040-	.287	.0482-	.0095	4.0434-	.1536
140	11	.950	16.24	2.77	10.00	7.625	3.8478-	.9676-	.445	.0817	.0044	4.0188-	.1710
140	12	.950	18.22	3.10	10.01	8.074	3.8441-1	.1167-	.622	.1313	.0117	4.0314-	.1873
140	13	.950	20.19	3.43	10.01	8.601	3.8337-1	.2789-	.765	.1941	.0122	4.0511-	.2174
140	14	.950	.44-	.00	10.00	3.074	3.3251	.3991-	.036	.0165-	.0040	3.4450-	.1199
141	2	.950	- 3.40-	1.38	20.01	1.258	2.7113	.7172	.314-	.1002	.0129	2.8323-	.1210
141	3	.950	- 1.49-	.69	20.00	2.027	2.9615	.5602	.123-	.0350	.0034	3.0842-	.1227
141	4	.950	.44-	.01	20.00	3.049	3.2901	.4000-	.042	.0166-	.0030	3.4009-	.1108
141	5	.950	2.34	.68	19.99	3.641	3.4355	.2564-	.214	.0814-	.0128	3.5334-	.0979
141	6	.950	4.23	1.36	19.98	4.275	3.5567	.0885-	.401	.1486-	.0274	3.6500-	.0933
141	7	.950	6.11	2.04	19.98	4.844	3.6604-	.0846-	.530	.1955-	.0408	3.7576-	.0972
141	8	.950	7.99	2.72	19.97	5.437	3.7371-	.2560-	.603	.2119-	.0543	3.8443-	.1072
141	9	.950	9.89	3.40	19.96	5.995	3.8019-	.4367-	.514	.1789-	.0675	3.9160-	.1141
141	10	.950	11.78	4.07	19.96	6.610	3.8584-	.6275-	.494	.1457-	.0734	3.9889-	.1305
141	11	.950	13.66	4.75	19.96	7.000	3.8153-	.7775-	.574	.1553-	.0672	3.9674-	.1521
141	12	.950	15.54	5.42	19.97	7.474	3.8057-	.9652-	.670	.1816-	.0501	3.9831-	.1774
141	14	.950	17.43	6.08	19.98	8.052	3.8291-1	.1613-	.853	.2302-	.0326	4.0497-	.2206
141	15	.950	19.33	6.75	19.99	8.551	3.8310-1	.3337-	1.079	.2943-	.0152	4.0724-	.2414
141	16	.950	.44-	.01	20.00	3.019	3.2988	.4022-	.044	.0154-	.0030	3.4085-	.1097
142	1	.950	- 3.06-	2.00	30.01	1.785	3.0469	.6985	.581-	.2564	.0222	3.1685-	.1216
142	2	.950	- 1.32-	1.00	30.01	2.455	3.1713	.5227	.242-	.1023	.0110	3.2879-	.1166

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	ϕ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
142	3	.950	.44-	.01	30.00	3.037	3.3206	.4039-	.025	.0099-	.0009	3.4216-	.1010
142	4	.950	2.19	.99	29.99	3.678	3.4294	.2709-	.277	.1101-	.0184	3.5236-	.0942
142	5	.950	3.92	1.98	29.98	4.170	3.5198	.0987-	.500	.1984-	.0373	3.6126-	.0928
142	6	.950	5.67	2.99	29.97	4.763	3.6204-	.0733-	.712	.2687-	.0610	3.7171-	.0967
142	7	.950	7.41	3.98	29.95	5.293	3.6949-	.2375-	.822	.2865-	.0801	3.8003-	.1054
142	8	.950	9.16	4.96	29.95	5.818	3.7552-	.4071-	.835	.2665-	.0934	3.8665-	.1113
142	9	.950	10.91	5.96	29.94	6.458	3.8026-	.6218-	.857	.2719-	.1038	3.9381-	.1355
142	10	.950	12.65	6.94	29.94	6.953	3.7933-	.8182-	.965	.3137-	.1047	3.9548-	.1615
142	11	.950	14.39	7.93	29.95	7.404	3.7666-	1.0107-	1.138	.3556-	.0833	3.9639-	.1973
142	12	.950	16.15	8.90	29.96	7.870	3.7555-	1.1870-	1.484	.4554-	.0664	4.0026-	.2471
142	13	.950	17.92	9.87	29.97	8.428	3.7222-	1.3873-	1.823	.5516-	.0505	4.0047-	.2825
142	14	.950	.44-	.01	30.00	3.018	3.3123	.4015-	.025	.0085-	.0010	3.4168-	.1045
143	1	.950	.46-	3.99-	89.96	3.166	3.3755	.3743	1.030-	.4318	.0640	3.4715-	.0960
143	2	.950	.46-	2.99-	89.97	3.171	3.3547	.3723	.785-	.3380	.0488	3.4496-	.0949
143	3	.950	.46-	1.99-	89.98	3.165	3.3574	.3771	.515-	.2277	.0309	3.4493-	.0919
143	4	.950	.46-	1.00-	89.99	3.140	3.3618	.3817	.265-	.1097	.0132	3.4556-	.0938
143	5	.950	.47-	.00-	90.00	3.165	3.3573	.3830-	.004	.0012-	.0023	3.4532-	.0959
143	6	.950	.46	1.00-	90.01	3.163	3.3473	.3742-	.244	.1031-	.0167	3.4410-	.0937
143	7	.950	.46	1.99-	90.02	3.170	3.3295	.3604-	.499	.2130-	.0323	3.4241-	.0946
143	8	.950	.46	2.99-	90.03	3.227	3.3574	.3529-	.749	.3153-	.0481	3.4501-	.0927
143	9	.950	.46	3.99-	90.04	3.276	3.3699	.3449-	1.014	.4151-	.0638	3.4653-	.0954
143	10	.950	.46-	.00-	90.00	3.141	3.3376	.3776-	.004	.0039-	.0011	3.4358-	.0982
144	3	.950	8.47-	4.00-	26.66	5.691	3.7327-	.3480	.781-	.2553	.0756	3.8590-	.1263
144	4	.950	8.47-	2.99-	20.57	5.625	3.7572-	.3111	.560-	.1915	.0557	3.8743-	.1171
144	5	.950	8.47-	1.99-	14.08	5.563	3.7709-	.2813	.348-	.1219	.0358	3.8806-	.1097
144	6	.950	8.47-	1.00-	7.19	5.533	3.7597-	.2810	.161-	.0554	.0173	3.8693-	.1096
144	7	.950	8.47-	.00-	.00	5.517	3.7684-	.2710-	.036	.0086-	.0016	3.8733-	.1049
144	8	.950	8.47	1.00	7.19	5.494	3.7745-	.2684-	.255	.0796-	.0195	3.8821-	.1076
144	9	.950	8.47	2.00	14.08	5.533	3.7523-	.2864-	.471	.1592-	.0384	3.8657-	.1134
144	10	.950	8.47	2.99	20.57	5.546	3.7489-	.2932-	.602	.2108-	.0594	3.8619-	.1130
144	11	.950	8.47	4.00	26.65	5.591	3.7264-	.3236-	.759	.2572-	.0796	3.8449-	.1185
145	1	.950	16.46-	4.02-	14.20	7.438	3.7394-	.2845	.605-	.1175	.0048	3.9187-	.1723
145	2	.950	16.46-	3.04-	10.80	7.671	3.8349-	1.0070	.492-	.0877-	.0043	4.0114-	.1768
145	3	.950	16.47-	2.00-	7.20	7.761	3.8751-	1.0001	.285-	.0527-	.0035	4.0510-	.1759
145	4	.950	16.49-	.99-	3.60	7.747	3.8761-	.9569	.096-	.0331	.0096	4.0461-	.1700

TABLE IIIb

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
145	5	.950	16.49-	.00	.00	7.711	3.8970-	.9320	.050-	.0195	.0027	4.0633-	.1663
145	6	.950	16.49	1.00	3.60	7.695	3.9033-	.9247-	.108	.0006	.0088	4.0693-	.1660
145	7	.950	16.48	2.02	7.21	7.655	3.8753-	.9581-	.324	.0447	.0113	4.042A-	.1671
145	8	.950	16.46	3.04	10.80	7.654	3.8239-	.9945-	.520	.0976	.0055	4.0024-	.1785
145	9	.950	16.46	4.02	14.20	7.530	3.7919-	.9877-	.667	.1310-	.0051	3.9734-	.1815
145	10	.950	16.49-	.00	.00	7.736	3.9003-	.9339	.050-	.0210	.0039	4.0720-	.1717
145	11	.950	16.49-	.00	.00	7.744	3.8993-	.9398	.050-	.0211	.0039	4.0681-	.1688
146	1	.750	3.76	.01-	.00	.920	2.3716	.7209	.093-	.0705-	.0086	2.4895-	.1179
146	2	.750	1.76-	.00-	.00	1.566	2.5219	.5476	.042-	.0243-	.0018	2.6241-	.1022
146	3	.750	.75-	.00	.00	1.956	2.5878	.4346	.071-	.0432	.0028	2.6830-	.0952
146	4	.750	.25-	.00	.00	2.308	2.6593	.3389	.082-	.0477	.0044	2.7553-	.0960
146	5	.750	2.27-	.00-	.00	2.896	2.8451	.2294-	.001-	.0006-	.0038	2.9293-	.0842
146	6	.750	4.28-	.00-	.00	3.599	2.9558	.0372-	.038	.0151-	.0048	3.0301-	.0743
146	7	.750	6.28-	.00-	.00	4.267	3.0664-	.1684-	.047	.0168-	.0045	3.1432-	.0768
146	8	.750	8.28-	.00-	.00	4.938	3.1744-	.3774-	.027	.0063-	.0028	3.2569-	.0825
146	9	.750	10.28-	.00-	.00	5.587	3.2572-	.5880-	.015	.0028-	.0025	3.3567-	.0995
146	10	.750	12.29-	.00-	.00	6.202	3.3438-	.7661-	.014	.0032-	.0005	3.4560-	.1122
146	11	.750	14.29-	.00-	.00	6.722	3.4344-	.9100-	.009	.0109-	.0011	3.5738-	.1394
146	12	.750	16.32-	.00	.00	7.097	3.4711-	.9252-	.018	.0028	.0009	3.6195-	.1484
146	13	.750	20.33-	.00-	.00	8.038	3.5327-1	.1903	.025-	.0076-	.0011	3.7219-	.1892
146	14	.750	.25-	.00	.00	2.371	2.6629	.3383	.084-	.0419	.0044	2.7592-	.0963
147	4	.950	3.64-	.00-	.00	1.075	2.7528	.7892-	.058	.0242-	.0021	2.9241-	.1713
147	5	.950	1.62-	.01	.00	1.566	2.9336	.7106	.048	.0101	.0063	3.0900-	.1564
147	6	.950	.61-	.00-	.00	2.135	3.0533	.5635	.023	.0034-	.0002	3.2004-	.1471
147	7	.950	.41-	.00-	.00	2.776	3.1899	.4278	.001	.0005-	.0020	3.3277-	.1378
147	8	.950	2.44-	.00-	.00	3.385	3.3506	.2925-	.028	.0028-	.0019	3.4641-	.1135
147	9	.950	4.45-	.00-	.00	3.926	3.4561	.1573-	.048	.0119-	.0027	3.5692-	.1131
147	10	.950	6.46-	.00-	.00	4.505	3.5691-	.0013-	.047	.0106-	.0027	3.6859-	.1168
147	11	.950	8.46-	.00-	.00	5.164	3.6510-	.2072-	.030	.0065-	.0019	3.7717-	.1207
147	12	.950	10.46-	.00-	.00	5.844	3.7447-	.4331-	.029	.0074-	.0023	3.8670-	.1223
147	13	.950	12.45-	.00-	.00	6.551	3.7949-	.6716-	.049	.0226-	.0038	3.9240-	.1291
147	14	.950	14.46-	.00-	.00	7.225	3.8595-	.8647	.028-	.0003-	.0062	3.9964-	.1369
147	15	.950	16.47-	.00	.00	7.553	3.8356-	.9410-	.027	.0015	.0062	3.9874-	.1518
147	16	.950	20.45	.02	.01	8.676	3.7990-1	.3792-	.381	.0756	.0129	3.9927-	.1937
147	17	.950	.42-	.00-	.00	2.753	3.2130	.4294-	.016	.0003-	.0021	3.3442-	.1312
147	18	.950	.42-	.00-	.00	2.748	3.2163	.4292-	.016-	.0011-	.0010	3.3443-	.1280

TABLE IIIb

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
148	3	.950	.43-	3.99-	89.96	2.857	3.2403	.3986	1.151-	.4604	.0653	3.3695-	.1292
148	4	.950	.44-	2.99-	89.97	2.893	3.2465	.4144	.841-	.3405	.0456	3.3748-	.1283
148	5	.950	.45-	2.00-	89.98	2.892	3.2552	.4181	.536-	.2183	.0267	3.3800-	.1248
148	6	.950	.45-	1.00-	89.99	2.912	3.2549	.4148	.284-	.1147	.0135	3.3773-	.1224
148	7	.950	.45-	.00-	90.00	2.893	3.2291	.4078	.029-	.0166	.0005	3.3557-	.1266
148	8	.950	.45	1.00-	90.01	2.909	3.2479	.4099-	.219	.0779-	.0117	3.3710-	.1231
148	9	.950	.45	2.00-	90.01	2.877	3.2521	.4202-	.497	.1840-	.0260	3.3790-	.1269
148	10	.950	.45	3.00-	90.03	2.935	3.2658	.4098-	.809	.3074-	.0449	3.3954-	.1296
148	11	.950	.44	4.00-	90.04	2.986	3.2228	.3816-	1.120	.4301-	.0629	3.3646-	.1418
148	12	.950	.45-	.00-	90.00	2.926	3.2448	.4107	.022-	.0139	.0004	3.3724-	.1276
149	3	.950	- 3.68	.01-	.00	.795	2.0281	.7499	.088-	.0708-	.0014	2.1805-	.1524
149	4	.950	- 1.66	.01-	.00	1.427	2.1753	.6261	.076-	.0654-	.0011	2.3144-	.1391
149	5	.950	- .65	.01-	.00	1.690	2.2423	.5652	.055-	.0597-	.0020	2.3700-	.1277
149	6	.950	.36	.01	.00	2.061	2.3197	.4921	.058-	.0551	.0003	2.4402-	.1205
149	7	.950	2.39-	.00	.00	2.740	2.4287	.3590	.089-	.0464	.0031	2.5395-	.1108
149	8	.950	4.42-	.00	.00	3.497	2.5599	.2023	.058-	.0230	.0033	2.6632-	.1033
149	9	.950	6.47-	.00-	.00	4.797	2.9391-	.0322-	.092	.0274-	.0028	3.0450-	.1059
149	10	.950	8.48-	.00-	.00	5.663	3.0652-	.2959-	.081	.0294-	.0026	3.1676-	.1024
149	11	.950	10.48-	.00-	.00	6.566	3.1349-	.5809-	.034	.0174-	.0034	3.2571-	.1222
149	12	.950	12.49-	.01-	.00	7.423	3.2491-	.8317	.015	.0123-	.0030	3.3771-	.1280
149	13	.950	14.50-	.00-	.00	8.016	3.3111-	.9755	.017	.0111-	.0048	3.4518-	.1407
149	14	.950	16.51-	.00	.00	8.551	3.3384-1	.1203	.007-	.0028	.0045	3.4915-	.1531
149	15	.950	20.53	.01	.01	9.762	3.3718-1	.4917-	.160	.0043	.0103	3.5421-	.1703
149	16	.950	.37-	.01-	.00	2.076	2.3455	.4966-	.108	.0703-	.0073	2.4631-	.1176
150	1	1.050	- 3.58-	.01-	.00	.381	2.3958	1.0959-	.134	.0762-	.0047	2.6749-	.2791
150	2	1.050	- 1.54-	.01-	.01	.985	2.5323	1.0075-	.176	.0954-	.0083	2.8026-	.2703
150	3	1.050	- .53-	.01-	.01	1.265	2.6223	.9576-	.176	.0888-	.0092	2.8785-	.2562
150	4	1.050	.48-	.01-	.01	1.605	2.6782	.8799-	.195	.0963-	.0112	2.9201-	.2419
150	5	1.050	2.50-	.00-	.01	2.378	2.7424	.6693-	.164	.0711-	.0105	2.9798-	.2374
150	6	1.050	4.50-	.00-	.01	3.389	2.8933	.3597-	.178	.0659-	.0110	3.1199-	.2266
150	7	1.050	6.50-	.00-	.01	4.568	3.0855-	.0225-	.150	.0561-	.0113	3.3062-	.2207
150	8	1.050	8.52	.01	.01	5.896	3.3555-	.3964-	.089	.0027	.0113	3.5746-	.2191
150	9	1.050	10.54-	.00	.00	7.200	3.5723-	.7434-	.054	.0094	.0012	3.8064-	.2341
150	10	1.050	12.56-	.00	.00	8.167	3.7032-1	.0137	.035	.0002	.0031	3.9437-	.2405
150	11	1.050	14.58-	.00	.00	8.844	3.7602-1	.1883-	.003	.0125	.0020	4.0104-	.2502
150	12	1.050	16.59-	.00	.00	9.515	3.7603-1	.3794-	.032	.0105	.0021	4.0177-	.2574
150	13	1.050	20.59-	.00	.00	10.868	3.8089-1	.8087	.052-	.0094	.0007	4.0664-	.2575

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
150	14	1.050	.49-	.01-	.01	1.588	2.6838	.8862-	.193	.0955-	.0101	2.9257-	.2419
151	2	1.000	- 3.62-	.00	.00	.550	2.2449	.9793	.101-	.0576	.0015	2.4517-	.2068
151	3	1.000	- 1.58	.01	.00	1.160	2.4125	.8908	.103-	.0623	.0062	2.5850-	.1725
151	4	1.000	- .57-	.00	.00	1.483	2.4859	.8253	.120-	.0652	.0052	2.6545-	.1686
151	5	1.000	.45-	.00	.00	1.856	2.5494	.7407	.128-	.0655	.0052	2.7113-	.1619
151	6	1.000	2.47-	.00	.00	2.586	2.6552	.5732	.098-	.0473	.0052	2.8032-	.1480
151	7	1.000	4.49-	.00	.00	3.433	2.7928	.3608	.056-	.0183	.0037	2.9343-	.1415
151	8	1.000	6.50-	.00	.00	4.436	2.9864	.0616-	.011	.0097	.0043	3.1211-	.1347
151	9	1.000	8.55-	.00	.00	6.097	3.3935-	.3263-	.050	.0121	.0009	3.5456-	.1521
151	10	1.000	10.54-	.00-	.00	7.054	3.4554-	.6395-	.005	.0043-	.0012	3.6336-	.1782
151	11	1.000	12.55-	.00	.00	7.920	3.5247-	.9121	.033-	.0023	.0010	3.7213-	.1966
151	12	1.000	14.55-	.00-	.00	8.535	3.5679-	1.0762	.019-	.0011-	.0007	3.7836-	.2157
151	13	1.000	16.56-	.00	.00	9.233	3.6403-	1.2727-	.025	.0013	.0043	3.8626-	.2223
151	14	1.000	20.57	.01	.00	10.486	3.6637-	1.6502-	.193	.0323	.0037	3.8948-	.2311
151	15	1.000	.44-	.00-	.01	1.806	2.5462	.7476-	.162	.0779-	.0105	2.7088-	.1626
152	1	.950	- 3.68-	.01-	.00	.811	2.0136	.7498-	.177	.1061-	.0010	2.1763-	.1627
152	2	.950	- 1.65-	.01-	.00	1.466	2.1682	.6274-	.135	.0978-	.0018	2.3190-	.1508
152	3	.950	- .64-	.01-	.00	1.743	2.2541	.5774-	.123	.0803-	.0039	2.3923-	.1382
152	7	.950	.38-	.01-	.00	2.120	2.3548	.5056-	.105	.0726-	.0061	2.4736-	.1188
152	8	.950	2.39	.01-	.01	2.769	2.4223	.3472-	.177	.0509-	.0094	2.5379-	.1156
152	9	.950	2.11-	.00-	.00-	1.199	2.4571	.7282-	.172	.0567-	.0088	2.5695-	.1124
152	10	.950	4.42-	.00-	.01	3.506	2.5635	.2104-	.124	.0463-	.0102	2.6686-	.1051
152	11	.950	6.48-	.00-	.00	4.831	2.9514-	.0348-	.075	.0234-	.0018	3.0583-	.1069
152	13	.950	10.48	.01	.06	6.495	3.1310-	.5625-	.019	.0136	.1085	3.2587-	.1277
152	17	.950	10.48	.01	.06	6.497	3.1411-	.5594-	.011	.0096	.1103	3.2637-	.1226
152	18	.950	12.49-	.01-	.00	7.346	3.2331-	.8169	.023	.0110-	.0030	3.3670-	.1339
152	19	.950	14.51-	.01-	.00	7.991	3.2876-	.9633	.033	.0072-	.0014	3.4392-	.1516
152	20	.950	16.50	.16	.57	7.838	3.1891-	.9474	.001-	.0394	1.0136	3.4348-	.2457
152	21	.950	20.49	.02	.01	9.398	3.3567-	1.4834-	.186	.0064	.0123	3.5317-	.1750
153	15	.950	.37-	.01	10.00	2.057	2.4340	.5033-	.090	.0653-	.0051	2.4450-	.0110
153	16	.950	- 1.63-	.36	10.00	1.398	2.1497	.6256-	.032	.0499	.0014	2.2940-	.1443
153	17	.950	- .63-	.18	10.00	1.764	2.2313	.5688-	.060	.0568-	.0018	2.3688-	.1375
153	18	.950	.37-	.01	10.00	2.048	2.3128	.5066-	.082	.0626-	.0051	2.4477-	.1349
153	19	.950	2.37	.35	9.99	2.781	2.3983	.3530-	.228	.0846-	.0150	2.5232-	.1249
153	20	.950	4.36	.70	9.99	3.456	2.5585	.2215-	.342	.1184-	.0226	2.6685-	.1100

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_{l}	C_{A_u}	ΔC_A
153	21	.950	6.39	1.03	9.98	4.798	2.9518-	.0180-	.377	.1372-	.0266	3.0666-	.1148
153	22	.950	8.37	1.38	9.98	5.626	3.0347-	.2798-	.436	.1640-	.0374	3.1540-	.1193
153	23	.950	10.33	1.72	9.97	6.518	3.1132-	.5616-	.400	.1714-	.0483	3.2489-	.1357
153	24	.950	12.31	2.06	9.98	7.337	3.2068-	.8145-	.443	.1771-	.0390	3.3553-	.1485
153	25	.950	14.28	2.41	9.99	7.970	3.2467-1	.0134-	.514	.1720-	.0234	3.4156-	.1689
153	26	.950	16.29	2.75	9.98	8.541	3.3089-1	.1253-	.471	.1541-	.0339	3.4844-	.1755
153	27	.950	20.24	3.40	9.99	9.708	3.3305-1	.4993-	.277	.1084-	.0244	3.5454-	.2149
153	28	.950	.37-	.01	10.00	2.046	2.2943	.4954-	.081	.0637-	.0051	2.4351-	.1408
154	1	.950	- 3.46-	1.37	20.00	.831	1.9530	.6954	.325-	.0927	.0083	2.1019-	.1489
154	2	.950	- 1.53-	.70	20.00	1.396	2.1649	.6233	.101-	.0040	.0055	2.3022-	.1373
154	3	.950	.37-	.02	20.00	2.034	2.2945	.4985-	.072	.0603-	.0053	2.4313-	.1368
154	4	.950	2.28	.68	19.99	2.728	2.3974	.3696-	.303	.1136-	.0194	2.5251-	.1277
154	5	.950	4.19	1.36	19.98	3.439	2.5467	.2276-	.536	.1868-	.0338	2.6052-	.1185
154	6	.950	6.12	2.04	19.97	4.759	2.9226-	.0158-	.644	.2530-	.0498	3.0410-	.1184
154	7	.950	8.01	2.71	19.96	5.561	3.0394-	.2607-	.768	.3087-	.0717	3.1600-	.1206
154	8	.950	9.90	3.38	19.95	6.346	3.1064-	.5204-	.790	.3257-	.0882	3.2380-	.1316
154	9	.950	11.78	4.06	19.95	7.081	3.1531-	.7690-	.830	.3194-	.0926	3.3021-	.1490
154	10	.950	13.67	4.73	19.95	7.750	3.2023-	.9736-	.879	.3210-	.0838	3.3688-	.1665
154	11	.950	15.57	5.41	19.96	8.388	3.2620-1	.1586-	.894	.2998-	.0704	3.4522-	.1902
154	12	.950	19.38	6.74	19.98	9.620	3.3005-1	.5074-	1.005	.2671-	.0330	3.5768-	.2763
154	13	.950	- .58-	.36	20.00	1.725	2.2299	.5690	.016	.0300	.0924	2.3703-	.1404
154	14	.950	.37-	.02	20.00	2.055	2.3115	.5022-	.087	.0639-	.0053	2.4411-	.1296
155	1	.950	- 3.15-	2.01	30.01	.988	1.9831	.6593	.597-	.1983	.0121	2.1261-	.1430
155	2	.950	- 1.39-	1.01	30.01	1.449	2.1479	.5978	.237-	.0515	.0097	2.2803-	.1324
155	3	.950	- .51-	.51	30.00	1.730	2.2255	.5588	.085	.0069	.0034	2.3551-	.1296
155	4	.950	.37-	.02	30.00	2.041	2.3138	.5063-	.077	.0599-	.0043	2.4400-	.1262
155	5	.950	2.13	1.00	29.99	2.663	2.3931	.3811-	.394	.1412-	.0249	2.5183-	.1252
155	6	.950	3.88	1.99	29.97	3.321	2.5394	.2482-	.724	.2554-	.0452	2.6544-	.1150
155	7	.950	5.67	2.98	29.96	4.607	2.9201	.0178-	.882	.3578-	.0694	3.0379-	.1178
155	8	.950	7.41	3.97	29.95	5.425	2.9985-	.2390-	1.007	.4320-	.0963	3.1257-	.1272
155	12	.950	14.41	7.93	29.95	8.116	3.1331-1	.1396-	1.219	.3470-	.0884	3.3649-	.2318
155	13	.950	9.17	4.96	29.94	6.151	3.0046-	.4809-	1.197	.4594-	.1138	3.1854-	.1808
155	14	.950	10.91	5.95	29.93	6.881	3.0948-	.7263-	1.120	.3970-	.1175	3.2593-	.1645
155	15	.950	12.66	6.95	29.94	7.466	3.1196-	.9374-	1.126	.3527-	.1053	3.3012-	.1816
155	16	.950	14.42	7.94	29.95	8.104	3.1454-1	.1408-	1.211	.3491-	.0870	3.3667-	.2213
155	17	.950	17.99	9.88	29.96	9.326	3.2183-1	.4957-	1.695	.4774-	.0624	3.4959-	.2776
155	18	.950	.38-	.01	30.00	2.050	2.2987	.5075-	.068	.0596-	.0042	2.4371-	.1384

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
156	1	.950	.38-	4.01-	89.97	2.296	2.3091	.4051	1.213-	.4211	.0518	2.4268-	.1177
156	2	.950	.37-	3.01-	89.98	2.249	2.2755	.3959	.875-	.2851	.0358	2.3911-	.1156
156	3	.950	.37-	2.01-	89.99	2.238	2.2748	.4092	.558-	.1649	.0251	2.3941-	.1193
156	4	.950	.38-	1.01-	89.99	2.216	2.3081	.4445	.269-	.0603	.0130	2.4263-	.1182
156	5	.950	.39-	.01-	90.00	2.193	2.3380	.4668-	.033	.0476-	.0025	2.4591-	.1211
156	6	.950	.39	1.00-	90.01	2.273	2.3395	.4650-	.350	.1406-	.0205	2.4694-	.1299
156	7	.950	.39	2.00-	90.02	2.293	2.3303	.4602-	.663	.2425-	.0373	2.4626-	.1323
156	8	.950	.39	3.00-	90.03	2.324	2.3254	.4563-	.961	.3494-	.0563	2.4591-	.1337
156	9	.950	.40	4.00-	90.04	2.374	2.3568	.4482-	1.242	.4503-	.0709	2.4878-	.1310
156	10	.950	.39-	.01-	90.00	2.216	2.3264	.4614-	.040	.0499-	.0014	2.4531-	.1267
157	2	.950	8.49-	3.99-	26.64	5.923	3.0825-	.3802	1.041-	.3919	.1034	3.2037-	.1212
157	3	.950	8.48-	2.99-	20.56	5.807	3.0718-	.3459	.800-	.3020	.0789	3.1985-	.1267
157	4	.950	8.47-	1.99-	14.07	5.737	3.0393-	.3267	.520-	.1942	.0527	3.1649-	.1256
157	5	.950	8.48-	1.01-	7.19	5.708	3.0455-	.3091	.249-	.0831	.0229	3.1629-	.1174
157	6	.950	8.48-	.00-	.00	5.663	3.0571-	.3038-	.058	.0216-	.0038	3.1690-	.1119
157	7	.950	8.48	1.00	7.18	5.683	3.0468-	.3058-	.371	.1328-	.0306	3.1609-	.1141
157	8	.950	8.47	1.99	14.07	5.728	3.0419-	.3198-	.590	.2242-	.0553	3.1599-	.1180
157	9	.950	8.49	2.98	20.55	5.798	3.0558-	.3399-	.827	.3258-	.0809	3.1785-	.1227
157	10	.950	8.48	3.98	26.64	5.860	3.0387-	.3724-	1.077	.4166-	.1012	3.1718-	.1331
157	11	.950	8.48-	.00-	.00	5.695	3.0402-	.3132-	.057	.0241-	.0016	3.1594-	.1192
158	1	.950	16.50-	4.01-	14.19	8.523	3.2657-	1.1799	.713-	.1746	.0159	3.4449-	.1792
158	2	.950	16.49-	3.02-	10.79	8.491	3.2843-	1.1595	.589-	.1542	.0164	3.4617-	.1774
158	3	.950	16.51-	1.98-	7.18	8.586	3.3046-	1.1331	.278-	.1107	.0375	3.4775-	.1729
158	4	.950	16.52-	.98-	3.59	8.573	3.3181-	1.1204	.100-	.0517	.0249	3.4858-	.1677
158	5	.950	16.53-	.00	.00	8.578	3.3472-	1.1025-	.053	.0109	.0021	3.5118-	.1646
158	6	.950	16.52	.99	3.59	8.564	3.3170-	1.1099-	.200	.0664-	.0150	3.4892-	.1722
158	7	.950	16.51	1.98	7.18	8.599	3.3278-	1.1338-	.304	.1159-	.0360	3.4995-	.1717
158	8	.950	16.51	3.01	10.78	8.584	3.3074-	1.1515-	.536	.1613-	.0310	3.4840-	.1766
158	9	.950	16.49	4.01	14.19	8.484	3.2523-	1.1756-	.741	.1872-	.0204	3.4402-	.1879
158	10	.950	16.52-	.00	.00	8.569	3.3235-	1.0988-	.046	.0099	.0024	3.4994-	.1759
159	1	.850	3.74-	.01	.00	.593	1.7972	.7652-	.200	.1173	.0018	1.9423-	.1451
159	2	.850	1.72-	.01	.00	1.212	1.9336	.6349-	.189	.1164	.0049	2.0684-	.1348
159	3	.850	.72-	.01	.00	1.544	1.9968	.5330-	.163	.1087	.0023	2.1198-	.1230
159	4	.850	.29-	.01-	.00	1.909	2.0562	.4492-	.138	.0983-	.0026	2.1732-	.1170
159	5	.850	2.31-	.01-	.01	2.509	2.1583	.3217-	.096	.0688-	.0123	2.2630-	.1047

TABLE IIIb

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
159	6	.850	4.33-	.01-	.01	3.244	2.2840	.1529-	.094	.0658-	.0133	2.3754-	.0914
159	7	.850	6.34-	.01-	.01	4.003	2.3950-	.0615-	.126	.0773-	.0121	2.4879-	.0929
159	8	.850	8.37-	.00-	.00	5.140	2.7190-	.3003-	.037	.0156-	.0032	2.8138-	.0948
159	9	.850	10.38-	.00-	.00	6.063	2.8129-	.5000-	.035	.0164-	.0013	2.9206-	.1077
159	10	.850	12.39-	.00-	.00	6.804	2.9105-	.7819	.003	.0108-	.0013	3.0317-	.1212
159	11	.850	14.41-	.00	.00	7.253	2.9637-	.8657-	.015	.0033	.0010	3.1015-	.1378
159	12	.850	16.43-	.00	.00	7.859	3.0107-	.9688-	.013-	.0006	.0009	3.1607-	.1500
159	13	.850	20.43-	.01-	.00	8.914	3.0432-1	.3232	.055	.0039-	.0030	3.2208-	.1776
159	14	.850	.29	.01-	.00	1.857	2.0308	.4445	.079-	.0792-	.0018	2.1494-	.1186
160	1	.750	3.78	.01-	.00	.501	1.7104	.7777	.058-	.0612-	.0036	1.8699-	.1595
160	2	.750	1.77-	.01	.00	1.140	1.8601	.6294-	.135	.0920	.0036	2.0025-	.1424
160	3	.750	.76-	.01	.00	1.500	1.9248	.5302-	.113	.0903	.0008	2.0574-	.1326
160	4	.750	.24-	.00-	.00	1.785	1.9699	.4630-	.062	.0384-	.0003	2.0918-	.1219
160	5	.750	2.25	.01	.00	2.386	2.0589	.3167	.034-	.0551	.0064	2.1657-	.1068
160	6	.750	4.26	.01	.00	3.054	2.1687	.1541	.006-	.0446	.0057	2.2711-	.1024
160	7	.750	6.27	.01	.00	3.779	2.2925-	.0550	.028-	.0532	.0059	2.3902-	.0977
160	8	.750	8.30-	.00-	.00	4.875	2.5950-	.2679-	.024	.0110-	.0035	2.6973-	.1023
160	9	.750	10.31-	.00-	.00	5.765	2.7075-	.5446-	.022	.0122-	.0023	2.8179-	.1104
160	10	.750	12.32-	.00-	.00	6.502	2.8096-	.7139-	.019	.0126-	.0015	2.9381-	.1285
160	11	.750	14.34-	.00	.00	7.010	2.8819-	.8223-	.019	.0042	.0010	3.0266-	.1447
160	12	.750	16.36-	.00	.00	7.553	2.9310-	.9094	.014-	.0089	.0027	3.0882-	.1572
160	13	.750	20.37-	.01-	.00	8.777	3.0022-1	.2731	.109	.0047-	.0105	3.1789-	.1767
160	14	.750	.24-	.01-	.00	1.767	1.9833	.4661-	.104	.0809-	.0033	2.1022-	.1189
161	1	.600	3.85-	.00	.00	.467	1.6828	.7688-	.081	.0528	.0026	1.8250-	.1422
161	2	.600	1.85	.01-	.00	1.052	1.8051	.6171	.047-	.0616-	.0025	1.9392-	.1341
161	3	.600	.84	.01-	.00	1.395	1.8734	.5450	.035-	.0549-	.0014	1.9941-	.1207
161	4	.600	.16	.01-	.00	1.565	1.9141	.4877	.036-	.0528-	.0003	2.0281-	.1140
161	5	.600	2.17	.01	.00	2.234	2.0057	.3329	.009-	.0444	.0062	2.1075-	.1018
161	6	.600	4.18-	.00	.00	2.970	2.1241	.1676-	.027-	.0150	.0037	2.2171-	.0930
161	7	.600	6.18	.01	.00	3.621	2.2326-	.0243	.014-	.0452	.0074	2.3212-	.0886
161	8	.600	8.18	.01	.00	4.461	2.3336-	.2838	.013-	.0528	.0084	2.4245-	.0909
161	9	.600	10.20	.01	.00	5.520	2.5806-	.5198-	.055-	.0300	.0113	2.6826-	.1020
161	10	.600	12.21-	.00-	.00	6.238	2.7207-	.6743-	.024	.0064-	.0023	2.8402-	.1195
161	11	.600	14.23-	.00	.00	6.813	2.8099-	.7768-	.021	.0050	.0023	2.9431-	.1332
161	12	.600	16.24-	.00-	.00	7.379	2.8851-	.9003-	.033	.0062-	.0060	3.0280-	.1429
161	13	.600	20.26-	.00-	.00	8.806	3.0317-1	.2846-	.010	.0139-	.0052	3.1981-	.1664
161	14	.600	.16	.01-	.00	1.614	1.9194	.4765	.020-	.0502-	.0004	2.0262-	.1068

TABLE IIIb

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
162	3	1.100	3.56-	.00-	.00	.324	2.3562	1.0937-	.123	.0602-	.0045	2.6482-	.2920
162	4	1.100	1.53-	.00-	.00	.889	2.4836	1.0085-	.132	.0650-	.0069	2.7622-	.2786
162	5	1.100	.51	.00-	.01	1.162	2.5564	.9610-	.163	.0720-	.0087	2.8174-	.2610
162	6	1.100	.50-	.00-	.01	1.513	2.6088	.8868-	.167	.0773-	.0096	2.8637-	.2549
162	7	1.100	2.51-	.00-	.01	2.318	2.7513	.6859-	.169	.0561-	.0104	3.0039-	.2526
162	8	1.100	4.52-	.00-	.00	3.387	2.9095	.3387-	.033-	.0020-	.0016	3.1500-	.2405
162	9	1.100	6.51-	.00-	.00	4.537	3.0516-	.0616-	.027	.0136-	.0049	3.2803-	.2287
162	10	1.100	8.53-	.00-	.00	5.893	3.2726-	.4539-	.026	.0092-	.0008	3.5060-	.2334
162	11	1.100	10.54-	.00	.00	6.857	3.4158-	.7075	.003	.0006	.0039	3.6593-	.2435
162	12	1.100	12.55-	.00	.00	7.685	3.4755-	.9498-	.054	.0148	.0032	3.7279-	.2524
162	13	1.100	14.58-	.00	.00	8.468	3.5426-	1.1379-	.027	.0036	.0020	3.8089-	.2663
162	14	1.100	16.57	.01	.00	9.133	3.5302-	1.3842-	.108	.0163	.0024	3.8048-	.2746
162	15	1.100	20.57-	.00	.00	10.789	3.6096-	1.9033-	.034-	.0025	.0031	3.9137-	.3041
162	16	1.100	.49-	.00	.00	1.448	2.6095	.8921	.123-	.0587	.0048	2.8660-	.2565
163	3	1.100	3.62-	.00	.01	.953	2.0512	.7405	.000-	.0036	.0095	2.3260-	.2748
163	4	1.100	1.57-	.00	.01	1.352	2.2156	.7447	.047-	.0285	.0078	2.4480-	.2324
163	5	1.100	.55-	.00	.01	1.569	2.2958	.7326	.055-	.0345	.0083	2.5161-	.2203
163	6	1.100	.47-	.00	.00	1.813	2.3621	.7161	.065-	.0335	.0078	2.5794-	.2173
163	7	1.100	2.50-	.00	.00	2.335	2.5148	.6461-	.024-	.0065	.0063	2.7231-	.2083
163	8	1.100	4.54-	.00-	.00	3.191	2.7107	.4607-	.098	.0384-	.0041	2.9075-	.1968
163	9	1.100	6.56-	.00-	.00	4.061	2.8663	.2422-	.095	.0391-	.0069	3.0652-	.1989
163	10	1.100	8.59-	.00-	.00	5.139	3.0674-	.0177-	.056	.0145-	.0063	3.2738-	.2064
163	11	1.100	10.63-	.00	.00	6.005	3.1760-	.1966	.013-	.0059	.0031	3.3976-	.2216
163	12	1.100	12.64	.00	.01	6.782	3.2621-	.4031-	.019-	.0003	.0095	3.5008-	.2387
163	13	1.100	14.67-	.00	.00	7.586	3.3495-	.5955	.010-	.0104	.0023	3.6022-	.2527
163	14	1.100	16.68	.01	.01	8.341	3.3419-	.8236-	.071-	.0001	.0127	3.6017-	.2598
163	15	1.100	20.69-	.00	.00	9.705	3.3831-	1.2426-	.022-	.0092	.0044	3.6627-	.2796
163	16	1.100	.55-	.00-	.00	1.594	2.3074	.7332-	.091	.0433-	.0063	2.5268-	.2194
163	17	1.100	.47-	.00-	.00	1.807	2.3791	.7189-	.109	.0460-	.0059	2.5902-	.2111
164	1	.950	3.72-	.01-	.00	1.311	1.7949	.4818-	.052	.0484-	.0043	1.9182-	.1233
164	2	.950	1.67-	.01-	.00	1.752	1.9876	.4836-	.054	.0519-	.0054	2.0990-	.1114
164	3	.950	.65-	.00-	.00	1.948	2.0984	.4891-	.070	.0463-	.0060	2.1968-	.0984
164	4	.950	.37-	.00-	.00	2.133	2.1641	.4870-	.053	.0397-	.0064	2.2580-	.0939
164	5	.950	2.40-	.00-	.00	2.655	2.3134	.4326-	.077	.0278-	.0067	2.3939-	.0805
164	6	.950	4.43-	.00-	.00	3.316	2.4615	.3111-	.097	.0318-	.0052	2.5355-	.0740
164	7	.950	6.50-	.00-	.00	4.634	2.8529	.1025-	.075	.0206-	.0021	2.9228-	.0699
164	8	.950	8.51-	.00-	.00	5.267	2.9234-	.0655-	.049	.0197-	.0031	3.0037-	.0803

UNCLASSIFIED

TABLE IIIb

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
164	2	.950	10.54-	.00-	.00	5.988	3.0038-	.2248	.007	.0059-	.0028	3.0972-	.0934
164	10	.950	12.56-	.00	.00	6.589	3.0752-	.3503	.041-	.0015	.0022	3.1866-	.1114
164	11	.950	14.57-	.00	.00	7.123	3.1462-	.4696	.003	.0008	.0004	3.2729-	.1267
164	12	.950	16.59-	.00	.00	7.668	3.1864-	.6136	.026-	.0094	.0020	3.3256-	.1392
164	13	.950	20.59	.01	.00	8.561	3.1470-	.8938-	.193	.0161	.0078	3.3137-	.1667
164	14	.950	.37-	.01-	.00	2.125	2.1708	.4904-	.044	.0396-	.0064	2.2658-	.0950
165	2	.950	.38-	4.03-	89.99	2.350	2.1208	.4009	.810-	.1975	.0222	2.2163-	.0955
165	3	.950	.38-	3.02-	89.99	2.289	2.1278	.4237	.593-	.1339	.0135	2.2197-	.0919
165	4	.950	.38-	2.02-	90.00	2.234	2.1313	.4431	.385-	.0722	.0071	2.2216-	.0903
165	5	.950	.39-	1.01-	90.00	2.224	2.1579	.4688	.198-	.0219	.0018	2.2508-	.0929
165	6	.950	.40-	.01-	90.00	2.244	2.1768	.4807-	.000	.0201-	.0048	2.2725-	.0957
165	7	.950	.40	1.01-	90.01	2.229	2.1821	.4815-	.194	.0529-	.0104	2.2803-	.0982
165	8	.950	.40	2.01-	90.01	2.329	2.1923	.4687-	.400	.0944-	.0171	2.2889-	.0966
165	9	.950	.40	3.02-	90.01	2.389	2.1767	.4418-	.594	.1381-	.0239	2.2749-	.0982
165	10	.950	.40	4.03-	90.02	2.471	2.2031	.4255-	.764	.1770-	.0318	2.2981-	.0950
165	11	.950	.40-	.01-	90.00	2.208	2.1913	.4944-	.000	.0203-	.0036	2.2819-	.0906
166	1	.950	8.52-	4.02-	26.68	5.462	2.8648-	.1391	.473-	.0774	.0392	2.9916-	.1268
166	2	.950	8.51-	3.00-	20.58	5.394	2.8716-	.1198	.370-	.0624	.0285	2.9875-	.1159
166	3	.950	8.51-	2.00-	14.09	5.360	2.9159-	.0911	.244-	.0375	.0175	3.0197-	.1038
166	4	.950	8.51-	1.01-	7.20	5.287	2.8912-	.0763	.094-	.0088	.0068	2.9918-	.1006
166	5	.950	[illegible]	.00-	.00	5.255	2.8867-	.0703-	.049	.0182-	.0030	2.9821-	.0954
166	6	.950	[illegible]	1.01	7.19	5.320	2.8854-	.0812-	.170	.0374-	.0098	2.9835-	.0981
166	7	.950	[illegible]	2.00	14.09	5.314	2.9048-	.0887-	.250	.0494-	.0166	3.0042-	.0994
166	8	.950	8.51	3.00	20.59	5.375	2.8983-	.1117-	.344	.0672-	.0233	3.0083-	.1100
166	9	.950	8.51	4.01	26.68	5.391	2.8871-	.1286-	.460	.0866-	.0334	3.0080-	.1209
166	10	.950	8.51-	.00-	.00	5.405	2.9645-	.0762-	.042	.0173-	.0021	3.0712-	.1067
167	1	.950	16.56-	4.04-	14.20	7.440	3.0404-	.6263	.252	.0911-	.0033	3.2241-	.1837
167	2	.950	16.57-	3.05-	10.80	7.478	3.0832-	.5991	.255	.0345-	.0002	3.2570-	.1738
167	3	.950	16.57-	2.00-	7.19	7.604	3.0888-	.6152-	.006	.0394	.0137	3.2640-	.1752
167	4	.950	16.58-	1.00-	3.60	7.606	3.1189-	.6077	.010	.0121	.0085	3.2845-	.1657
167	5	.950	16.57-	.00	.00	7.596	3.1224-	.6197	.025-	.0095	.0023	3.2882-	.1658
167	6	.950	16.58	1.00	3.60	7.669	3.1413-	.6267-	.060-	.0131	.0004	3.3046-	.1633
167	7	.950	16.58	2.01	7.20	7.594	3.1239-	.5974-	.069-	.0392-	.0032	3.2929-	.1690
167	8	.950	16.57	3.04	10.80	7.492	3.1005-	.5934-	.172-	.0541-	.0027	3.2752-	.1747
167	9	.950	16.56	4.04	14.20	7.464	3.0699-	.6308-	.216-	.0968	.0052	3.2555-	.1856

UNCLASSIFIED

TABLE IIIb

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
167	10	.950	16.58-	.00	.00	7.621	3.1171-	.6211	.041-	.0119	.0011	3.2908-	.1737
168	1	.750	3.81-	.00	.00	1.002	1.5721	.5008	.010-	.0246	.0070	1.7272-	.1551
168	2	.750	1.78	.01	.00	1.413	1.7220	.4803	.002-	.0269	.0073	1.8580-	.1360
168	3	.750	.77-	.01-	.00	1.637	1.8011	.4732	.005	.0434-	.0006	1.9271-	.1260
168	4	.750	.25-	.01-	.00	1.896	1.8763	.4517	.026	.0344-	.0012	1.9925-	.1162
168	5	.750	2.26-	.00	.00	2.281	1.9737	.3892	.009-	.0280	.0062	2.0793-	.1056
168	6	.750	4.28	.01	.00	2.888	2.1083	.2736-	.010-	.0315	.0087	2.2069-	.0986
168	7	.750	6.30	.01	.00	3.601	2.2212	.1127-	.001-	.0453	.0094	2.3174-	.0962
168	8	.750	8.33-	.00	.00	4.337	2.4649	.0099-	.003	.0005	.0011	2.5657-	.1008
168	9	.750	10.35-	.00-	.00	5.015	2.5521-	.1438-	.009	.0063-	.0041	2.6625-	.1104
168	10	.750	12.36-	.00-	.00	5.713	2.6323-	.2908	.057-	.0047-	.0015	2.7573-	.1250
168	11	.750	14.38-	.00	.00	6.284	2.6973-	.4062	.024-	.0140	.0058	2.8391-	.1418
168	12	.750	16.40-	.00	.00	6.845	2.7643-	.5257	.029-	.0076	.0024	2.9191-	.1548
168	13	.750	20.41	.01	.00	7.937	2.8245-	.8232-	.068-	.0140	.0090	2.9977-	.1732
168	14	.750	.24-	.01-	.00	1.821	1.8635	.4562	.004	.0377-	.0012	1.9808-	.1173
169	3	1.100	3.64-	.00	.00	1.930	2.1583	.3636	.047-	.0121	.0004	2.3564-	.1981
169	4	1.100	1.61-	.00	.00	2.674	2.3214	.2166	.082-	.0245	.0001	2.5183-	.1969
169	5	1.100	.42-	.00	.00	3.275	2.[illegible]994	.1103	.086-	.0256	.0011	2.6992-	.1998
169	6	1.100	.59-	.00	.00	2.996	2.4108	.1565	.077-	.0238	.0009	2.6169-	.2061
169	7	1.100	2.46-	.00-	.00	3.684	2.6701	.0792	.053-	.0286-	.0004	2.8844-	.2143
169	8	1.100	4.50-	.00-	.00	4.112	2.8333	.0611-	.026-	.0004-	.0006	3.0568-	.2235
169	9	1.100	6.55-	.00-	.00	4.435	2.9466	.0730-	.028	.0017-	.0012	3.1774-	.2308
169	10	1.100	8.60-	.00	.00	4.772	3.0509	.0957	.001-	.0095	.0012	3.2874-	.2365
169	11	1.100	10.64	.00	.01	5.523	3.1438-	.0194	.052-	.0192	.0113	3.3825-	.2387
169	12	1.100	12.65-	.00	.00	6.198	3.1264-	.2243-	.056	.0142	.0055	3.3734-	.2470
169	13	1.100	14.67-	.00-	.00	6.903	3.1617-	.4103	.045-	.0059-	.0004	3.4178-	.2561
169	14	1.100	16.68-	.00	.00	7.614	3.2222-	.5855-	.072	.0167	.0063	3.4949-	.2727
169	15	1.100	20.72	.01	.00	9.004	3.2969-	.9516-	.189	.0334	.0030	3.6286-	.3317
169	16	1.100	.43-	.00-	.00	3.286	2.4672	.1103-	.107	.0346-	.0010	2.7021-	.2349
170	2	1.050	3.64-	.00-	.00	2.049	2.1950	.3678	.057-	.0088-	.0004	2.3871-	.1921
170	3	1.050	1.62-	.00-	.00	2.777	2.3725	.2163	.081-	.0160-	.0006	2.5731-	.2006
170	4	1.050	.60-	.00	.00	3.132	2.4640	.1544	.083-	.0165	.0003	2.6667-	.2027
170	5	1.050	.41-	.00	.00	3.411	2.5532	.1052	.076-	.0195	.0014	2.7573-	.2041
170	6	1.050	2.45-	.00	.00	3.946	2.7138	.0338	.073-	.0192	.0008	2.9261-	.2123
170	7	1.050	4.49-	.00-	.00	4.351	2.8687	.0149	.048-	.0164-	.0004	3.0864-	.2177

UNCLASSIFIED

TABLE IIIb

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
170	8	1.050	6.54-	.00-	.00	4.635	3.0186	.0578	.027-	.0021-	.0010	3.2522-	.2336
170	9	1.050	8.58-	.00	.00	4.944	3.1250	.0929-	.023	.0114	.0006	3.3735-	.2485
170	10	1.050	10.63	.00	.01	5.794	3.2948-	.0515	.126-	.0517	.0084	3.5431-	.2483
170	11	1.050	12.64-	.00	.00	6.567	3.3065-	.2662	.011	.0027	.0045	3.5531-	.2466
170	12	1.050	14.66-	.00	.00	7.376	3.3793-	.4712-	.021	.0101	.0032	3.6246-	.2453
170	13	1.050	16.68-	.00	.00	8.041	3.4335-	.6389-	.047	.0155	.0022	3.6962-	.2627
170	14	1.050	20.70-	.01	.00	9.243	3.5234-	.9836	.115-	.0205	.0012	3.8292-	.3058
170	15	1.050	.42-	.00	.00	3.439	2.5271	.1056	.084-	.0181	.0014	2.7497-	.2226
171	1	1.000	3.67-	.01-	.00	2.052	2.1001	.3587	.072-	.0104-	.0010	2.1688-	.0687
171	2	1.000	1.63-	.00-	.00	2.783	2.2974	.2244	.103-	.0251-	.0012	2.3661-	.0687
171	3	1.000	.61-	.00-	.00	3.156	2.4191	.1596	.120-	.0306-	.0014	2.4829-	.0638
171	4	1.000	.40-	.00-	.00	3.473	2.4958	.1082	.099-	.0263-	.0002	2.5669-	.0711
171	5	1.000	2.43-	.00-	.00	4.024	2.7025	.0233	.066-	.0202-	.0001	2.7798-	.0773
171	6	1.000	4.47-	.00-	.00	4.448	2.8417-	.0064	.048-	.0158-	.0024	2.9414-	.0997
171	7	1.000	6.51-	.00-	.00	4.680	2.9680	.0370	.018	.0016-	.0029	3.0907-	.1227
171	8	1.000	8.55-	.00	.00	4.894	3.0509	.0904	.111-	.0430	.0063	3.1883-	.1374
171	9	1.000	10.59-	.00	.00	5.835	3.1669-	.1064	.030-	.0141	.0039	3.3201-	.1532
171	10	1.000	12.60-	.00	.00	6.514	3.1792-	.2843-	.021	.0165	.0043	3.3366-	.1574
171	11	1.000	14.62-	.00	.00	7.214	3.2463-	.4555-	.006	.0052	.0023	3.4067-	.1604
171	12	1.000	16.64-	.00	.00	7.857	3.3027-	.6139-	.055	.0184	.0025	3.4781-	.1754
171	13	1.000	20.66	.01	.00	9.130	3.4078-	.9557-	.162	.0323	.0057	3.6108-	.2030
171	14	1.000	.41-	.00	.00	3.487	2.4743	.1085	.107-	.0262	.0008	2.5676-	.0928
172	1	.950	3.71-	.01-	.00	2.005	1.9029	.2632	.042	.0042-	.0053	1.9677-	.0648
172	2	.950	1.68-	.01-	.00	2.689	2.1214	.1465	.060-	.0033-	.0041	2.1763-	.0549
172	3	.950	.66-	.00-	.00	3.084	2.2159	.0841	.069-	.0091-	.0052	2.2708-	.0549
172	4	.950	.35-	.01-	.00	3.343	2.3062	.0387	.071-	.0096-	.0050	2.3504-	.0532
172	5	.950	2.38-	.00-	.00	3.902	2.4804-	.0408	.044-	.0014-	.0057	2.5376-	.0572
172	6	.950	4.41-	.01-	.00	4.347	2.6192-	.0826	.028	.0138-	.0081	2.6858-	.0666
172	7	.950	6.45-	.01-	.01	4.514	2.7022-	.0356-	.076	.0598-	.0095	2.7878-	.0856
172	8	.950	8.51-	.00	.00	4.911	2.8803-	.0300	.012	.0052	.0011	2.9041-	.1048
172	9	.950	10.53-	.00	.00	5.407	2.9193-	.0642	.007	.0096	.0021	3.0223-	.1030
172	10	.950	12.55-	.00	.00	6.086	2.9529-	.2336	.001	.0072	.0047	3.0528-	.0999
172	11	.950	14.56-	.00	.00	6.721	2.9878-	.3854	.017	.0003	.0010	3.0967-	.1089
172	12	.950	16.58-	.00	.00	7.331	3.0612-	.5310-	.010	.0077	.0024	3.1818-	.1206
172	13	.950	20.60	.01	.00	8.509	3.1078-	.8622-	.210	.0244	.0072	3.2515-	.1437
172	14	.950	.36-	.00-	.00	3.405	2.3128	.0755	.071-	.0102-	.0051	2.3727-	.0602

UNCLASSIFIED

TABLE IIIb
MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_l	C_{A_u}	ΔC_A
173	3	.950	.38-	4.02-	89.97	3.352	2.3190	.0715	.700-	.1854	.0510	2.4233-	.1043
173	4	.950	.39-	3.01-	89.98	3.403	2.3149	.0581	.527-	.1414	.0398	2.4102-	.0953
173	5	.950	.39-	2.01-	89.98	3.423	2.3220	.0489	.354-	.0962	.0286	2.4048-	.0828
173	6	.950	.39-	1.00-	89.99	3.423	2.3149	.0397	.173-	.0513	.0198	2.3910-	.0761
173	7	.950	.39	.00-	89.99	3.470	2.3167	.0261-	.007-	.0024	.0098	2.3808-	.0641
173	8	.950	.39	1.01-	90.00	3.499	2.3271	.0074-	.191	.0386-	.0003	2.3834-	.0563
173	9	.950	.38	2.01-	90.01	3.552	2.3289-	.0105-	.343	.0788-	.0093	2.3869-	.0580
173	10	.950	.38	3.02-	90.01	3.558	2.3131-	.0241-	.468	.1080-	.0183	2.3881-	.0750
173	11	.950	.38	4.02-	90.02	3.584	2.3166-	.0274-	.625	.1422-	.0284	2.4069-	.0903
173	12	.950	.39	.00-	89.99	3.466	2.3349	.0257	.000-	.0036	.0098	2.3977-	.0628
174	1	.950	8.50-	4.03-	26.69	5.024	2.8094-	.0309	.056	.1140	.0213	2.9134-	.1040
174	2	.950	8.51-	3.01-	20.59	4.967	2.8446	.0050-	.040	.1195	.0139	2.9513-	.1067
174	3	.950	8.51-	2.01-	14.09	5.022	2.8806	.0085-	.048	.1004	.0129	2.9950-	.1144
174	4	.950	8.51-	1.02-	7.19	4.933	2.8842	.0243	.008	.0567	.0110	3.0009-	.1167
174	5	.950	8.51-	.00	.00	4.894	2.8752	.0350	.028	.0056	.0011	2.9914-	.1162
174	6	.950	8.51	1.01	7.20	4.980	2.8953	.0180	.017-	.0481-	.0082	3.0109-	.1156
174	7	.950	8.51	2.02	14.10	4.960	2.8719	.0142	.058-	.0913-	.0080	2.9859-	.1140
174	8	.950	8.51	3.01	20.59	4.890	2.8227	.0116	.072-	.1183-	.0111	2.9322-	.1095
174	9	.950	8.51	4.02	26.69	4.956	2.8080-	.0128-	.001-	.1182-	.0177	2.9125-	.1045
174	10	.950	8.51-	.00-	.00	4.935	2.8849	.0310	.035	.0017-	.0001	2.9969-	.1120
175	1	.950	16.56-	4.03-	14.19	7.342	3.0456-	.5914	.439-	.0020	.0142	3.1749-	.1293
175	2	.950	16.57-	3.03-	10.79	7.323	3.0299-	.5453	.270	.0037	.0197	3.1665-	.1366
175	3	.950	16.57-	2.00-	7.19	7.180	3.0087-	.5038	.037	.0202	.0216	3.1472-	.1385
175	4	.950	16.57-	1.00-	3.59	7.214	3.0192-	.5093	.030	.0037	.0132	3.1537-	.1345
175	5	.950	16.57-	.00	.00	7.242	3.0257-	.5197-	.034	.0128	.0035	3.1600-	.1343
175	6	.950	16.57	1.00	3.60	7.267	3.0414-	.5243-	.171	.0261-	.0038	3.1775-	.1361
175	7	.950	16.57	2.00	7.19	7.230	3.0345-	.5188-	.215	.0222-	.0111	3.1707-	.1362
175	8	.950	16.57	3.03	10.79	7.275	3.0265-	.5380-	.299	.0130-	.0141	3.1603-	.1338
175	9	.950	16.56	4.02	14.19	7.337	3.0369-	.5975-	.446	.0102-	.0086	3.1714-	.1345
175	10	.950	16.58-	.00	.00	7.298	3.0296-	.5285-	.034	.0114	.0035	3.1639-	.1343
176	1	.850	- 3.78-	.01-	.00	1.692	1.6970	.2663	.032	.0108-	.0056	1.7714-	.0744
176	2	.850	- 1.75-	.01-	.00	2.317	1.8643	.1559	.037	.0144-	.0063	1.9303-	.0660
176	3	.850	- .74-	.01-	.00	2.633	1.9483	.1095	.039	.0155-	.0072	2.0115-	.0632
176	4	.850	.27-	.01-	.00	2.887	2.0257	.0683	.042	.0181-	.0068	2.0914-	.0657
176	5	.850	2.30-	.01-	.00	3.380	2.1781	.0024	.049	.0298-	.0084	2.2523-	.0742

TABLE IIIb

MODEL FORCE AND MOMENT COEFFICIENTS - BODY AXIS SYSTEM

MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α	β	Φ	C_N	C_A	C_{m_l}	C_Y	C_{n_l}	C_{l}	C_{A_u}	ΔC_A
176	6	.850	4.33-	.01-	.01	3.772	2.3125-	.0209-	.002	.0606-	.0147	2.3082-	.0857
176	7	.850	6.35	.01	.01	4.014	2.3082-	.0086	.075-	.0633	.0152	2.4896-	.0917
176	8	.850	8.40-	.00	.00	4.266	2.5791	.0918	.024-	.0051	.0009	2.6752-	.0961
176	9	.850	10.41-	.00	.00	4.775	2.5782-	.0350	.037	.0016	.0034	2.6685-	.0903
176	10	.850	12.42-	.01	.00	5.409	2.6157-	.2049	.057-	.0009	.0028	2.7013-	.0856
176	11	.850	14.44-	.00	.00	6.004	2.6627-	.3744	.031-	.0025	.0011	2.7559-	.0932
176	12	.850	16.46-	.00	.00	6.589	2.7248-	.4509	.069-	.0123	.0033	2.8256-	.1008
176	13	.850	20.48	.01	.00	7.762	2.7778-	.7686-	.160	.0237	.0046	2.9036-	.1258
176	14	.850	.27-	.01-	.00	2.879	2.0258	.0678	.043	.0211-	.0068	2.0932-	.0674
177	1	.750	3.82-	.01-	.00	1.577	1.6510	.2817	.022	.0178-	.0053	1.7305-	.0795
177	2	.750	1.79-	.01-	.00	2.190	1.7953	.1771	.027	.0222-	.0072	1.8701-	.0748
177	4	.750	.78-	.01-	.00	2.503	1.8798	.1360	.031	.0255-	.0066	1.9534-	.0736
177	5	.750	.23-	.01-	.00	2.766	1.9622	.0943	.021	.0229-	.0030	2.0366-	.0744
177	6	.750	2.25-	.00	.00	3.173	2.1057	.0333	.028-	.0357	.0101	2.1821-	.0764
177	7	.750	4.27	.01	.00	3.567	2.2155-	.0039	.059-	.0556	.0118	2.3031-	.0876
177	8	.750	6.29-	.00	.00	3.787	2.2943	.0067	.068-	.0357	.0066	2.3872-	.0929
177	9	.750	8.33	.01-	.00	4.018	2.4495	.0958	.085-	.0710	.0001	2.5449-	.0954
177	10	.750	10.34-	.00	.00	4.518	2.4931	.0032	.031-	.0028	.0035	2.5840-	.0909
177	11	.750	12.35-	.00	.00	5.063	2.5151-	.1458	.034	.0013	.0017	2.6041-	.0890
177	12	.750	14.37-	.00	.00	5.646	2.5563-	.2721	.005	.0048	.0075	2.6468-	.0905
177	13	.750	16.38-	.00	.00	6.227	2.6148-	.3854	.049-	.0062	.0029	2.7142-	.0994
177	14	.750	20.41-	.00	.00	7.372	2.6912-	.6769-	.114	.0205	.0035	2.8083-	.1171
177	15	.750	.23-	.00	.00	2.743	1.9365	.0881	.028	.0120	.0014	2.0143-	.0778
178	1	.600	3.87-	.00-	.00	1.558	1.6158	.2955	.016	.0148-	.0030	1.6939-	.0781
178	2	.600	1.86-	.00-	.00	2.003	1.7357	.2023	.037	.0210-	.0050	1.8143-	.0786
178	3	.600	.85-	.00	.00	2.381	1.8174	.1449	.014-	.0100	.0069	1.8933-	.0759
178	4	.600	.15-	.01-	.00	2.569	1.8998	.1147	.041	.0211-	.0072	1.9713-	.0715
178	5	.600	2.16-	.00	.00	3.027	2.0216	.0410	.043-	.0354	.0105	2.1007-	.0791
178	6	.600	4.18-	.00	.00	3.443	2.1539	.0024	.074-	.0540	.0131	2.2372-	.0834
178	7	.600	6.19-	.01-	.00	3.631	2.2510	.0176	.045	.0531-	.0139	2.3439-	.0929
178	8	.600	8.21-	.00	.00	3.869	2.3074	.0338	.115-	.0455	.0068	2.4067-	.0993
178	9	.600	10.23-	.00	.00	4.289	2.4179	.0353	.057-	.0418	.0057	2.5132-	.0953
178	10	.600	12.24-	.00	.00	4.817	2.4800-	.0801	.056-	.0040	.0040	2.5608-	.0808
178	11	.600	14.25-	.00	.00	5.330	2.4920-	.2129	.058-	.0027	.0064	2.5802-	.0882
178	12	.600	16.26-	.00	.00	5.900	2.5264-	.3327	.045-	.0042	.0068	2.6212-	.0948
178	13	.600	20.28-	.00-	.00	7.023	2.6176-	.5720	.065-	.0287-	.0013	2.7227-	.1171
178	14	.600	.15-	.00	.00	2.536	1.8742	.1172	.033-	.0030	.0060	1.9474-	.0772

TABLE IVa

MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_\beta}$	$C_{Y'}$	$C_{n'_\beta}$	$C_{\ell'}$	$C_{A'_u}$	$\Delta C_{A'}$
10	2	1.100-	4.08-	50.00-	.240	.1982-	.0494-	.017	.0010-	.0003	.3840-	.1858
10	3	1.100-	3.06-	50.00-	.165	.2015-	.0373-	.029-	.0008-	.0007	.3823-	.1808
10	4	1.100-	2.04-	50.00-	.104	.1983-	.0235-	.021-	.0038-	.0001	.3755-	.1772
10	5	1.100-	1.02-	50.00-	.063	.2025-	.0132-	.005-	.0015-	.0005	.3724-	.1699
10	6	1.100	.01-	50.00	.017	.2056	.0022-	.025-	.0043-	.0004	.3716-	.1660
10	7	1.100	1.02-	50.00	.070	.2081	.0135-	.025-	.0040-	.0003	.3718-	.1637
10	8	1.100	2.04-	50.00	.110	.2107	.0253	.007-	.0020-	.0003	.3778-	.1671
10	9	1.100	3.06-	50.00	.189	.2099	.0373-	.029-	.0037-	.0002	.3812-	.1713
10	10	1.100	4.09-	50.00	.253	.2083	.0489-	.033-	.0045-	.0001	.3866-	.1783
10	11	1.100	.00-	50.00	.004	.2055	.0007-	.021-	.0042-	.0004	.3727-	.1672
11	1	.950-	4.07	45.00-	.233	.0883-	.0458-	.019-	.0016-	.0002	.1858-	.0975
11	2	.950-	3.05	45.00-	.161	.0912-	.0331-	.007	.0001-	.0002	.1832-	.0920
11	3	.950-	2.04	45.00-	.127	.0921-	.0229-	.028-	.0020-	.0002	.1804-	.0883
11	4	.950-	1.02	45.00-	.057	.0905-	.0089	.003	.0001-	.0002	.1776-	.0871
11	5	.950	.00	45.00-	.002	.0892	.0017-	.003-	.0023-	.0003	.1756-	.0864
11	6	.950	1.01	45.00	.034	.0939	.0138-	.027-	.0031-	.0003	.1817-	.0878
11	7	.950	2.03	45.00	.097	.0894	.0265-	.007-	.0011-	.0003	.1826-	.0932
11	8	.950	3.05	45.00	.140	.0927	.0356-	.019-	.0036-	.0004	.1879-	.0952
11	9	.950	4.07	45.00	.210	.0930	.0479-	.007-	.0015-	.0005	.1921-	.0991
11	10	.950-	.00	45.00-	.011	.0879	.0004-	.012-	.0027-	.0003	.1757-	.0878
11	11	.950-	.00	45.00-	.008	.0888	.0012	.003-	.0018-	.0002	.1754-	.0866
12	2	1.100-	4.09	45.00-	.254	.2043-	.0501-	.026-	.0002-	.0003	.3835-	.1792
12	3	1.100-	3.07	45.00-	.191	.2046-	.0389-	.030-	.0001-	.0003	.3774-	.1728
12	4	1.100-	2.04	45.00-	.110	.2053-	.0245-	.007	.0012	.0001	.3747-	.1694
12	5	1.100-	1.02	45.00-	.071	.2062-	.0133-	.036-	.0001	.0001	.3708-	.1646
12	6	1.100-	.00	45.00-	.010	.2047	.0002-	.009	.0006-	.0003	.3702-	.1655
12	7	1.100	1.02	45.00	.044	.2048	.0142-	.022	.0022-	.0004	.3746-	.1698
12	8	1.100	2.04	45.00	.087	.2034	.0253-	.041-	.0004	.0000	.3781-	.1747
12	9	1.100	3.06	45.00	.151	.2051	.0375-	.033	.0002-	.0000	.3835-	.1784
12	10	1.100	4.08	45.00	.235	.2071	.0492-	.013	.0010-	.0005	.3903-	.1832
12	11	1.100-	.01	45.00-	.020	.2058-	.0016-	.029-	.0005-	.0004	.3716-	.1658
16	4	.750-	4.05	45.00-	.207	.0872-	.0443-	.002-	.0030	.0003	.1669-	.0797
16	5	.750-	3.03	45.00-	.142	.0854-	.0339	.004-	.0024	.0002	.1634-	.0780
16	6	.750-	2.02	45.00-	.092	.0882-	.0237-	.001-	.0037	.0001	.1627-	.0745
16	7	.750-	1.01	45.00-	.063	.0872-	.0118-	.011-	.0045	.0001	.1603-	.0731

TABLE IVa
MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M.S. 18.000

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_3}$	$C_{Y'}$	$C_{n'_3}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
16	8	.750	.02	45.00	.200	.0855	.0014-	.007-	.0022	.0000	.1592-	.0737
16	9	.750	1.01	45.00	.048	.0871	.0122-	.012-	.0042-	.0001	.1613-	.0742
16	10	.750	2.02	45.00	.092	.0883	.0222-	.013-	.0051	.0006	.1636-	.0753
16	11	.750	3.03	45.00	.139	.0892	.0325-	.017-	.0065	.0004	.1686-	.0794
16	12	.750	4.05	45.00	.202	.0894	.0434-	.012-	.0065	.0003	.1725-	.0831
16	13	.750	.00	45.00	.016	.0864	.0006	.002-	.0036	.0000	.1589-	.0725
20	1	.950-	4.08	45.00-	.285	.0947-	.0460-	.007-	.0014	.0004	.1892-	.0945
20	2	.950-	3.06	45.00-	.205	.0933-	.0351-	.019-	.0026	.0003	.1850-	.0917
20	3	.950-	2.04	45.00-	.132	.0949-	.0230-	.007-	.0034	.0003	.1828-	.0879
20	4	.950-	1.02	45.00-	.057	.0929-	.0100	.003-	.0019-	.0002	.1800-	.0871
20	5	.950-	.00	45.00-	.014	.0923	.0015-	.010-	.0037-	.0003	.1800-	.0877
20	6	.950	1.02	45.00	.052	.0948	.0127-	.009-	.0051	.0002	.1831-	.0883
20	7	.950	2.03	45.00	.105	.0950	.0264-	.016-	.0043	.0001	.1864-	.0914
20	8	.950	3.06	45.00	.190	.0985	.0381	.001-	.0029	.0006	.1927-	.0942
20	9	.950	4.08	45.00	.254	.0986	.0493-	.015-	.0029-	.0000	.1958-	.0972
20	10	.950-	.00	45.00-	.023	.0942	.0008-	.019-	.0045	.0002	.1817-	.0875
24	2	.950-	4.06	90.00-	.274	.1301-	.0273-	.031	.0002-	.0001	.2716-	.1415
24	3	.950-	3.05	90.00-	.187	.1346-	.0242-	.005	.0022-	.0002	.2701-	.1355
24	4	.950-	2.03	90.00-	.121	.1363-	.0187-	.018-	.0015	.0001	.2684-	.1321
24	5	.950-	1.02	90.00-	.058	.1345-	.0097-	.058-	.0029-	.0006	.2650-	.1305
24	6	.950-	.00	90.00-	.004	.1353-	.0007-	.022-	.0019-	.0002	.2640-	.1287
24	7	.950	1.02	90.00	.058	.1361	.0090-	.037-	.0032-	.0004	.2662-	.1301
24	8	.950	2.03	90.00	.116	.1318	.0177-	.014-	.0011-	.0005	.2661-	.1343
24	9	.950	3.05	90.00	.184	.1323	.0242-	.003-	.0001-	.0001	.2695-	.1372
24	10	.950	4.06	90.00	.272	.1324	.0271-	.053-	.0028	.0002	.2732-	.1408
24	11	.950-	.00	90.00	.000	.1359-	.0003-	.022-	.0019-	.0002	.2635-	.1276
28	2	.950-	4.05	45.00-	.506	.2013	.0564	.008-	.0061-	.0001	.3538-	.1525
28	3	.950-	3.03	45.00-	.340	.2027	.0400	.029-	.0050	.0002	.3526-	.1499
28	4	.950-	2.03	45.00-	.230	.2014	.0244	.006-	.0067-	.0001	.3504-	.1490
28	5	.950-	1.04	45.00-	.160	.2042	.0390-	.003-	.0058	.0002	.3537-	.1495
28	6	.950-	1.01	45.00-	.095	.2005	.0126	.018-	.0055	.0003	.3485-	.1480
28	7	.950	.00	45.00	.020	.1997	.0007	.022-	.0072	.0005	.3480-	.1483
28	8	.950	1.02	45.00	.140	.1976-	.0100	.030-	.0077	.0003	.3472-	.1497
28	9	.950	2.03	45.00	.254	.1992-	.0241	.002-	.0084	.0001	.3499-	.1506
28	10	.950	3.04	45.00	.395	.2025-	.0376	.015-	.0070	.0003	.3541-	.1514

TABLE IVa
MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_3}$	$C_{Y'}$	$C_{n'_3}$	$C_{\ell'}$	$C_{A'_u}$	$\Delta C_{A'}$
28	11	.950	4.06	45.00	.547	.2032-	.0564	.013-	.0055	.0000	.3588-	.1556
28	12	.950	.06	45.00	.018	.1979	.0009	.024-	.0074	.0000	.3473-	.1494
34	2	.950-	3.99	45.00-	.966	.5851	.2827-	.050	.0124-	.0038	.7934-	.2083
34	3	.950-	2.99	45.00-	.707	.5858	.2085-	.037	.0124-	.0034	.7910-	.2052
34	4	.950-	2.00	45.00-	.464	.5819	.1332-	.045	.0106-	.0030	.7859-	.2040
34	5	.950-	1.00	45.00-	.224	.5875	.0646-	.037	.0103-	.0021	.7889-	.2014
34	6	.950-	.00	45.00-	.021	.5861-	.0009-	.066	.0103-	.0027	.7889-	.2028
34	7	.950	1.00	45.00	.209	.5832-	.0649-	.050	.0122-	.0028	.7869-	.2037
34	8	.950	1.99	45.00	.444	.5869-	.1353-	.055	.0124-	.0019	.7911-	.2042
34	9	.950	3.00	45.00	.708	.5781-	.2009-	.035	.0189-	.0024	.7865-	.2084
34	10	.950	3.99	45.00	.981	.5753-	.2827-	.033	.0204-	.0021	.7860-	.2107
34	11	.950	.00	45.00-	.007	.5854	.0051-	.047	.0141-	.0021	.7884-	.2030
39	2	.950-	4.04	45.00-	.852	.3007	.1750-	.023	.0036	.0007	.4567-	.1560
39	3	.950-	3.03	45.00-	.615	.3006	.1277-	.007	.0037-	.0003	.4556-	.1550
39	4	.950-	2.02	45.00-	.411	.3065	.0810-	.030	.0031-	.0003	.4585-	.1520
39	5	.950-	1.01	45.00-	.208	.3043	.0378-	.038	.0010-	.0002	.4566-	.1523
39	6	.950-	.00	45.00-	.012	.3102-	.0001-	.043	.0034-	.0001	.4593-	.1491
39	7	.950	1.01	45.00	.218	.3060-	.0398-	.008	.0044-	.0006	.4581-	.1521
39	8	.950	2.02	45.00	.434	.3093-	.0814	.004	.0042-	.0005	.4582-	.1489
39	9	.950	3.03	45.00	.629	.3044-	.1260-	.014	.0053-	.0005	.4570-	.1526
39	10	.950	4.04	45.00	.873	.3033-	.1755-	.005	.0044-	.0005	.4570-	.1537
39	11	.950	.00	45.00	.001	.3081	.0004-	.020	.0031-	.0001	.4577-	.1496
42	2	.950-	4.04	90.00-	.512	.5748	.0912-	.022	.0062-	.0010	.7965-	.2217
42	3	.950-	3.03	90.00-	.367	.5790	.0648-	.034	.0075-	.0012	.8016-	.2226
42	4	.950-	2.02	90.00-	.250	.5868	.0439-	.060	.0055-	.0014	.8050-	.2182
42	5	.950-	1.01	90.00-	.133	.5869	.0243-	.037	.0081-	.0015	.8060-	.2191
42	6	.950-	.00	90.00-	.017	.5858	.0049-	.089	.0039-	.0017	.8053-	.2195
42	7	.950	1.01	90.00	.091	.5887-	.0159-	.066	.0065-	.0018	.8094-	.2207
42	8	.950	2.02	90.00	.214	.5889-	.0353-	.042	.0069-	.0014	.8099-	.2210
42	9	.950	3.03	90.00	.338	.5829-	.0581-	.029	.0082-	.0020	.8048-	.2219
42	10	.950	4.03	90.00	.477	.5743-	.0834-	.016	.0096-	.0021	.7981-	.2238
42	11	.950-	.00	90.00-	.020	.5861	.0052-	.051	.0050-	.0017	.8070-	.2209
44	2	.950-	4.06	90.00-	.481	.2235	.0434-	.039-	.0026-	.0000	.3695-	.1460

TABLE IVa
MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_3}$	$C_{Y'}$	$C_{n'_3}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
44	3	.950-	3.04	90.00-	.347	.2266	.0335-	.044-	.0045-	.0002	.3695-	.1429
44	4	.950-	2.03	90.00-	.241	.2297	.0252-	.026-	.0039	.0001	.3712-	.1415
44	5	.950-	1.01	90.00-	.139	.2300	.0173-	.033-	.0033	.0005	.3714-	.1414
44	6	.950	.00	90.00-	.027	.2300	.0091-	.001-	.0039-	.0002	.3705-	.1405
44	7	.950	1.01	90.00	.079	.2300	.0015-	.046-	.0069-	.0004	.3711-	.1411
44	8	.950	2.03	90.00	.186	.2290-	.0070-	.015-	.0051	.0000	.3701-	.1411
44	9	.950	3.04	90.00	.305	.2297-	.0158-	.034-	.0058-	.0002	.3722-	.1425
44	10	.950	4.06	90.00	.415	.2280-	.0252-	.015-	.0029-	.0003	.3731-	.1451
44	11	.950	.00	90.00-	.030	.2319	.0093-	.027-	.0016-	.0002	.3721-	.1402
44	12	.950	.00	90.00-	.030	.2304	.0093-	.027-	.0039-	.0002	.3719-	.1415
46	1	.950-	4.04	90.00-	.569	.2243	.0967-	.028	.0113	.0005	.3799-	.1556
46	2	.950-	3.03	90.00-	.416	.2271	.0729-	.028	.0115	.0009	.3800-	.1529
46	3	.950-	2.02	90.00-	.281	.2319	.0498-	.053	.0093	.0002	.3819-	.1500
46	4	.950-	1.01	90.00-	.144	.2302	.0266-	.040	.0108	.0006	.3802-	.1500
46	5	.950-	.00	90.00-	.017	.2301	.0042-	.053	.0098-	.0001	.3784-	.1483
46	7	.950	1.01	90.00	.116	.2275-	.0186-	.040	.0090	.0003	.3801-	.1526
46	8	.950	2.02	90.00	.245	.2290-	.0419-	.028	.0104	.0002	.3820-	.1530
46	9	.950	3.03	90.00	.385	.2257-	.0654-	.053	.0106	.0000	.3804-	.1547
46	10	.950	4.04	90.00	.529	.2189-	.0892-	.078	.0084-	.0001	.3771-	.1582
46	11	.950-	.00	90.00-	.021	.2324	.0052-	.041	.0110-	.0001	.3819-	.1495
49	2	1.100-	3.96	45.00-	1.218	.4610	.3852-	.044	.0154	.0009	.7205-	.2595
49	3	1.100-	2.97	45.00-	.901	.4659	.2893-	.041	.0158	.0001	.7239-	.2580
49	4	1.100-	1.98	45.00-	.622	.4714	.1932-	.065	.0136	.0006	.7272-	.2558
49	5	1.100-	.99	45.00-	.296	.4740	.0931-	.054	.0168	.0003	.7302-	.2562
49	6	1.100-	.00	45.00-	.003	.4745-	.0020-	.062	.0168	.0004	.7306-	.2561
49	7	1.100	.99	45.00	.305	.4709-	.1020-	.065	.0173-	.0005	.7288-	.2579
49	8	1.100	1.98	45.00	.622	.4663-	.2003-	.049	.0165-	.0000	.7254-	.2591
49	9	1.100	2.97	45.00	.937	.4649-	.2949-	.052	.0170-	.0000	.7266-	.2617
49	10	1.100	3.96	45.00	.221	.4609-	.3858-	.057	.0206-	.0002	.7247-	.2638
49	11	1.100	5.36	45.00	.837	.4536-	.5533-	.040	.0138-	.0002	.7224-	.2688
49	12	1.100-	.00	45.00-	.001	.4725-	.0022-	.060	.0162	.0003	.7328-	.2603
51	1	.950-	3.97	45.00-	1.003	.3520	.2768-	.036	.0097	.0005	.5156-	.1656
51	2	.950-	2.98	45.00-	.802	.3561	.2024-	.050	.0126	.0007	.5198-	.1637
51	3	.950-	1.99	45.00-	.603	.3591	.1277-	.046	.0128	.0006	.5229-	.1638
51	4	.950-	.99	45.00-	.314	.3624	.0527-	.051	.0128	.0002	.5259-	.1636

TABLE IVa

MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_3}$	$C_{Y'}$	$C_{n'_3}$	$C_{\ell'}$	$C_{A'_u}$	$\Delta C_{A'}$
51	5	.850-	.20	45.00-	.032	.3604	.0029-	.067	.0129-	.0001	.5241-	.1637
51	6	.950	.99	45.00	.278	.3599-	.0912-	.055	.0127-	.0004	.5238-	.1639
51	7	.950	1.98	45.00	.556	.3534-	.1800-	.053	.0141-	.0001	.5192-	.1658
51	8	.950	2.98	45.00	.868	.3537-	.2738-	.043	.0137-	.0005	.5183-	.1646
51	9	.950	3.97	45.00	1.184	.3481-	.3715-	.045	.0167-	.0003	.5157-	.1676
51	10	.950	5.96	45.00	1.791	.3282-	.5554-	.040	.0162	.0004	.5041-	.1759
51	11	.950	7.95	45.00	2.417	.3008-	.7407-	.034	.0187	.0007	.4835-	.1827
51	12	.950	.00	45.00-	.021	.3626	.0052-	.061	.0156	.0004	.5265-	.1639
55	1	.750-	3.99	45.00-	1.058	.2860	.3121-	.015	.0041	.0019	.4055-	.1195
55	2	.750-	2.99	45.00-	.802	.2964	.2350-	.042	.0057	.0012	.4102-	.1138
55	3	.750-	1.99	45.00-	.529	.2994	.1556-	.038	.0053	.0019	.4140-	.1146
55	4	.750-	1.00	45.00-	.264	.3005	.0800-	.026	.0058	.0012	.4162-	.1157
55	5	.750-	.00	45.00-	.018	.2999	.0039-	.047	.0070	.0019	.4157-	.1158
55	6	.750	1.00	45.00	.267	.2990-	.0775-	.027	.0065	.0004	.4145-	.1155
55	7	.750	2.00	45.00	.526	.2996-	.1499-	.014	.0085	.0004	.4162-	.1166
55	8	.750	3.00	45.00	.795	.2913-	.2285-	.009	.0081	.0011	.4094-	.1181
55	9	.750	3.99	45.00	1.057	.2847-	.3035-	.021	.0100	.0011	.4043-	.1196
55	10	.750	5.99	45.00	1.571	.2620-	.4537-	.025	.0118	.0016	.3853-	.1233
55	11	.750	7.99	45.00	2.119	.2212-	.5980-	.014	.0102	.0013	.3484-	.1272
55	12	.750	12.01	45.00	3.241	.1873-	.8819	.025	.0069	.0004	.3228-	.1355
55	13	.750	.00	45.00-	.012	.3024	.0037-	.027	.0093	.0012	.4172-	.1148
58	2	1.100-	4.07	90.00-	.399	.5762	.0115-	.022-	.0028-	.0003	.8643-	.2881
58	3	1.100-	3.05	90.00-	.292	.5706	.0082-	.030-	.0022-	.0001	.8640-	.2934
58	4	1.100-	2.03	90.00-	.193	.5708	.0060-	.026-	.0027-	.0002	.8618-	.2910
58	5	1.100-	1.02	90.00-	.103	.5708	.0057-	.024-	.0031	.0001	.8610-	.2902
58	6	1.100	.00	90.00-	.020	.5717	.0065-	.022-	.0034-	.0000	.8601-	.2884
58	7	1.100	1.02	90.00	.069	.5733	.0067-	.032-	.0028	.0003	.8622-	.2889
58	8	1.100	2.03	90.00	.151	.5745	.0054-	.018-	.0022	.0001	.8647-	.2902
58	9	1.100	3.05	90.00	.248	.5741	.0032-	.026-	.0037-	.0000	.8668-	.2927
58	10	1.100	4.07	90.00	.348	.5739	.0003-	.022-	.0041	.0007	.8683-	.2944
58	11	1.100	5.09	90.00	.466	.5719-	.0047-	.017-	.0047	.0001	.8678-	.2959
58	12	1.100	6.11	90.00	.593	.5682-	.0110-	.011-	.0053	.0004	.8657-	.2975
58	13	1.100	8.16	90.00	.857	.5634-	.0258-	.009-	.0057	.0000	.8655-	.3021
58	14	1.100	12.26	90.00	1.615	.5497-	.1014-	.007-	.0068	.0000	.8571-	.3074
58	15	1.100	16.39	90.00	2.556	.5122-	.1966-	.029	.0025	.0005	.8485-	.3263
58	16	1.100	20.02	90.00	3.627	.4762-	.3226-	.009-	.0068	.0001	.8157-	.3305
58	17	1.100-	.00	90.00-	.023	.5695	.0062-	.022-	.0034-	.0000	.8599-	.2904

UNCLASSIFIED

TABLE IVa
MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_3}$	$C_{Y'}$	$C_{n'_3}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
59	1	.950-	4.06	90.00-	.379	.4015	.0143-	.029	.0057-	.0003	.6315-	.2300
59	2	.950-	3.04	90.00-	.281	.4055	.0112-	.033-	.0050	.0000	.6338-	.2283
59	3	.950-	2.03	90.00-	.193	.4109	.0089-	.017-	.0043-	.0001	.6371-	.2262
59	4	.950-	1.01	90.00-	.104	.4137	.0085-	.028-	.0059-	.0003	.6401-	.2264
59	5	.950	.00	90.00-	.027	.4117	.0091-	.026-	.0063-	.0004	.6389-	.2272
59	6	.950	1.02	90.00	.062	.4133	.0094-	.012-	.0054	.0005	.6386-	.2253
59	7	.950	2.03	90.00	.146	.4102	.0081-	.022-	.0070	.0003	.6367-	.2265
59	8	.950	3.04	90.00	.237	.4034	.0049-	.018-	.0074	.0007	.6323-	.2289
59	9	.950	4.06	90.00	.335	.4015	.0011-	.027-	.0068	.0005	.6327-	.2312
59	10	.950	6.09	90.00	.569	.3917-	.0103-	.017-	.0080	.0007	.6270-	.2353
59	11	.950	8.13	90.00	.829	.3818-	.0248-	.004-	.0093	.0009	.6183-	.2365
59	12	.950	12.21	90.00	1.555	.3378-	.1029-	.022-	.0045	.0004	.6259-	.2881
59	13	.950	16.32	90.00	2.469	.3196-	.2009-	.028-	.0047	.0003	.6359-	.3163
59	14	.950	19.92	90.00	3.484	.2655-	.3243-	.021-	.0055	.0001	.5885-	.3230
59	15	.950	.00	90.00-	.023	.4123	.0094-	.027-	.0039	.0001	.6378-	.2255
63	1	.750-	4.04	90.00-	.365	.4429	.0085	.011-	.0114	.0008	.5748-	.1319
63	2	.750-	3.03	90.00-	.270	.4472	.0075	.031-	.0104	.0006	.5766-	.1294
63	3	.750-	2.02	90.00-	.188	.4483	.0085	.014-	.0091	.0011	.5780-	.1297
63	4	.750-	1.01	90.00-	.117	.4461	.0104	.016-	.0126	.0009	.5741-	.1280
63	5	.750	.00	90.00-	.041	.4472	.0127	.016-	.0092	.0008	.5732-	.1260
63	6	.750	1.01	90.00	.035	.4481	.0160-	.001-	.0117	.0013	.5749-	.1268
63	7	.750	2.02	90.00	.110	.4486	.0175	.017-	.0105	.0018	.5786-	.1300
63	8	.750	3.03	90.00	.198	.4479	.0178	.038-	.0126	.0009	.5793-	.1314
63	9	.750	4.05	90.00	.296	.4457	.0164	.023-	.0114	.0014	.5803-	.1346
63	10	.750	6.07	90.00	.498	.4381	.0087	.031-	.0125	.0017	.5755-	.1374
63	11	.750	8.10	90.00	.750	.4267-	.0048	.008-	.0130	.0014	.5684-	.1417
63	12	.750	12.15	90.00	1.404	.3814-	.0570-	.002-	.0120	.0013	.5470-	.1656
63	13	.750	16.23	90.00	2.272	.3698-	.1589-	.000-	.0087	.0013	.5656-	.1958
63	14	.750	19.80	90.00	3.172	.3311-	.2668	.012-	.0111	.0002	.5292-	.1981
63	15	.750	.00	90.00-	.034	.4456	.0133	.016-	.0098	.0015	.5725-	.1340
67	1	1.130-	4.05	90.00-	.452	1.3352	.0387-	.044	.0065-	.0003	1.3327-	.2225
67	2	1.130-	3.04	90.00-	.376	1.3437	.0367-	.037	.0053-	.0005	1.3404-	.2263
67	3	1.130-	2.03	90.00-	.310	1.3461	.0354-	.044	.0066-	.0006	1.3411-	.2256
67	4	1.130-	1.01	90.00-	.113	1.3469	.0345-	.038	.0061-	.0002	1.3419-	.2246
67	5	1.130-	.00	90.00	.116	1.3501-	.0331-	.031	.0055-	.0006	1.3453-	.2249
67	6	1.130	1.01	90.00	.116	1.3490-	.0337-	.053	.0050-	.0000	1.3441-	.2243
67	7	1.130	2.03	90.00	.214	1.3485-	.0336-	.032	.0054-	.0001	1.3429-	.2244

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TABLE IVa

MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_3}$	$C_{Y'}$	$C_{n'_3}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
67	8	1.100	3.03	90.00	.721	1.0458-	.0332-	.054	.0050-	.0003	1.3407-	.2949
67	9	1.100	4.05	90.00	.453	1.0400-	.0465-	.045	.0043-	.0005	1.3367-	.2967
67	10	1.100	6.07	90.00	.725	1.0234-	.0784-	.039	.0040-	.0002	1.3241-	.3007
67	11	1.100	8.10	90.00	1.044	.9965-	.1150-	.031	.0036	.0001	1.3085-	.3120
67	12	1.100	12.18	90.00	1.851	.8827-	.2199-	.030	.0055-	.0006	1.2299-	.3472
67	13	1.100	16.27	90.00	2.815	.8619-	.3301-	.023	.0044	.0000	1.2206-	.3587
67	14	1.100	19.88	90.00	3.809	.8529-	.4250-	.050	.0032-	.0006	1.2220-	.3691
67	15	1.100-	.00	90.00-	.004	1.0482-	.0035-	.045	.0067-	.0004	1.3475-	.2993
68	4	.950-	3.04	90.00-	.339	.7922	.0350-	.038	.0033-	.0003	1.0547-	.2625
68	5	.950-	2.02	90.00-	.223	.8005	.0239-	.044	.0039	.0001	1.0576-	.2571
68	6	.950-	1.01	90.00-	.110	.8071	.0118-	.036	.0033-	.0001	1.0583-	.2512
68	7	.950-	.00	90.00-	.007	.8052-	.0009-	.041	.0038-	.0002	1.0586-	.2534
68	8	.950	1.01	90.00	.105	.8055-	.0135-	.034	.0032	.0001	1.0582-	.2527
68	9	.950	2.02	90.00	.219	.8043-	.0264-	.025	.0026-	.0000	1.0572-	.2529
68	10	.950	3.04	90.00	.337	.7967-	.0390-	.043	.0019-	.0001	1.0526-	.2559
68	11	.950	4.05	90.00	.451	.7799-	.0507-	.048	.0024-	.0002	1.0410-	.2611
68	12	.950	6.07	90.00	.760	.7435-	.1055-	.044	.0027	.0000	1.0210-	.2775
68	13	.950	8.10	90.00	1.095	.6956-	.1496-	.045	.0037	.0005	1.0012-	.3056
68	14	.950	12.19	90.00	1.799	.6350-	.2138-	.030	.0033	.0000	.9736-	.3386
68	15	.950	16.30	90.00	2.692	.6587-	.3023-	.027	.0022-	.0002	1.0078-	.3491
68	16	.950	19.90	90.00	3.726	.5974-	.4304-	.003-	.0019-	.0009	.9444-	.3470
68	17	.950-	.00	90.00-	.006	.8053-	.0009-	.041	.0038-	.0002	1.0609-	.2556
71	2	.750-	4.04	90.00-	.436	.7963	.0385-	.048	.0014	.0010	1.0046-	.2083
71	3	.750-	3.03	90.00-	.319	.7987	.0277-	.040	.0038	.0001	1.0135-	.2148
71	4	.750-	2.02	90.00-	.205	.8054	.0180-	.052	.0048	.0006	1.0169-	.2115
71	5	.750-	1.01	90.00-	.106	.8048	.0088-	.045	.0042	.0004	1.0164-	.2116
71	6	.750-	.00	90.00-	.004	.8068-	.0007-	.056	.0052	.0002	1.0179-	.2111
71	7	.750	1.01	90.00	.094	.8061-	.0099-	.050	.0047	.0001	1.0180-	.2119
71	8	.750	2.02	90.00	.210	.8033-	.0197-	.043	.0041	.0006	1.0152-	.2119
71	9	.750	3.03	90.00	.306	.8028-	.0288-	.072	.0035	.0004	1.0115-	.2087
71	10	.750	4.04	90.00	.427	.7986-	.0390-	.065	.0029	.0009	1.0055-	.2069
71	11	.750	6.06	90.00	.675	.7678-	.0637-	.031	.0031	.0007	.9793-	.2115
71	12	.750	8.08	90.00	.964	.7256-	.0936-	.046	.0045	.0004	.9494-	.2238
71	13	.750	12.14	90.00	1.650	.6592-	.1672-	.035	.0045-	.0000	.8930-	.2338
71	14	.750	16.22	90.00	2.496	.6262-	.2560-	.052	.0075	.0001	.8831-	.2569
71	15	.750	19.79	90.00	3.341	.6115-	.3343-	.001	.0011	.0000	.8823-	.2708
71	16	.750-	.00	90.00-	.004	.8036-	.0007-	.056	.0021	.0002	1.0160-	.2124

UNCLASSIFIED

TABLE IVa
MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_3}$	$C_{Y'}$	$C_{n'_3}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
76	1	.950-	4.03	45.00-	.836	.8979	.1834-	.011-	.0023-	.0006	1.1762-	.2783
76	2	.950-	3.02	45.00-	.636	.9007	.1399-	.016-	.0007-	.0000	1.1796-	.2789
76	3	.950-	2.01	45.00-	.427	.9026	.0932-	.008-	.0015-	.0005	1.1804-	.2778
76	4	.950-	1.01	45.00-	.228	.9070	.0471-	.026	.0005-	.0010	1.1833-	.2763
76	5	.950-	.00	45.00-	.019	.9060-	.0010-	.019-	.0018	.0001	1.1826-	.2766
76	6	.950	1.00	45.00	.192	.9068-	.0466-	.013-	.0002-	.0004	1.1830-	.2762
76	7	.950	2.01	45.00	.396	.9060-	.0920-	.004-	.0020	.0001	1.1838-	.2778
76	8	.950	3.02	45.00	.595	.9051-	.1369-	.006-	.0028-	.0003	1.1828-	.2777
76	9	.950	4.02	45.00	.810	.9022-	.1824-	.006-	.0012-	.0003	1.1797-	.2775
76	10	.950	6.04	45.00	1.248	.8819-	.2721-	.002	.0038	.0002	1.1609-	.2790
76	11	.950	8.06	45.00	1.692	.8656-	.3696-	.021	.0054-	.0001	1.1416-	.2760
76	12	.950	12.09	45.00	2.884	.8191-	.6505	.007	.0018	.0009	1.0983-	.2792
76	13	.950	16.14	45.00	4.096	.7180-	.9151	.020	.0032	.0002	1.0128-	.2948
76	14	.950	19.70	45.00	5.150	.6554-1	.1087	.025	.0069-	.0003	.9733-	.3179
76	15	.950-	.00	45.00-	.023	.9126-	.0011-	.032-	.0001	.0000	1.1904-	.2776
83	3	.950-	4.04	90.00-	.882	.7797	.2027-	.034	.0003	.0002	1.0575-	.2778
83	4	.950-	3.03	90.00-	.653	.7918	.1490-	.031-	.0013	.0005	1.0627-	.2709
83	5	.950-	2.02	90.00-	.436	.7942	.0978-	.018	.0006	.0004	1.0619-	.2677
83	6	.950-	1.01	90.00-	.217	.7998	.0482-	.017-	.0009	.0002	1.0635-	.2637
83	7	.950-	.00	90.00-	.010	.8018	.0005-	.044-	.0001	.0001	1.0649-	.2631
83	8	.950	1.01	90.00	.193	.8010-	.0476-	.006-	.0003-	.0001	1.0629-	.2619
83	9	.950	2.02	90.00	.410	.7973-	.0962-	.018-	.0007-	.0002	1.0611-	.2638
83	10	.950	3.02	90.00	.622	.7896-	.1464-	.018	.0001-	.0004	1.0587-	.2691
83	11	.950	4.03	90.00	.845	.7761-	.1994-	.003-	.0003	.0000	1.0533-	.2772
83	12	.950	6.05	90.00	1.365	.7397-	.3231-	.034	.0014	.0003	1.0369-	.2972
83	13	.950	8.08	90.00	1.916	.6835-	.4490	.014	.0024	.0004	.9960-	.3125
83	14	.950	12.14	90.00	3.168	.5823-	.7173	.035-	.0001-	.0021	.9419-	.3596
83	16	.950-	.00	90.00-	.044	.8048	.0008-	.019	.0024	.0006	1.0678-	.2630
83	17	.950	.00-	90.00	.044	.8069-	.0101-	.045-	.0013	.0001	1.0689-	.2620
89	2	.950-	4.05	90.00-	.709	.3966	.1269-	.002-	.0026	.0018	.6279-	.2713
89	3	.950-	3.04	90.00-	.528	.4068	.0936	.003-	.0026	.0021	.6343-	.2275
89	4	.950-	2.02	90.00-	.351	.4124	.0637-	.006-	.0108	.0019	.6361-	.2237
89	5	.950-	1.01	90.00-	.189	.4117	.0346	.010-	.0026	.0018	.6358-	.2241
89	6	.950	.00	90.00-	.023	.4148	.0076	.000-	.0107	.0016	.6375-	.2227
89	7	.950	1.01	90.00	.171	.4135-	.0190	.002-	.0105	.0020	.6363-	.2228
89	8	.950	2.02	90.00	.303	.4123-	.0484	.006-	.0106	.0013	.6375-	.2252
89	9	.950	3.04	90.00	.467	.4080-	.0773-	.004-	.0026	.0012	.6340-	.2269

TABLE IVa
MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_3}$	$C_{Y'}$	$C_{n'_3}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
89	10	.950	4.05	90.00	.648	.4014-	.1099	.001-	.0118	.0015	.6303-	.2289
89	11	.950	6.08	90.00	1.041	.3808-	.1819	.000-	.0123	.0015	.6195-	.2387
89	12	.950	8.10	90.00	1.589	.3529-	.2990-	.006-	.0070	.0005	.5975-	.2446
89	13	.950	12.17	90.00	2.744	.2731-	.5391	.013-	.0081-	.0002	.6041-	.3310
89	14	.950	.00	90.00-	.020	.4138	.0073	.000-	.0107	.0016	.6359-	.2221
93	1	.950-	4.05	90.00-	.687	.4826	.1201-	.003-	.0011-	.0002	.7494-	.2668
93	2	.950-	3.04	90.00-	.511	.4872	.0871-	.011-	.0023-	.0004	.7500-	.2628
93	3	.950-	2.02	90.00-	.337	.4924	.0582-	.008-	.0021-	.0001	.7537-	.2613
93	4	.950-	1.01	90.00-	.178	.4967	.0312-	.005-	.0044-	.0002	.7565-	.2598
93	5	.950-	.00	90.00-	.023	.4973	.0044	.010-	.0030-	.0004	.7563-	.2590
93	6	.950	1.01	90.00	.139	.5000-	.0222-	.001-	.0040-	.0001	.7574-	.2574
93	7	.950	2.02	90.00	.297	.4932-	.0499	.015-	.0028-	.0007	.7528-	.2596
93	8	.950	3.03	90.00	.465	.4882-	.0803	.019-	.0050-	.0003	.7501-	.2619
93	9	.950	4.05	90.00	.636	.4790-	.1104	.009-	.0038-	.0005	.7449-	.2659
93	10	.950	6.07	90.00	1.033	.4569-	.1823	.011-	.0029-	.0007	.7336-	.2767
93	11	.950	8.10	90.00	1.582	.4394-	.3038	.004-	.0012-	.0005	.7187-	.2793
93	12	.950	12.17	90.00	2.712	.3595-	.5328	.017-	.0019-	.0012	.7154-	.3559
93	13	.950-	.00	90.00-	.023	.4982	.0044-	.003-	.0042-	.0004	.7572-	.2590
95	1	.950-	4.04	45.00-	.661	.4871	.1130	.008-	.0009	.0004	.7423-	.2552
95	2	.950-	3.03	45.00-	.485	.4912	.0828-	.001-	.0006-	.0005	.7453-	.2541
95	3	.950-	2.02	45.00-	.315	.4907	.0530-	.002-	.0015-	.0003	.7463-	.2556
95	4	.950-	1.01	45.00-	.158	.4921	.0260-	.010-	.0002-	.0001	.7493-	.2572
95	5	.950-	.00	45.00-	.000	.4960-	.0007-	.001-	.0007	.0000	.7506-	.2546
95	6	.950	1.01	45.00	.165	.4956-	.0255-	.001	.0002-	.0003	.7489-	.2533
95	7	.950	2.02	45.00	.327	.4928-	.0551	.004-	.0007-	.0001	.7480-	.2552
95	8	.950	3.03	45.00	.500	.4900-	.0835	.015-	.0009	.0001	.7449-	.2549
95	9	.950	4.04	45.00	.673	.4892-	.1144	.010-	.0006-	.0003	.7448-	.2556
95	10	.950	.00	45.00	.002	.4988-	.0005-	.004-	.0009	.0000	.7519-	.2531
97	2	.950-	4.05	22.50-	.757	.1715	.1189-	.199	.0435-	.0020	.2991-	.1276
97	3	.950-	3.03	22.50-	.541	.1771	.0872-	.149	.0334-	.0008	.3023-	.1252
97	4	.950-	2.02	22.50-	.356	.1775	.0566-	.100	.0214-	.0002	.3011-	.1236
97	5	.950-	1.01	22.50-	.170	.1799	.0263-	.055	.0091	.0004	.3021-	.1222
97	6	.950-	.00	22.50-	.013	.1788-	.0010-	.014-	.0039	.0005	.3017-	.1229
97	7	.950	1.01	22.50	.158	.1794-	.0298	.028-	.0165	.0006	.3020-	.1226
97	8	.950	2.02	22.50	.341	.1797-	.0602	.081-	.0288-	.0004	.3039-	.1242

UNCLASSIFIED

TABLE IVa
MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M.S. 18.000

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_3}$	$C_{Y'}$	$C_{n'_3}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
97	9	.950	3.03	22.50	.531	.1796-	.0012	.116-	.0396-	.0014	.3043-	.1247
97	10	.950	4.05	22.50	.757	.1762-	.1242	.168-	.0485-	.0020	.3042-	.1280
97	11	.950	5.06	22.49	.971	.1703-	.1605	.215-	.0581-	.0045	.3043-	.1340
97	12	.950-	.00	22.50-	.002	.1797-	.0022-	.006-	.0040	.0010	.3024-	.1227
98	1	.950-	4.05	90.00-	.275	.1803	.0008-	.069	.0052-	.0003	.3148-	.1345
98	2	.950-	3.04	90.00-	.204	.1798-	.0019-	.053	.0037-	.0004	.3097-	.1299
98	3	.950-	2.02	90.00-	.134	.1799-	.0014-	.039	.0022-	.0001	.3066-	.1267
98	4	.950-	1.01	90.00-	.074	.1814	.0007-	.038	.0020-	.0002	.3063-	.1249
98	5	.950	.00	90.00-	.010	.1821	.0037-	.051	.0028-	.0003	.3057-	.1236
98	6	.950	1.01	90.00	.047	.1840	.0073-	.064	.0015	.0000	.3077-	.1237
98	7	.950	2.02	90.00	.110	.1833	.0098-	.051	.0023-	.0001	.3076-	.1243
98	8	.950	3.04	90.00	.172	.1833	.0097-	.062	.0009	.0003	.3096-	.1263
98	9	.950	4.05	90.00	.248	.1837	.0077-	.060	.0029	.0006	.3143-	.1306
98	10	.950	6.07	90.00	.408	.1786-	.0033-	.064	.0008	.0008	.3289-	.1503
98	11	.950	8.09	90.00	.606	.1778-	.0203-	.052-	.0004	.0004	.3443-	.1665
98	12	.950	12.15	90.00	1.005	.1700-	.0450-	.058	.0021	.0009	.3468-	.1768
98	13	.950	16.23	90.00	1.396	.1548-	.0237-	.072	.0066	.0003	.3451-	.1903
98	14	.950	20.33	90.00	1.852	.1371	.0023-	.061	.0040-	.0005	.3329-	.1958
98	15	.950	.00	90.00-	.013	.1837	.0040-	.064	.0017-	.0003	.3082-	.1245
99	2	.950-	4.05-	90.00-	.266	.1742-	.0039-	.090	.0214-	.0017	.3075-	.1333
99	3	.950-	3.03-	90.00-	.189	.1791-	.0032-	.086	.0187-	.0012	.3059-	.1268
99	4	.950-	2.02-	90.00-	.125	.1804-	.0028-	.072	.0198-	.0012	.3044-	.1240
99	5	.950-	1.01-	90.00-	.065	.1790-	.0007-	.071	.0173-	.0007	.3024-	.1234
99	6	.950	.00-	90.00-	.001	.1818	.0023-	.057	.0161-	.0002	.3045-	.1227
99	7	.950	1.01-	90.00	.056	.1785	.0060-	.071	.0172-	.0008	.3027-	.1239
99	8	.950	2.03-	90.00	.122	.1792	.0080-	.072	.0171	.0002	.3049-	.1257
99	9	.950	3.04-	90.00	.184	.1779	.0079-	.056	.0181	.0001	.3076-	.1297
99	10	.950	4.05-	90.00	.260	.1789	.0057-	.066	.0168	.0001	.3131-	.1342
99	11	.950	.00-	90.00-	.004	.1789	.0026-	.071	.0172-	.0008	.3016-	.1227
105	1	.950-	4.03	90.00-	.551	1.2119	.1450-	.031	.0058	.0004	2.7994-1	.5875
105	2	.950-	3.02	90.00-	.408	1.2318	.1073-	.024	.0058	.0002	2.8052-1	.5734
105	3	.950-	2.01	90.00-	.278	1.2619	.0709-	.018	.0058	.0004	2.8216-1	.5497
105	4	.950-	1.01	90.00-	.146	1.2666	.0362-	.013	.0058	.0003	2.8207-1	.5541
105	5	.950-	.00	90.00-	.004	1.2748	.0006-	.030	.0070	.0001	2.8177-1	.5429
105	6	.950	1.01	90.00	.154	1.2973-	.0359-	.026	.0059	.0004	2.8218-1	.5241

UNCLASSIFIED

TABLE IVa
MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_3}$	$C_{Y'}$	$C_{n'_3}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
105	7	.950	2.01	90.00	.306	1.2693-	.0709-	.021	.0060	.0003	2.8245-1	.5552
105	8	.950	3.02	90.00	.471	1.2424-	.1080-	.015	.0083	.0002	2.8165-1	.5741
105	9	.950	4.03	90.00	.650	1.2133-	.1464-	.007	.0060	.0006	2.8039-1	.5906
105	10	.950-	.00	90.00-	.008	1.2972	.0009-	.020	.0071	.0002	2.8146-1	.5174
111	2	.950-	4.02	90.00-	.595	1.3077	.1168	.007	.0095	.0016	2.8044-1	.4967
111	3	.950-	3.01	90.00-	.437	1.2729	.0886-	.006	.0108	.0012	2.8134-1	.5405
111	4	.950-	2.01	90.00-	.306	1.3262	.0605-	.019	.0076	.0018	2.8239-1	.4977
111	5	.950-	1.00	90.00-	.161	1.3320	.0311	.024	.0091	.0016	2.8081-1	.4761
111	6	.950-	.00	90.00-	.025	1.3406	.0026	.012	.0105	.0012	2.8301-1	.4895
111	7	.950	1.00	90.00	.118	1.3277-	.0276-	.001	.0123	.0021	2.8128-1	.4851
111	8	.950	2.01	90.00	.266	1.3304-	.0570	.015	.0112	.0017	2.8253-1	.4949
111	9	.950	3.01	90.00	.399	1.2765-	.0848	.003	.0079	.0026	2.8030-1	.5265
111	10	.950	4.01	90.00	.548	1.2925-	.1129	.018	.0117	.0012	2.8129-1	.5204
111	11	.950-	.00	90.00-	.017	1.3119	.0019-	.016	.0130	.0013	2.8192-1	.5073
140	1	.950-	3.63	10.00	1.223	2.8329	.8570	.511	.0014	.0002	2.9571-	.1242
140	2	.950-	1.62	10.00	1.938	2.9280	.7045	.500	.0524	.0036	3.0620-	.1340
140	3	.950	.42	10.00	2.982	3.2900	.5947	.489	.1204-	.0039	3.4086-	.1186
140	4	.950	2.44	9.99	3.634	3.4391	.4897	.502	.1324-	.0094	3.5435-	.1044
140	5	.950	4.46	9.99	4.304	3.5675	.3660	.512	.1430-	.0161	3.6663-	.0988
140	6	.950	6.46	9.99	4.907	3.6680	.2245	.529	.1403-	.0219	3.7732-	.1052
140	7	.950	8.48	9.98	5.516	3.7943	.1037	.616	.1136-	.0276	3.9019-	.1076
140	8	.950	10.47	9.98	6.056	3.8324-	.0505	.838	.0490-	.0322	3.9517-	.1193
140	9	.950	12.47	9.98	6.656	3.8661-	.1828	.966	.0040-	.0266	4.0081-	.1420
140	10	.950	14.48	9.99	7.173	3.8898-	.3054	.973-	.0250-	.0095	4.0434-	.1536
140	11	.950	16.47	10.00	7.586	3.8478-	.4438	.886-	.0264	.0044	4.0188-	.1710
140	12	.950	18.47	10.01	8.059	3.8441-	.5666	.791-	.0102	.0117	4.0314-	.1873
140	13	.950	20.47	10.01	8.603	3.8337-	.6999	.741	.0199	.0122	4.0511-	.2174
140	14	.950	.43	10.00	3.034	3.3251	.5094	.498	.1159-	.0040	3.4450-	.1199
141	2	.950-	3.67	20.01	1.075	2.7113	.7823	.725	.2013	.0129	2.8323-	.1210
141	3	.950-	1.64	20.00	1.862	2.9615	.6669	.809	.2145	.0034	3.0842-	.1227
141	4	.950	.41	20.00	2.879	3.2901	.5688	1.003	.2217-	.0030	3.4009-	.1108
141	5	.950	2.43	19.99	3.495	3.4355	.4542	1.044	.2361-	.0128	3.5334-	.0979
141	6	.950	4.44	19.98	4.155	3.5567	.3189	1.084	.2446-	.0274	3.6500-	.0933
141	7	.950	6.44	19.98	4.734	3.6604	.1802	1.157	.2346-	.0408	3.7576-	.0972
141	8	.950	8.44	19.97	5.315	3.7371	.0537	1.290	.2007-	.0543	3.8443-	.1072

TABLE IVa
MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 18.000

Run	Pt	M	α'	ϕ	$C_{N'}$	$C_{A'}$	$C_{m'_3}$	$C_{Y'}$	$C_{n'_3}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
141	9	.950	10.45	19.96	5.810	3.8019-	.0708	1.563	.1260-	.0675	3.9160-	.1141
141	10	.950	12.45	19.96	6.382	3.8584-	.1994	1.792	.0463-	.0734	3.9889-	.1305
141	11	.950	14.45	19.96	6.775	3.8153-	.3165	1.850	.0082-	.0672	3.9674-	.1521
141	12	.950	16.44	19.97	7.253	3.8057-	.4689	1.923-	.0269-	.0501	3.9831-	.1774
141	14	.950	18.43	19.98	7.859	3.8291-	.6281	1.949-	.0460-	.0326	4.0497-	.2206
141	15	.950	20.43	19.99	8.405	3.8310-	.7743	1.909-	.0476-	.0152	4.0724-	.2414
141	16	.950	.41	20.00	2.851	3.2988	.5693	.992	.2204-	.0030	3.4085-	.1097
142	1	.950-	3.65	30.01	1.255	3.0469	.8196	1.396	.2236	.0222	3.1685-	.1216
142	2	.950-	1.64	30.01	2.005	3.1713	.6420	1.437	.2720	.0110	3.2879-	.1166
142	3	.950	.38	30.00	2.642	3.3206	.5271	1.497	.3138-	.0009	3.4216-	.1010
142	4	.950	2.39	29.99	3.237	3.4294	.4029	1.548	.3376-	.0184	3.5236-	.0942
142	5	.950	4.39	29.98	3.862	3.5198	.2527	1.651	.3350-	.0373	3.6126-	.0928
142	6	.950	6.40	29.97	4.482	3.6204	.1114	1.763	.3177-	.0610	3.7171-	.0967
142	7	.950	8.40	29.95	4.996	3.6949-	.0042	1.930	.2628-	.0801	3.8003-	.1054
142	8	.950	10.41	29.95	5.458	3.7552-	.1094	2.182	.1781-	.0934	3.8665-	.1113
142	9	.950	12.41	29.94	6.024	3.8026-	.2590	2.480	.0964-	.1038	3.9381-	.1355
142	10	.950	14.40	29.94	6.507	3.7933-	.4169	2.634	.0450-	.1047	3.9548-	.1615
142	11	.950	16.39	29.95	6.984	3.7666-	.5716	2.710-	.0095-	.0833	3.9639-	.1973
142	12	.950	18.38	29.96	7.560	3.7555-	.7344	2.644-	.0159-	.0664	4.0026-	.2471
142	13	.950	20.38	29.97	8.211	3.7222-	.9110	2.631-	.0337-	.0505	4.0047-	.2825
142	14	.950	.38	30.00	2.626	3.3123	.5246	1.488	.3108-	.0010	3.4168-	.1045
153	15	.950	.36	10.00	2.042	2.4340	.6251	.269	.1703-	.0051	2.4450-	.0110
153	16	.950-	1.67	10.00	1.382	2.1497	.7027	.211	.1724	.0014	2.2940-	.1443
153	17	.950-	.65	10.00	1.748	2.2313	.6709	.247	.1718-	.0018	2.3688-	.1375
153	18	.950	.36	10.00	2.031	2.3128	.6281	.275	.1686-	.0051	2.4477-	.1349
153	19	.950	2.39	9.99	2.778	2.3983	.5246	.258	.1524-	.0150	2.5232-	.1249
153	20	.950	4.41	9.99	3.463	2.5585	.4765	.263	.1731-	.0226	2.6685-	.1100
153	21	.950	6.47	9.98	4.791	2.9518	.2889	.460	.1637-	.0266	3.0666-	.1148
153	22	.950	8.48	9.98	5.616	3.0347	.0833	.545	.1506-	.0374	3.1840-	.1122
153	23	.950	10.47	9.97	6.489	3.1132-	.1753	.735	.1222-	.0483	3.2889-	.1357
153	24	.950	12.48	9.98	7.303	3.2068-	.3292	.835	.0908-	.0390	3.3553-	.1488
153	25	.950	14.48	9.99	7.938	3.2467-	.4804	.877	.0540-	.0234	3.4156-	.1589
153	26	.950	16.51	9.98	8.404	3.3089-	.5492	1.016	.0268-	.0339	3.4844-	.1755
153	27	.950	20.51	9.99	9.509	3.3305-	.8324	1.411-	.0560-	.0244	3.5454-	.2140
153	28	.950	.36	10.00	2.029	2.2943	.6167	.275	.1677-	.0051	2.4351-	.1408
154	1	.950-	3.72	20.00	.670	1.9530	.7214	.520	.1214	.0283	2.1013-	.1482

UNCLASSIFIED

TABLE IVa

MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM

MOMENT CENTER = M. S. 18.000

Run	Pt	M	α'	ϕ	$C_{N'}$	$C_{A'}$	$C_{m'_3}$	$C_{Y'}$	$C_{n'_3}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
154	2	.950-	1.68	22.00	1.277	2.1649	.6752	.573	.2490	.0055	2.3022-	.1373
154	3	.950	.34	22.00	1.936	2.2945	.5852	.628	.2705-	.0053	2.4315-	.1368
154	4	.950	2.37	19.99	2.667	2.3974	.4[illegible]5	.647	.2778-	.0194	2.5251-	.1277
154	5	.950	4.40	19.98	3.415	2.5467	.3556	.671	.2996-	.0338	2.6652-	.1185
154	6	.950	6.45	19.97	4.692	2.9226	.2223	1.020	.3027-	.0498	3.0410-	.1184
154	7	.950	8.45	19.96	5.489	3.0394	.0281	1.177	.2823-	.0717	3.1600-	.1206
154	8	.950	10.45	19.95	6.234	3.1064-	.1703	1.423	.2267-	.0882	3.2380-	.1316
154	9	.950	12.45	19.95	6.939	3.1531-	.3532	1.636	.1507-	.0926	3.3021-	.1490
154	10	.950	14.45	19.95	7.595	3.2023-	.5016	1.819	.0950-	.0838	3.3688-	.1665
154	11	.950	16.46	19.96	8.130	3.2620-	.6265	2.023	.0259-	.0704	3.4522-	.1902
154	12	.950	20.48	19.98	9.384	3.3005-	.8608	2.342-	.1024-	.0330	3.5768-	.2763
154	13	.950-	.67	20.00	1.616	2.2299	.6358	.605	.2645	.0024	2.3703-	.1404
154	14	.950	.34	20.00	1.960	2.3115	.5852	.621	.2746-	.0053	2.4411-	.1296
155	1	.950-	3.73	30.01	.557	1.9831	.7085	1.011	.2278	.0121	2.1261-	.1430
155	2	.950-	1.71	30.01	1.136	2.1479	.6218	.930	.3185	.0097	2.2803-	.1324
155	3	.950-	.70	30.00	1.455	2.2255	.5808	.939	.3501	.0034	2.3551-	.1296
155	4	.950	.31	30.00	1.806	2.3138	.5331	.954	.3709-	.0043	2.4400-	.1262
155	5	.950	2.34	29.99	2.504	2.3931	.4322	.990	.3811-	.0240	2.5183-	.1252
155	6	.950	4.36	29.97	3.238	2.5394	.3108	1.032	.4164-	.0452	2.6544-	.1150
155	7	.950	6.40	29.96	4.432	2.9201	.1423	1.537	.4249-	.0694	3.0379-	.1178
155	8	.950	8.40	29.95	5.248	2.9985-	.0608	1.759	.3762-	.0963	3.1257-	.1272
155	12	.950	16.41	29.95	7.640	3.1331-	.6336	2.996-	.0617-	.0884	3.3649-	.2318
155	13	.950	10.41	29.94	5.928	3.0046-	.2371	2.033	.2983-	.1138	3.1854-	.1808
155	14	.950	12.41	29.93	6.522	3.0948-	.3777	2.463	.1516-	.1175	3.2593-	.1645
155	15	.950	14.41	29.94	7.032	3.1196-	.5034	2.750	.0275-	.1053	3.3012-	.1816
155	16	.950	16.42	29.95	7.626	3.1454-	.6367	2.997-	.0604-	.0870	3.3667-	.2213
155	17	.950	20.44	29.96	8.926	3.2183-	.9186	3.188-	.1134-	.0696	3.4959-	.2776
155	18	.950	.32	30.00	1.809	2.2987	.5345	.966	.3720-	.0042	2.4371-	.1384

UNCLASSIFIED

TABLE IVb

MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M.S. 15.500

Run	Pt	M	α'	ϕ	$C_{N'}$	$C_{A'}$	$C_{m'_l}$	$C_{Y'}$	$C_{n'_l}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
10	2	1.100-	4.08-	50.00-	.240	.1982-	.0328-	.017	.0022-	.0003	.3840-	.1858
10	3	1.100-	3.06-	50.00-	.165	.2015-	.0259-	.029	.0012-	.0007	.3823-	.1808
10	4	1.100-	2.04-	50.00-	.104	.1983-	.0163-	.021-	.0024-	.0001	.3755-	.1772
10	5	1.100-	1.02-	50.00-	.063	.2025-	.0089-	.005-	.0012-	.0005	.3724-	.1699
10	6	1.100	.01-	50.00	.017	.2056	.0010-	.025-	.0026-	.0004	.3716-	.1660
10	7	1.100	1.02-	50.00	.070	.2081	.0087-	.025-	.0023-	.0003	.3718-	.1637
10	8	1.100	2.04-	50.00	.110	.2107	.0177	.007-	.0025-	.0003	.3778-	.1671
10	9	1.100	3.06-	50.00	.189	.2099	.0243-	.029-	.0017-	.0002	.3812-	.1713
10	10	1.100	4.09-	50.00	.253	.2083	.0315-	.033-	.0022-	.0001	.3866-	.1783
10	11	1.100	.00-	50.00	.004	.2055	.0004-	.021-	.0028-	.0004	.3727-	.1672
11	1	.950-	4.07	45.00-	.233	.0883-	.0297-	.019-	.0003-	.0002	.1858-	.0975
11	2	.950-	3.05	45.00-	.161	.0912-	.0220-	.007	.0006-	.0002	.1832-	.0920
11	3	.950-	2.04	45.00-	.127	.0921-	.0141-	.028-	.0001-	.0002	.1804-	.0883
11	4	.950-	1.02	45.00-	.057	.0905-	.0050	.003-	.0001-	.0002	.1776-	.0871
11	5	.950	.00	45.00-	.002	.0892	.0018-	.003-	.0021-	.0003	.1756-	.0864
11	6	.950	1.01	45.00	.034	.0939	.0115-	.027-	.0012-	.0003	.1817-	.0878
11	7	.950	2.03	45.00	.097	.0894	.0198-	.007-	.0006-	.0003	.1826-	.0932
11	8	.950	3.05	45.00	.140	.0927	.0259-	.019-	.0023-	.0004	.1879-	.0952
11	9	.950	4.07	45.00	.210	.0930	.0334-	.007-	.0010-	.0005	.1921-	.0991
11	10	.950-	.00	45.00-	.011	.0879	.0012-	.012-	.0019-	.0003	.1757-	.0878
11	11	.950-	.00	45.00-	.008	.0888	.0018	.003-	.0020-	.0002	.1754-	.0866
12	2	1.100-	4.09	45.00-	.254	.2043-	.0326-	.026	.0016-	.0003	.3835-	.1792
12	3	1.100-	3.07	45.00-	.191	.2046-	.0257-	.030	.0020-	.0003	.3774-	.1728
12	4	1.100-	2.04	45.00-	.110	.2053-	.0169-	.007	.0017	.0001	.3747-	.1694
12	5	1.100-	1.02	45.00-	.071	.2062-	.0084-	.036	.0024	.0001	.3708-	.1646
12	6	1.100-	.00	45.00-	.010	.2047	.0002-	.009	.0012-	.0003	.3702-	.1655
12	7	1.100	1.02	45.00	.044	.2048	.0112-	.022	.0037-	.0004	.3746-	.1698
12	8	1.100	2.04	45.00	.087	.2034	.0193-	.041	.0024	.0000	.3781-	.1747
12	9	1.100	3.06	45.00	.151	.2051	.0271-	.033	.0028-	.0000	.3835-	.1784
12	10	1.100	4.08	45.00	.235	.2071	.0330-	.013	.0010-	.0005	.3903-	.1832
12	11	1.100-	.01	45.00-	.020	.2058-	.0002-	.020	.0015-	.0004	.3716-	.1658
16	4	.750-	4.05	45.00-	.207	.0872-	.0300-	.002-	.0029	.0003	.1669-	.0797
16	5	.750-	3.03	45.00-	.142	.0854-	.0241	.004-	.0027	.0002	.1634-	.0780
16	6	.750-	2.02	45.00-	.092	.0882-	.0174-	.001-	.0036	.0001	.1627-	.0745
16	7	.750-	1.01	45.00-	.043	.0872-	.0075-	.011-	.0037	.0001	.1603-	.0731

TABLE IVb
MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_l}$	$C_{Y'}$	$C_{n'_l}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
16	8	.750	.20	45.00	.000	.0855	.0014-	.007-	.0017	.0000	.1592-	.0737
16	9	.750	1.01	45.00	.048	.0871	.0088-	.012-	.0034-	.0001	.1613-	.0742
16	10	.750	2.02	45.00	.092	.0883	.0159-	.013-	.0042	.0006	.1636-	.0753
16	11	.750	3.03	45.00	.139	.0892	.0229-	.017-	.0053	.0004	.1686-	.0794
16	12	.750	4.05	45.00	.202	.0894	.0295-	.012-	.0057	.0003	.1725-	.0831
16	13	.750	.00	45.00	.016	.0864-	.0005	.002-	.0037	.0000	.1589-	.0725
20	1	.950-	4.08	45.00-	.285	.0947-	.0263-	.007-	.0009	.0004	.1892-	.0945
20	2	.950-	3.06	45.00-	.205	.0933-	.0210-	.019-	.0013	.0003	.1850-	.0917
20	3	.950-	2.04	45.00-	.132	.0949-	.0139-	.007-	.0029	.0003	.1828-	.0879
20	4	.950-	1.02	45.00-	.057	.0929-	.0061	.003-	.0021-	.0002	.1800-	.0871
20	5	.950-	.00	45.00-	.014	.0923	.0025-	.010-	.0030-	.0003	.1800-	.0877
20	6	.950	1.02	45.00	.052	.0948	.0091-	.009-	.0045	.0002	.1831-	.0883
20	7	.950	2.03	45.00	.105	.0950	.0192-	.016-	.0032	.0001	.1864-	.0914
20	8	.950	3.06	45.00	.190	.0985	.0250	.001-	.0030	.0006	.1927-	.0942
20	9	.950	4.08	45.00	.254	.0986	.0318-	.015-	.0019-	.0000	.1958-	.0972
20	10	.950-	.00	45.00-	.023	.0942	.0024-	.019-	.0032	.0002	.1817-	.0875
24	2	.950-	4.06	90.00-	.274	.1301-	.0084-	.031	.0023-	.0001	.2716-	.1415
24	3	.950-	3.05	90.00-	.187	.1346-	.0113-	.005	.0025-	.0002	.2701-	.1355
24	4	.950-	2.03	90.00-	.121	.1363-	.0104-	.018-	.0003	.0001	.2684-	.1321
24	5	.950-	1.02	90.00-	.058	.1345-	.0057-	.058	.0011-	.0006	.2650-	.1305
24	6	.950-	.00	90.00-	.004	.1353-	.0004-	.022-	.0004-	.0002	.2640-	.1287
24	7	.950	1.02	90.00	.058	.1361	.0050-	.037-	.0006-	.0004	.2662-	.1301
24	8	.950	2.03	90.00	.116	.1318	.0097-	.014-	.0001-	.0005	.2661-	.1343
24	9	.950	3.05	90.00	.184	.1323	.0115-	.003	.0001-	.0001	.2695-	.1372
24	10	.950	4.06	90.00	.272	.1324	.0083-	.053	.0000	.0002	.2732-	.1408
24	11	.950-	.00	90.00	.000	.1359-	.0003-	.022-	.0004-	.0002	.2635-	.1276
28	2	.950-	4.05	45.00-	.506	.2013	.0601	.008-	.0062-	.0001	.3538-	.1525
28	3	.950-	3.03	45.00-	.349	.2027	.0641	.029-	.0070	.0002	.3526-	.1499
28	4	.950-	2.03	45.00-	.239	.2014	.0409	.006-	.0071-	.0001	.3504-	.1490
28	5	.950-	3.04	45.00-	.369	.2042	.0644-	.003-	.0056	.0002	.3537-	.1495
28	6	.950-	1.01	45.00-	.095	.2005	.0192	.018-	.0067	.0003	.3485-	.1480
28	7	.950	.00	45.00	.020	.1997-	.0007	.022-	.0087	.0005	.3480-	.1483
28	8	.950	1.02	45.00	.149	.1976-	.0212	.030-	.0098	.0003	.3473-	.1497
28	9	.950	2.03	45.00	.254	.1993-	.0416	.009-	.0090	.0001	.3499-	.1506
28	10	.950	3.04	45.00	.385	.2025-	.0642	.015-	.0080	.0003	.3541-	.1516

TABLE IVb

MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_l}$	$C_{Y'}$	$C_{n'_l}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
28	11	.950	4.06	45.00	.547	.2032-	.0241	.013-	.0064	.0000	.3588-	.1556
28	12	.950	.00	45.00	.018	.1979-	.0003	.024-	.0091	.0006	.3473-	.1494
34	2	.950-	3.99	45.00-	.966	.5851	.3493-	.050	.0158-	.0038	.7934-	.2083
34	3	.950-	2.99	45.00-	.707	.5858	.2573-	.037	.0150-	.0034	.7910-	.2052
34	4	.950-	2.00	45.00-	.464	.5819	.1652-	.045	.0137-	.0030	.7859-	.2040
34	5	.950-	1.00	45.00-	.224	.5875	.0800-	.037	.0129-	.0021	.7889-	.2014
34	6	.950-	.00	45.00-	.021	.5861	.0005-	.066	.0142-	.0027	.7889-	.2028
34	7	.950	1.00	45.00	.209	.5832-	.0793-	.050	.0156-	.0028	.7869-	.2037
34	8	.950	1.99	45.00	.444	.5869-	.1659-	.055	.0162-	.0019	.7911-	.2042
34	9	.950	3.00	45.00	.708	.5781-	.2497-	.035	.0213-	.0024	.7865-	.2084
34	10	.950	3.99	45.00	.981	.5753-	.3504-	.033	.0227-	.0021	.7860-	.2107
34	11	.950	.00	45.00-	.007	.5854	.0056-	.047	.0173-	.0021	.7884-	.2030
39	2	.950-	4.04	45.00-	.932	.3007	.2338-	.023	.0052	.0007	.4567-	.1560
39	3	.950-	3.03	45.00-	.615	.3006	.1701-	.007	.0042-	.0003	.4556-	.1550
39	4	.950-	2.02	45.00-	.411	.3065	.1093-	.030	.0052-	.0003	.4585-	.1520
39	5	.950-	1.01	45.00-	.208	.3043	.0521-	.038	.0036-	.0002	.4566-	.1523
39	6	.950-	.00	45.00-	.012	.3102	.0007-	.043	.0064-	.0001	.4593-	.1491
39	7	.950	1.01	45.00	.218	.3060-	.0548-	.008	.0050-	.0006	.4581-	.1521
39	8	.950	2.02	45.00	.434	.3093-	.1113	.004	.0039-	.0005	.4582-	.1489
39	9	.950	3.03	45.00	.620	.3044-	.1694-	.014	.0062-	.0005	.4570-	.1526
39	10	.950	4.04	45.00	.977	.3033-	.2357-	.005	.0047-	.0005	.4570-	.1537
39	11	.950	.00	45.00	.001	.3081	.0003-	.020	.0045-	.0001	.4577-	.1496
42	2	.950-	4.04	90.00-	.512	.5748	.1265-	.022	.0077-	.0010	.7965-	.2217
42	3	.950-	3.03	90.00-	.367	.5790	.0901-	.034	.0098-	.0012	.8016-	.2226
42	4	.950-	2.02	90.00-	.250	.5868	.0611-	.060	.0096-	.0014	.8050-	.2182
42	5	.950-	1.01	90.00-	.133	.5869	.0335-	.037	.0107-	.0015	.8060-	.2191
42	6	.950-	.00	90.00-	.017	.5858	.0061-	.082	.0100-	.0017	.8053-	.2195
42	7	.950	1.01	90.00	.091	.5887-	.0222-	.066	.0111-	.0018	.8094-	.2207
42	8	.950	2.02	90.00	.214	.5889-	.0501-	.042	.0098-	.0014	.8099-	.2216
42	9	.950	3.03	90.00	.338	.5829-	.0814-	.022	.0102-	.0020	.8048-	.2[illegible]
42	10	.950	4.03	90.00	.477	.5743-	.1163-	.014	.0107-	.0021	.7981-	.2[illegible]
42	11	.950-	.00	90.00-	.020	.5861	.0066-	.051	.0085-	.0017	.8076-	.2[illegible]
44	2	.950-	4.06	90.00-	.481	.2235	.0766-	.032	.0001-	.0000	.[illegible]	.1460

UNCLASSIFIED

TABLE IVb
MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α'	ϕ	$C_{N'}$	$C_{A'}$	$C_{m'_l}$	$C_{Y'}$	$C_{n'_l}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
44	3	.950-	3.04	90.00-	.347	.2266	.0574-	.044-	.0015-	.0002	.3695-	.1429
44	4	.950-	2.03	90.00-	.241	.2297	.0418-	.026-	.0021	.0001	.3712-	.1415
44	5	.950-	1.01	90.00-	.139	.2300	.0269-	.033-	.0010	.0005	.3714-	.1414
44	6	.950	.00	90.00-	.027	.2300	.0110-	.001-	.0038-	.0002	.3705-	.1405
44	7	.950	1.01	90.00	.079	.2300-	.0039-	.046-	.0037-	.0004	.3711-	.1411
44	8	.950	2.03	90.00	.186	.2290-	.0198-	.015-	.0041	.0000	.3701-	.1411
44	9	.950	3.04	90.00	.305	.2297-	.0368-	.034-	.0035-	.0002	.3722-	.1425
44	10	.950	4.06	90.00	.415	.2280-	.0538-	.015-	.0019-	.0003	.3731-	.1451
44	11	.950	.00	90.00-	.030	.2319	.0114-	.027	.0003-	.0002	.3721-	.1402
44	12	.950	.00	90.00-	.030	.2304	.0114-	.027-	.0020-	.0002	.3719-	.1415
46	1	.950-	4.04	90.00-	.569	.2243	.1359-	.028	.0132	.0005	.3799-	.1556
46	2	.950-	3.03	90.00-	.416	.2271	.1016-	.028	.0134	.0009	.3800-	.1529
46	3	.950-	2.02	90.00-	.281	.2319	.0692-	.053	.0130	.0002	.3819-	.1500
46	4	.950-	1.01	90.00-	.144	.2302	.0365-	.040	.0136	.0006	.3802-	.1500
46	5	.950-	.00	90.00-	.017	.2301	.0054-	.053	.0135-	.0001	.3784-	.1483
46	7	.950	1.01	90.00	.116	.2275-	.0266-	.040	.0118	.0003	.3801-	.1526
46	8	.950	2.02	90.00	.245	.2290-	.0588-	.028	.0123	.0002	.3820-	.1530
46	9	.950	3.03	90.00	.385	.2257-	.0920-	.053	.0143	.0000	.3804-	.1547
46	10	.950	4.04	90.00	.529	.2189-	.1257-	.078	.0138-	.0001	.3771-	.1582
46	11	.950-	.00	90.00-	.021	.2324	.0066-	.041	.0138-	.0001	.3819-	.1495
49	2	1.100-	3.96	45.00-	1.218	.4610	.4692-	.044	.0184	.0009	.7205-	.2595
49	3	1.100-	2.97	45.00-	.901	.4659	.3514-	.041	.0186	.0001	.7239-	.2580
49	4	1.100-	1.98	45.00-	.622	.4714	.2361-	.065	.0181	.0006	.7272-	.2558
49	5	1.100-	.99	45.00-	.296	.4740	.1135-	.054	.0205	.0003	.7302-	.2562
49	6	1.100-	.00	45.00-	.003	.4745-	.0018-	.062	.0211	.0004	.7306-	.2561
49	7	1.100	.99	45.00	.305	.4709-	.1230-	.065	.0218-	.0005	.7288-	.2579
49	8	1.100	1.98	45.00	.623	.4663-	.2433-	.049	.0199-	.0000	.7254-	.2591
49	9	1.100	2.97	45.00	.937	.4649-	.3588-	.052	.0235-	.0000	.7266-	.2617
49	10	1.100	3.96	45.00	1.221	.4609-	.4700-	.057	.0245-	.0002	.7247-	.2638
49	11	1.100	5.96	45.00	1.837	.4536-	.6899-	.040	.0226-	.0002	.7224-	.2688
49	12	1.100-	.00	45.00-	.001	.4725-	.0021-	.063	.0212	.0003	.7328-	.2603
51	1	.950-	3.97	45.00-	1.203	.3500	.4598-	.036	.0122	.0005	.5156-	.1656
51	2	.950-	2.98	45.00-	.902	.3561	.3446-	.050	.0160	.0007	.5198-	.1637
51	3	.950-	1.99	45.00-	.603	.3591	.2293-	.046	.0152	.0004	.5229-	.1638
51	4	.950-	.99	45.00-	.314	.3624	.1174-	.051	.0163	.0002	.5258-	.1634

UNCLASSIFIED

TABLE IVb
MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α'	ϕ	$C_{N'}$	$C_{A'}$	$C_{m'_l}$	$C_{Y'}$	$C_{n'_l}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
51	5	.950-	.00	45.00-	.232	.3604	.0051-	.067	.0175-	.0001	.5241-	.1637
51	6	.950	.00	45.00	.279	.3599-	.1104-	.055	.0165-	.0004	.5238-	.1639
51	7	.950	1.98	45.00	.556	.3534-	.2193-	.053	.0178-	.0001	.5192-	.1658
51	8	.950	2.98	45.00	.869	.3537-	.3337-	.043	.0167-	.0005	.5183-	.1646
51	9	.950	3.97	45.00	1.184	.3481-	.4532-	.045	.0198-	.0003	.5157-	.1676
51	10	.950	5.96	45.00	1.791	.3282-	.6789-	.040	.0190	.0004	.5041-	.1759
51	11	.950	7.95	45.00	2.417	.3008-	.9074-	.034	.0210	.0007	.4835-	.1827
51	12	.950	.00	45.00-	.021	.3626	.0066-	.061	.0198	.0004	.5265-	.1639
55	1	.750-	3.99	45.00-	1.059	.2860	.3951-	.015	.0051	.0019	.4055-	.1195
55	2	.750-	2.99	45.00-	.802	.2964	.2903-	.042	.0086	.0012	.4102-	.1138
55	3	.750-	1.99	45.00-	.523	.2994	.1921-	.038	.0079	.0019	.4140-	.1146
55	4	.750-	1.00	45.00-	.264	.3005	.0982-	.026	.0076	.0012	.4162-	.1157
55	5	.750-	.00	45.00-	.018	.2999	.0051-	.047	.0102	.0019	.4157-	.1158
55	6	.750	1.00	45.00	.267	.2990-	.0959-	.027	.0084	.0004	.4145-	.1155
55	7	.750	2.00	45.00	.526	.2996-	.1962-	.014	.0095	.0004	.4162-	.1166
55	8	.750	3.00	45.00	.795	.2913-	.2873-	.009	.0087	.0011	.4094-	.1181
55	9	.750	3.99	45.00	1.057	.2847-	.3764-	.021	.0114	.0011	.4043-	.1196
55	10	.750	5.99	45.00	1.571	.2620-	.5621-	.025	.0135	.0016	.3853-	.1233
55	11	.750	7.99	45.00	2.119	.2212-	.7441-	.014	.0112	.0013	.3484-	.1272
55	12	.750	12.01	45.00	3.241	.1873-1	.1054	.025	.0052	.0004	.3228-	.1355
55	13	.750	.00	45.00-	.012	.3024	.0045-	.027	.0112	.0012	.4172-	.1148
58	2	1.100-	4.07	90.00-	.799	.5762	.0390-	.022-	.0013-	.0003	.8643-	.2881
58	3	1.100-	3.05	90.00-	.592	.5706	.0283-	.030-	.0001-	.0001	.8640-	.2934
58	4	1.100-	2.03	90.00-	.193	.5708	.0102-	.026-	.0000-	.0002	.8618-	.2910
58	5	1.100-	1.02	90.00-	.103	.5708	.0128-	.024-	.0014	.0001	.8610-	.2902
58	6	1.100	.00	90.00-	.020	.5717	.0070-	.022-	.0019-	.0000	.8601-	.2884
58	7	1.100	1.02	90.00	.060	.5733	.0010-	.032-	.0006	.0003	.8622-	.2889
58	8	1.100	2.03	90.00	.151	.5745-	.0050-	.018-	.0010	.0001	.8647-	.2902
58	9	1.100	3.05	90.00	.249	.5741-	.0132-	.026-	.0019-	.0000	.8668-	.2927
58	10	1.100	4.07	90.00	.348	.5739-	.0237-	.022-	.0026	.0007	.8683-	.2944
58	11	1.100	5.09	90.00	.466	.5719-	.0368-	.017-	.0035	.0001	.8678-	.2959
58	12	1.100	6.11	90.00	.593	.5682-	.0510-	.011-	.0048	.0004	.8657-	.2975
58	13	1.100	8.16	90.00	.857	.5634-	.0840-	.003-	.0051	.0000	.8655-	.3021
58	14	1.100	10.26	90.00	1.115	.5607-	.1138-	.007-	.0062	.0000	.8671-	.3074
58	15	1.100	14.39	90.00	1.654	.5532-	.1730-	.000	.0048	.0005	.8685-	.3163
58	16	1.100	20.72	90.00	2.437	.4762-	.2728-	.000-	.0062	.0001	.8157-	.3305
58	17	1.100-	.00	90.00-	.037	.5635	.0028-	.022-	.0013-	.0000	.8599-	.2906

TABLE IVb

MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_l}$	$C_{Y'}$	$C_{n'_l}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
59	1	.950-	4.06	90.00-	.379	.4015	.0404-	.023-	.0041-	.0003	.6315-	.2300
59	2	.950-	3.04	90.00-	.281	.4055	.0306-	.033-	.0027	.0000	.6338-	.2283
59	3	.950-	2.03	90.00-	.193	.4109	.0222-	.017-	.0031-	.0001	.6371-	.2262
59	4	.950-	1.01	90.00-	.104	.4137	.0157-	.028-	.0040-	.0003	.6401-	.2264
59	5	.950	.00	90.00-	.027	.4117	.0110-	.026-	.0045-	.0004	.6389-	.2272
59	6	.950	1.02	90.00	.062	.4133	.0051-	.012-	.0046	.0005	.6386-	.2253
59	7	.950	2.03	90.00	.146	.4102-	.0020-	.022-	.0055	.0003	.6367-	.2265
59	8	.950	3.04	90.00	.237	.4034-	.0114-	.018-	.0062	.0007	.6323-	.2289
59	9	.950	4.06	90.00	.335	.4015-	.0220-	.027-	.0049	.0005	.6327-	.2312
59	10	.950	6.09	90.00	.568	.3917-	.0495-	.017-	.0068	.0007	.6270-	.2353
59	11	.950	8.13	90.00	.829	.3818-	.0820-	.004-	.0090	.0009	.6183-	.2365
59	12	.950	12.21	90.00	1.555	.3378-	.2101-	.022-	.0030	.0004	.6259-	.2881
59	13	.950	16.32	90.00	2.468	.3196-	.3711-	.028-	.0028	.0003	.6359-	.3163
59	14	.950	19.92	90.00	3.484	.2655-	.5646-	.021-	.0041	.0001	.5885-	.3230
59	15	.950	.00	90.00-	.023	.4123	.0110-	.027-	.0020	.0001	.6378-	.2255
63	1	.750-	4.04	90.00-	.365	.4429	.0337	.011-	.0122	.0008	.5748-	.1319
63	2	.750-	3.03	90.00-	.270	.4472	.0261	.031-	.0125	.0006	.5766-	.1294
63	3	.750-	2.02	90.00-	.188	.4483	.0215	.014-	.0101	.0011	.5780-	.1297
63	4	.750-	1.01	90.00-	.117	.4461	.0185	.016-	.0137	.0009	.5741-	.1280
63	5	.750	.00	90.00-	.041	.4472	.0155	.016-	.0110	.0008	.5732-	.1260
63	6	.750	1.01	90.00	.035	.4481	.0136-	.001-	.0116	.0013	.5749-	.1268
63	7	.750	2.02	90.00	.110	.4486	.0099	.017-	.0117	.0018	.5786-	.1300
63	8	.750	3.03	90.00	.198	.4479	.0041	.038-	.0152	.0009	.5793-	.1314
63	9	.750	4.05	90.00	.296	.4457-	.0040	.023-	.0130	.0014	.5803-	.1346
63	10	.750	6.07	90.00	.498	.4381-	.0256	.031-	.0146	.0017	.5755-	.1374
63	11	.750	8.10	90.00	.750	.4267-	.0565	.008-	.0145	.0014	.5684-	.1417
63	12	.750	12.15	90.00	1.404	.3814-	.1638-	.002-	.0128	.0013	.5470-	.1656
63	13	.750	16.23	90.00	2.272	.3698-	.3156-	.000-	.0087	.0013	.5656-	.1958
63	14	.750	19.80	90.00	3.172	.3311-	.4856	.012-	.0119	.0002	.5292-	.1981
63	15	.750	.00	90.00-	.036	.4456	.0157	.016-	.0109	.0015	.5725-	.1269
67	1	1.100-	4.05	90.00-	.452	1.0352	.0699-	.044	.0095-	.0009	1.3327-	.2975
67	2	1.100-	3.04	90.00-	.336	1.0437	.0499-	.037	.0085-	.0005	1.3404-	.2967
67	3	1.100-	2.03	90.00-	.219	1.0461	.0305-	.044	.0096-	.0006	1.3411-	.2950
67	4	1.100-	1.01	90.00-	.113	1.0469	.0143-	.038	.0087-	.0002	1.3415-	.2946
67	5	1.100-	.00	90.00	.000	1.0501-	.0031-	.031	.0076-	.0004	1.3433-	.2932
67	6	1.100	1.01	90.00	.105	1.0499-	.0199-	.053	.0087-	.0000	1.3431-	.2932
67	7	1.100	2.02	90.00	.214	1.0485-	.0374-	.032	.0078-	.0001	1.3420-	.2935

TABLE IVb

MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_l}$	$C_{Y'}$	$C_{n'_l}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
67	8	1.100	3.03	90.00	.321	1.0458-	.0553-	.054	.0087-	.0003	1.3407-	.2949
67	9	1.100	4.05	90.00	.453	1.0400-	.0777-	.045	.0074-	.0005	1.3367-	.2967
67	10	1.100	6.07	90.00	.725	1.0234-	.1284-	.030	.0067-	.0002	1.3241-	.3007
67	11	1.100	8.10	90.00	1.044	.9965-	.1870-	.031	.0057	.0001	1.3085-	.3120
67	12	1.100	12.18	90.00	1.851	.8827-	.3476-	.030	.0076-	.0006	1.2299-	.3472
67	13	1.100	16.27	90.00	2.815	.8619-	.5243-	.023	.0060	.0000	1.2206-	.3587
67	14	1.100	19.88	90.00	3.809	.8529-	.6877-	.050	.0066-	.0006	1.2220-	.3691
67	15	1.100-	.00	90.00-	.304	1.0482-	.0032-	.045	.0098-	.0004	1.3475-	.2993
68	4	.950-	3.04	90.00-	.339	.7922	.0584-	.038	.0059-	.0003	1.0547-	.2625
68	5	.950-	2.02	90.00-	.223	.8005	.0393-	.044	.0069	.0001	1.0576-	.2571
68	6	.950-	1.01	90.00-	.110	.8071	.0194-	.036	.0058-	.0001	1.0583-	.2512
68	7	.950-	.00	90.00-	.007	.8052-	.0004-	.041	.0066-	.0002	1.0586-	.2534
68	8	.950	1.01	90.00	.105	.8055-	.0207-	.034	.0055	.0001	1.0582-	.2527
68	9	.950	2.02	90.00	.219	.8043-	.0415-	.025	.0043-	.0000	1.0572-	.2529
68	10	.950	3.04	90.00	.337	.7967-	.0622-	.043	.0049-	.0001	1.0526-	.2559
68	11	.950	4.05	90.00	.451	.7799-	.0818-	.048	.0057-	.0002	1.0410-	.2611
68	12	.950	6.07	90.00	.760	.7435-	.1579-	.044	.0057	.0000	1.0210-	.2775
68	13	.950	8.10	90.00	1.095	.6956-	.2251-	.045	.0068	.0005	1.0012-	.3056
68	14	.950	12.19	90.00	1.799	.6350-	.3379-	.030	.0054	.0000	.9736-	.3386
68	15	.950	16.30	90.00	2.692	.6587-	.4880-	.027	.0041-	.0002	1.0078-	.3491
68	16	.950	19.90	90.00	3.726	.5974-	.6874-	.003-	.0017-	.0009	.9444-	.3470
68	17	.950-	.00	90.00-	.006	.8053-	.0005-	.041	.0066-	.0002	1.0609-	.2556
71	2	.750-	4.04	90.00-	.436	.7963	.0686-	.048	.0047	.0010	1.0046-	.2083
71	3	.750-	3.03	90.00-	.319	.7987	.0497-	.040	.0066	.0001	1.0135-	.2148
71	4	.750-	2.02	90.00-	.205	.8054	.0321-	.052	.0084	.0006	1.0169-	.2115
71	5	.750-	1.01	90.00-	.106	.8048	.0161-	.045	.0073	.0004	1.0164-	.2116
71	6	.750-	.00	90.00-	.004	.8068-	.0004-	.056	.0091	.0002	1.0179-	.2111
71	7	.750	1.01	90.00	.094	.8061-	.0164-	.050	.0081	.0001	1.0180-	.2119
71	8	.750	2.02	90.00	.210	.8033-	.0342-	.043	.0071	.0006	1.0152-	.2119
71	9	.750	3.03	90.00	.326	.8028-	.0499-	.072	.0085	.0004	1.0115-	.2087
71	10	.750	4.04	90.00	.427	.7986-	.0685-	.065	.0074	.0000	1.0055-	.2069
71	11	.750	6.06	90.00	.675	.7678-	.1103-	.031	.0052	.0007	.9793-	.2115
71	12	.750	8.08	90.00	.964	.7256-	.1601-	.046	.0077	.0001	.9494-	.2238
71	13	.750	12.14	90.00	1.650	.6592-	.2810-	.035	.0060-	.0000	.8930-	.2338
71	14	.750	16.22	90.00	2.496	.5262-	.4281-	.052	.0111	.0001	.8821-	.2560
71	15	.750	19.78	90.00	3.341	.5115-	.5647-	.001	.0012	.0000	.8823-	.2708
71	16	.750-	.00	90.00-	.004	.8036-	.0004-	.056	.0060	.0002	1.0160-	.2124

TABLE IVb

MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_l}$	$C_{Y'}$	$C_{n'_l}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
76	1	.950-	4.03	45.00-	.836	.8979	.2411-	.011-	.0015-	.0006	1.1762-	.2783
76	2	.950-	3.02	45.00-	.636	.9007	.1838-	.016	.0004-	.0000	1.1796-	.2789
76	3	.950-	2.01	45.00-	.427	.9026	.1227-	.008-	.0009-	.0005	1.1804-	.2778
76	4	.950-	1.01	45.00-	.228	.9070	.0628-	.026	.0023-	.0010	1.1833-	.2783
76	5	.950-	.00	45.00-	.019	.9060	.0003-	.019-	.0005	.0001	1.1826-	.2766
76	6	.950	1.00	45.00	.192	.9068-	.0598-	.013	.0007-	.0004	1.1830-	.2762
76	7	.950	2.01	45.00	.396	.9060-	.1193-	.004-	.0017	.0001	1.1838-	.2778
76	8	.950	3.02	45.00	.595	.9051-	.1779-	.006-	.0024-	.0003	1.1828-	.2777
76	9	.950	4.02	45.00	.810	.9022-	.2383-	.006-	.0008-	.0003	1.1797-	.2775
76	10	.950	6.04	45.00	1.248	.8819-	.3582-	.002	.0039	.0002	1.1609-	.2790
76	11	.950	8.06	45.00	1.692	.8656-	.4863-	.021	.0068-	.0001	1.1416-	.2760
76	12	.950	12.09	45.00	2.884	.8191-	.8494	.007	.0013	.0009	1.0983-	.2792
76	13	.950	16.14	45.00	4.096	.7180-	1.1976	.020	.0018	.0002	1.0128-	.2948
76	14	.950	19.70	45.00	5.159	.6554-	1.4645	.025	.0052-	.0003	.9733-	.3179
76	15	.950-	.00	45.00-	.023	.9128	.0005-	.032	.0021	.0000	1.1904-	.2776
83	3	.950-	4.04	90.00-	.882	.7797	.2635-	.034	.0026	.0002	1.0575-	.2778
83	4	.950-	3.03	90.00-	.653	.7918	.1940-	.031	.0008	.0005	1.0627-	.2709
83	5	.950-	2.02	90.00-	.436	.7942	.1279-	.018	.0018	.0004	1.0619-	.2677
83	6	.950-	1.01	90.00-	.217	.7998	.0632-	.017	.0003	.0002	1.0635-	.2637
83	7	.950-	.00	90.00-	.010	.8018	.0012-	.044	.0029	.0001	1.0649-	.2631
83	8	.950	1.01	90.00	.193	.8010-	.0609-	.006	.0001-	.0001	1.0629-	.2619
83	9	.950	2.02	90.00	.410	.7973-	.1245-	.018	.0005-	.0002	1.0611-	.2638
83	10	.950	3.02	90.00	.622	.7896-	.1893-	.018	.0013-	.0004	1.0587-	.2691
83	11	.950	4.03	90.00	.845	.7761-	.2577-	.003-	.0001	.0000	1.0533-	.2772
83	12	.950	6.05	90.00	1.365	.7397-	.4172-	.034	.0037	.0003	1.0369-	.2972
83	13	.950	8.08	90.00	1.916	.6835-	.5811	.014	.0014	.0004	.9960-	.3125
83	14	.950	12.14	90.00	3.168	.5823-	.9358	.035-	.0025-	.0021	.9419-	.3596
83	16	.950-	.00	90.00-	.014	.8048	.0018-	.019	.0037	.0006	1.0678-	.2630
83	17	.950	.00-	90.00	.044	.8069-	.0131-	.045	.0018	.0001	1.0689-	.2620
89	2	.950-	4.05	90.00-	.709	.3966	.1758-	.002-	.0095	.0018	.6279-	.2313
89	3	.950-	3.04	90.00-	.528	.4068	.1300	.003-	.0098	.0021	.6343-	.2275
89	4	.950-	2.02	90.00-	.351	.4124	.0879-	.006-	.0104	.0019	.6361-	.2237
89	5	.950-	1.01	90.00-	.189	.4117	.0476	.010-	.0103	.0018	.6358-	.2241
89	6	.950	.00	90.00-	.023	.4148	.0092	.000-	.0107	.0016	.6375-	.2227
89	7	.950	1.01	90.00	.131	.4135-	.0280	.002-	.0106	.0020	.6363-	.2228
89	8	.950	2.02	90.00	.303	.4123-	.0693	.006-	.0110	.0013	.6375-	.2252
89	9	.950	3.04	90.00	.467	.4080-	.1094-	.004-	.0091	.0012	.6349-	.2269

TABLE IVb

MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_l}$	$C_{Y'}$	$C_{n'_l}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
89	10	.950	4.05	90.00	.648	.4014-	.1546	.001-	.0119	.0015	.6303-	.2289
89	11	.950	6.08	90.00	1.041	.3808-	.2537	.000-	.0123	.0015	.6195-	.2387
89	12	.950	8.10	90.00	1.589	.3529-	.4086-	.006-	.0066	.0005	.5975-	.2446
89	13	.950	12.17	90.00	2.744	.2731-	.7284	.013-	.0090-	.0002	.6041-	.3310
89	14	.950	.00	90.00-	.020	.4138	.0087	.000-	.0107	.0016	.6359-	.2221
93	1	.950-	4.05	90.00-	.687	.4826	.1675-	.003-	.0009-	.0002	.7494-	.2668
93	2	.950-	3.04	90.00-	.511	.4872	.1223-	.011-	.0015-	.0004	.7500-	.2628
93	3	.950-	2.02	90.00-	.337	.4924	.0814-	.008-	.0015-	.0001	.7537-	.2613
93	4	.950-	1.01	90.00-	.179	.4967	.0435-	.005-	.0041-	.0002	.7565-	.2598
93	5	.950-	.00	90.00-	.023	.4973	.0060	.010-	.0037-	.0004	.7563-	.2590
93	6	.950	1.01	90.00	.139	.5000-	.0318-	.001-	.0039-	.0001	.7574-	.2574
93	7	.950	2.02	90.00	.297	.4932-	.0704	.015-	.0038-	.0007	.7528-	.2596
93	8	.950	3.03	90.00	.465	.4882-	.1124	.019-	.0063-	.0003	.7501-	.2619
93	9	.950	4.05	90.00	.636	.4790-	.1543	.009-	.0044-	.0005	.7449-	.2659
93	10	.950	6.07	90.00	1.033	.4569-	.2535	.011-	.0037-	.0007	.7336-	.2767
93	11	.950	8.10	90.00	1.582	.4394-	.4129	.004-	.0015-	.0005	.7187-	.2793
93	12	.950	12.17	90.00	2.712	.3595-	.7198	.017-	.0031-	.0012	.7154-	.3559
93	13	.950-	.00	90.00-	.023	.4982	.0060-	.003-	.0040-	.0004	.7572-	.2590
95	1	.950-	4.04	45.00-	.661	.4871	.1586	.008-	.0015	.0004	.7423-	.2552
95	2	.950-	3.03	45.00-	.485	.4912	.1163-	.001-	.0005-	.0005	.7453-	.2541
95	3	.950-	2.02	45.00-	.315	.4907	.0747-	.002-	.0014-	.0003	.7463-	.2556
95	4	.950-	1.01	45.00-	.158	.4921	.0369-	.010	.0005-	.0001	.7493-	.2572
95	5	.950-	.00	45.00-	.000	.4960-	.0007-	.001-	.0006	.0000	.7506-	.2546
95	6	.950	1.01	45.00	.165	.4956-	.0369-	.001	.0003-	.0003	.7489-	.2533
95	7	.950	2.02	45.00	.327	.4928-	.0777	.004-	.0010-	.0001	.7480-	.2552
95	8	.950	3.03	45.00	.500	.4900-	.1180	.015-	.0012	.0001	.7449-	.2549
95	9	.950	4.04	45.00	.673	.4892-	.1608	.010-	.0013-	.0003	.7448-	.2556
95	10	.950	.00	45.00	.002	.4988-	.0006-	.004-	.0006	.0000	.7519-	.2571
97	2	.950-	4.05	22.50-	.757	.1715	.1711-	.139	.0572-	.0020	.2991-	.1276
97	3	.950-	3.03	22.50-	.541	.1771	.1245-	.149	.0437-	.0008	.3023-	.1252
97	4	.950-	2.02	22.50-	.356	.1775	.0812-	.100	.0283-	.0002	.3011-	.1236
97	5	.950-	1.01	22.50-	.179	.1799	.0390-	.055	.0120	.0004	.3021-	.1222
97	6	.950-	.00	22.50-	.013	.1788-	.0001-	.014-	.0020	.0005	.3017-	.1229
97	7	.950	1.01	22.50	.158	.1794-	.0407	.028-	.0184	.0006	.3020-	.1226
97	8	.950	2.02	22.50	.341	.1797-	.0837	.081-	.0344-	.0004	.3039-	.1242

UNCLASSIFIED

TABLE IVb
MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_l}$	$C_{Y'}$	$C_{n'_l}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
97	9	.950	3.03	22.50	.531	.1796-	.1278	.116-	.0476-	.0014	.3043-	.1247
97	10	.950	4.05	22.50	.757	.1762-	.1764	.168-	.0601-	.0029	.3042-	.1280
97	11	.950	5.06	22.49	.971	.1703-	.2275	.215-	.0729-	.0045	.3043-	.1340
97	12	.950-	.00	22.50-	.002	.1797-	.0021-	.006-	.0036	.0010	.3024-	.1227
98	1	.950-	4.05	90.00-	.275	.1803	.0138-	.069	.0100-	.0003	.3148-	.1345
98	2	.950-	3.04	90.00-	.204	.1798	.0132-	.053	.0074-	.0004	.3097-	.1299
98	3	.950-	2.02	90.00-	.134	.1799	.0078-	.039	.0040-	.0001	.3066-	.1267
98	4	.950-	1.01	90.00-	.074	.1814	.0058-	.038	.0046-	.0002	.3063-	.1249
98	5	.950	.00	90.00-	.010	.1821	.0044-	.051	.0063-	.0003	.3057-	.1236
98	6	.950	1.01	90.00	.047	.1840	.0041-	.064	.0059	.0000	.3077-	.1237
98	7	.950	2.02	90.00	.110	.1833	.0022-	.051	.0058-	.0001	.3076-	.1243
98	8	.950	3.04	90.00	.172	.1833-	.0022-	.062	.0052	.0003	.3096-	.1263
98	9	.950	4.05	90.00	.248	.1837-	.0094-	.060	.0070	.0006	.3143-	.1306
98	10	.950	6.07	90.00	.406	.1786-	.0314-	.064	.0052	.0008	.3289-	.1503
98	11	.950	8.09	90.00	.606	.1778-	.0621-	.052	.0032	.0004	.3443-	.1665
98	12	.950	12.15	90.00	1.005	.1700-	.1143-	.058	.0061	.0009	.3468-	.1768
98	13	.950	16.23	90.00	1.386	.1548-	.1193-	.072	.0116	.0003	.3451-	.1903
98	14	.950	20.33	90.00	1.852	.1371-	.1184-	.061	.0082-	.0005	.3329-	.1958
98	15	.950	.00	90.00-	.013	.1837	.0049-	.064	.0061-	.0003	.3082-	.1245
99	2	.950-	4.05-	90.00-	.266	.1742	.0174-	.090	.0276-	.0017	.3075-	.1333
99	3	.950-	3.03-	90.00-	.189	.1791	.0098-	.086	.0246-	.0012	.3059-	.1268
99	4	.950-	2.02-	90.00-	.125	.1804	.0058-	.072	.0248-	.0012	.3044-	.1240
99	5	.950-	1.01-	90.00-	.065	.1790	.0038-	.071	.0222-	.0007	.3024-	.1234
99	6	.950	.00-	90.00-	.001	.1818	.0024-	.057	.0200-	.0002	.3045-	.1227
99	7	.950	1.01-	90.00	.056	.1788	.0021-	.071	.0221-	.0008	.3027-	.1239
99	8	.950	2.03-	90.00	.122	.1792-	.0004-	.070	.0219	.0002	.3049-	.1257
99	9	.950	3.04-	90.00	.184	.1779-	.0048-	.056	.0220	.0001	.3076-	.1297
99	10	.950	4.05-	90.00	.263	.1789-	.0124-	.066	.0214	.0001	.3131-	.1342
99	11	.950	.00-	90.00-	.004	.1789	.0029-	.071	.0221-	.0008	.3016-	.1227
105	1	.950-	4.03	90.00-	.651	1.2119	.1899-	.071	.0079	.0004	2.7994-1	.5875
105	2	.950-	3.02	90.00-	.480	1.2318	.1410-	.024	.0075	.0002	2.8052-1	.5734
105	3	.950-	2.01	90.00-	.318	1.2619	.0928-	.018	.0070	.0004	2.8216-1	.5597
105	4	.950-	1.01	90.00-	.166	1.2666	.0476-	.013	.0067	.0002	2.8207-1	.5541
105	5	.950-	.00	90.00-	.004	1.2748	.0009-	.020	.0084	.0001	2.8177-1	.5429
105	6	.950	1.01	90.00	.154	1.2973-	.0465-	.026	.0077	.0004	2.8218-1	.5245

UNCLASSIFIED

TABLE IVb

MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 15.500

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_l}$	$C_{Y'}$	$C_{n'_l}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
105	7	.950	2.01	90.00	.306	1.2693-	.0920-	.021	.0074	.0003	2.8245-1	.5552
105	8	.950	3.02	90.00	.471	1.2424-	.1405-	.015	.0093	.0002	2.8165-1	.5741
105	9	.950	4.03	90.00	.650	1.2133-	.1912-	.007	.0065	.0006	2.8039-1	.5906
105	10	.950-	.00	90.00-	.008	1.2972	.0015-	.020	.0085	.0002	2.8146-1	.5174
111	2	.950-	4.02	90.00-	.595	1.3077	.1578	.007	.0090	.0016	2.8044-1	.4967
111	3	.950-	3.01	90.00-	.437	1.2729	.1187-	.006	.0112	.0012	2.8134-1	.5405
111	4	.950-	2.01	90.00-	.306	1.3262	.0816-	.019	.0080	.0018	2.8239-1	.4977
111	5	.950-	1.00	90.00-	.161	1.3320	.0422	.024	.0074	.0016	2.8081-1	.4761
111	6	.950-	.00	90.00-	.025	1.3406	.0043	.012	.0097	.0012	2.8301-1	.4875
111	7	.950	1.00	90.00	.118	1.3277-	.0357-	.001	.0124	.0021	2.8128-1	.4851
111	8	.950	2.01	90.00	.266	1.3304-	.0753	.015	.0102	.0017	2.8253-1	.4949
111	9	.950	3.01	90.00	.399	1.2765-	.1123	.003	.0077	.0026	2.8030-1	.5265
111	10	.950	4.01	90.00	.548	1.2925-	.1507	.018	.0105	.0012	2.8129-1	.5204
111	11	.950-	.00	90.00-	.017	1.3119	.0031-	.016	.0141	.0013	2.8192-1	.5073
140	1	.950-	3.63	10.00	1.223	2.8329	.7726	.511-	.0338	.0002	2.9571-	.1242
140	2	.950-	1.62	10.00	1.938	2.9280	.5708	.500	.0179	.0036	3.0620-	.1340
140	3	.950	.42	10.00	2.982	3.2900	.3890	.489	.0867-	.0039	3.4086-	.1186
140	4	.950	2.44	9.99	3.634	3.4391	.2391	.502	.0978-	.0094	3.5435-	.1044
140	5	.950	4.46	9.99	4.304	3.5675	.0692	.512	.1077-	.0161	3.6663-	.0988
140	6	.950	6.46	9.99	4.907	3.6680-	.1139	.529	.1038-	.0219	3.7732-	.1052
140	7	.950	8.48	9.98	5.516	3.7943-	.2767	.616	.0711-	.0276	3.9019-	.1076
140	8	.950	10.47	9.98	6.056	3.8324-	.4682	.838-	.0088-	.0322	3.9517-	.1193
140	9	.950	12.47	9.98	6.656	3.8661-	.6419	.966-	.0626-	.0266	4.0081-	.1420
140	10	.950	14.48	9.99	7.173	3.8898-	.8001	.973-	.0921-	.0095	4.0434-	.1536
140	11	.950	16.47	10.00	7.586	3.8478-	.9670	.885-	.0875	.0044	4.0188-	.1710
140	12	.950	18.47	10.01	8.059	3.8441-1	.1224	.791-	.0648	.0117	4.0314-	.1873
140	13	.950	20.47	10.01	8.603	3.8337-1	.2932	.741-	.0312	.0122	4.0511-	.2174
140	14	.950	.43	10.00	3.074	3.3251	.3901	.498	.0856-	.0040	3.4450-	.1199
141	2	.950-	3.67	20.01	1.075	2.7113	.7082	.725	.1513	.0122	2.8321-	.1210
141	3	.950-	1.64	20.00	1.862	2.9515	.5385	.800	.1587	.0074	3.0842-	.1227
141	4	.950	.41	20.00	2.879	3.2901	.3702	1.003	.1525-	.0030	3.4009-	.1108
141	5	.950	2.43	19.99	3.495	3.4355	.2171	1.044	.1641-	.0128	3.5336-	.0979
141	6	.950	4.44	19.98	4.155	3.5567	.0263	1.084	.1698-	.0274	3.6500-	.0933
141	7	.950	6.44	19.98	4.774	3.6604-	.1463	1.157	.1548-	.0408	3.7576-	.0972
141	8	.950	8.44	19.97	5.315	3.7371-	.3139	1.290	.1117-	.0543	3.8443-	.1072

TABLE IVb

MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_l}$	$C_{Y'}$	$C_{n'_l}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
141	9	.950	10.45	19.96	5.810	3.8019-	.4715	1.563	.0191-	.0675	3.9160-	.1141
141	10	.950	12.45	19.96	6.382	3.8584-	.6396	1.792-	.0773-	.0734	3.9889-	.1305
141	11	.950	14.45	19.96	6.775	3.8153-	.7838	1.850-	.1194-	.0672	3.9674-	.1521
141	12	.950	16.44	19.97	7.253	3.8057-	.9491	1.923-	.1589-	.0501	3.9831-	.1774
141	14	.950	18.43	19.98	7.859	3.8291-1	.1701	1.949-	.1804-	.0326	4.0497-	.2206
141	15	.950	20.43	19.99	8.405	3.8310-1	.3540	1.909-	.1793-	.0152	4.0724-	.2414
141	16	.950	.41	20.00	2.851	3.2988	.3727	.992	.1520-	.0030	3.4085-	.1097
142	1	.950-	3.65	30.01	1.255	3.0469	.7330	1.396	.1273	.0222	3.1685-	.1216
142	2	.950-	1.64	30.01	2.005	3.1713	.5037	1.437	.1729	.0110	3.2879-	.1166
142	3	.950	.38	30.00	2.642	3.3206	.3449	1.497	.2106-	.0009	3.4216-	.1010
142	4	.950	2.39	29.99	3.237	3.4294	.1796	1.548	.2308-	.0184	3.5236-	.0942
142	5	.950	4.39	29.98	3.862	3.5198-	.0137	1.651	.2211-	.0373	3.6126-	.0928
142	6	.950	6.40	29.97	4.482	3.6204-	.1977	1.763	.1961-	.0610	3.7171-	.0967
142	7	.950	8.40	29.95	4.996	3.6949-	.3488	1.930	.1297-	.0801	3.8003-	.1054
142	8	.950	10.41	29.95	5.458	3.7552-	.4858	2.182	.0276-	.0934	3.8665-	.1113
142	9	.950	12.41	29.94	6.024	3.8026-	.6745	2.480-	.0746-	.1038	3.9381-	.1355
142	10	.950	14.40	29.94	6.507	3.7933-	.8657	2.634-	.1367-	.1047	3.9548-	.1615
142	11	.950	16.39	29.95	6.984	3.7666-1	.0533	2.710-	.1964-	.0833	3.9639-	.1973
142	12	.950	18.38	29.96	7.560	3.7555-1	.2558	2.644-	.1983-	.0664	4.0026-	.2471
142	13	.950	20.38	29.97	8.211	3.7222-1	.4773	2.631-	.2152-	.0505	4.0047-	.2825
142	14	.950	.38	30.00	2.626	3.3123	.3435	1.488	.2082-	.0010	3.4168-	.1045
153	15	.950	.36	10.00	2.042	2.4340	.4843	.269	.1517-	.0051	2.4450-	.0110
153	16	.950-	1.67	10.00	1.382	2.1497	.6074	.211	.1578	.0014	2.2940-	.1443
153	17	.950-	.65	10.00	1.748	2.2313	.5503	.247	.1548-	.0018	2.3688-	.1375
153	18	.950	.36	10.00	2.031	2.3128	.4880	.275	.1496-	.0051	2.4477-	.1349
153	19	.950	2.39	9.99	2.778	2.3983	.3330	.258	.1446-	.0150	2.5232-	.1249
153	20	.950	4.41	9.99	3.463	2.5585	.1977	.263	.1550-	.0226	2.6685-	.1100
153	21	.950	6.47	9.98	4.791	2.9518-	.0415	.460	.1320-	.0266	3.0666-	.1148
153	22	.950	8.48	9.98	5.616	3.0347-	.3040	.545	.1130-	.0374	3.1540-	.1193
153	23	.950	10.47	9.97	6.489	3.1132-	.5828	.735	.0715-	.0483	3.2489-	.1357
153	24	.950	12.48	9.98	7.303	3.2068-	.8329	.835	.0332-	.0390	3.3553-	.1485
153	25	.950	14.48	9.99	7.938	3.2467-1	.0279	.877-	.0065-	.0234	3.4156-	.1689
153	26	.950	16.51	9.98	8.494	3.3089-1	.1350	1.016-	.0433-	.0339	3.4844-	.1755
153	27	.950	20.51	9.99	9.609	3.3305-1	.4953	1.411-	.1533-	.0244	3.5454-	.2149
153	28	.950	.36	10.00	2.029	2.2943	.4768	.275	.1487-	.0051	2.4351-	.1408
154	1	.950-	3.72	20.00	.670	1.9530	.6852	.590	.1507	.0083	2.1019-	.1489

TABLE IVb
MODEL FORCE AND MOMENT COEFFICIENTS - MISSILE AXIS SYSTEM
MOMENT CENTER = M. S. 15. 500

Run	Pt	M	α'	Φ	$C_{N'}$	$C_{A'}$	$C_{m'_l}$	$C_{Y'}$	$C_{n'_l}$	$C_{l'}$	$C_{A'_u}$	$\Delta C_{A'}$
154	3	.950-	1.68	20.00	1.377	2.1649	.5871	.573	.2095	.0055	2.3022-	.1373
154	5	.950	.34	20.00	1.036	2.2945	.4479	.628	.2272-	.0053	2.4313-	.1368
154	4	.950	2.37	19.99	2.667	2.3974	.3086	.647	.2332-	.0194	2.5251-	.1277
154	5	.950	4.40	19.98	3.415	2.5467	.1501	.671	.2533-	.0338	2.6652-	.1185
154	6	.950	6.45	19.97	4.692	2.9226-	.1013	1.020	.2324-	.0498	3.0410-	.1184
154	7	.950	8.45	19.96	5.489	3.0394-	.3505	1.177	.2011-	.0717	3.1600-	.1206
154	8	.950	10.45	19.95	6.234	3.1064-	.6003	1.423	.1286-	.0882	3.2380-	.1316
154	9	.950	12.45	19.95	6.939	3.1531-	.8318	1.636	.0379-	.0926	3.3021-	.1490
154	10	.950	14.45	19.95	7.585	3.2023-1	.0247	1.819-	.0305-	.0838	3.3688-	.1665
154	11	.950	16.46	19.96	8.190	3.2620-1	.1914	2.023-	.1137-	.0704	3.4522-	.1902
154	12	.950	20.48	19.98	9.384	3.3005-1	.5080	2.342-	.2639-	.0330	3.5768-	.2763
154	13	.950-	.67	20.00	1.616	2.2299	.5243	.605	.2228	.0024	2.3703-	.1404
154	14	.950	.34	20.00	1.960	2.3115	.4500	.621	.2318-	.0053	2.4411-	.1296
155	1	.950-	3.73	30.01	.557	1.9831	.6701	1.011	.1581	.0121	2.1261-	.1430
155	2	.950-	1.71	30.01	1.136	2.1479	.5435	.930	.2544	.0097	2.2803-	.1324
155	3	.950-	.70	30.00	1.455	2.2255	.4804	.939	.2853	.0034	2.3551-	.1296
155	4	.950	.31	30.00	1.806	2.3138	.4085	.954	.3051-	.0043	2.4400-	.1262
155	5	.950	2.34	29.99	2.504	2.3931	.2595	.990	.3128-	.0240	2.5183-	.1252
155	6	.950	4.36	29.97	3.238	2.5394	.0875	1.032	.3452-	.0452	2.6544-	.1150
155	7	.950	6.40	29.96	4.432	2.9201-	.1634	1.537	.3189-	.0694	3.0379-	.1178
155	8	.950	8.40	29.95	5.248	2.9985-	.4228	1.759	.2549-	.0963	3.1257-	.1272
155	12	.950	16.41	29.95	7.640	3.1331-1	.1605	2.996-	.2683-	.0884	3.3649-	.2318
155	13	.950	10.41	29.94	5.928	3.0046-	.6460	2.033	.1581-	.1138	3.1854-	.1808
155	14	.950	12.41	29.93	6.522	3.0948-	.8275	2.463-	.0183-	.1175	3.2503-	.1648
155	15	.950	14.41	29.94	7.072	3.1196-	.9884	2.750-	.1622-	.1053	3.3012-	.1816
155	16	.950	16.42	29.95	7.626	3.1454-1	.1627	2.997-	.2671-	.0870	3.3667-	.2213
155	17	.950	20.44	29.96	8.926	3.2182-1	.5242	3.188-	.3333-	.0606	3.4959-	.2776
155	18	.950	.32	30.00	1.809	2.2981	.4027	.966	.3054-	.0042	2.4271-	.1384

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
3	6	1.100-	4.07-	.231-	.218-	.236-	.262
3	7	1.100-	3.05-	.228-	.215-	.236-	.257
3	8	1.100-	2.03-	.224-	.210-	.233-	.247
3	9	1.100-	1.01-	.219-	.205-	.233-	.244
3	10	1.100	.00-	.219-	.205-	.236-	.243
3	11	1.100	1.02-	.222-	.207-	.241-	.244
3	12	1.100	2.04-	.221-	.209-	.243-	.240
3	13	1.100	3.05-	.227-	.214-	.252-	.242
3	14	1.100	4.08-	.232-	.218-	.261-	.242
3	15	1.100	6.12-	.251-	.234-	.277-	.254
3	16	1.100	8.15-	.276-	.258-	.291-	.276
3	17	1.100	12.24-	.307-	.289-	.312-	.310
3	18	1.100	16.35-	.336-	.318-	.330-	.343
3	19	1.100	19.98-	.363-	.339-	.351-	.373
3	21	1.100	.00-	.220-	.208-	.238-	.244
4	2	.950-	4.05-	.129-	.132-	.119-	.152
4	3	.950-	3.04-	.123-	.129-	.119-	.144
4	4	.950-	2.02-	.118-	.125-	.117-	.137
4	5	.950-	1.01-	.118-	.123-	.123-	.135
4	6	.950	.00-	.116-	.120-	.125-	.135
4	7	.950	1.01-	.118-	.122-	.128-	.133
4	8	.950	2.03-	.121-	.122-	.133-	.132
4	9	.950	3.05-	.121-	.123-	.135-	.126
4	10	.950	4.06-	.130-	.130-	.147-	.130
4	11	.950	6.09-	.144-	.143-	.170-	.139
4	12	.950	8.12-	.162-	.162-	.182-	.153
4	13	.950	12.19-	.201-	.199-	.209-	.200
4	14	.950	16.28-	.232-	.227-	.224-	.234
4	15	.950	19.88-	.253-	.244-	.235-	.261
4	16	.950	.00-	.123-	.116-	.128-	.137
6	4	.750-	4.04-	.114-	.111-	.111-	.128
6	5	.750-	3.03-	.109-	.104-	.106-	.123
6	6	.750-	2.02-	.109-	.104-	.109-	.121
6	7	.750-	1.01-	.102-	.097-	.108-	.116
6	8	.750	.00-	.104-	.099-	.116-	.116
6	9	.750	1.01-	.104-	.097-	.115-	.114
6	10	.750	2.02-	.104-	.099-	.118-	.109
6	11	.750	3.03-	.106-	.102-	.122-	.106
6	12	.750	4.05-	.111-	.109-	.130-	.109
6	13	.750	6.06-	.123-	.126-	.149-	.124
6	14	.750	8.09-	.139-	.144-	.157-	.140
6	15	.750	12.14-	.177-	.180-	.184-	.179
6	16	.750	16.19-	.196-	.206-	.196-	.218
6	17	.750	19.75-	.227-	.225-	.214-	.244
6	18	.750	.00-	.097-	.094-	.111-	.114
9	2	1.100-	4.08-	.242-	.225-	.241-	.269
9	3	1.100-	3.06-	.240-	.225-	.239-	.267
9	4	1.100-	2.04-	.233-	.218-	.236-	.262
9	5	1.100-	1.02-	.227-	.212-	.237-	.256
9	6	1.100	.00-	.224-	.210-	.238-	.253
9	7	1.100	1.02-	.224-	.210-	.241-	.245
9	8	1.100	2.04-	.230-	.216-	.250-	.241
9	9	1.100	3.06-	.234-	.219-	.256-	.241
9	10	1.100	4.09-	.238-	.221-	.262-	.243
9	11	1.100	6.13-	.250-	.235-	.255-	.253
9	12	1.100	8.18-	.267-	.250-	.264-	.272
9	13	1.100	12.29-	.302-	.281-	.296-	.306
9	14	1.100	16.43-	.336-	.314-	.332-	.343
9	15	1.100	20.08-	.379-	.355-	.375-	.392

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
9	16	1.100	.00-	.224-	.205-	.239-	.251
10	2	1.100-	2.63-	.243-	.229-	.257-	.284
10	3	1.100-	1.97-	.235-	.222-	.252-	.278
10	4	1.100-	1.30-	.230-	.217-	.249-	.271
10	5	1.100-	.66-	.221-	.209-	.243-	.254
10	6	1.100	.01-	.220-	.208-	.238-	.247
10	7	1.100	.66-	.221-	.209-	.236-	.239
10	8	1.100	1.31-	.228-	.216-	.240-	.238
10	9	1.100	1.98-	.232-	.220-	.246-	.244
10	10	1.100	2.64-	.240-	.226-	.260-	.253
10	11	1.100	.01-	.221-	.211-	.242-	.249
11	1	.950-	2.89-	.117-	.121-	.139-	.146
11	2	.950-	2.16-	.113-	.127-	.129-	.136
11	3	.950-	1.45-	.110-	.124-	.130-	.131
11	4	.950-	.72-	.109-	.123-	.119-	.129
11	5	.950	.00-	.107-	.119-	.121-	.127
11	6	.950	.71-	.111-	.120-	.126-	.126
11	7	.950	1.44-	.118-	.128-	.138-	.128
11	8	.950	2.16-	.121-	.132-	.145-	.126
11	9	.950	2.88-	.125-	.135-	.154-	.131
11	10	.950	.00-	.112-	.121-	.122-	.127
11	11	.950	.00-	.110-	.118-	.121-	.127
12	2	1.100-	2.90-	.242-	.230-	.240-	.262
12	3	1.100-	2.18-	.236-	.222-	.241-	.258
12	4	1.100-	1.44-	.231-	.219-	.235-	.247
12	5	1.100-	.73-	.221-	.211-	.228-	.244
12	6	1.100	.00-	.218-	.208-	.233-	.247
12	7	1.100	.72-	.223-	.212-	.243-	.250
12	8	1.100	1.44-	.229-	.217-	.259-	.250
12	9	1.100	2.16-	.232-	.220-	.268-	.255
12	10	1.100	2.89-	.239-	.226-	.276-	.259
12	11	1.100-	.01-	.218-	.204-	.235-	.248
13	1	.950-	4.07-	.127-	.139-	.125-	.148
13	2	.950-	3.05-	.122-	.136-	.123-	.144
13	3	.950-	2.03-	.118-	.131-	.123-	.141
13	4	.950-	1.01-	.111-	.122-	.121-	.135
13	5	.950	.00-	.111-	.122-	.125-	.132
13	6	.950	1.01-	.113-	.125-	.128-	.128
13	7	.950	2.03-	.116-	.125-	.133-	.126
13	8	.950	3.05-	.120-	.132-	.139-	.126
13	9	.950	4.07-	.127-	.136-	.146-	.126
13	10	.950	6.10-	.136-	.148-	.149-	.131
13	11	.950	8.15-	.153-	.160-	.153-	.144
13	12	.950	12.24-	.181-	.187-	.184-	.175
13	13	.950	16.35-	.211-	.213-	.219-	.211
13	14	.950	19.98-	.227-	.221-	.228-	.220
13	15	.950	.00-	.111-	.123-	.126-	.132
14	2	.750-	4.05-	.110-	.108-	.107-	.132
14	3	.750-	3.04-	.105-	.105-	.107-	.130
14	4	.750-	2.03-	.100-	.100-	.104-	.124
14	5	.750-	1.01-	.098-	.093-	.105-	.122
14	6	.750	.00-	.096-	.093-	.107-	.120
14	7	.750	1.01-	.098-	.096-	.109-	.117
14	8	.750	2.03-	.103-	.098-	.119-	.117
14	9	.750	3.03-	.105-	.103-	.121-	.115

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
14	10	.750	4.05-	.110-	.105-	.128-	.115
14	11	.750	6.07-	.120-	.115-	.131-	.122
14	12	.750	8.10-	.134-	.127-	.131-	.132
14	13	.750	12.17-	.165-	.160-	.154-	.161
14	14	.750	16.24-	.186-	.184-	.180-	.188
14	15	.750	19.82-	.205-	.201-	.200-	.208
14	16	.750	.00-	.098-	.093-	.112-	.120
16	4	.750-	2.87-	.096-	.108-	.112-	.120
16	5	.750-	2.14-	.096-	.103-	.110-	.118
16	6	.750-	1.43-	.091-	.103-	.102-	.113
16	7	.750-	.71-	.089-	.098-	.103-	.110
16	8	.750	.00-	.091-	.101-	.102-	.110
16	9	.750	.71-	.093-	.103-	.107-	.105
16	10	.750	1.43-	.096-	.108-	.112-	.100
16	11	.750	2.14-	.101-	.113-	.119-	.105
16	12	.750	2.87-	.105-	.112-	.129-	.110
16	13	.750	.00-	.091-	.100-	.100-	.108
18	2	1.100-	4.10-	.235-	.223-	.232-	.256
18	3	1.100-	3.08-	.233-	.218-	.229-	.253
18	4	1.100-	2.05-	.228-	.213-	.227-	.247
18	5	1.100-	1.03-	.222-	.208-	.229-	.243
18	6	1.100	.00-	.219-	.208-	.229-	.239
18	7	1.100	1.02-	.222-	.210-	.234-	.235
18	8	1.100	2.05-	.227-	.214-	.245-	.233
18	9	1.100	3.07-	.232-	.218-	.251-	.234
18	10	1.100	4.10-	.233-	.218-	.255-	.236
18	11	1.100	6.15-	.247-	.232-	.250-	.247
18	12	1.100	8.21-	.262-	.247-	.252-	.259
18	13	1.100	12.36-	.296-	.283-	.280-	.299
18	14	1.100	16.51-	.326-	.307-	.310-	.334
18	15	1.100	20.19-	.354-	.330-	.333-	.378
18	16	1.100	.00-	.222-	.209-	.233-	.241
19	3	.950-	4.08-	.125-	.132-	.119-	.142
19	4	.950-	3.06-	.120-	.127-	.116-	.138
19	5	.950-	2.04-	.116-	.125-	.117-	.135
19	6	.950-	1.02-	.110-	.123-	.117-	.129
19	7	.950	.00-	.109-	.118-	.119-	.127
19	8	.950	1.02-	.112-	.119-	.124-	.126
19	9	.950	2.04-	.118-	.123-	.131-	.126
19	10	.950	3.06-	.117-	.126-	.131-	.120
19	11	.950	4.08-	.125-	.132-	.138-	.124
19	12	.950	6.12-	.133-	.142-	.136-	.127
19	13	.950	8.17-	.147-	.156-	.140-	.138
19	14	.950	12.29-	.173-	.177-	.162-	.167
19	15	.950	16.44-	.198-	.200-	.185-	.199
19	16	.950	20.09-	.215-	.217-	.202-	.215
19	17	.950	.00-	.110-	.119-	.120-	.129
20	1	.950-	2.89-	.117-	.128-	.131-	.142
20	2	.950-	2.17-	.116-	.126-	.126-	.136
20	3	.950-	1.44-	.114-	.119-	.121-	.129
20	4	.950-	.72-	.112-	.121-	.119-	.128
20	5	.950	.00-	.114-	.118-	.123-	.128
20	6	.950	.72-	.112-	.119-	.126-	.127
20	7	.950	1.44-	.116-	.125-	.134-	.127
20	8	.950	2.16-	.121-	.128-	.142-	.127
20	9	.950	2.89-	.124-	.130-	.148-	.131
20	10	.950-	.01-	.114-	.118-	.122-	.127

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
21	2	.750-	4.06-	.113-	.108-	.110-	.130
21	3	.750-	4.06-	.108-	.103-	.107-	.130
21	4	.750-	3.04-	.105-	.100-	.107-	.125
21	5	.750-	2.03-	.103-	.093-	.105-	.122
21	6	.750-	1.01-	.100-	.098-	.107-	.120
21	7	.750	.00-	.098-	.093-	.107-	.115
21	8	.750	1.01-	.100-	.091-	.112-	.115
21	9	.750	2.02-	.102-	.093-	.114-	.110
21	10	.750	3.05-	.105-	.098-	.121-	.113
21	11	.750	4.06-	.110-	.103-	.124-	.113
21	12	.750	6.09-	.119-	.112-	.124-	.115
21	13	.750	8.12-	.131-	.126-	.123-	.127
21	14	.750	12.21-	.160-	.155-	.147-	.154
21	15	.750	16.30-	.186-	.177-	.169-	.191
21	16	.750	19.89-	.193-	.189-	.174-	.220
21	17	.750	.00-	.100-	.095-	.109-	.117
23	2	.950-	4.06-	.167-	.172-	.182-	.220
23	3	.950-	3.04-	.169-	.169-	.187-	.216
23	4	.950-	2.02-	.163-	.165-	.186-	.211
23	5	.950-	1.01-	.160-	.161-	.187-	.207
23	6	.950	.00-	.160-	.160-	.192-	.203
23	7	.950	1.01-	.159-	.160-	.196-	.201
23	8	.950	2.02-	.161-	.160-	.203-	.199
23	9	.950	3.05-	.161-	.163-	.208-	.199
23	10	.950	4.06-	.164-	.165-	.213-	.199
23	11	.950	6.09-	.182-	.186-	.213-	.203
23	12	.950	8.12-	.212-	.209-	.236-	.219
23	13	.950	12.17-	.266-	.259-	.272-	.283
23	14	.950	16.24-	.294-	.287-	.289-	.328
23	15	.950	19.82-	.304-	.292-	.312-	.355
23	16	.950	.00-	.161-	.157-	.191-	.206
24	2	.950-	.01-	.175-	.174-	.206-	.214
24	3	.950	.00-	.168-	.168-	.195-	.206
24	4	.950	.00-	.165-	.163-	.190-	.201
24	5	.950-	.01-	.161-	.161-	.188-	.199
24	6	.950-	.01-	.155-	.155-	.188-	.199
24	7	.950-	.01-	.155-	.154-	.190-	.204
24	8	.950	.00-	.157-	.159-	.195-	.213
24	9	.950	.00-	.159-	.161-	.201-	.219
24	10	.950-	.01-	.159-	.163-	.211-	.224
24	11	.950-	.01-	.155-	.152-	.196-	.199
26	2	1.100-	4.06-	.336-	.312-	.345-	.336
26	3	1.100-	3.04-	.332-	.308-	.345-	.332
26	4	1.100-	2.03-	.329-	.304-	.341-	.332
26	5	1.100-	1.01-	.325-	.299-	.337-	.330
26	6	1.100	.00-	.322-	.298-	.335-	.328
26	7	1.100	1.01-	.321-	.299-	.334-	.326
26	9	1.100	3.04-	.327-	.303-	.338-	.332
26	10	1.100	4.06-	.330-	.306-	.344-	.360
26	11	1.100	6.08-	.329-	.314-	.336-	.362
26	12	1.100	8.10-	.330-	.318-	.336-	.337
26	13	1.100	12.15-	.380-	.357-	.378-	.437
26	14	1.100	16.21-	.441-	.415-	.447-	.475
26	15	1.100	20.31-	.458-	.420-	.471-	.506
26	16	1.100	.00-	.328-	.298-	.337-	.351
27	2	.950-	4.05-	.189-	.187-	.211-	.240
27	3	.950-	3.04-	.182-	.183-	.210-	.235

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
27	4	.950-	2.02-	.181-	.179-	.212-	.232
27	5	.950-	1.01-	.179-	.175-	.211-	.228
27	6	.950	.00-	.179-	.177-	.215-	.226
27	7	.950	1.01-	.179-	.177-	.218-	.222
27	8	.950	2.02-	.179-	.177-	.223-	.220
27	9	.950	3.03-	.182-	.177-	.228-	.220
27	10	.950	4.05-	.187-	.184-	.234-	.224
27	11	.950	6.07-	.203-	.201-	.228-	.231
27	12	.950	8.09-	.221-	.219-	.246-	.249
27	13	.950	12.13-	.266-	.259-	.300-	.333
27	14	.950	16.18-	.325-	.316-	.334-	.394
27	15	.950	20.24-	.372-	.361-	.381-	.449
27	17	.950	.00-	.179-	.179-	.213-	.224
28	2	.950-	2.87-	.189-	.187-	.214-	.238
28	3	.950-	2.14-	.185-	.184-	.213-	.233
28	4	.950-	1.44-	.185-	.182-	.212-	.231
28	5	.950-	2.15-	.183-	.186-	.212-	.232
28	6	.950-	.71-	.183-	.181-	.212-	.228
28	7	.950	.00-	.183-	.181-	.214-	.228
28	8	.950	.72-	.185-	.181-	.219-	.228
28	9	.950	1.43-	.185-	.183-	.223-	.227
28	10	.950	2.15-	.186-	.185-	.228-	.225
28	11	.950	2.87-	.190-	.190-	.236-	.228
28	12	.950	.00-	.184-	.181-	.218-	.228
29	1	.750-	4.03-	.148-	.144-	.174-	.208
29	2	.750-	3.02-	.144-	.134-	.174-	.201
29	3	.750-	2.01-	.146-	.139-	.177-	.199
29	4	.750-	1.00-	.146-	.134-	.181-	.194
29	5	.750	.00-	.139-	.131-	.178-	.188
29	6	.750	1.01-	.141-	.134-	.188-	.186
29	7	.750	2.02-	.141-	.134-	.190-	.181
29	8	.750	3.03-	.138-	.134-	.197-	.181
29	9	.750	4.04-	.143-	.139-	.202-	.183
29	10	.750	6.06-	.156-	.151-	.200-	.181
29	11	.750	8.07-	.172-	.165-	.217-	.194
29	12	.750	12.11-	.189-	.194-	.238-	.264
29	13	.750	16.15-	.227-	.218-	.229-	.319
29	14	.750	20.20-	.263-	.251-	.264-	.355
29	15	.750	.00-	.144-	.132-	.184-	.194
32	2	1.100-	3.98-	.482-	.443-	.499-	.497
32	3	1.100-	2.99-	.486-	.444-	.498-	.500
32	4	1.100-	1.99-	.482-	.443-	.496-	.497
32	5	1.100-	1.00-	.482-	.441-	.494-	.500
32	6	1.100	.00-	.484-	.441-	.496-	.505
32	7	1.100	.99-	.484-	.440-	.497-	.505
32	8	1.100	1.99-	.483-	.442-	.496-	.503
32	9	1.100	2.98-	.482-	.441-	.495-	.504
32	10	1.100	3.97-	.482-	.439-	.492-	.503
32	11	1.100	5.96-	.466-	.422-	.461-	.493
32	12	1.100	7.95-	.452-	.416-	.446-	.502
32	13	1.100	11.96-	.475-	.437-	.497-	.527
32	14	1.100	16.01-	.504-	.466-	.524-	.544
32	15	1.100	.00-	.482-	.438-	.493-	.507
33	2	.950-	3.97-	.233-	.238-	.353-	.262
33	3	.950-	2.98-	.245-	.238-	.338-	.267
33	4	.950-	1.99-	.245-	.238-	.322-	.274
33	5	.950-	1.00-	.250-	.243-	.310-	.290

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
33	6	.950	.00-	.250-	.243-	.294-	.301
33	7	.950	.99-	.250-	.241-	.282-	.314
33	8	.950	1.99-	.248-	.239-	.270-	.330
33	9	.950	2.98-	.244-	.232-	.257-	.349
33	10	.950	3.96-	.242-	.234-	.254-	.365
33	11	.950	5.95-	.251-	.243-	.257-	.406
33	12	.950	7.94-	.269-	.260-	.271-	.428
33	13	.950	11.95-	.325-	.313-	.331-	.482
33	14	.950	16.00-	.400-	.381-	.416-	.520
33	15	.950	.00-	.254-	.246-	.295-	.309
34	2	.950-	2.82-	.252-	.245-	.353-	.276
34	3	.950-	2.11-	.256-	.245-	.340-	.270
34	4	.950-	1.41-	.257-	.249-	.325-	.280
34	5	.950-	.71-	.255-	.245-	.308-	.288
34	6	.950-	.01-	.255-	.244-	.301-	.302
34	7	.950	.70-	.251-	.237-	.296-	.319
34	8	.950	1.40-	.246-	.232-	.289-	.335
34	9	.950	2.12-	.244-	.227-	.289-	.359
34	10	.950	2.82-	.237-	.220-	.287-	.380
34	11	.950	.00-	.249-	.245-	.298-	.309
35	1	.750-	3.98-	.164-	.157-	.241-	.194
35	2	.750-	2.97-	.161-	.152-	.236-	.189
35	3	.750-	1.97-	.161-	.152-	.229-	.195
35	4	.750-	.96-	.163-	.151-	.224-	.206
35	5	.750	.00-	.161-	.149-	.213-	.213
35	6	.750	.98-	.164-	.154-	.203-	.221
35	7	.750	1.97-	.159-	.152-	.191-	.229
35	8	.750	2.98-	.163-	.149-	.191-	.233
35	9	.750	3.98-	.166-	.156-	.194-	.238
35	10	.750	5.98-	.175-	.164-	.199-	.252
35	11	.750	7.98-	.190-	.178-	.203-	.277
35	12	.750	12.02-	.211-	.201-	.217-	.317
35	13	.750	16.05-	.259-	.249-	.258-	.369
35	14	.750	20.09-	.311-	.299-	.317-	.406
35	15	.750	.00-	.166-	.154-	.210-	.218
37	2	1.100-	4.03-	.352-	.321-	.381-	.365
37	3	1.100-	3.02-	.351-	.320-	.378-	.367
37	4	1.100-	2.01-	.349-	.323-	.373-	.371
37	5	1.100-	1.01-	.344-	.320-	.366-	.371
37	6	1.100	.00-	.343-	.316-	.364-	.373
37	7	1.100	1.01-	.344-	.315-	.362-	.375
37	8	1.100	2.02-	.345-	.320-	.361-	.378
37	9	1.100	3.02-	.347-	.320-	.359-	.383
37	10	1.100	4.03-	.348-	.321-	.356-	.391
37	11	1.100	6.05-	.353-	.324-	.347-	.411
37	12	1.100	8.07-	.359-	.324-	.351-	.430
37	13	1.100	12.14-	.404-	.374-	.410-	.471
37	14	1.100	16.22-	.460-	.432-	.475-	.501
37	15	1.100	20.34-	.522-	.466-	.513-	.551
37	16	1.100	.00-	.351-	.316-	.362-	.388
38	2	.950-	4.03-	.193-	.195-	.235-	.234
38	3	.950-	3.02-	.188-	.190-	.232-	.230
38	4	.950-	2.01-	.186-	.188-	.230-	.231
38	5	.950-	1.01-	.182-	.184-	.227-	.230
38	6	.950	.00-	.186-	.183-	.231-	.232
38	7	.950	1.01-	.186-	.183-	.229-	.232
38	8	.950	2.02-	.184-	.180-	.228-	.229

UNCLASSIFIED

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
38	9	.950	3.02-	.187-	.188-	.232-	.231
38	10	.950	4.03-	.189-	.189-	.234-	.233
38	11	.950	6.05-	.198-	.200-	.248-	.246
38	12	.950	8.07-	.224-	.219-	.272-	.270
38	13	.950	12.13-	.259-	.261-	.324-	.338
38	14	.950	16.21-	.292-	.293-	.352-	.353
38	15	.950	20.30-	.343-	.329-	.418-	.393
38	16	.950	.00-	.190-	.183-	.230-	.236
39	2	.950-	2.85-	.184-	.191-	.238-	.232
39	3	.950-	2.14-	.186-	.188-	.234-	.232
39	4	.950-	1.43-	.181-	.184-	.229-	.230
39	5	.950-	.71-	.182-	.184-	.227-	.231
39	6	.950-	.01-	.179-	.182-	.225-	.222
39	7	.950	.71-	.180-	.182-	.229-	.231
39	8	.950	1.43-	.180-	.184-	.225-	.220
39	9	.950	2.14-	.183-	.185-	.228-	.231
39	10	.950	2.85-	.182-	.187-	.230-	.233
39	11	.950	.00-	.178-	.178-	.224-	.229
40	1	.750-	4.02-	.147-	.147-	.187-	.192
40	2	.750-	3.01-	.142-	.145-	.184-	.187
40	3	.750-	2.01-	.143-	.143-	.187-	.192
40	4	.750-	1.01-	.138-	.138-	.180-	.190
40	5	.750	.00-	.140-	.138-	.182-	.187
40	6	.750	1.01-	.138-	.140-	.180-	.185
40	7	.750	2.01-	.138-	.138-	.182-	.185
40	8	.750	3.02-	.138-	.140-	.182-	.185
40	9	.750	4.03-	.145-	.147-	.189-	.187
40	10	.750	6.04-	.150-	.155-	.197-	.185
40	11	.750	8.06-	.160-	.167-	.225-	.200
40	12	.750	12.11-	.180-	.202-	.258-	.255
40	13	.750	16.17-	.235-	.245-	.279-	.294
40	14	.750	20.26-	.257-	.264-	.268-	.333
40	15	.750	.00-	.138-	.138-	.177-	.187
41	3	.950-	4.00-	.288-	.280-	.370-	.297
41	4	.950-	3.00-	.284-	.278-	.354-	.298
41	5	.950-	2.00-	.288-	.278-	.342-	.304
41	6	.950-	1.00-	.288-	.280-	.326-	.312
41	7	.950	.00-	.288-	.283-	.313-	.316
41	8	.950	.99-	.292-	.279-	.304-	.329
41	9	.950	1.99-	.284-	.277-	.295-	.336
41	10	.950	2.99-	.284-	.275-	.292-	.354
41	11	.950	3.99-	.286-	.275-	.290-	.372
41	12	.950	5.98-	.293-	.286-	.290-	.420
41	13	.950	7.98-	.313-	.310-	.312-	.447
41	14	.950	12.00-	.370-	.354-	.374-	.518
41	15	.950	16.05-	.427-	.409-	.442-	.542
41	16	.950	20.17-	.473-	.450-	.488-	.567
41	17	.950	.00-	.290-	.281-	.312-	.322
42	2	.950	.00-	.293-	.279-	.320-	.322
42	3	.950	.00-	.295-	.284-	.320-	.322
42	4	.950-	.01-	.287-	.279-	.314-	.316
42	5	.950	.00-	.287-	.278-	.316-	.319
42	6	.950-	.01-	.287-	.273-	.317-	.323
42	7	.950-	.01-	.286-	.276-	.318-	.326
42	8	.950	.00-	.286-	.273-	.322-	.326
42	9	.950	.00-	.284-	.269-	.327-	.329
42	10	.950	.00-	.281-	.262-	.336-	.335

UNCLASSIFIED

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
42	11	.950-	.01-	.288-	.276-	.320-	.324
43	3	.950-	4.04-	.168-	.176-	.214-	.219
43	4	.950-	3.03-	.163-	.170-	.212-	.214
43	5	.950-	2.02-	.161-	.168-	.206-	.210
43	6	.950-	1.01-	.160-	.167-	.205-	.209
43	7	.950	.00-	.159-	.168-	.205-	.209
43	8	.950	1.01-	.159-	.168-	.206-	.209
43	9	.950	2.02-	.159-	.169-	.208-	.209
43	10	.950	3.03-	.161-	.170-	.209-	.210
43	11	.950	4.05-	.164-	.173-	.217-	.218
43	12	.950	.00-	.161-	.168-	.204-	.209
44	2	.950-	.01-	.170-	.176-	.221-	.222
44	3	.950-	.01-	.168-	.173-	.215-	.217
44	4	.950-	.01-	.168-	.172-	.213-	.215
44	5	.950-	.01-	.166-	.172-	.211-	.216
44	6	.950	.00-	.166-	.170-	.211-	.213
44	7	.950-	.01-	.168-	.170-	.211-	.215
44	8	.950-	.01-	.169-	.171-	.211-	.213
44	9	.950-	.01-	.171-	.171-	.213-	.217
44	10	.950	.00-	.176-	.176-	.216-	.219
44	11	.950-	.01-	.169-	.168-	.209-	.213
44	12	.950-	.01-	.171-	.168-	.212-	.215
45	3	.950-	3.99-	.188-	.192-	.230-	.232
45	4	.950-	2.99-	.186-	.188-	.226-	.229
45	5	.950-	1.99-	.184-	.188-	.223-	.227
45	6	.950-	1.00-	.184-	.186-	.221-	.230
45	7	.950	.00-	.182-	.186-	.226-	.234
45	8	.950	1.00-	.182-	.184-	.221-	.234
45	9	.950	2.00-	.184-	.185-	.217-	.230
45	10	.950	2.99-	.182-	.181-	.213-	.227
45	11	.950	4.00-	.186-	.186-	.210-	.240
45	12	.950	5.99-	.196-	.198-	.202-	.255
45	14	.950	.00-	.187-	.186-	.222-	.232
46	1	.950	.00-	.194-	.196-	.230-	.228
46	2	.950	.00-	.192-	.193-	.225-	.224
46	3	.950	.00-	.189-	.190-	.221-	.218
46	4	.950	.00-	.189-	.187-	.221-	.220
46	5	.950	.00-	.183-	.183-	.218-	.222
46	7	.950	.00-	.187-	.183-	.226-	.231
46	8	.950	.00-	.183-	.182-	.220-	.235
46	9	.950	.00-	.185-	.183-	.232-	.236
46	10	.950-	.01-	.189-	.185-	.230-	.240
46	11	.950	.00-	.185-	.185-	.219-	.224
48	2	1.100-	3.94-	.348-	.321-	.383-	.385
48	3	1.100-	2.95-	.345-	.321-	.381-	.387
48	4	1.100-	1.97-	.346-	.322-	.377-	.380
48	5	1.100-	.98-	.349-	.326-	.372-	.379
48	6	1.100	.00-	.350-	.325-	.365-	.376
48	7	1.100	.99-	.350-	.323-	.359-	.380
48	8	1.100	1.96-	.349-	.323-	.358-	.382
48	9	1.100	2.95-	.345-	.318-	.353-	.381
48	10	1.100	3.94-	.341-	.316-	.344-	.385
48	11	1.100	4.93-	.342-	.316-	.340-	.390
48	12	1.100	5.92-	.341-	.315-	.337-	.394
48	13	1.100	7.91-	.347-	.328-	.355-	.410

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
48	14	1.100	11.93-	.380-	.356-	.408-	.431
48	15	1.100	.00-	.352-	.326-	.362-	.377
49	2	1.100-	2.78-	.325-	.307-	.396-	.380
49	3	1.100-	2.09-	.339-	.318-	.381-	.372
49	4	1.100-	1.39-	.346-	.325-	.370-	.363
49	5	1.100-	.69-	.350-	.328-	.366-	.365
49	6	1.100	.00-	.349-	.325-	.362-	.371
49	7	1.100	.69-	.346-	.325-	.361-	.383
49	8	1.100	1.39-	.338-	.315-	.367-	.394
49	9	1.100	2.09-	.323-	.301-	.380-	.411
49	10	1.100	2.79-	.318-	.296-	.388-	.420
49	11	1.100	4.20-	.320-	.306-	.392-	.431
49	12	1.100	.00-	.347-	.327-	.366-	.387
50	2	.950-	3.95-	.193-	.197-	.270-	.219
50	3	.950-	2.97-	.197-	.197-	.267-	.227
50	4	.950-	1.98-	.197-	.197-	.261-	.234
50	5	.950-	.99-	.197-	.199-	.254-	.243
50	6	.950	.00-	.193-	.200-	.242-	.250
50	7	.950	.99-	.195-	.195-	.231-	.256
50	8	.950	1.97-	.193-	.195-	.222-	.262
50	9	.950	2.96-	.195-	.193-	.217-	.272
50	10	.950	3.96-	.193-	.195-	.213-	.280
50	11	.950	5.93-	.196-	.202-	.211-	.295
50	12	.950	7.92-	.217-	.217-	.229-	.320
50	13	.950	11.90-	.260-	.258-	.287-	.375
50	14	.950	15.92-	.300-	.299-	.343-	.422
50	15	.950	.00-	.200-	.198-	.239-	.252
51	1	.950-	2.79-	.201-	.203-	.272-	.222
51	2	.950-	2.10-	.203-	.203-	.263-	.222
51	3	.950-	1.40-	.203-	.203-	.257-	.228
51	4	.950-	.70-	.203-	.201-	.248-	.237
51	5	.950	.00-	.201-	.200-	.243-	.246
51	6	.950	.69-	.198-	.195-	.238-	.257
51	7	.950	1.39-	.194-	.193-	.237-	.269
51	8	.950	2.09-	.189-	.187-	.232-	.277
51	9	.950	2.79-	.189-	.185-	.235-	.289
51	10	.950	4.20-	.192-	.190-	.242-	.314
51	11	.950	5.61-	.189-	.187-	.253-	.339
51	12	.950	.00-	.197-	.198-	.242-	.251
54	2	.750-	3.98-	.139-	.137-	.198-	.169
54	3	.750-	2.99-	.134-	.132-	.188-	.172
54	4	.750-	1.99-	.136-	.131-	.186-	.176
54	5	.750-	1.00-	.131-	.129-	.178-	.178
54	6	.750	.00-	.133-	.131-	.176-	.181
54	7	.750	1.00-	.133-	.131-	.169-	.183
54	8	.750	1.99-	.131-	.131-	.166-	.188
54	9	.750	2.99-	.131-	.129-	.162-	.188
54	10	.750	3.98-	.131-	.134-	.157-	.195
54	11	.750	5.98-	.131-	.136-	.147-	.203
54	12	.750	7.97-	.138-	.153-	.157-	.215
54	13	.750	11.97-	.174-	.169-	.178-	.249
54	14	.750	15.98-	.203-	.198-	.214-	.285
54	15	.750	20.03-	.229-	.225-	.259-	.330
54	16	.750	.00-	.136-	.131-	.173-	.180
55	1	.750-	2.82-	.145-	.141-	.187-	.173

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
55	2	.750-	2.11-	.136-	.136-	.178-	.166
55	3	.750-	1.41-	.136-	.136-	.178-	.170
55	4	.750-	.71-	.136-	.136-	.175-	.175
55	5	.750	.00-	.135-	.133-	.175-	.180
55	6	.750	.71-	.135-	.131-	.173-	.183
55	7	.750	1.41-	.136-	.131-	.173-	.187
55	8	.750	2.12-	.133-	.133-	.175-	.192
55	9	.750	2.82-	.133-	.136-	.175-	.197
55	10	.750	4.23-	.133-	.140-	.180-	.207
55	11	.750	5.65-	.138-	.145-	.184-	.214
55	12	.750	8.53-	.135-	.143-	.194-	.246
55	13	.750	.00-	.135-	.131-	.173-	.180
57	3	1.100-	4.06-	.368-	.342-	.458-	.405
57	4	1.100-	3.04-	.369-	.345-	.459-	.411
57	5	1.100-	2.03-	.369-	.343-	.452-	.417
57	6	1.100-	1.01-	.365-	.340-	.444-	.419
57	7	1.100	.00-	.364-	.336-	.437-	.427
57	8	1.100	1.01-	.364-	.334-	.429-	.439
57	9	1.100	2.03-	.364-	.334-	.419-	.445
57	10	1.100	3.04-	.367-	.345-	.407-	.454
57	11	1.100	4.06-	.373-	.343-	.399-	.462
57	12	1.100	6.09-	.374-	.347-	.382-	.472
57	13	1.100	8.12-	.376-	.349-	.375-	.488
57	14	1.100	12.19-	.379-	.355-	.361-	.505
57	15	1.100	16.29-	.350-	.325-	.411-	.536
57	16	1.100	19.90-	.381-	.363-	.422-	.519
57	17	1.100	.00-	.365-	.332-	.436-	.439
58	2	1.100-	.01-	.359-	.345-	.426-	.435
58	3	1.100-	.01-	.368-	.342-	.437-	.443
58	4	1.100-	.01-	.367-	.334-	.437-	.438
58	5	1.100-	.01-	.366-	.333-	.437-	.437
58	6	1.100-	.01-	.364-	.331-	.437-	.439
58	7	1.100-	.01-	.366-	.333-	.438-	.439
58	8	1.100-	.01-	.366-	.332-	.440-	.434
58	9	1.100-	.01-	.369-	.335-	.443-	.439
58	10	1.100-	.01-	.370-	.337-	.446-	.441
58	11	1.100-	.01-	.372-	.340-	.447-	.444
58	12	1.100-	.01-	.376-	.343-	.447-	.447
58	13	1.100-	.01-	.376-	.341-	.459-	.458
58	14	1.100-	.01-	.379-	.344-	.469-	.467
58	15	1.100	.00-	.396-	.365-	.532-	.511
58	16	1.100-	.01-	.334-	.300-	.574-	.567
58	17	1.100-	.01-	.364-	.331-	.441-	.435
59	1	.950-	.01-	.261-	.257-	.359-	.356
59	2	.950-	.01-	.260-	.255-	.356-	.354
59	3	.950-	.01-	.258-	.253-	.353-	.349
59	4	.950-	.01-	.263-	.257-	.351-	.346
59	5	.950-	.01-	.269-	.260-	.350-	.346
59	6	.950-	.01-	.263-	.256-	.350-	.347
59	7	.950-	.01-	.261-	.252-	.355-	.348
59	8	.950-	.01-	.259-	.252-	.358-	.356
59	9	.950-	.01-	.263-	.254-	.362-	.359
59	10	.950-	.01-	.264-	.258-	.369-	.368
59	11	.950-	.01-	.263-	.253-	.376-	.373
59	12	.950-	.01-	.335-	.325-	.445-	.444
59	13	.950-	.01-	.348-	.327-	.503-	.505
59	14	.950-	.01-	.324-	.307-	.534-	.534
59	15	.950-	.01-	.266-	.258-	.348-	.347

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
60	2	.950-	4.04-	.264-	.255-	.371-	.299
60	3	.950-	3.03-	.262-	.255-	.365-	.311
60	4	.950-	2.02-	.263-	.255-	.358-	.322
60	5	.950-	1.01-	.264-	.257-	.352-	.333
60	6	.950	.00-	.265-	.255-	.343-	.342
60	7	.950	1.01-	.265-	.253-	.334-	.088
60	8	.950	2.02-	.262-	.251-	.322-	.088
60	9	.950	3.04-	.261-	.253-	.306-	.090
60	10	.950	4.05-	.261-	.253-	.292-	.090
60	11	.950	6.08-	.269-	.258-	.262-	.090
60	12	.950	8.10-	.256-	.248-	.241-	.092
60	13	.950	12.16-	.356-	.347-	.227-	.108
60	14	.950	16.24-	.335-	.32[illegible]-	.306-	.111
60	15	.950	19.82-	.312-	.301-	.349-	.108
60	16	.950	.00-	.262-	.25[illegible]-	.340-	.086
62	2	.750-	4.03-	.208-	.201-	.293-	.005
62	3	.750-	3.02-	.205-	.201-	.288-	.012
62	4	.750-	2.01-	.208-	.201-	.283-	.017
62	5	.750-	1.01-	.205-	.201-	.278-	.024
62	6	.750	.00-	.205-	.201-	.273-	.029
62	7	.750	1.01-	.205-	.198-	.266-	.037
62	8	.750	2.02-	.205-	.198-	.257-	.041
62	9	.750	3.03-	.205-	.198-	.249-	.046
62	10	.750	4.04-	.205-	.200-	.237-	.051
62	11	.750	6.06-	.212-	.205-	.223-	.061
62	12	.750	8.08-	.212-	.210-	.214-	.066
62	13	.750	12.13-	.270-	.263-	.193-	.105
62	14	.750	16.19-	.315-	.305-	.218-	.129
62	15	.750	19.74-	.253-	.251-	.285-	.130
62	16	.750	.00-	.207-	.200-	.276-	.032
62	17	.750	.00-	.210-	.203-	.276-	.034
63	1	.750	.00-	.210-	.205-	.287-	.046
63	2	.750	.00-	.208-	.203-	.283-	.041
63	3	.750	.00-	.210-	.203-	.283-	.041
63	4	.750	.00-	.210-	.203-	.280-	.037
63	5	.750	.00-	.210-	.203-	.276-	.032
63	6	.750-	.01-	.208-	.201-	.280-	.034
63	7	.750	.00-	.208-	.201-	.290-	.039
63	8	.750	.00-	.207-	.200-	.294-	.041
63	9	.750	.00-	.210-	.205-	.299-	.046
63	10	.750	.00-	.214-	.207-	.303-	.051
63	11	.750-	.01-	.217-	.210-	.311-	.059
63	12	.750-	.01-	.270-	.263-	.328-	.083
63	13	.750	.00-	.322-	.308-	.368-	.117
63	14	.750	.00-	.279-	.269-	.401-	.149
63	15	.750	.00-	.210-	.203-	.278-	.034
66	2	1.100-	4.03-	.327-	.313-	.493-	.460
66	3	1.100-	3.03-	.323-	.309-	.490-	.462
66	4	1.100-	2.02-	.323-	.307-	.486-	.464
66	5	1.100-	1.01-	.317-	.295-	.482-	.468
66	6	1.100	.00-	.315-	.293-	.477-	.472
66	7	1.100	1.01-	.319-	.305-	.473-	.474
66	8	1.100	2.02-	.318-	.308-	.466-	.475
66	9	1.100	3.03-	.319-	.311-	.465-	.480
66	10	1.100	4.04-	.322-	.313-	.463-	.484
66	11	1.100	6.05-	.322-	.314-	.450-	.485
66	12	1.100	8.07-	.323-	.313-	.416-	.488
66	13	1.100	12.11-	.365-	.354-	.401-	.495
66	14	1.100	16.19-	.377-	.379-	.393-	.499

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
66	15	1.100	19.79-	.381-	.363-	.442-	.511
66	16	1.100	.00-	.318-	.298-	.471-	.472
67	1	1.100	.00-	.321-	.310-	.479-	.472
67	2	1.100	.00-	.321-	.309-	.477-	.472
67	3	1.100	.00-	.319-	.305-	.475-	.468
67	4	1.100	.00-	.317-	.305-	.475-	.469
67	5	1.100	.00-	.315-	.294-	.477-	.468
67	6	1.100-	.01-	.315-	.292-	.478-	.469
67	7	1.100	.00-	.315-	.292-	.480-	.469
67	8	1.100-	.01-	.317-	.294-	.481-	.471
67	9	1.100	.00-	.317-	.298-	.487-	.471
67	10	1.100	.00-	.321-	.298-	.493-	.481
67	11	1.100	.00-	.323-	.301-	.515-	.507
67	12	1.100	.00-	.368-	.363-	.562-	.551
67	13	1.100	.00-	.405-	.394-	.567-	.555
67	14	1.100	.00-	.408-	.385-	.590-	.584
67	15	1.100	.00-	.321-	.303-	.488-	.476
68	4	.950	.00-	.295-	.277-	.417-	.412
68	5	.950-	.01-	.289-	.273-	.408-	.403
68	6	.950	.00-	.283-	.259-	.400-	.397
68	7	.950-	.01-	.285-	.262-	.402-	.401
68	8	.950	.00-	.283-	.262-	.401-	.401
68	9	.950	.00-	.283-	.266-	.400-	.400
68	10	.950-	.01-	.285-	.266-	.407-	.406
68	11	.950-	.01-	.289-	.269-	.416-	.415
68	12	.950-	.01-	.297-	.285-	.446-	.446
68	13	.950-	.01-	.313-	.296-	.502-	.500
68	14	.950	.00-	.362-	.346-	.548-	.540
68	15	.950	.00-	.386-	.354-	.560-	.556
68	16	.950	.00-	.340-	.312-	.581-	.593
68	17	.950-	.01-	.286-	.270-	.406-	.403
69	1	.950-	4.03-	.291-	.277-	.430-	.352
69	2	.950-	3.02-	.287-	.275-	.425-	.367
69	3	.950-	2.02-	.288-	.272-	.419-	.380
69	4	.950-	1.01-	.286-	.272-	.410-	.394
69	5	.950	.00-	.288-	.269-	.404-	.408
69	6	.950	1.00-	.286-	.270-	.389-	.414
69	7	.950	2.01-	.286-	.271-	.377-	.423
69	8	.950	3.02-	.286-	.272-	.360-	.426
69	9	.950	4.02-	.286-	.275-	.348-	.433
69	10	.950	6.04-	.309-	.293-	.295-	.452
69	11	.950	8.05-	.314-	.298-	.262-	.470
69	12	.950	12.12-	.359-	.343-	.257-	.514
69	13	.950	16.21-	.377-	.363-	.321-	.520
69	14	.950	19.79-	.333-	.318-	.461-	.516
69	15	.950	.00-	.284-	.270-	.398-	.404
70	2	.750-	4.03-	.213-	.194-	.376-	.338
70	3	.750-	3.02-	.208-	.194-	.371-	.343
70	4	.750-	2.01-	.208-	.194-	.366-	.350
70	5	.750-	1.01-	.212-	.193-	.364-	.357
70	6	.750	.00-	.207-	.189-	.354-	.359
70	7	.750	1.00-	.210-	.193-	.349-	.366
70	8	.750	2.01-	.207-	.191-	.342-	.371
70	9	.750	3.02-	.213-	.194-	.338-	.377
70	10	.750	4.02-	.208-	.191-	.326-	.376
70	11	.750	6.04-	.208-	.184-	.300-	.375
70	12	.750	8.05-	.203-	.191-	.252-	.364

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
70	13	.750	12.09-	.200-	.202-	.235-	.358
70	14	.750	16.16-	.272-	.260-	.221-	.376
70	15	.750	19.72-	.293-	.279-	.283-	.384
70	16	.750	.00-	.210-	.196-	.354-	.359
71	2	.750-	.01-	.201-	.194-	.352-	.345
71	3	.750	.00-	.209-	.199-	.363-	.354
71	4	.750	.00-	.203-	.196-	.357-	.350
71	5	.750	.00-	.203-	.196-	.359-	.350
71	6	.750-	.01-	.205-	.194-	.357-	.350
71	7	.750	.00-	.206-	.194-	.357-	.353
71	8	.750	.00-	.205-	.196-	.357-	.352
71	9	.750-	.01-	.203-	.191-	.352-	.347
71	10	.750-	.01-	.201-	.191-	.347-	.345
71	11	.750	.00-	.198-	.189-	.362-	.355
71	12	.750	.00-	.203-	.198-	.387-	.376
71	13	.750	.00-	.234-	.225-	.392-	.379
71	14	.750	.00-	.291-	.279-	.402-	.403
71	15	.750	.00-	.301-	.289-	.428-	.428
71	16	.750-	.01-	.205-	.198-	.358-	.352
72	4	1.100-	4.02-	.341-	.315-	.520-	.506
72	5	1.100-	3.02-	.336-	.311-	.517-	.503
72	6	1.100-	2.01-	.336-	.311-	.519-	.503
72	7	1.100-	1.01-	.334-	.309-	.517-	.505
72	8	1.100	.00-	.335-	.307-	.519-	.508
72	9	1.100	1.00-	.332-	.306-	.516-	.506
72	10	1.100	2.01-	.332-	.308-	.516-	.506
72	11	1.100	3.02-	.336-	.313-	.517-	.507
72	12	1.100	4.02-	.336-	.313-	.513-	.509
72	13	1.100	6.03-	.336-	.316-	.508-	.508
72	14	1.100	8.05-	.340-	.320-	.477-	.496
72	15	1.100	12.06-	.367-	.353-	.456-	.493
72	16	1.100	16.12-	.409-	.388-	.413-	.488
72	17	1.100	19.71-	.407-	.383-	.464-	.497
72	18	1.100	.00-	.332-	.305-	.514-	.494
73	2	1.050-	4.02-	.342-	.319-	.530-	.502
73	3	1.050-	3.02-	.343-	.319-	.535-	.510
73	4	1.050-	2.01-	.345-	.311-	.533-	.514
73	5	1.050-	1.01-	.343-	.308-	.532-	.518
73	6	1.050	.00-	.343-	.308-	.530-	.520
73	7	1.050	1.01-	.342-	.311-	.524-	.520
73	8	1.050	2.01-	.346-	.317-	.524-	.524
73	9	1.050	3.01-	.346-	.317-	.520-	.527
73	10	1.050	4.02-	.346-	.317-	.516-	.529
73	11	1.050	.00-	.344-	.305-	.527-	.523
74	1	1.000-	4.02-	.365-	.341-	.563-	.533
74	2	1.000-	3.01-	.370-	.342-	.569-	.540
74	3	1.000-	2.01-	.377-	.344-	.572-	.550
74	4	1.000-	1.01-	.369-	.341-	.559-	.544
74	5	1.000	.00-	.372-	.342-	.560-	.549
74	6	1.000	1.00-	.372-	.340-	.556-	.558
74	7	1.000	2.01-	.373-	.341-	.555-	.559
74	8	1.000	3.01-	.369-	.339-	.543-	.556
74	9	1.000	4.02-	.376-	.340-	.547-	.565
74	10	1.000	.00-	.376-	.341-	.559-	.553
75	2	.950-	4.02-	.314-	.295-	.486-	.394

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
75	3	.950-	3.01-	.311-	.290-	.475-	.406
75	4	.950-	2.01-	.307-	.289-	.466-	.420
75	5	.950-	1.01-	.304-	.290-	.454-	.429
75	6	.950	.00-	.303-	.287-	.443-	.440
75	7	.950	1.00-	.305-	.287-	.433-	.455
75	8	.950	2.00-	.302-	.288-	.418-	.462
75	9	.950	3.01-	.307-	.291-	.409-	.473
75	10	.950	4.01-	.306-	.292-	.391-	.477
75	11	.950	6.01-	.334-	.311-	.331-	.500
75	12	.950	8.02-	.341-	.315-	.303-	.518
75	13	.950	12.06-	.360-	.341-	.285-	.540
75	14	.950	16.13-	.368-	.360-	.319-	.547
75	15	.950	19.71-	.325-	.309-	.474-	.529
75	16	.950	.00-	.307-	.286-	.443-	.440
76	1	.950-	2.85-	.306-	.289-	.472-	.415
76	2	.950-	2.14-	.307-	.290-	.469-	.419
76	3	.950-	1.42-	.305-	.286-	.462-	.425
76	4	.950-	.71-	.305-	.286-	.452-	.429
76	5	.950	.00-	.305-	.284-	.443-	.439
76	6	.950	.70-	.305-	.284-	.434-	.446
76	7	.950	1.41-	.307-	.289-	.429-	.455
76	8	.950	2.13-	.305-	.286-	.424-	.463
76	9	.950	2.84-	.305-	.284-	.420-	.466
76	10	.950	4.27-	.305-	.286-	.411-	.481
76	11	.950	5.70-	.299-	.280-	.401-	.495
76	12	.950	8.59-	.270-	.250-	.400-	.530
76	13	.950	11.53-	.277-	.256-	.404-	.529
76	14	.950	14.17-	.303-	.275-	.456-	.623
76	15	.950-	.01-	.307-	.284-	.446-	.440
77	2	.850-	4.02-	.244-	.230-	.412-	.365
77	3	.850-	3.02-	.244-	.230-	.410-	.374
77	4	.850-	2.01-	.245-	.232-	.407-	.381
77	5	.850-	1.01-	.248-	.232-	.406-	.390
77	6	.850	.00-	.245-	.231-	.397-	.393
77	7	.850	1.00-	.247-	.231-	.391-	.400
77	8	.850	2.01-	.245-	.229-	.382-	.404
77	9	.850	3.01-	.246-	.230-	.375-	.408
77	10	.850	4.02-	.243-	.227-	.364-	.405
77	11	.850	.00-	.248-	.232-	.395-	.396
78	1	.750-	4.02-	.222-	.207-	.384-	.351
78	2	.750-	3.01-	.222-	.207-	.384-	.356
78	3	.750-	2.01-	.222-	.210-	.382-	.361
78	4	.750-	1.00-	.222-	.207-	.377-	.366
78	5	.750	.00-	.224-	.207-	.375-	.371
78	6	.750	1.00-	.222-	.205-	.368-	.371
78	7	.750	2.01-	.224-	.207-	.366-	.378
78	8	.750	3.01-	.222-	.207-	.358-	.376
78	9	.750	4.02-	.219-	.205-	.351-	.376
78	10	.750	6.03-	.217-	.203-	.332-	.376
78	11	.750	8.04-	.222-	.205-	.297-	.367
78	12	.750	12.06-	.210-	.198-	.283-	.352
78	13	.750	16.11-	.250-	.241-	.249-	.364
78	14	.750	19.68-	.291-	.277-	.273-	.371
78	15	.750	.00-	.226-	.210-	.375-	.368
79	2	.600-	4.01-	.208-	.198-	.350-	.338
79	3	.600-	3.01-	.208-	.195-	.354-	.347
79	4	.600-	2.01-	.213-	.199-	.356-	.352

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
79	5	.600-	1.00-	.209-	.199-	.352-	.355
79	6	.600	.00-	.212-	.199-	.351-	.354
79	7	.600	1.00-	.209-	.199-	.348-	.358
79	9	.600	3.01-	.212-	.198-	.341-	.365
79	10	.600	4.02-	.215-	.195-	.337-	.361
79	11	.600	.00-	.215-	.198-	.351-	.358
81	3	1.100-	4.05-	.320-	.297-	.509-	.474
81	4	1.100-	3.04-	.315-	.295-	.509-	.463
81	5	1.100-	2.03-	.310-	.289-	.507-	.474
81	6	1.100-	1.01-	.308-	.288-	.506-	.481
81	7	1.100	.00-	.306-	.288-	.502-	.477
81	8	1.100	1.01-	.308-	.288-	.498-	.486
81	9	1.100	2.03-	.312-	.292-	.494-	.494
81	10	1.100	3.04-	.316-	.296-	.490-	.494
81	11	1.100	4.05-	.315-	.295-	.483-	.487
81	12	1.100	6.08-	.321-	.301-	.467-	.486
81	13	1.100	8.11-	.323-	.303-	.418-	.480
81	14	1.100	12.20-	.359-	.345-	.405-	.473
81	15	1.100	16.28-	.382-	.368-	.415-	.474
81	16	1.100	19.89-	.403-	.386-	.410-	.457
81	17	1.100	.00-	.313-	.289-	.494-	.486
82	3	.950-	4.08-	.342-	.323-	.362-	.403
82	4	.950-	3.06-	.331-	.310-	.359-	.408
82	5	.950-	2.02-	.286-	.267-	.419-	.394
82	6	.950-	1.01-	.281-	.264-	.432-	.409
82	7	.950	.00-	.283-	.267-	.424-	.420
82	8	.950	1.01-	.282-	.267-	.410-	.425
82	9	.950	2.04-	.312-	.298-	.411-	.375
82	10	.950	3.06-	.330-	.310-	.409-	.357
82	11	.950	4.07-	.340-	.321-	.402-	.356
82	12	.950	6.10-	.350-	.331-	.378-	.362
82	13	.950	8.13-	.359-	.339-	.343-	.369
82	14	.950	12.20-	.358-	.340-	.274-	.473
82	15	.950	16.31-	.369-	.351-	.313-	.450
82	16	.950	19.92-	.374-	.358-	.327-	.421
82	17	.950	.00-	.287-	.266-	.416-	.417
83	3	.950-	.01-	.291-	.275-	.458-	.446
83	4	.950-	.01-	.285-	.269-	.445-	.434
83	5	.950	.00-	.287-	.270-	.437-	.426
83	6	.950	.00-	.285-	.269-	.429-	.418
83	7	.950-	.01-	.283-	.268-	.428-	.418
83	8	.950	.00-	.283-	.267-	.425-	.416
83	9	.950	.00-	.285-	.265-	.429-	.421
83	10	.950	.00-	.286-	.269-	.439-	.432
83	11	.950	.00-	.288-	.271-	.457-	.448
83	12	.950-	.01-	.304-	.284-	.493-	.485
83	13	.950	.00-	.310-	.289-	.520-	.521
83	14	.950	.01-	.332-	.321-	.619-	.602
83	16	.950	.00-	.285-	.265-	.429-	.417
83	17	.950	.01-	.283-	.265-	.420-	.423
85	2	.750-	4.04-	.202-	.188-	.369-	.331
85	3	.750-	3.03-	.202-	.190-	.367-	.338
85	4	.750-	2.02-	.207-	.193-	.369-	.348
85	5	.750-	1.01-	.207-	.195-	.367-	.355
85	6	.750	.00-	.207-	.193-	.357-	.360
85	7	.750	1.01-	.204-	.190-	.347-	.364
85	8	.750	2.02-	.204-	.192-	.345-	.367

UNCLASSIFIED

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
85	9	.750	3.03-	.202-	.192-	.336-	.367
85	10	.750	4.04-	.199-	.188-	.324-	.362
85	11	.750	6.07-	.202-	.190-	.300-	.355
85	12	.750	8.10-	.204-	.204-	.255-	.340
85	13	.750	12.16-	.249-	.242-	.255-	.332
85	14	.750	16.23-	.275-	.266-	.243-	.340
85	15	.750	19.81-	.292-	.280-	.267-	.333
85	16	.750	.00-	.204-	.194-	.354-	.356
87	2	1.100-	4.07-	.360-	.335-	.473-	.437
87	3	1.100-	3.06-	.358-	.332-	.468-	.442
87	4	1.100-	2.04-	.358-	.332-	.466-	.451
87	5	1.100-	1.02-	.352-	.328-	.460-	.454
87	6	1.100	.00-	.353-	.327-	.457-	.459
87	7	1.100	1.02-	.355-	.329-	.453-	.451
87	8	1.100	2.04-	.355-	.330-	.446-	.454
87	9	1.100	3.06-	.356-	.334-	.440-	.465
87	10	1.100	4.08-	.358-	.332-	.434-	.469
87	11	1.100	.00-	.353-	.327-	.455-	.460
88	1	.950-	4.06-	.250-	.249-	.361-	.298
88	2	.950-	3.04-	.248-	.247-	.360-	.310
88	3	.950-	2.03-	.248-	.243-	.354-	.323
88	4	.950-	1.01-	.248-	.245-	.351-	.337
88	5	.950	.00-	.250-	.245-	.344-	.346
88	6	.950	1.02-	.250-	.243-	.332-	.354
88	7	.950	2.03-	.248-	.241-	.319-	.357
88	8	.950	3.05-	.250-	.243-	.307-	.359
88	9	.950	4.07-	.250-	.246-	.296-	.362
88	10	.950	6.10-	.252-	.250-	.270-	.368
88	11	.950	8.14-	.252-	.248-	.263-	.366
88	12	.950	12.23-	.308-	.306-	.242-	.459
88	13	.950	16.33-	.306-	.329-	.244-	.445
88	14	.950	19.95-	.262-	.262-	.298-	.348
88	15	.950	.00-	.248-	.246-	.343-	.344
89	2	.950-	.01-	.253-	.248-	.360-	.365
89	3	.950-	.01-	.253-	.246-	.359-	.358
89	4	.950-	.01-	.252-	.243-	.351-	.350
89	5	.950	.00-	.254-	.244-	.351-	.350
89	6	.950-	.01-	.254-	.242-	.348-	.349
89	7	.950-	.01-	.254-	.241-	.349-	.348
89	8	.950-	.01-	.255-	.243-	.353-	.354
89	9	.950-	.01-	.255-	.241-	.358-	.357
89	10	.950-	.01-	.252-	.240-	.363-	.364
89	11	.950-	.01-	.251-	.241-	.383-	.387
89	12	.950-	.01-	.244-	.232-	.404-	.406
89	13	.950	.00-	.350-	.334-	.532-	.538
89	14	.950-	.01-	.253-	.242-	.348-	.347
90	1	.750-	4.05-	.206-	.192-	.298-	.252
90	2	.750-	3.03-	.201-	.186-	.293-	.257
90	3	.750-	2.02-	.203-	.187-	.288-	.267
90	4	.750-	1.01-	.201-	.185-	.284-	.272
90	5	.750	.00-	.199-	.182-	.274-	.270
90	6	.750	1.01-	.201-	.182-	.269-	.292
90	7	.750	2.03-	.203-	.184-	.262-	.298
90	8	.750	3.04-	.202-	.184-	.254-	.302
90	9	.750	4.05-	.205-	.188-	.249-	.305
90	10	.750	.00-	.202-	.183-	.277-	.288

UNCLASSIFIED

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
91	3	1.100-	4.04-	.416-	.380-	.493-	.473
91	4	1.100-	3.03-	.414-	.377-	.491-	.486
91	5	1.100-	2.02-	.407-	.372-	.488-	.489
91	6	1.100-	1.01-	.404-	.369-	.487-	.481
91	8	1.100	1.01-	.410-	.374-	.490-	.495
91	9	1.100	2.02-	.410-	.374-	.487-	.488
91	10	1.100	.00-	.406-	.371-	.488-	.485
91	11	1.100	3.03-	.411-	.375-	.487-	.497
91	12	1.100	4.05-	.414-	.378-	.482-	.497
91	13	1.100	6.07-	.420-	.382-	.465-	.497
91	14	1.100	8.09-	.418-	.384-	.453-	.499
91	15	1.100	12.13-	.424-	.400-	.445-	.502
91	16	1.100	16.22-	.360-	.326-	.441-	.533
91	17	1.100	.00-	.410-	.375-	.490-	.496
92	2	.950-	4.03-	.296-	.284-	.418-	.355
92	3	.950-	3.02-	.296-	.284-	.417-	.370
92	4	.950-	2.02-	.297-	.284-	.412-	.380
92	5	.950-	1.01-	.297-	.283-	.404-	.390
92	6	.950	.00-	.297-	.285-	.399-	.399
92	7	.950	1.01-	.297-	.283-	.388-	.407
92	8	.950	2.02-	.295-	.281-	.378-	.414
92	9	.950	3.03-	.297-	.281-	.366-	.417
92	10	.950	4.04-	.299-	.285-	.355-	.421
92	11	.950	6.06-	.303-	.288-	.318-	.427
92	12	.950	8.07-	.293-	.279-	.292-	.437
92	13	.950	12.11-	.369-	.355-	.233-	.543
92	14	.950	16.17-	.361-	.346-	.309-	.570
92	15	.950	.00-	.299-	.284-	.396-	.400
93	1	.950	.00-	.302-	.288-	.419-	.418
93	2	.950	.00-	.300-	.286-	.412-	.409
93	3	.950	.00-	.300-	.288-	.406-	.407
93	4	.950	.00-	.302-	.287-	.403-	.402
93	5	.950	.00-	.300-	.288-	.401-	.401
93	6	.950	.00-	.298-	.286-	.398-	.400
93	7	.950	.00-	.298-	.283-	.405-	.405
93	8	.950	.00-	.297-	.281-	.410-	.412
93	9	.950	.00-	.299-	.283-	.415-	.423
93	10	.950	.00-	.304-	.288-	.436-	.445
93	11	.950	.00-	.293-	.275-	.452-	.457
93	12	.950	.00-	.372-	.353-	.576-	.581
93	13	.950	.00-	.302-	.286-	.402-	.401
94	3	.750-	4.03-	.223-	.211-	.312-	.280
94	4	.750-	3.02-	.224-	.209-	.310-	.285
94	5	.750-	2.01-	.223-	.207-	.308-	.292
94	6	.750-	1.00-	.223-	.209-	.305-	.299
94	7	.750	.00-	.223-	.207-	.298-	.304
94	8	.750	1.01-	.221-	.207-	.291-	.309
94	9	.750	2.02-	.221-	.205-	.284-	.312
94	10	.750	3.02-	.223-	.207-	.276-	.313
94	11	.750	4.03-	.221-	.207-	.269-	.318
94	12	.750	6.05-	.223-	.212-	.251-	.321
94	13	.750	8.06-	.221-	.209-	.239-	.326
94	14	.750	12.09-	.268-	.252-	.225-	.367
94	15	.750	16.14-	.323-	.307-	.213-	.380
94	16	.750	20.20-	.254-	.242-	.272-	.387
94	17	.750	.00-	.221-	.207-	.293-	.299
95	1	.950-	2.85-	.293-	.283-	.412-	.381

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
95	2	.950-	2.14-	.292-	.282-	.409-	.381
95	3	.950-	1.43-	.295-	.283-	.406-	.387
95	4	.950-	.71-	.297-	.285-	.403-	.395
95	5	.950	.00-	.295-	.281-	.394-	.396
95	6	.950	.71-	.291-	.279-	.386-	.403
95	7	.950	1.43-	.291-	.279-	.387-	.410
95	8	.950	2.14-	.291-	.277-	.382-	.415
95	9	.950	2.85-	.291-	.278-	.379-	.420
95	10	.950	.00-	.292-	.280-	.391-	.395
96	6	.950-	4.05-	.163-	.162-	.184-	.178
96	7	.950-	3.03-	.160-	.160-	.180-	.178
96	8	.950-	2.02-	.160-	.158-	.180-	.180
96	9	.950-	1.01-	.154-	.151-	.177-	.176
96	10	.950	.00-	.158-	.154-	.178-	.180
96	11	.950	1.01-	.156-	.156-	.176-	.176
96	12	.950	2.02-	.156-	.153-	.175-	.176
96	13	.950	3.03-	.156-	.156-	.174-	.177
96	14	.950	4.05-	.161-	.158-	.178-	.181
96	15	.950	6.08-	.161-	.168-	.178-	.198
96	16	.950	8.11-	.191-	.191-	.199-	.210
96	17	.950	12.20-	.233-	.230-	.231-	.262
96	18	.950	16.31-	.258-	.253-	.245-	.286
96	19	.950	20.41-	.290-	.28[illegible]-	.283-	.320
96	20	.950	.00-	.154-	.152-	.174-	.175
97	2	.950-	3.75-	.164-	.162-	.186-	.186
97	3	.950-	2.80-	.160-	.160-	.182-	.183
97	4	.950-	1.87-	.158-	.154-	.180-	.183
97	5	.950-	.93-	.154-	.154-	.176-	.183
97	6	.950-	.00-	.156-	.154-	.178-	.183
97	7	.950	.93-	.155-	.154-	.178-	.182
97	8	.950	1.87-	.157-	.156-	.180-	.185
97	9	.950	2.80-	.159-	.156-	.181-	.185
97	10	.950	3.74-	.163-	.159-	.188-	.188
97	11	.950	4.68-	.171-	.166-	.199-	.195
97	12	.950	.00-	.157-	.153-	.177-	.182
98	1	.950-	.01-	.160-	.164-	.201-	.203
98	2	.950-	.01-	.162-	.162-	.191-	.193
98	3	.950-	.01-	.160-	.158-	.186-	.187
98	4	.950-	.01-	.160-	.155-	.182-	.184
98	5	.950-	.01-	.158-	.153-	.181-	.182
98	6	.950-	.01-	.157-	.155-	.181-	.182
98	7	.950-	.01-	.156-	.154-	.183-	.184
98	8	.950-	.01-	.157-	.157-	.186-	.188
98	9	.950-	.01-	.157-	.159-	.195-	.197
98	10	.950-	.01-	.180-	.175-	.229-	.228
98	11	.950-	.01-	.198-	.189-	.257-	.253
98	12	.950-	.01-	.210-	.199-	.270-	.272
98	13	.950-	.01-	.224-	.208-	.308-	.282
98	14	.950-	.01-	.260-	.246-	.283-	.284
98	15	.950-	.01-	.159-	.153-	.183-	.184
99	2	.950	.00-	.167-	.166-	.195-	.199
99	3	.950	.00-	.161-	.161-	.185-	.186
99	4	.950	.00-	.159-	.157-	.179-	.182
99	5	.950	.00-	.157-	.155-	.179-	.182
99	6	.950	.00-	.157-	.153-	.177-	.182
99	7	.950	.00-	.157-	.157-	.179-	.184
99	8	.950	.00-	.159-	.157-	.182-	.188

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
99	9	.950	.00-	.160-	.159-	.189-	.196
99	10	.950	.00-	.163-	.162-	.196-	.207
99	11	.950	.00-	.155-	.155-	.179-	.182
100	1	1.100-	4.05-	.299-	.281-	.325-	.323
100	2	1.100-	2.03-	.292-	.272-	.321-	.324
100	3	1.100	.00-	.285-	.267-	.320-	.320
100	4	1.100	2.02-	.291-	.273-	.322-	.323
100	5	1.100	4.05-	.297-	.279-	.324-	.331
100	6	1.100	6.08-	.301-	.282-	.330-	.346
100	7	1.100	8.12-	.321-	.303-	.333-	.366
100	8	1.100	12.22-	.367-	.347-	.376-	.408
100	9	1.100	16.32-	.406-	.385-	.412-	.447
100	10	1.100	20.43-	.467-	.446-	.477-	.492
100	11	1.100	.00-	.292-	.272-	.324-	.327
101	2	.750-	4.04-	.127-	.124-	.138-	.139
101	3	.750-	2.02-	.122-	.119-	.136-	.139
101	4	.750	.00-	.117-	.115-	.131-	.139
101	5	.750	2.02-	.119-	.117-	.136-	.137
101	6	.750	4.04-	.121-	.119-	.135-	.137
101	7	.750	6.06-	.133-	.129-	.140-	.144
101	8	.750	8.09-	.148-	.145-	.154-	.156
101	9	.750	12.16-	.186-	.181-	.180-	.200
101	10	.750	16.25-	.214-	.210-	.199-	.232
101	11	.750	20.34-	.226-	.224-	.209-	.256
101	12	.750	.00-	.119-	.117-	.133-	.137
114	2	1.100-	3.49-	.336-	.323-	.407-	.368
114	3	1.100-	2.48-	.329-	.313-	.400-	.347
114	4	1.100-	1.47-	.316-	.300-	.390-	.344
114	5	1.100-	.47-	.313-	.303-	.370-	.337
114	6	1.100	.53-	.313-	.304-	.361-	.341
114	7	1.100	1.54-	.311-	.301-	.352-	.338
114	8	1.100	2.54-	.305-	.288-	.346-	.325
114	9	1.100	3.54-	.298-	.285-	.339-	.319
114	10	1.100	4.54-	.288-	.279-	.333-	.312
114	11	1.100	6.54-	.289-	.276-	.337-	.312
114	12	1.100	8.54-	.292-	.282-	.340-	.319
114	13	1.100	12.53-	.314-	.308-	.362-	.345
114	14	1.100	16.56-	.334-	.324-	.384-	.341
114	15	1.100	20.55-	.343-	.323-	.394-	.364
114	16	1.100	.53-	.324-	.311-	.368-	.345
115	2	.950-	3.64-	.182-	.178-	.287-	.213
115	3	.950-	2.62-	.174-	.171-	.264-	.210
115	4	.950-	1.62-	.159-	.155-	.238-	.206
115	5	.950-	.60-	.166-	.166-	.226-	.209
115	6	.950	.42-	.140-	.140-	.196-	.170
115	7	.950	1.43-	.145-	.133-	.194-	.168
115	8	.950	2.43-	.133-	.129-	.185-	.155
115	9	.950	3.44-	.134-	.126-	.187-	.149
115	10	.950	4.45-	.126-	.126-	.186-	.140
115	11	.950	6.45-	.142-	.138-	.206-	.153
115	12	.950	8.46-	.145-	.141-	.206-	.149
115	13	.950	12.46-	.153-	.145-	.213-	.156
115	14	.950	16.47-	.176-	.176-	.240-	.192
115	15	.950	20.47-	.209-	.209-	.269-	.238
115	16	.950	.42-	.148-	.137-	.201-	.183
116	1	.950	4.45-	.130-	.130-	.186-	.144

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
116	2	.950	3.44-	.133-	.133-	.189-	.148
116	3	.950	2.44-	.133-	.125-	.189-	.148
116	4	.950	1.43-	.137-	.133-	.189-	.152
116	5	.950	.42-	.141-	.141-	.193-	.159
116	6	.950-	.61-	.164-	.164-	.216-	.199
116	7	.950-	1.61-	.163-	.156-	.227-	.179
116	8	.950-	2.63-	.171-	.163-	.254-	.206
116	9	.950-	3.64-	.182-	.175-	.276-	.187
116	10	.950	.42-	.151-	.140-	.219-	.189
117	1	.950	8.46-	.148-	.144-	.223-	.167
117	2	.950	8.46-	.153-	.141-	.232-	.164
117	3	.950	8.45-	.145-	.137-	.213-	.152
117	4	.950	8.45-	.153-	.142-	.210-	.153
117	5	.950	8.46-	.149-	.145-	.206-	.157
117	6	.950	8.45-	.149-	.142-	.210-	.160
117	7	.950	8.45-	.145-	.137-	.217-	.160
117	8	.950	8.45-	.145-	.138-	.236-	.164
117	9	.950	8.45-	.141-	.138-	.248-	.160
117	10	.950	8.46-	.145-	.145-	.221-	.160
118	2	.950	16.44-	.195-	.199-	.267-	.232
118	3	.950	16.44-	.192-	.188-	.264-	.212
118	4	.950	16.45-	.188-	.184-	.252-	.207
118	5	.950	16.46-	.184-	.180-	.248-	.184
118	6	.950	16.47-	.180-	.176-	.248-	.180
118	7	.950	16.46-	.179-	.179-	.246-	.199
118	8	.950	16.46-	.179-	.183-	.250-	.218
118	9	.950	16.45-	.186-	.187-	.269-	.234
118	10	.950	16.45-	.194-	.194-	.294-	.242
118	11	.950	16.47-	.179-	.179-	.258-	.222
119	1	.750-	3.76-	.158-	.158-	.233-	.219
119	2	.750-	2.75-	.138-	.143-	.214-	.188
119	3	.750-	1.75-	.128-	.133-	.194-	.168
119	4	.750-	.74-	.113-	.123-	.174-	.147
119	5	.750	.26-	.108-	.113-	.158-	.131
119	6	.750	1.26-	.103-	.113-	.154-	.121
119	7	.750	2.28-	.092-	.098-	.143-	.100
119	8	.750	3.28-	.087-	.098-	.138-	.089
119	9	.750	4.28-	.082-	.098-	.143-	.084
119	10	.750	6.28-	.093-	.098-	.149-	.084
119	11	.750	8.28-	.098-	.108-	.154-	.089
119	12	.750	12.29-	.118-	.128-	.184-	.116
119	13	.750	16.31-	.154-	.164-	.225-	.157
119	14	.750	20.33-	.201-	.206-	.272-	.211
119	15	.750	.26-	.108-	.118-	.158-	.121
121	2	1.100-	3.59-	.357-	.334-	.441-	.365
121	3	1.100-	2.57-	.352-	.313-	.426-	.337
121	4	1.100-	1.55-	.323-	.303-	.424-	.344
121	5	1.100-	.53-	.305-	.289-	.405-	.302
121	6	1.100	.48-	.302-	.282-	.392-	.295
121	7	1.100	1.49-	.295-	.285-	.386-	.289
121	8	1.100	2.50-	.296-	.286-	.380-	.286
121	9	1.100	3.51-	.296-	.282-	.373-	.286
121	10	1.100	4.51-	.289-	.269-	.366-	.285
121	11	1.100	6.50-	.286-	.272-	.363-	.286
121	13	1.100	8.50-	.301-	.285-	.359-	.301
121	14	1.100	8.50-	.301-	.281-	.359-	.301
121	15	1.100	12.51-	.327-	.318-	.391-	.328

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
99	9	.950	.00-	.160-	.159-	.189-	.196
99	10	.950	.00-	.163-	.162-	.196-	.207
99	11	.950	.00-	.155-	.155-	.179-	.182
100	1	1.100-	4.05-	.299-	.281-	.325-	.323
100	2	1.100-	2.03-	.292-	.272-	.321-	.324
100	3	1.100	.00-	.285-	.267-	.320-	.320
100	4	1.100	2.02-	.291-	.273-	.322-	.323
100	5	1.100	4.05-	.297-	.279-	.324-	.331
100	6	1.100	6.08-	.301-	.282-	.330-	.346
100	7	1.100	8.12-	.321-	.303-	.333-	.366
100	8	1.100	12.22-	.367-	.347-	.376-	.408
100	9	1.100	16.32-	.406-	.385-	.412-	.447
100	10	1.100	20.43-	.467-	.446-	.477-	.492
100	11	1.100	.00-	.292-	.272-	.324-	.327
101	2	.750-	4.04-	.127-	.124-	.138-	.139
101	3	.750-	2.02-	.122-	.119-	.136-	.139
101	4	.750	.00-	.117-	.115-	.131-	.139
101	5	.750	2.02-	.119-	.117-	.136-	.137
101	6	.750	4.04-	.121-	.119-	.135-	.137
101	7	.750	6.06-	.133-	.129-	.140-	.144
101	8	.750	8.09-	.148-	.145-	.154-	.156
101	9	.750	12.16-	.186-	.181-	.180-	.200
101	10	.750	16.25-	.214-	.210-	.199-	.232
101	11	.750	20.34-	.226-	.224-	.209-	.256
101	12	.750	.00-	.119-	.117-	.133-	.137
114	2	1.100-	3.49-	.336-	.323-	.407-	.368
114	3	1.100-	2.48-	.329-	.313-	.400-	.347
114	4	1.100-	1.47-	.316-	.300-	.390-	.344
114	5	1.100-	.47-	.313-	.303-	.370-	.337
114	6	1.100	.53-	.313-	.304-	.361-	.341
114	7	1.100	1.54-	.311-	.301-	.352-	.338
114	8	1.100	2.54-	.305-	.288-	.346-	.325
114	9	1.100	3.54-	.298-	.285-	.339-	.319
114	10	1.100	4.54-	.288-	.279-	.333-	.312
114	11	1.100	6.54-	.289-	.276-	.337-	.312
114	12	1.100	8.54-	.292-	.282-	.340-	.319
114	13	1.100	12.53-	.314-	.308-	.362-	.345
114	14	1.100	16.56-	.334-	.324-	.384-	.341
114	15	1.100	20.55-	.343-	.323-	.394-	.364
114	16	1.100	.53-	.324-	.311-	.368-	.345
115	2	.950-	3.64-	.182-	.178-	.287-	.213
115	3	.950-	2.62-	.174-	.171-	.264-	.210
115	4	.950-	1.62-	.159-	.155-	.238-	.206
115	5	.950-	.60-	.166-	.166-	.226-	.209
115	6	.950	.42-	.140-	.140-	.196-	.170
115	7	.950	1.43-	.145-	.133-	.194-	.168
115	8	.950	2.43-	.133-	.129-	.185-	.155
115	9	.950	3.44-	.134-	.126-	.187-	.149
115	10	.950	4.45-	.126-	.126-	.186-	.140
115	11	.950	6.45-	.142-	.138-	.206-	.153
115	12	.950	8.46-	.145-	.141-	.206-	.149
115	13	.950	12.46-	.153-	.145-	.213-	.156
115	14	.950	16.47-	.176-	.176-	.240-	.192
115	15	.950	20.47-	.209-	.209-	.269-	.238
115	16	.950	.42-	.148-	.137-	.201-	.183
116	1	.950	4.45-	.130-	.130-	.186-	.144

UNCLASSIFIED

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
116	2	.950	3.44-	.133-	.133-	.189-	.148
116	3	.950	2.44-	.133-	.125-	.189-	.148
116	4	.950	1.43-	.137-	.133-	.189-	.152
116	5	.950	.42-	.141-	.141-	.193-	.159
116	6	.950-	.61-	.164-	.164-	.216-	.190
116	7	.950-	1.61-	.163-	.156-	.227-	.179
116	8	.950-	2.63-	.171-	.163-	.254-	.206
116	9	.950-	3.64-	.182-	.175-	.276-	.197
116	10	.950	.42-	.151-	.140-	.219-	.182
117	1	.950	8.46-	.148-	.144-	.223-	.167
117	2	.950	8.46-	.153-	.141-	.232-	.164
117	3	.950	8.45-	.145-	.137-	.213-	.152
117	4	.950	8.45-	.153-	.142-	.210-	.153
117	5	.950	8.46-	.149-	.145-	.206-	.157
117	6	.950	8.45-	.149-	.142-	.210-	.160
117	7	.950	8.45-	.145-	.137-	.217-	.160
117	8	.950	8.45-	.145-	.138-	.236-	.164
117	9	.950	8.45-	.141-	.138-	.248-	.160
117	10	.950	8.46-	.145-	.145-	.221-	.160
118	2	.950	16.44-	.195-	.199-	.267-	.239
118	3	.950	16.44-	.192-	.188-	.264-	.212
118	4	.950	16.45-	.188-	.184-	.252-	.223
118	5	.950	16.46-	.184-	.180-	.248-	.184
118	6	.950	16.47-	.180-	.176-	.248-	.180
118	7	.950	16.46-	.179-	.179-	.246-	.199
118	8	.950	16.46-	.179-	.183-	.250-	.218
118	9	.950	16.45-	.186-	.187-	.269-	.234
118	10	.950	16.45-	.194-	.194-	.284-	.242
118	11	.950	16.47-	.179-	.179-	.258-	.222
119	1	.750-	3.76-	.158-	.158-	.233-	.219
119	2	.750-	2.75-	.138-	.143-	.214-	.188
119	3	.750-	1.75-	.128-	.133-	.194-	.168
119	4	.750-	.74-	.113-	.123-	.174-	.147
119	5	.750	.26-	.108-	.113-	.158-	.131
119	6	.750	1.26-	.103-	.113-	.154-	.121
119	7	.750	2.28-	.092-	.098-	.143-	.100
119	8	.750	3.28-	.087-	.098-	.138-	.089
119	9	.750	4.28-	.082-	.098-	.143-	.084
119	10	.750	6.28-	.093-	.098-	.149-	.084
119	11	.750	8.28-	.098-	.108-	.154-	.089
119	12	.750	12.29-	.118-	.128-	.184-	.116
119	13	.750	16.31-	.154-	.164-	.225-	.157
119	14	.750	20.33-	.201-	.206-	.272-	.211
119	15	.750	.26-	.108-	.118-	.158-	.121
121	2	1.100-	3.59-	.357-	.334-	.441-	.365
121	3	1.100-	2.57-	.352-	.313-	.426-	.337
121	4	1.100-	1.55-	.323-	.303-	.424-	.344
121	5	1.100-	.53-	.305-	.289-	.405-	.309
121	6	1.100	.48-	.302-	.282-	.392-	.295
121	7	1.100	1.49-	.295-	.285-	.386-	.289
121	8	1.100	2.50-	.296-	.286-	.380-	.286
121	9	1.100	3.51-	.296-	.282-	.373-	.286
121	10	1.100	4.51-	.289-	.269-	.366-	.285
121	11	1.100	6.50-	.286-	.272-	.363-	.286
121	13	1.100	8.50-	.301-	.285-	.359-	.301
121	14	1.100	8.50-	.301-	.281-	.359-	.301
121	15	1.100	12.51-	.327-	.318-	.391-	.328

UNCLASSIFIED

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
121	16	1.100	16.55-	.350-	.344-	.398-	.355
121	17	1.100	20.56-	.357-	.357-	.408-	.416
121	18	1.100	.49-	.307-	.288-	.388-	.335
122	2	.950-	3.67-	.182-	.190-	.261-	.190
122	3	.950-	2.66-	.174-	.175-	.253-	.175
122	4	.950-	1.66-	.176-	.168-	.255-	.176
122	5	.950-	.64-	.163-	.164-	.243-	.163
122	6	.950	.37-	.160-	.160-	.239-	.155
122	7	.950	1.37-	.156-	.156-	.231-	.152
122	8	.950	2.38-	.156-	.156-	.227-	.152
122	9	.950	3.41-	.140-	.144-	.211-	.135
122	10	.950	4.42-	.144-	.140-	.212-	.136
122	11	.950	6.43-	.134-	.134-	.198-	.121
122	12	.950	8.45-	.125-	.133-	.193-	.116
122	13	.950	12.45-	.156-	.160-	.213-	.152
122	14	.950	16.49-	.179-	.183-	.246-	.152
122	15	.950	20.50-	.214-	.210-	.274-	.191
122	16	.950	.37-	.151-	.151-	.226-	.143
123	2	.950	.39-	.160-	.164-	.228-	.191
123	3	.950	.39-	.163-	.171-	.231-	.163
123	4	.950	.39-	.160-	.167-	.231-	.160
123	5	.950	.40-	.151-	.159-	.230-	.159
123	6	.950	.39-	.155-	.163-	.242-	.143
123	7	.950	.39-	.159-	.167-	.242-	.167
123	8	.950	.40-	.151-	.166-	.234-	.135
123	11	.950	.40-	.144-	.159-	.226-	.147
123	12	.950	.39-	.163-	.171-	.242-	.159
123	13	.950	.40-	.163-	.171-	.242-	.151
123	14	.950	.39-	.152-	.171-	.238-	.143
123	15	.950	.39-	.161-	.172-	.240-	.180
123	16	.950	.39-	.156-	.167-	.235-	.167
124	1	.950	8.45-	.155-	.156-	.227-	.155
124	2	.950	8.45-	.164-	.156-	.228-	.168
124	3	.950	8.44-	.159-	.144-	.208-	.163
124	4	.950	8.45-	.159-	.144-	.200-	.159
124	5	.950	8.45-	.159-	.144-	.204-	.163
124	6	.950	8.44-	.163-	.148-	.204-	.163
124	7	.950	8.44-	.136-	.148-	.215-	.167
124	8	.950	8.44-	.148-	.156-	.231-	.175
124	9	.950	8.45-	.148-	.159-	.238-	.167
124	10	.950	8.45-	.140-	.144-	.215-	.171
125	2	.950	16.47-	.218-	.214-	.286-	.270
125	3	.950	16.48-	.214-	.203-	.282-	.258
125	4	.950	16.48-	.206-	.195-	.278-	.238
125	5	.950	16.49-	.193-	.190-	.265-	.214
125	6	.950	16.49-	.193-	.186-	.261-	.202
125	7	.950	16.49-	.193-	.186-	.268-	.210
125	8	.950	16.49-	.197-	.193-	.279-	.232
125	11	.950	16.48-	.205-	.197-	.291-	.260
125	12	.950	16.48-	.224-	.212-	.299-	.280
125	13	.950	16.49-	.193-	.182-	.268-	.210
126	1	.750-	3.79-	.186-	.176-	.273-	.228
126	2	.750-	2.78-	.176-	.171-	.258-	.206
126	3	.750-	1.78-	.160-	.155-	.242-	.180
126	4	.750-	.77-	.150-	.140-	.227-	.164

UNCLASSIFIED

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
126	5	.750	.23-	.139-	.134-	.216-	.153
126	6	.750	1.24-	.138-	.128-	.220-	.157
126	7	.750	2.25-	.133-	.128-	.204-	.152
126	8	.750	3.25-	.134-	.129-	.200-	.148
126	9	.750	4.26-	.123-	.118-	.189-	.137
126	10	.750	6.27-	.123-	.123-	.189-	.131
126	11	.750	8.29-	.123-	.118-	.189-	.126
126	12	.750	10.29-	.128-	.118-	.189-	.131
126	13	.750	12.30-	.149-	.149-	.220-	.163
126	14	.750	16.34-	.185-	.180-	.266-	.195
126	15	.750	20.36-	.216-	.206-	.302-	.226
126	16	.750	.23-	.149-	.133-	.210-	.152
127	2	.950	.45-	.136-	.144-	.185-	.170
127	3	.950	.46-	.144-	.144-	.196-	.151
127	4	.950	.46-	.147-	.144-	.200-	.170
127	5	.950	.46-	.140-	.140-	.192-	.131
127	6	.950	.46-	.140-	.140-	.196-	.151
127	7	.950	.46-	.140-	.144-	.196-	.155
127	8	.950	.46-	.144-	.148-	.205-	.160
127	9	.950	.45-	.149-	.153-	.213-	.172
127	10	.950	.45-	.152-	.153-	.217-	.156
127	11	.950	.45-	.145-	.145-	.201-	.136
129	2	1.100-	3.55-	.275-	.259-	.356-	.262
129	3	1.100-	2.53-	.285-	.272-	.362-	.285
129	4	1.100-	1.51-	.291-	.278-	.365-	.264
129	5	1.100-	.49-	.301-	.288-	.378-	.285
129	6	1.100	.53-	.311-	.298-	.385-	.308
129	7	1.100	1.53-	.317-	.304-	.388-	.312
129	8	1.100	2.54-	.314-	.298-	.381-	.284
129	9	1.100	3.55-	.307-	.288-	.361-	.288
129	10	1.100	4.56-	.298-	.281-	.375-	.281
129	11	1.100	6.56-	.281-	.258-	.361-	.274
129	12	1.100	8.56-	.275-	.255-	.355-	.244
129	13	1.100	10.56-	.281-	.272-	.352-	.278
129	14	1.100	10.57-	.298-	.275-	.359-	.299
129	15	1.100	12.56-	.304-	.294-	.368-	.294
129	16	1.100	14.57-	.327-	.317-	.375-	.335
129	17	1.100	16.58-	.354-	.337-	.385-	.342
129	18	1.100	20.57-	.365-	.342-	.390-	.374
129	19	1.100-	9.65-	.269-	.252-	.343-	.272
129	20	1.100-	5.58-	.262-	.249-	.337-	.268
129	21	1.100-	7.62-	.259-	.249-	.333-	.265
129	22	1.100	.52-	.308-	.298-	.376-	.312
130	2	1.050	.50-	.300-	.307-	.367-	.310
130	3	1.050	2.53-	.315-	.309-	.389-	.323
130	4	1.050	4.55-	.297-	.284-	.382-	.297
130	5	1.050	6.55-	.276-	.263-	.367-	.279
130	6	1.050	8.56-	.260-	.253-	.354-	.266
130	7	1.050	10.56-	.263-	.256-	.354-	.273
130	8	1.050	12.55-	.288-	.288-	.365-	.298
130	9	1.050	14.56-	.334-	.324-	.391-	.321
130	10	1.050	16.58-	.344-	.334-	.398-	.331
130	11	1.050	.51-	.326-	.316-	.396-	.312
131	1	1.000	.46-	.238-	.231-	.319-	.255
131	2	1.000	2.48-	.272-	.218-	.314-	.241
131	3	1.000	4.51-	.203-	.189-	.289-	.204
131	4	1.000	6.53-	.174-	.163-	.252-	.170

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
131	5	1.000	8.54-	.166-	.163-	.241-	.163
131	6	1.000	10.55-	.170-	.170-	.248-	.174
131	7	1.000	12.55-	.202-	.210-	.266-	.207
131	8	1.000	14.56-	.233-	.233-	.293-	.238
131	9	1.000	16.58-	.254-	.251-	.315-	.264
131	10	1.000	.46-	.236-	.229-	.311-	.249
132	2	.950-	9.74-	.156-	.160-	.236-	.160
132	3	.950-	7.72-	.141-	.137-	.224-	.148
132	4	.950-	5.68-	.141-	.141-	.227-	.159
132	5	.950-	3.66-	.149-	.145-	.224-	.168
132	6	.950-	2.64-	.152-	.148-	.220-	.163
132	7	.950-	1.63-	.163-	.159-	.231-	.167
132	8	.950-	.62-	.171-	.167-	.243-	.175
132	9	.950	.40-	.178-	.178-	.257-	.182
132	10	.950	1.41-	.186-	.175-	.265-	.186
132	11	.950	2.42-	.174-	.171-	.261-	.182
132	12	.950	3.44-	.166-	.163-	.252-	.170
132	14	.950	6.47-	.128-	.121-	.207-	.124
132	15	.950	8.47-	.126-	.119-	.187-	.117
132	16	.950	10.49-	.134-	.130-	.183-	.121
132	17	.950	12.50-	.153-	.149-	.198-	.149
132	18	.950	14.52-	.172-	.161-	.225-	.168
132	19	.950	16.53-	.164-	.160-	.225-	.168
132	20	.950	20.54-	.183-	.183-	.247-	.199
132	21	.950	.40-	.175-	.175-	.250-	.175
133	1	.950	.43-	.179-	.179-	.247-	.199
133	2	.950	.43-	.183-	.179-	.251-	.199
133	3	.950	.43-	.186-	.182-	.253-	.194
133	4	.950	.43-	.186-	.179-	.262-	.191
133	5	.950	.43-	.183-	.179-	.262-	.183
133	6	.950	.43-	.179-	.179-	.262-	.187
133	7	.950	.43-	.191-	.188-	.267-	.196
133	8	.950	.43-	.184-	.184-	.259-	.196
133	9	.950	.44-	.183-	.186-	.250-	.202
133	10	.950	.42-	.184-	.176-	.263-	.188
134	2	.950	8.48-	.132-	.132-	.188-	.139
134	3	.950	8.48-	.136-	.136-	.196-	.139
134	4	.950	8.47-	.121-	.129-	.185-	.124
134	5	.950	8.48-	.113-	.121-	.177-	.116
134	6	.950	8.48-	.110-	.117-	.174-	.112
134	7	.950	8.47-	.110-	.122-	.179-	.113
134	8	.950	8.47-	.118-	.126-	.186-	.121
134	9	.950	8.47-	.130-	.130-	.199-	.133
134	10	.950	8.48-	.133-	.141-	.205-	.140
134	11	.950	8.48-	.118-	.118-	.182-	.113
135	1	.950	16.50-	.179-	.194-	.246-	.214
135	2	.950	16.51-	.183-	.186-	.250-	.222
135	3	.950	16.52-	.172-	.179-	.247-	.199
135	4	.950	16.53-	.167-	.171-	.235-	.183
135	5	.950	16.53-	.168-	.175-	.236-	.179
135	6	.950	16.53-	.172-	.172-	.236-	.176
135	7	.950	16.53-	.167-	.175-	.242-	.194
135	8	.950	16.51-	.178-	.182-	.253-	.214
135	9	.950	16.51-	.194-	.198-	.265-	.241
135	10	.950	16.54-	.175-	.175-	.243-	.195
136	2	.750-	9.83-	.128-	.133-	.199-	.136

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
136	3	.750-	7.81-	.118-	.123-	.199-	.136
136	4	.750-	5.80-	.118-	.123-	.209-	.152
136	5	.750-	3.78-	.128-	.133-	.214-	.162
136	6	.750-	2.77-	.133-	.128-	.214-	.162
136	7	.750-	1.76-	.133-	.133-	.214-	.162
136	8	.750-	.75-	.138-	.143-	.224-	.162
136	9	.750	.25-	.143-	.148-	.229-	.169
136	10	.750	1.26-	.148-	.148-	.229-	.173
136	11	.750	2.27-	.143-	.143-	.219-	.162
136	12	.750	3.28-	.138-	.133-	.209-	.147
136	13	.750	4.28-	.133-	.128-	.204-	.141
136	15	.750	6.30-	.123-	.123-	.189-	.126
136	16	.750	8.31-	.112-	.113-	.173-	.110
136	17	.750	10.31-	.123-	.118-	.183-	.126
136	18	.750	12.33-	.143-	.138-	.199-	.141
136	19	.750	16.35-	.179-	.174-	.255-	.188
136	20	.750	20.37-	.189-	.184-	.265-	.204
136	21	.750	.25-	.153-	.148-	.229-	.173
138	3	1.100-	3.50-	.340-	.335-	.397-	.342
138	4	1.100-	1.47-	.327-	.322-	.383-	.326
138	5	1.100	.53-	.320-	.319-	.364-	.316
138	6	1.100	2.54-	.308-	.303-	.344-	.303
138	7	1.100	4.56-	.301-	.300-	.331-	.296
138	8	1.100	6.55-	.305-	.303-	.331-	.296
138	9	1.100	8.55-	.314-	.313-	.335-	.306
138	10	1.100	10.55-	.331-	.329-	.345-	.330
138	11	1.100	12.57-	.354-	.349-	.364-	.347
138	12	1.100	.53-	.324-	.323-	.354-	.320
139	3	.950-	3.64-	.118-	.125-	.247-	.153
139	4	.950-	1.62-	.129-	.140-	.223-	.164
139	5	.950	.43-	.118-	.129-	.189-	.153
139	6	.950	2.45-	.114-	.121-	.181-	.137
139	7	.950	4.46-	.115-	.118-	.182-	.126
139	8	.950	6.47-	.110-	.114-	.177-	.113
139	9	.950	8.48-	.125-	.129-	.196-	.125
139	10	.950	10.48-	.133-	.140-	.208-	.133
139	11	.950	12.47-	.152-	.155-	.227-	.153
139	12	.950	14.48-	.171-	.178-	.250-	.180
139	13	.950	16.49-	.194-	.197-	.270-	.204
139	14	.950	18.48-	.212-	.219-	.284-	.234
139	15	.950	20.47-	.228-	.235-	.301-	.262
139	16	.950	.43-	.129-	.136-	.200-	.160
139	17	.950	.43-	.121-	.128-	.192-	.152
140	1	.950-	3.57-	.128-	.135-	.233-	.163
140	2	.950-	1.58-	.144-	.151-	.234-	.187
140	3	.950	.43-	.129-	.136-	.203-	.167
140	4	.950	2.42-	.110-	.121-	.188-	.140
140	5	.950	4.41-	.106-	.117-	.184-	.124
140	6	.950	6.38-	.117-	.124-	.199-	.124
140	7	.950	8.37-	.117-	.127-	.206-	.128
140	8	.950	10.33-	.132-	.139-	.226-	.144
140	9	.950	12.30-	.155-	.162-	.261-	.188
140	10	.950	14.28-	.166-	.176-	.271-	.209
140	11	.950	16.24-	.185-	.200-	.291-	.241
140	12	.950	18.22-	.205-	.215-	.323-	.261
140	13	.950	2' .19-	.242-	.249-	.375-	.300
140	14	.950	.44-	.125-	.132-	.218-	.163
141	2	.950-	3.40-	.121-	.124-	.230-	.164

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
141	3	.950-	1.49-	.132-	.132-	.215-	.175
141	4	.950	.44-	.124-	.124-	.187-	.159
141	5	.950	2.34-	.109-	.109-	.171-	.135
141	6	.950	4.23-	.102-	.101-	.171-	.124
141	7	.950	6.11-	.109-	.109-	.183-	.120
141	8	.950	7.99-	.117-	.117-	.203-	.136
141	9	.950	9.89-	.124-	.120-	.213-	.151
141	10	.950	11.78-	.147-	.146-	.236-	.170
141	11	.950	13.66-	.177-	.173-	.263-	.205
141	12	.950	15.54-	.207-	.206-	.293-	.251
141	14	.950	17.43-	.252-	.247-	.371-	.314
141	15	.950	19.33-	.271-	.270-	.406-	.346
141	16	.950	.44-	.121-	.121-	.184-	.160
142	1	.950-	3.06-	.145-	.144-	.189-	.180
142	2	.950-	1.32-	.137-	.136-	.181-	.176
142	3	.950	.44-	.117-	.113-	.161-	.152
142	4	.950	2.19-	.110-	.102-	.157-	.136
142	5	.950	3.92-	.106-	.102-	.161-	.128
142	6	.950	5.67-	.114-	.109-	.177-	.121
142	7	.950	7.41-	.117-	.113-	.196-	.136
142	8	.950	9.16-	.117-	.120-	.207-	.148
142	9	.950	10.91-	.155-	.151-	.245-	.175
142	10	.950	12.65-	.186-	.185-	.284-	.214
142	11	.950	14.39-	.224-	.223-	.342-	.270
142	12	.950	16.15-	.288-	.283-	.411-	.347
142	13	.950	17.92-	.342-	.336-	.442-	.410
142	14	.950	.44-	.120-	.120-	.167-	.155
143	1	.950	.46-	.118-	.110-	.146-	.145
143	2	.950	.46-	.115-	.110-	.147-	.141
143	3	.950	.46-	.110-	.106-	.143-	.137
143	4	.950	.46-	.114-	.110-	.146-	.137
143	5	.950	.47-	.114-	.114-	.150-	.141
143	6	.950	.46-	.114-	.110-	.146-	.137
143	7	.950	.46-	.114-	.110-	.150-	.137
143	8	.950	.46-	.110-	.106-	.146-	.137
143	9	.950	.46-	.114-	.110-	.146-	.145
143	10	.950	.46-	.118-	.114-	.154-	.146
144	3	.950	8.47-	.149-	.141-	.236-	.153
144	4	.950	8.47-	.137-	.133-	.220-	.141
144	5	.950	8.47-	.125-	.124-	.203-	.136
144	6	.950	8.47-	.130-	.129-	.204-	.129
144	7	.950	8.47-	.121-	.124-	.196-	.125
144	8	.950	8.47-	.125-	.128-	.199-	.128
144	9	.950	8.47-	.129-	.128-	.215-	.136
144	10	.950	8.47-	.121-	.124-	.218-	.140
144	11	.950	8.47-	.125-	.128-	.226-	.152
145	1	.950	16.46-	.205-	.212-	.296-	.254
145	2	.950	16.46-	.200-	.207-	.291-	.252
145	3	.950	16.47-	.200-	.207-	.287-	.253
145	4	.950	16.49-	.197-	.204-	.284-	.234
145	5	.950	16.49-	.200-	.200-	.283-	.218
145	6	.950	16.49-	.193-	.199-	.283-	.221
145	7	.950	16.48-	.189-	.195-	.279-	.237
145	8	.950	16.46-	.199-	.206-	.302-	.252
145	9	.950	16.46-	.205-	.208-	.308-	.254
145	10	.950	16.49-	.198-	.205-	.297-	.227
145	11	.950	16.49-	.194-	.205-	.293-	.219

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
146	1	.750-	3.76-	.108-	.123-	.230-	.159
146	2	.750-	1.76-	.093-	.108-	.190-	.138
146	3	.750-	.75-	.088-	.103-	.189-	.128
146	4	.750	.25-	.088-	.108-	.189-	.123
146	5	.750	2.27-	.077-	.087-	.178-	.101
146	6	.750	4.28-	.067-	.077-	.172-	.074
146	7	.750	6.28-	.067-	.077-	.183-	.074
146	8	.750	8.28-	.077-	.092-	.198-	.079
146	9	.750	10.28-	.093-	.108-	.219-	.106
146	10	.750	12.29-	.108-	.123-	.241-	.122
146	11	.750	14.29-	.139-	.154-	.282-	.165
146	12	.750	16.32-	.149-	.164-	.296-	.179
146	13	.750	20.33-	.201-	.216-	.355-	.239
146	14	.750	.25-	.077-	.092-	.209-	.122
147	4	.950-	3.64-	.191-	.194-	.313-	.220
147	5	.950-	1.62-	.171-	.174-	.277-	.215
147	6	.950-	.61-	.170-	.170-	.241-	.210
147	7	.950	.41-	.160-	.159-	.231-	.192
147	8	.950	2.44-	.133-	.132-	.199-	.148
147	9	.950	4.45-	.133-	.136-	.203-	.140
147	10	.950	6.46-	.137-	.144-	.211-	.140
147	11	.950	8.46-	.148-	.151-	.218-	.140
147	12	.950	10.46-	.147-	.151-	.222-	.144
147	13	.950	12.45-	.156-	.159-	.230-	.156
147	14	.950	14.46-	.166-	.165-	.240-	.170
147	15	.950	16.47-	.185-	.184-	.264-	.190
147	16	.950	20.45-	.239-	.242-	.307-	.266
147	17	.950	.42-	.147-	.154-	.229-	.175
147	18	.950	.42-	.147-	.150-	.222-	.171
148	3	.950	.43-	.144-	.147-	.219-	.181
148	4	.950	.44-	.140-	.144-	.215-	.187
148	5	.950	.45-	.136-	.143-	.211-	.179
148	6	.950	.45-	.136-	.139-	.210-	.171
148	7	.950	.45-	.140-	.144-	.219-	.176
148	8	.950	.45-	.133-	.140-	.215-	.171
148	9	.950	.45-	.136-	.139-	.222-	.179
148	10	.950	.45-	.136-	.143-	.225-	.186
148	11	.950	.44-	.148-	.155-	.242-	.210
148	12	.950	.45-	.136-	.142-	.221-	.182
149	3	.950-	3.68-	.186-	.182-	.266-	.192
149	4	.950-	1.66-	.168-	.167-	.251-	.169
149	5	.950-	.65-	.156-	.152-	.231-	.157
149	6	.950	.36-	.140-	.144-	.220-	.141
149	7	.950	2.39-	.137-	.136-	.196-	.133
149	8	.950	4.42-	.130-	.125-	.181-	.125
149	9	.950	6.47-	.134-	.133-	.189-	.122
149	10	.950	8.48-	.133-	.129-	.181-	.117
149	11	.950	10.48-	.156-	.160-	.209-	.145
149	12	.950	12.49-	.167-	.167-	.216-	.152
149	13	.950	14.50-	.187-	.182-	.235-	.168
149	14	.950	16.51-	.202-	.201-	.250-	.188
149	15	.950	20.53-	.224-	.219-	.273-	.210
149	16	.950	.37-	.144-	.143-	.207-	.144
150	1	1.050-	3.58-	.376-	.371-	.422-	.360
150	2	1.050-	1.54-	.356-	.354-	.423-	.352
150	3	1.050-	.52-	.338-	.333-	.409-	.326
150	4	1.050	.46-	.324-	.319-	.380-	.308

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
150	5	1.050	2.50-	.321-	.316-	.367-	.305
150	6	1.050	4.50-	.303-	.298-	.355-	.290
150	7	1.050	6.50-	.293-	.288-	.349-	.283
150	8	1.050	8.52-	.295-	.290-	.333-	.289
150	9	1.050	10.54-	.324-	.319-	.345-	.308
150	10	1.050	12.56-	.340-	.335-	.347-	.314
150	11	1.050	14.58-	.353-	.348-	.361-	.328
150	12	1.050	16.59-	.364-	.359-	.368-	.339
150	13	1.050	20.59-	.360-	.351-	.371-	.345
150	14	1.050	.49-	.328-	.323-	.374-	.309
151	2	1.000-	3.62-	.254-	.253-	.352-	.265
151	3	1.000-	1.58-	.203-	.206-	.315-	.209
151	4	1.000-	.57-	.199-	.199-	.307-	.205
151	5	1.000	.45-	.192-	.195-	.296-	.193
151	6	1.000	2.47-	.177-	.180-	.270-	.175
151	7	1.000	4.49-	.166-	.173-	.256-	.171
151	8	1.000	6.50-	.159-	.162-	.248-	.160
151	9	1.000	8.55-	.188-	.194-	.266-	.182
151	10	1.000	10.54-	.228-	.234-	.299-	.216
151	11	1.000	12.55-	.256-	.258-	.320-	.245
151	12	1.000	14.55-	.274-	.283-	.354-	.270
151	13	1.000	16.56-	.287-	.293-	.363-	.276
151	14	1.000	20.57-	.296-	.302-	.373-	.296
151	15	1.000	.44-	.193-	.199-	.294-	.195
152	1	.950-	3.68-	.183-	.193-	.297-	.203
152	2	.950-	1.65-	.168-	.178-	.285-	.180
152	3	.950-	.64-	.152-	.159-	.266-	.164
152	7	.950	.38-	.140-	.135-	.225-	.139
152	8	.950	2.39-	.137-	.133-	.212-	.141
152	9	.950	2.11-	.136-	.132-	.199-	.136
152	10	.950	4.42-	.129-	.124-	.188-	.128
152	11	.950	6.48-	.132-	.128-	.191-	.128
152	13	.950	10.48-	.163-	.155-	.218-	.160
152	17	.950	10.48-	.159-	.154-	.206-	.151
152	18	.950	12.49-	.174-	.169-	.222-	.167
152	19	.950	14.51-	.197-	.192-	.249-	.191
152	20	.950	16.52-	.212-	.200-	.260-	.597
152	21	.950	20.49-	.227-	.222-	.275-	.233
153	15	.950	.37-	.011-	.015-	.026-	.007
153	16	.950-	1.63-	.164-	.168-	.275-	.169
153	17	.950-	.63-	.152-	.159-	.270-	.157
153	18	.950	.37-	.152-	.155-	.262-	.156
153	19	.950	2.37-	.145-	.144-	.239-	.145
153	20	.950	4.36-	.125-	.128-	.215-	.124
153	21	.950	6.39-	.129-	.132-	.227-	.129
153	22	.950	8.37-	.132-	.139-	.237-	.132
153	23	.950	10.33-	.156-	.163-	.258-	.156
153	24	.950	12.31-	.171-	.178-	.277-	.176
153	25	.950	14.28-	.194-	.197-	.300-	.219
153	26	.950	16.29-	.205-	.208-	.308-	.227
153	27	.950	20.24-	.257-	.260-	.348-	.299
153	28	.950	.37-	.155-	.159-	.269-	.171
154	1	.950-	3.46-	.167-	.170-	.284-	.179
154	2	.950-	1.53-	.151-	.154-	.267-	.163
154	3	.950	.37-	.152-	.151-	.265-	.164
154	4	.950	2.28-	.143-	.147-	.245-	.151
154	5	.950	4.19-	.132-	.135-	.229-	.139

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
154	6	.950	6.12-	.132-	.135-	.233-	.135
154	7	.950	8.01-	.136-	.135-	.237-	.136
154	8	.950	9.90-	.147-	.151-	.249-	.159
154	9	.950	11.78-	.171-	.170-	.277-	.180
154	10	.950	13.67-	.194-	.193-	.300-	.211
154	11	.950	15.57-	.228-	.227-	.327-	.246
154	12	.950	19.38-	.339-	.333-	.431-	.395
154	13	.950-	.58-	.155-	.158-	.264-	.175
154	14	.950	.37-	.144-	.147-	.249-	.155
155	1	.950-	3.15-	.166-	.161-	.263-	.178
155	2	.950-	1.39-	.152-	.151-	.249-	.160
155	3	.950-	.51-	.148-	.147-	.246-	.156
155	4	.950	.37-	.144-	.144-	.238-	.152
155	5	.950	2.13-	.149-	.148-	.231-	.140
155	6	.950	3.88-	.137-	.129-	.216-	.137
155	7	.950	5.67-	.141-	.137-	.217-	.141
155	8	.950	7.41-	.153-	.153-	.229-	.154
155	12	.950	14.41-	.279-	.274-	.377-	.323
155	13	.950	9.17-	.208-	.204-	.310-	.249
155	14	.950	10.91-	.193-	.188-	.295-	.210
155	15	.950	12.66-	.215-	.210-	.317-	.237
155	16	.950	14.42-	.269-	.264-	.365-	.300
155	17	.950	17.99-	.348-	.342-	.424-	.396
155	18	.950	.38-	.162-	.157-	.252-	.174
156	1	.950	.38-	.136-	.131-	.195-	.170
156	2	.950	.37-	.137-	.129-	.200-	.156
156	3	.950	.37-	.145-	.137-	.213-	.140
156	4	.950	.38-	.141-	.136-	.216-	.145
156	5	.950	.39-	.149-	.141-	.220-	.145
156	6	.950	.39-	.157-	.152-	.236-	.157
156	7	.950	.39-	.160-	.156-	.235-	.164
156	8	.950	.39-	.160-	.159-	.235-	.168
156	9	.950	.40-	.156-	.152-	.231-	.168
156	10	.950	.39-	.152-	.148-	.232-	.153
157	2	.950	8.49-	.153-	.156-	.213-	.141
157	3	.950	8.48-	.156-	.159-	.223-	.152
157	4	.950	8.47-	.152-	.155-	.223-	.152
157	5	.950	8.48-	.141-	.144-	.212-	.141
157	6	.950	8.48-	.132-	.139-	.207-	.129
157	7	.950	8.48-	.137-	.144-	.211-	.129
157	8	.950	8.47-	.140-	.144-	.219-	.136
157	9	.950	8.49-	.144-	.151-	.226-	.144
157	10	.950	8.48-	.159-	.166-	.239-	.160
157	11	.950	8.48-	.140-	.147-	.219-	.140
158	1	.950	16.50-	.216-	.223-	.289-	.246
158	2	.950	16.49-	.212-	.218-	.291-	.241
158	3	.950	16.51-	.208-	.215-	.291-	.225
158	4	.950	16.52-	.204-	.211-	.287-	.210
158	5	.950	16.53-	.204-	.210-	.286-	.198
158	6	.950	16.52-	.212-	.218-	.294-	.214
158	7	.950	16.51-	.210-	.216-	.293-	.215
158	8	.950	16.51-	.213-	.224-	.297-	.227
158	9	.950	16.49-	.225-	.235-	.305-	.251
158	10	.950	16.52-	.213-	.220-	.296-	.227
159	1	.850-	3.74-	.165-	.164-	.259-	.192

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
159	2	.850-	1.72-	.147-	.155-	.246-	.174
159	3	.850-	.72-	.135-	.138-	.229-	.156
159	4	.850	.29-	.126-	.130-	.221-	.149
159	5	.850	2.31-	.113-	.121-	.198-	.129
159	6	.850	4.33-	.100-	.103-	.180-	.107
159	7	.850	6.34-	.104-	.108-	.180-	.107
159	8	.850	8.37-	.108-	.112-	.184-	.107
159	9	.850	10.38-	.126-	.130-	.202-	.125
159	10	.850	12.39-	.143-	.151-	.224-	.138
159	11	.850	14.41-	.165-	.173-	.250-	.161
159	12	.850	16.43-	.178-	.185-	.272-	.178
159	13	.850	20.43-	.213-	.220-	.316-	.214
159	14	.850	.29-	.121-	.129-	.228-	.152
160	1	.750-	3.78-	.170-	.179-	.286-	.217
160	2	.750-	1.77-	.143-	.153-	.269-	.189
160	3	.750-	.76-	.134-	.138-	.255-	.175
160	4	.750	.24-	.118-	.128-	.234-	.164
160	5	.750	2.25-	.102-	.112-	.212-	.137
160	6	.750	4.26-	.098-	.107-	.208-	.127
160	7	.750	6.27-	.098-	.107-	.198-	.116
160	8	.750	8.30-	.108-	.113-	.203-	.122
160	9	.750	10.31-	.118-	.122-	.218-	.131
160	10	.750	12.32-	.144-	.148-	.245-	.153
160	11	.750	14.34-	.165-	.169-	.265-	.180
160	12	.750	16.36-	.180-	.184-	.292-	.191
160	13	.750	20.37-	.201-	.205-	.328-	.217
160	14	.750	.24-	.118-	.123-	.229-	.158
161	1	.600-	3.85-	.138-	.137-	.253-	.219
161	2	.600-	1.85-	.138-	.138-	.238-	.196
161	3	.600-	.84-	.123-	.115-	.216-	.181
161	4	.600	.16-	.108-	.108-	.208-	.173
161	5	.600	2.17-	.101-	.100-	.193-	.142
161	6	.600	4.18-	.093-	.093-	.178-	.127
161	7	.600	6.18-	.093-	.085-	.170-	.119
161	8	.600	8.18-	.101-	.093-	.171-	.119
161	9	.600	10.20-	.116-	.108-	.186-	.135
161	10	.600	12.21-	.139-	.138-	.209-	.158
161	11	.600	14.23-	.161-	.153-	.232-	.174
161	12	.600	16.24-	.175-	.166-	.252-	.180
161	13	.600	20.26-	.206-	.190-	.292-	.212
161	14	.600	.16-	.115-	.100-	.192-	.157
162	3	1.100-	3.56-	.383-	.382-	.458-	.381
162	4	1.100-	1.53-	.360-	.362-	.444-	.360
162	5	1.100-	.51-	.337-	.339-	.421-	.333
162	6	1.100	.50-	.331-	.330-	.409-	.327
162	7	1.100	2.51-	.331-	.333-	.400-	.323
162	8	1.100	4.52-	.315-	.317-	.379-	.310
162	9	1.100	6.51-	.298-	.300-	.358-	.299
162	10	1.100	8.53-	.311-	.310-	.358-	.306
162	11	1.100	10.54-	.328-	.330-	.365-	.321
162	12	1.100	12.55-	.347-	.349-	.365-	.337
162	13	1.100	14.58-	.371-	.369-	.379-	.358
162	14	1.100	16.57-	.380-	.381-	.381-	.380
162	15	1.100	20.57-	.412-	.410-	.406-	.450
162	16	1.100	.49-	.335-	.337-	.409-	.327
163	3	1.100-	3.62-	.371-	.359-	.408-	.374
163	4	1.100-	1.57-	.311-	.299-	.368-	.299

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
163	5	1.100-	.55-	.291-	.280-	.358-	.279
163	6	1.100	.47-	.288-	.277-	.352-	.275
163	7	1.100	2.50-	.274-	.263-	.338-	.265
163	8	1.100	4.54-	.260-	.246-	.320-	.251
163	9	1.100	6.56-	.261-	.250-	.324-	.254
163	10	1.100	8.59-	.274-	.263-	.334-	.261
163	11	1.100	10.63-	.303-	.292-	.346-	.281
163	12	1.100	12.64-	.330-	.319-	.364-	.305
163	13	1.100	14.67-	.353-	.342-	.374-	.320
163	14	1.100	16.68-	.369-	.354-	.373-	.345
163	15	1.100	20.69-	.391-	.379-	.379-	.399
163	16	1.100-	.55-	.292-	.281-	.352-	.280
163	17	1.100	.47-	.291-	.270-	.341-	.266
164	1	.950-	3.72-	.161-	.145-	.213-	.153
164	2	.950-	1.67-	.145-	.133-	.197-	.133
164	3	.950-	.65-	.130-	.114-	.178-	.114
164	4	.950	.37-	.122-	.110-	.170-	.109
164	5	.950	2.40-	.106-	.091-	.146-	.094
164	6	.950	4.43-	.099-	.087-	.135-	.080
164	7	.950	6.50-	.095-	.083-	.134-	.079
164	8	.950	8.51-	.110-	.098-	.150-	.088
164	9	.950	10.54-	.129-	.117-	.169-	.097
164	10	.950	12.56-	.156-	.140-	.196-	.121
164	11	.950	14.57-	.171-	.159-	.220-	.145
164	12	.950	16.59-	.190-	.178-	.234-	.164
164	13	.950	20.59-	.228-	.212-	.265-	.211
164	14	.950	.37-	.125-	.110-	.173-	.109
165	2	.950	.38-	.110-	.110-	.165-	.129
165	3	.950	.38-	.102-	.106-	.165-	.121
165	4	.950	.38-	.102-	.106-	.165-	.117
165	5	.950	.39-	.106-	.109-	.172-	.117
165	6	.950	.40-	.110-	.113-	.180-	.117
165	7	.950	.40-	.113-	.117-	.184-	.116
165	8	.950	.40-	.109-	.116-	.179-	.116
165	9	.950	.40-	.113-	.117-	.180-	.120
165	10	.950	.40-	.106-	.113-	.176-	.116
165	11	.950	.40-	.103-	.110-	.170-	.106
166	1	.950	8.52-	.133-	.144-	.220-	.180
166	2	.950	8.51-	.122-	.133-	.208-	.157
166	3	.950	8.51-	.110-	.117-	.192-	.136
166	4	.950	8.51-	.110-	.117-	.192-	.121
166	5	.950	8.51-	.106-	.113-	.184-	.109
166	6	.950	8.51-	.110-	.117-	.192-	.109
166	7	.950	8.51-	.110-	.121-	.188-	.117
166	8	.950	8.51-	.117-	.128-	.200-	.140
166	9	.950	8.51-	.129-	.140-	.211-	.160
166	10	.950	8.51-	.116-	.124-	.205-	.128
167	1	.950	16.56-	.213-	.220-	.289-	.270
167	2	.950	16.57-	.195-	.206-	.283-	.252
167	3	.950	16.57-	.204-	.210-	.296-	.237
167	4	.950	16.58-	.191-	.206-	.287-	.213
167	5	.950	16.57-	.196-	.207-	.292-	.205
167	6	.950	16.58-	.192-	.199-	.292-	.201
167	7	.950	16.58-	.196-	.206-	.291-	.221
167	8	.950	16.57-	.199-	.214-	.295-	.236
167	9	.950	16.56-	.211-	.225-	.306-	.260
167	10	.950	16.58-	.192-	.213-	.298-	.220

UNCLASSIFIED

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
168	1	.750-	3.81-	.159-	.174-	.276-	.217
168	2	.750-	1.78-	.133-	.148-	.255-	.185
168	3	.750-	.77-	.118-	.133-	.239-	.174
168	4	.750	.25-	.108-	.123-	.224-	.158
168	5	.750	2.26-	.097-	.107-	.213-	.137
168	6	.750	4.28-	.092-	.102-	.203-	.121
168	7	.750	6.30-	.092-	.102-	.198-	.116
168	8	.750	8.33-	.098-	.113-	.208-	.116
168	9	.750	10.35-	.112-	.122-	.227-	.126
168	10	.750	12.36-	.134-	.143-	.244-	.148
168	11	.750	14.38-	.155-	.164-	.272-	.170
168	12	.750	16.40-	.170-	.179-	.291-	.190
168	13	.750	20.41-	.195-	.199-	.326-	.211
168	14	.750	.24-	.113-	.117-	.223-	.164
169	3	1.100-	3.64-	.284-	.283	-	.268
169	4	1.100-	1.61-	.278-	.280	-	.269
169	5	1.100	.42-	.282-	.284	-	.273
169	6	1.100-	.59-	.286-	.291	-	.284
169	7	1.100	2.46-	.298-	.297	-	.296
169	8	1.100	4.50-	.308-	.313	-	.309
169	9	1.100	6.55-	.318-	.323	-	.320
169	10	1.100	8.60-	.334-	.336	-	.323
169	11	1.100	10.64-	.344-	.342	-	.323
169	12	1.100	12.65-	.340-	.342	-	.343
169	13	1.100	14.67-	.353-	.354	-	.356
169	14	1.100	16.68-	.379-	.381	-	.376
169	15	1.100	20.72-	.458-	.459	-	.461
169	16	1.100	.43-	.313-	.318	-	.332
170	2	1.050-	3.64-	.267-	.262	-	.267
170	3	1.050-	1.62-	.274-	.272	-	.281
170	4	1.050-	.60-	.277-	.275	-	.284
170	5	1.050	.41-	.276-	.275	-	.288
170	6	1.050	2.45-	.290-	.285	-	.298
170	7	1.050	4.49-	.298-	.293	-	.306
170	8	1.050	6.54-	.321-	.317	-	.327
170	9	1.050	8.58-	.352-	.347	-	.341
170	10	1.050	10.63-	.347-	.345	-	.343
170	11	1.050	12.64-	.341-	.339	-	.343
170	12	1.050	14.66-	.344-	.339	-	.339
170	13	1.050	16.68-	.372-	.366	-	.361
170	14	1.050	20.70-	.426-	.421	-	.424
170	15	1.050	.42-	.309-	.301	-	.311
171	1	1.000-	3.67-	.092-	.088	-	.098
171	2	1.000-	1.63-	.092-	.088	-	.098
171	3	1.000-	.61-	.088-	.081	-	.091
171	4	1.000	.40-	.096-	.092	-	.102
171	5	1.000	2.43-	.106-	.102	-	.109
171	6	1.000	4.47-	.139-	.135	-	.139
171	7	1.000	6.51-	.175-	.167	-	.169
171	8	1.000	8.55-	.197-	.192	-	.187
171	9	1.000	10.59-	.222-	.210	-	.210
171	10	1.000	12.60-	.226-	.214	-	.217
171	11	1.000	14.62-	.230-	.218	-	.221
171	12	1.000	16.64-	.252-	.243	-	.240
171	13	1.000	20.66-	.294-	.285	-	.276
171	14	1.000	.41-	.124-	.113	-	.135
172	1	.950-	3.71-	.095-	.087	-	.089

UNCLASSIFIED

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
172	2	.950-	1.68-	.083-	.075	-	.074
172	3	.950-	.66-	.083-	.075	-	.074
172	4	.950	.35-	.084-	.076	-	.075
172	5	.950	2.38-	.087-	.075	-	.078
172	6	.950	4.41-	.102-	.091	-	.089
172	7	.950	6.45-	.121-	.110	-	.121
172	8	.950	8.51-	.152-	.140	-	.145
172	9	.950	10.53-	.152-	.140	-	.141
172	10	.950	12.55-	.148-	.136	-	.136
172	11	.950	14.56-	.159-	.151	-	.148
172	12	.950	16.58-	.178-	.166	-	.164
172	13	.950	20.60-	.212-	.200	-	.195
172	14	.950	.36-	.091-	.083	-	.081
173	3	.950	.38-	.125-	.129	-	.156
173	4	.950	.39-	.110-	.117	-	.144
173	5	.950	.39-	.098-	.102	-	.124
173	6	.950	.39-	.091-	.098	-	.113
173	7	.950	.39-	.079-	.086	-	.093
173	8	.950	.39-	.075-	.083	-	.077
173	9	.950	.38-	.075-	.083	-	.081
173	10	.950	.38-	.095-	.098	-	.109
173	11	.950	.38-	.110-	.117	-	.133
173	12	.950	.39-	.080-	.087	-	.099
174	1	.950	8.50-	.140-	.147	-	.144
174	2	.950	8.51-	.144-	.151	-	.148
174	3	.950	8.51-	.155-	.158	-	.160
174	4	.950	8.51-	.159-	.159	-	.164
174	5	.950	8.51-	.156-	.159	-	.164
174	6	.950	8.51-	.152-	.158	-	.164
174	7	.950	8.51-	.152-	.159	-	.160
174	8	.950	8.51-	.148-	.155	-	.152
174	9	.950	8.51-	.144-	.147	-	.144
174	10	.950	8.51-	.155-	.154	-	.155
175	1	.950	16.56-	.180-	.183	-	.177
175	2	.950	16.57-	.187-	.194	-	.188
175	3	.950	16.57-	.191-	.193	-	.192
175	4	.950	16.57-	.187-	.193	-	.184
175	5	.950	16.57-	.186-	.193	-	.184
175	6	.950	16.57-	.186-	.193	-	.188
175	7	.950	16.57-	.187-	.193	-	.188
175	8	.950	16.57-	.186-	.189	-	.184
175	9	.950	16.56-	.187-	.194	-	.184
175	10	.950	16.58-	.186-	.193	-	.184
176	1	.850-	3.78-	.101-	.118	-	.099
176	2	.850-	1.75-	.088-	.100	-	.090
176	3	.850-	.74-	.083-	.100	-	.085
176	4	.850	.27-	.087-	.100	-	.089
176	5	.850	2.30-	.096-	.109	-	.103
176	6	.850	4.33-	.109-	.122	-	.121
176	7	.850	6.35-	.114-	.131	-	.130
176	8	.850	8.40-	.127-	.135	-	.135
176	9	.850	10.41-	.118-	.130	-	.126
176	10	.850	12.42-	.113-	.130	-	.117
176	11	.850	14.44-	.126-	.143	-	.125
176	12	.850	16.46-	.139-	.156	-	.134
176	13	.850	20.48-	.174-	.187	-	.170
176	14	.850	.27-	.087-	.099	-	.094

TABLE Va

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - STANDARD AND EXPANDED AFTERBODIES

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{c_2}}$	$C_{p_{b_1}}$	$C_{p_{b_2}}$
177	1	.750-	3.82-	.102-	.117	-	.110
177	2	.750-	1.79-	.092-	.112	-	.105
177	4	.750-	.78-	.087-	.107	-	.105
177	5	.750	.23-	.092-	.107	-	.105
177	6	.750	2.25-	.092-	.107	-	.110
177	7	.750	4.27-	.107-	.122	-	.126
177	8	.750	6.29-	.107-	.127	-	.136
177	9	.750	8.33-	.118-	.133	-	.137
177	10	.750	10.34-	.113-	.122	-	.131
177	11	.750	12.35-	.112-	.127	-	.126
177	12	.750	14.37-	.117-	.132	-	.126
177	13	.750	16.38-	.133-	.147	-	.136
177	14	.750	20.41-	.158-	.167	-	.162
177	15	.750	.23-	.092-	.101	-	.115
178	1	.600-	3.87-	.085-	.100	-	.118
178	2	.600-	1.86-	.092-	.099	-	.118
178	3	.600-	.85-	.078-	.092	-	.118
178	4	.600	.15-	.078-	.085	-	.111
178	5	.600	2.16-	.093-	.100	-	.118
178	6	.600	4.18-	.093-	.107	-	.126
178	7	.600	6.19-	.107-	.114	-	.141
178	8	.600	8.21-	.114-	.129	-	.148
178	9	.600	10.23-	.115-	.122	-	.141
178	10	.600	12.24-	.100-	.107	-	.118
178	11	.600	14.25-	.114-	.121	-	.125
178	12	.600	16.26-	.122-	.136	-	.133
178	13	.600	20.28-	.153-	.160	-	.157
178	14	.600	.15-	.085-	.092	-	.110

TABLE Vb

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - FLARED SKIRT AFTERBODY

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{b_{r_1}}}$	$C_{p_{b_{r_2}}}$	$C_{p_{b_{r_3}}}$	$C_{p_{b_{r_4}}}$	$C_{p_{b_{r_5}}}$
104	6	.950-	3.00-	.239-	.311-	.302-	.315-	.321-	.285
104	7	.950-	2.00-	.240-	.300-	.297-	.301-	.326-	.285
104	8	.950-	1.00-	.240-	.293-	.288-	.292-	.339-	.279
104	9	.950	.00-	.242-	.292-	.285-	.291-	.337-	.283
104	10	.950	1.00-	.240-	.288-	.278-	.287-	.323-	.283
104	11	.950	2.00-	.240-	.289-	.274-	.289-	.330-	.285
104	12	.950	3.00-	.240-	.296-	.272-	.290-	.328-	.301
104	13	.950	4.01-	.242-	.305-	.274-	.307-	.330-	.310
104	14	.950	.00-	.240-	.291-	.283-	.289-	.310-	.283
105	1	.950	.00-	.242-	.307-	.297-	.282-	.317-	.304
105	2	.950	.00-	.242-	.303-	.291-	.283-	.317-	.297
105	3	.950	.00-	.241-	.298-	.289-	.283-	.315-	.292
105	4	.950	.00-	.241-	.291-	.286-	.285-	.302-	.283
105	5	.950	.00-	.241-	.289-	.284-	.288-	.310-	.284
105	6	.950	.00-	.240-	.284-	.284-	.291-	.298-	.279
105	7	.950	.00-	.234-	.279-	.286-	.296-	.316-	.281
105	8	.950	.00-	.227-	.280-	.291-	.301-	.321-	.281
105	9	.950	.00-	.238-	.282-	.293-	.305-	.321-	.286
105	10	.950	.00-	.238-	.287-	.280-	.287-	.299-	.281
107	2	1.100-	4.01-	.309-	.424-	.412-	.422-	.342-	.379
107	3	1.100-	3.00-	.312-	.407-	.401-	.410-	.355-	.382
107	4	1.100-	2.01-	.316-	.393-	.388-	.396-	.364-	.376
107	5	1.100-	1.00-	.316-	.387-	.376-	.390-	.384-	.372
107	6	1.100	.00-	.315-	.387-	.375-	.392-	.388-	.365
107	7	1.100	1.00-	.316-	.385-	.371-	.396-	.393-	.363
107	8	1.100	2.00-	.315-	.381-	.369-	.394-	.373-	.355
107	9	1.100	3.00-	.315-	.377-	.371-	.393-	.417-	.381
107	10	1.100	4.01-	.323-	.377-	.377-	.396-	.425-	.403
107	11	1.100	.00-	.323-	.389-	.373-	.396-	.413-	.367
108	2	.750-	4.01-	.241-	.307-	.305-	.311-	.275-	.280
108	3	.750-	3.00-	.237-	.300-	.301-	.300-	.268-	.282
108	4	.750-	2.00-	.234-	.296-	.295-	.297-	.271-	.272
108	5	.750-	1.00-	.241-	.293-	.295-	.294-	.287-	.282
108	6	.750	.00-	.237-	.287-	.289-	.291-	.278-	.282
108	7	.750	1.00-	.234-	.290-	.289-	.291-	.287-	.279
108	8	.750	2.00-	.240-	.290-	.286-	.294-	.303-	.286
108	9	.750	3.01-	.237-	.290-	.286-	.294-	.303-	.286
108	10	.750	4.01-	.237-	.297-	.286-	.300-	.302-	.282
108	11	.750	.00-	.237-	.284-	.286-	.291-	.303-	.276
109	2	1.100-	4.00-	.308-	.414-	.383-	.393-	.318-	.351
109	3	1.100-	3.00-	.307-	.403-	.372-	.382-	.357-	.343
109	4	1.100-	2.00-	.314-	.398-	.369-	.387-	.382-	.351
109	5	1.100-	1.00-	.310-	.390-	.359-	.386-	.371-	.350
109	6	1.100	.00-	.310-	.386-	.352-	.389-	.374-	.356
109	7	1.100	1.00-	.310-	.386-	.348-	.389-	.374-	.360
109	8	1.100	2.00-	.313-	.386-	.348-	.395-	.384-	.356
109	9	1.100	3.00-	.310-	.389-	.348-	.392-	.360-	.360
109	10	1.100	4.00-	.304-	.390-	.349-	.392-	.358-	.370
109	11	1.100	6.00-	.306-	.398-	.360-	.391-	.393-	.396
109	12	1.100	8.00-	.316-	.436-	.381-	.415-	.424-	.428
109	13	1.100	12.01-	.368-	.540-	.400-	.485-	.473-	.487
109	14	1.100	16.02-	.424-	.586-	.436-	.563-	.516-	.542
109	15	1.100	20.03-	.477-	.619-	.485-	.607-	.546-	.570
109	16	1.100	.00-	.312-	.415-	.357-	.411-	.382-	.379
110	2	.250-	4.00-	.238-	.329-	.309-	.333-	.242-	.280

TABLE Vb

BALANCE CAVITY AND MODEL BASE PRESSURE COEFFICIENTS - FLARED SKIRT AFTERBODY

Run	Pt	M	α	$C_{p_{c_1}}$	$C_{p_{b_{r_1}}}$	$C_{p_{b_{r_2}}}$	$C_{p_{b_{r_3}}}$	$C_{p_{b_{r_4}}}$	$C_{p_{b_{r_5}}}$
110	3	.950-	3.00-	.235-	.307-	.291-	.310-	.245-	.273
110	4	.950-	2.00-	.240-	.308-	.292-	.308-	.250-	.278
110	5	.950-	1.00-	.236-	.301-	.284-	.296-	.246-	.274
110	6	.950	.00-	.229-	.286-	.273-	.289-	.255-	.274
110	7	.950	1.00-	.233-	.290-	.270-	.297-	.263-	.283
110	8	.950	2.00-	.233-	.294-	.270-	.301-	.267-	.287
110	9	.950	3.00-	.233-	.298-	.266-	.305-	.267-	.295
110	10	.950	4.00-	.232-	.309-	.269-	.312-	.289-	.306
110	11	.950	6.00-	.236-	.320-	.269-	.324-	.304-	.325
110	12	.950	8.00-	.236-	.347-	.281-	.348-	.344-	.353
110	13	.950	12.00-	.278-	.423-	.319-	.406-	.424-	.419
110	14	.950	16.00-	.331-	.514-	.352-	.515-	.524-	.517
110	15	.950	20.01-	.369-	.533-	.390-	.569-	.481-	.552
110	16	.950	.00-	.244-	.317-	.285-	.320-	.251-	.306
111	2	.950	.00-	.245-	.295-	.283-	.283-	.275-	.288
111	3	.950	.00-	.244-	.306-	.293-	.293-	.282-	.294
111	4	.950	.00-	.244-	.294-	.285-	.289-	.266-	.290
111	5	.950	.00-	.247-	.297-	.284-	.292-	.254-	.282
111	6	.950	.00-	.247-	.289-	.284-	.296-	.266-	.278
111	7	.950	.00-	.247-	.286-	.284-	.300-	.258-	.278
111	8	.950	.00-	.243-	.281-	.284-	.299-	.273-	.273
111	9	.950	.00-	.254-	.292-	.295-	.315-	.261-	.281
111	10	.950	.01-	.251-	.289-	.292-	.312-	.266-	.278
111	11	.950	.00-	.250-	.296-	.287-	.303-	.261-	.285
112	1	.750-	4.00-	.241-	.313-	.307-	.326-	.239-	.285
112	2	.750-	3.00-	.242-	.309-	.308-	.317-	.250-	.286
112	3	.750-	2.00-	.242-	.299-	.298-	.306-	.229-	.281
112	4	.750-	1.00-	.243-	.295-	.294-	.308-	.267-	.282
112	5	.750	.00-	.238-	.290-	.289-	.307-	.267-	.282
112	6	.750	1.00-	.242-	.289-	.282-	.301-	.261-	.286
112	7	.750	2.00-	.247-	.293-	.282-	.305-	.276-	.286
112	8	.750	3.00-	.247-	.298-	.282-	.316-	.265-	.291
112	9	.750	4.00-	.247-	.299-	.282-	.317-	.287-	.302
112	10	.750	6.00-	.252-	.313-	.286-	.321-	.265-	.306
112	11	.750	8.01-	.258-	.330-	.298-	.338-	.365-	.371
112	12	.750	12.01-	.280-	.384-	.330-	.366-	.388-	.373
112	13	.750	16.02-	.335-	.490-	.395-	.449-	.433-	.429
112	14	.750	20.03-	.404-	.503-	.459-	.515-	.488-	.411
112	15	.750	.00-	.247-	.289-	.297-	.306-	.261-	.281

SECTION X

FIGURE INDEX

Figure No.	Contents
1	Model Photographs
2	Installation Drawings
3	Model Drawings
4	Axis Systems and Sign Conventions

PLOTTED AERODYNAMIC DATA - WINGS FOLDED

Figure No.	Configuration	δ_t	ϕ	Effective Fins (pitch effectiveness runs only)
5	B_2	0	0	
6	B_2C_2	↓	↓	
7	↓	↓	45	
8	B_2C_3	↓	0	
9	↓	↓	45	
10	$B_2C_2F_{2A/2B}$	↓	90	F_{2A}
11	↓	↓	0	F_{2B}
12	$B_2C_2F_{2C}$	↓	↓	F_{2C}
13	↓	↓	45	
14	$B_2C_2F_{2AX/2BX}$	↓	90	F_{2AX}
15	↓	↓	0	F_{2BX}
16	$B_2C_2F_{2CX}$	↓	↓	F_{2CX}
17	↓	↓	45	
18	$B_2C_2F_{2AT/2BT}$	↓	90	F_{2AT}
19	↓	↓	0	F_{2BT}

SECTION X

FIGURE INDEX (CON'T)

PLOTTED AERODYNAMIC DATA - WINGS FOLDED (CON'T)

Figure No.	Configuration	e_t	Φ	Effective Fins (pitch effectiveness runs only)
20	$B_2C_2F_{2CT}$	0	0	F_{2CT}
21	↓	↓	45	
22	$B_2C_{-/3}F_{-/2CT}$		0	
23	↓		22.5	
24	↓		90	
25	↓		-90	
26	$B_2C_2F_{3A/3B}$		90	F_{3A}
27	↓		0	F_{3B}
28	$B_2C_2F_{3C}$		0	F_{3C}
29	↓	↓	45	
30	$B_2C_2F_{2C/-}$	5	0	—
31	$B_2C_2F_{2A/2B}$		90	F_{2A}
32	↓		0	F_{2B}
33	$B_2C_2F_{2C/-}$		90	F_{2C}
34	$B_2C_2F_{2C}$		0	↓
35	↓		45	
36	↓	↓	90	F_{2C}
37	$B_2C_2F_{2C/-}$	10	0	—
38	$B_2C_2F_{2A/2B}$	↓	90	F_{2A}

SECTION X FIGURE INDEX

PLOTTED AERODYNAMIC DATA - WING FOLDED (CON'T)

Figure No.	Configuration	e_t	Φ	Effective Fins (pitch effectiveness runs only)
39	$B_2C_2F_{2A/2B}$	10	0	F_{2B}
40	$B_2C_2F_{2C/-}$	↓	90	F_{2C}
41	$B_2C_2F_{2C}$	↓	0	↓
42	↓	↓	45	
43	$B_2C_2S_1F_{-/2C}$	0	90	--
44	$B_2C_2S_1F_{2A/2B}$	↓	↓	F_{2A}
45	↓	↓	0	F_{2B}
46	$B_2C_2S_1F_{-/2C}$	↓	↓	F_{2C}

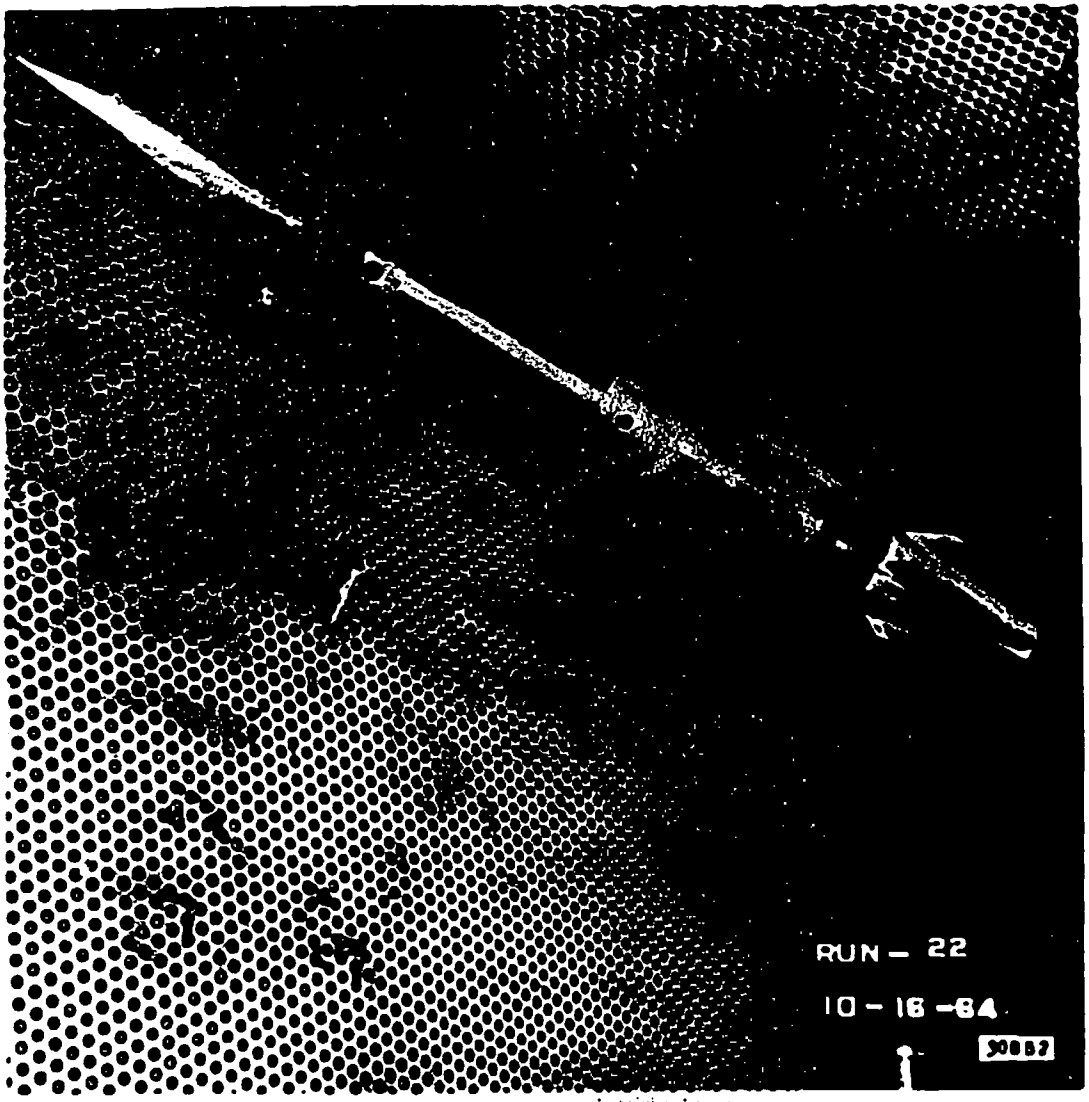
PLOTTED AERODYNAMIC DATA - WINGS EXTENDED

Figure No.	Configuration	i_w	Φ	α
47	$B_3W_2F_{2CX}$	33	0	Var
48	↓	↓	↓	↓
49	↓	↓	Var	0, 8, 16
50	↓	↓	↓	↓
51	$B_3W_3F_{2CX}$	↓	0	Var
52	↓	↓	10	↓
53	↓	↓	20	↓
54	↓	↓	30	↓
55	↓	↓	Var	0, 8, 16

SECTION X FIGURE INDEX (CON'T)

PLOTTED AERODYNAMIC DATA - WINGS EXTENDED (CON'T)

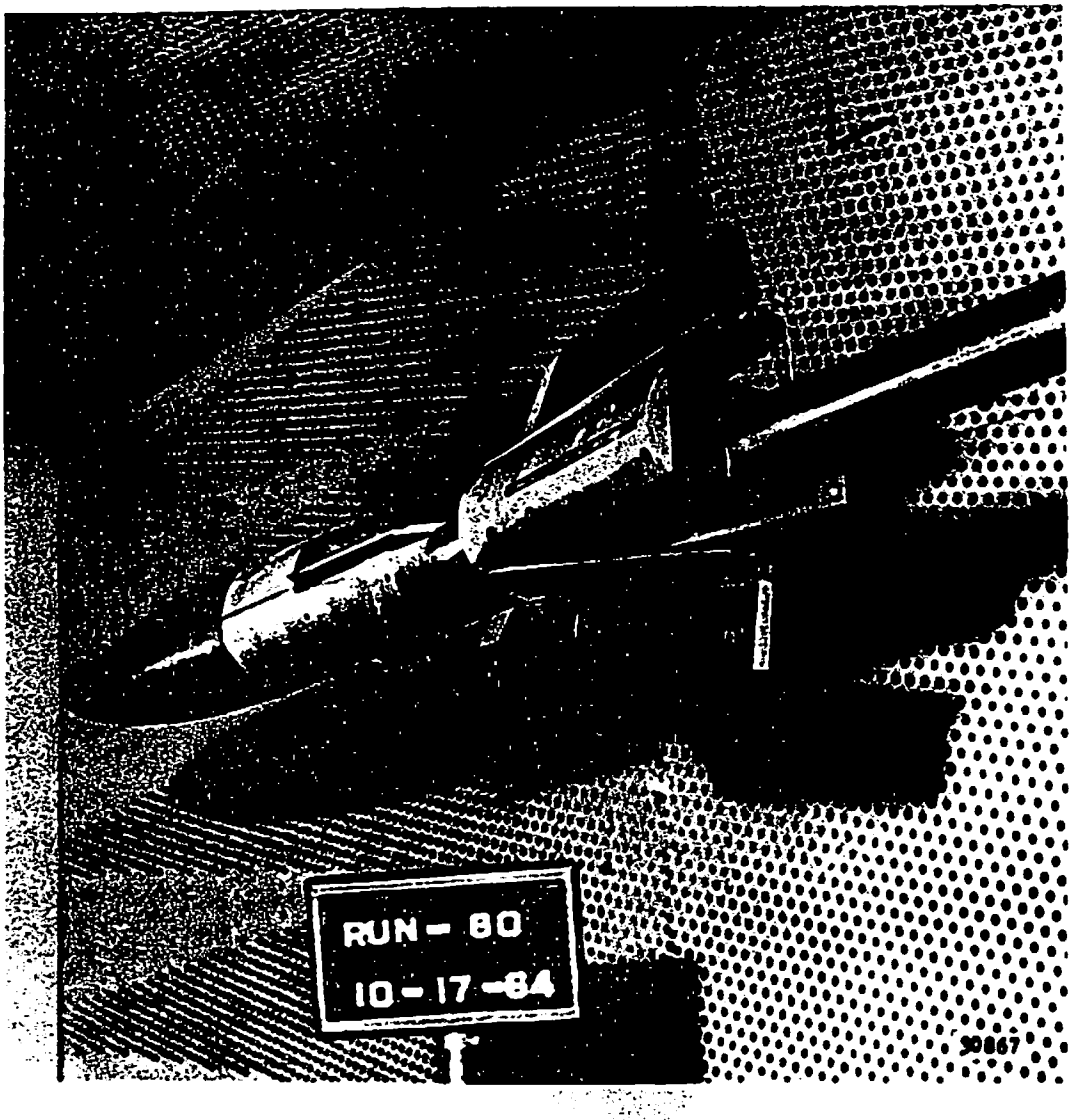
Figure No.	Configuration	i_w	Φ	α
56	$B_3W_2F_{2CX}$	26	0	Var
57	↓	↓	Var	0, 8, 16
58	$B_3W_3F_{2CX}$	↓	0	Var
59	↓	↓	10	↓
60	↓	↓	20	↓
61	↓	↓	30	↓
62	↓	↓	Var	0, 8, 16
63	$B_3W_3F_{2C}$	↓	0	Var
64	↓	↓	Var	0, 8, 16
65	↓ $\Phi_{fin}=45°$	↓	0	Var
66	↓ ↓	↓	Var	0, 8, 16
67	$B_3W_2F_{3C}$	↓	0	Var
68	↓	↓	Var	0, 8, 16



MODEL PHOTOGRAPH

SANDIA SAUTERNE MODEL

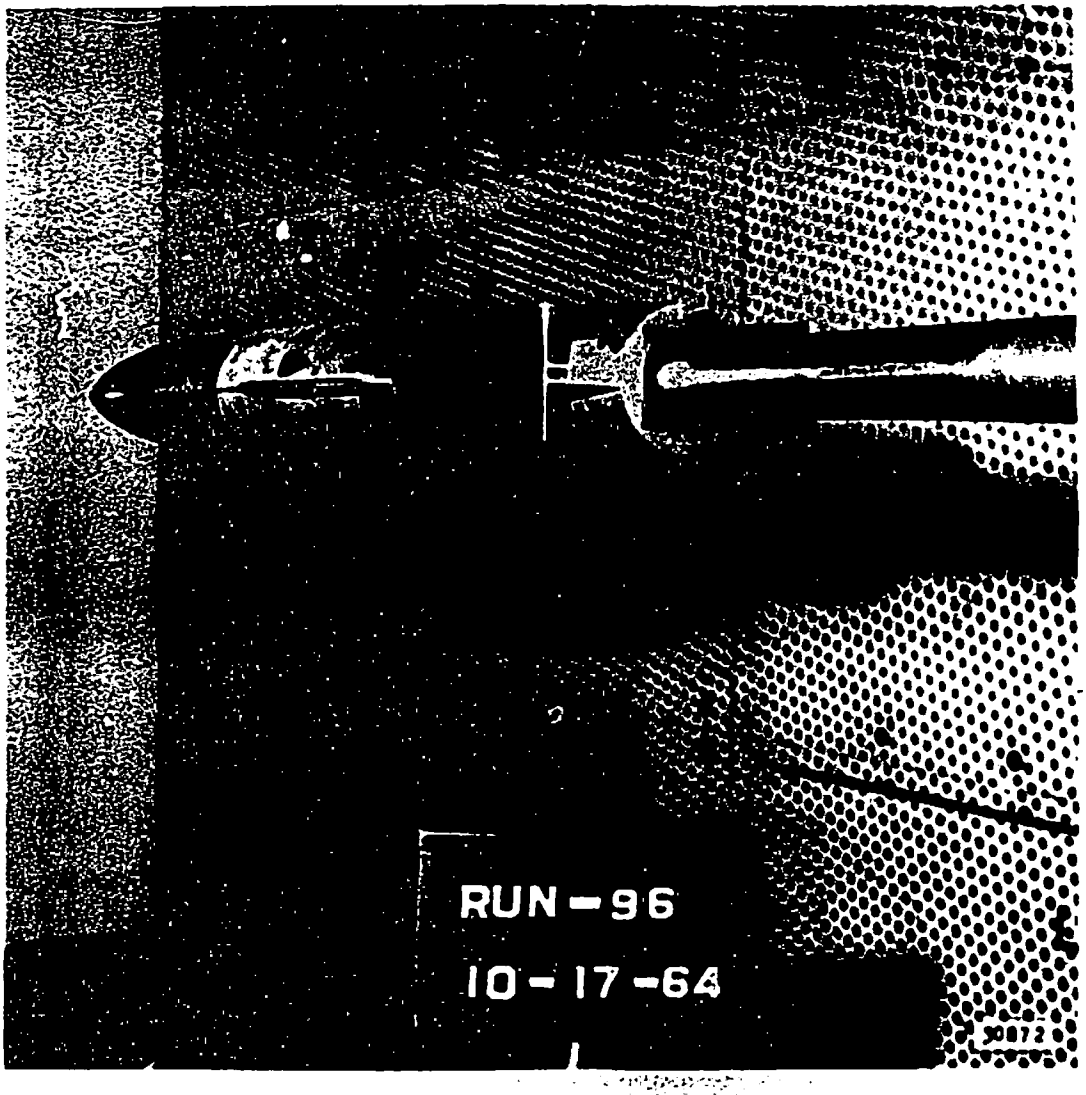
Figure 1a



MODEL PHOTOGRAPH

SANDIA SAUTERNE MODEL

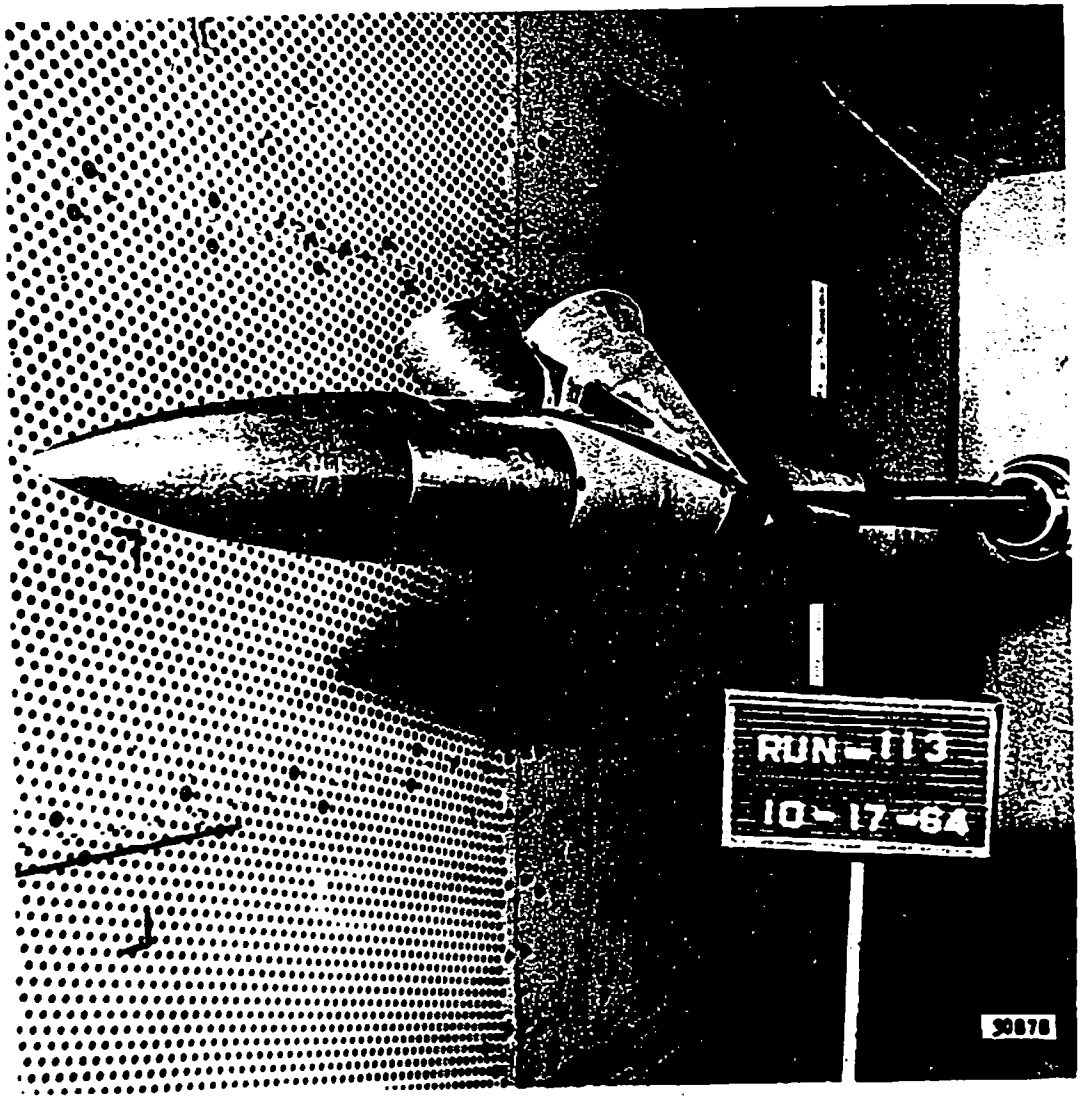
Figure 1b



MODEL PHOTOGRAPH

SANDIA SAUTERNE MODEL

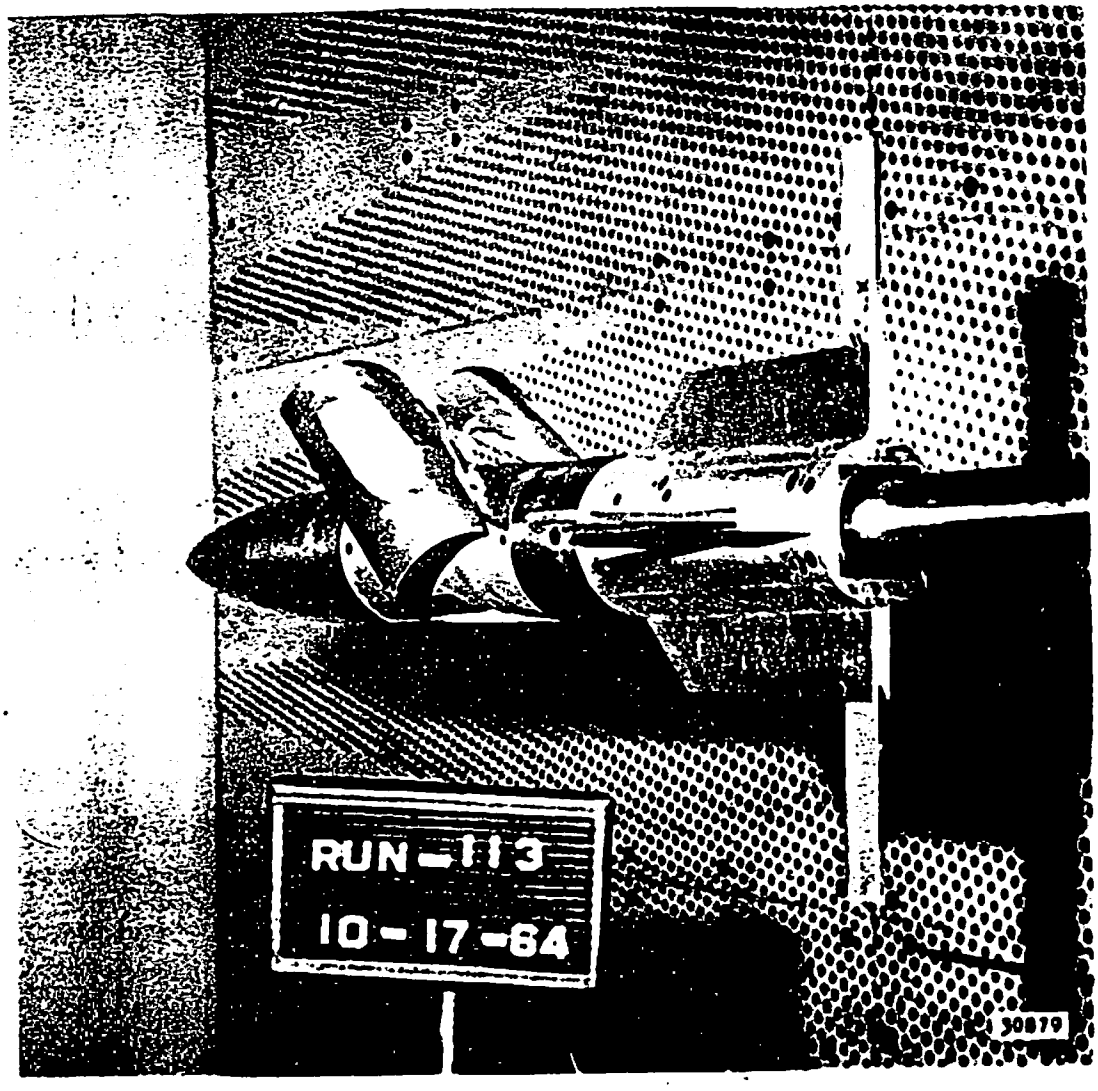
Figure 1c



MODEL PHOTOGRAPH

SANDIA SAUTERNE MODEL

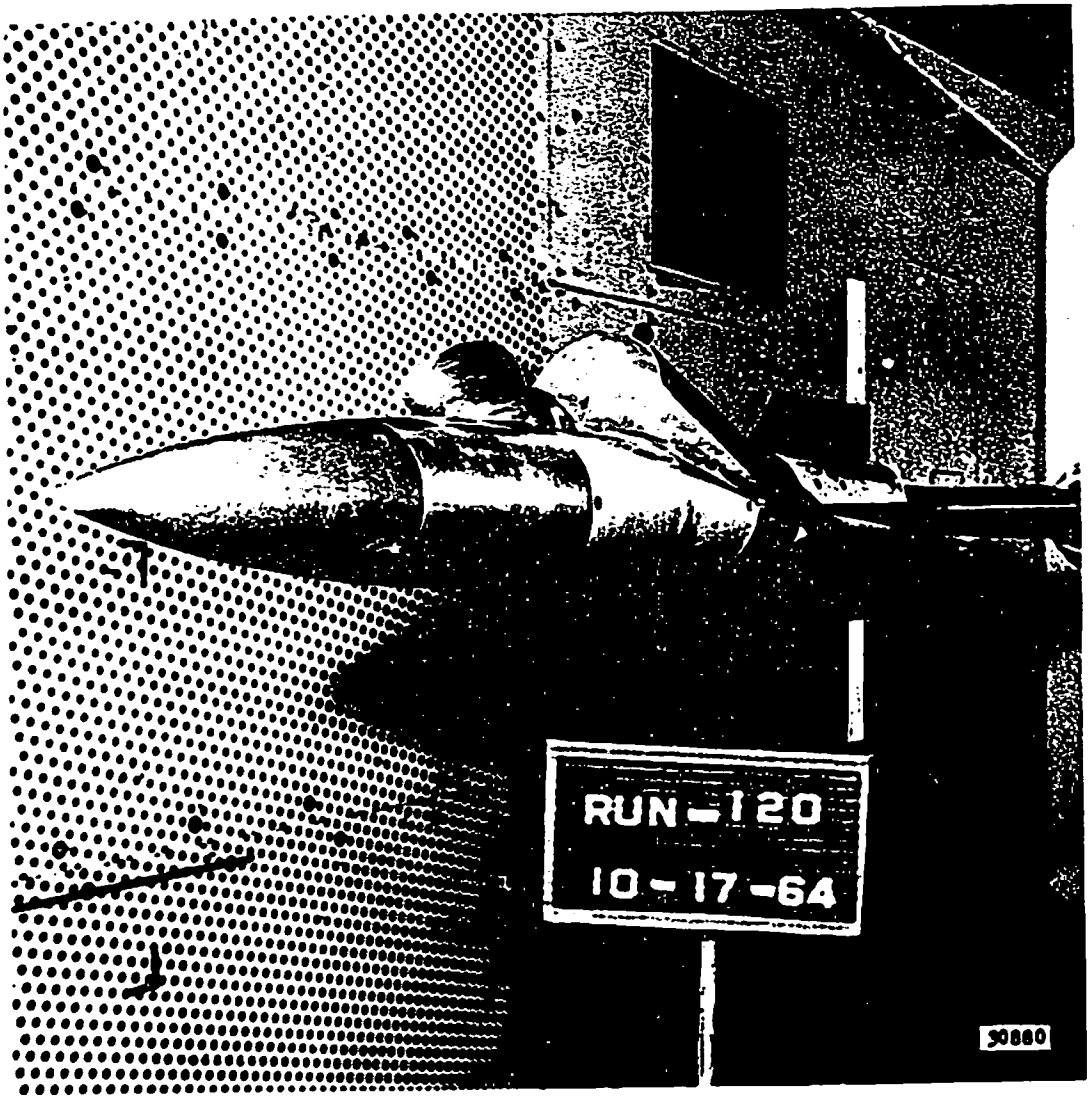
Figure 1d



MODEL PHOTOGRAPH

SANDIA SAUTERNE MODEL

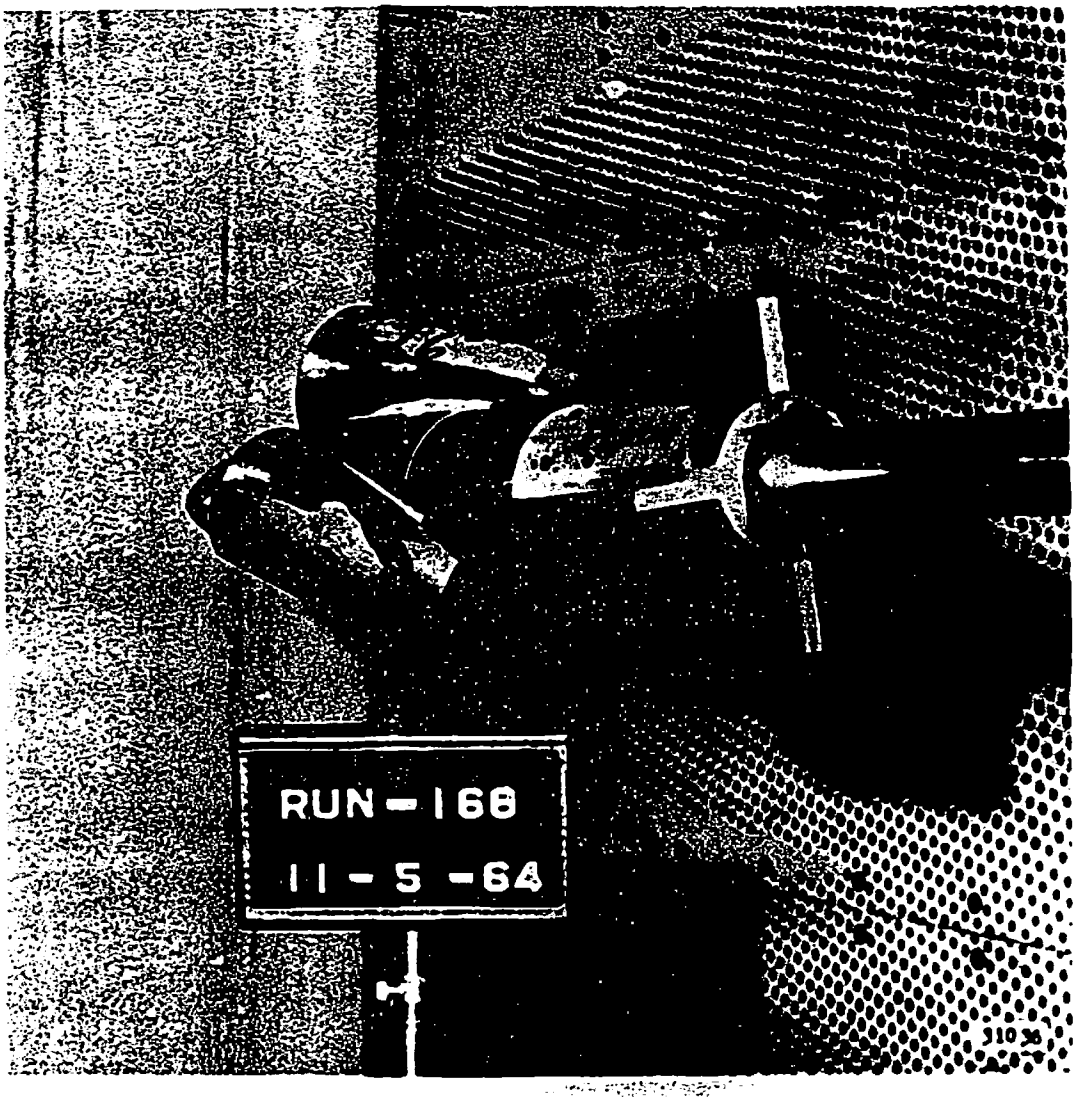
Figure 1e



MODEL PHOTOGRAPH

SANDIA SAUTERNE MODEL

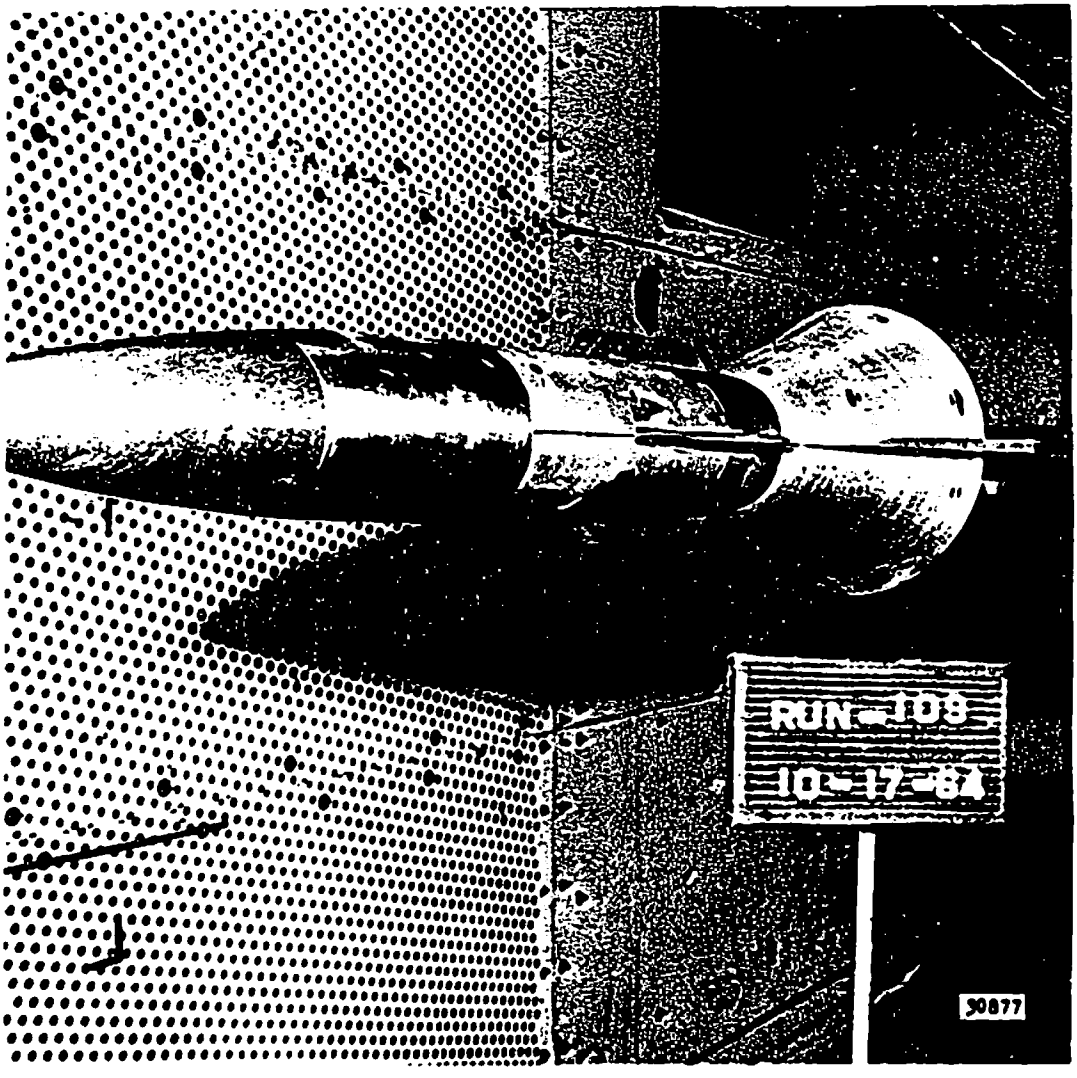
Figure 1f



MODEL PHOTOGRAPH

SANDIA SAUTERNE MODEL

Figure 1g

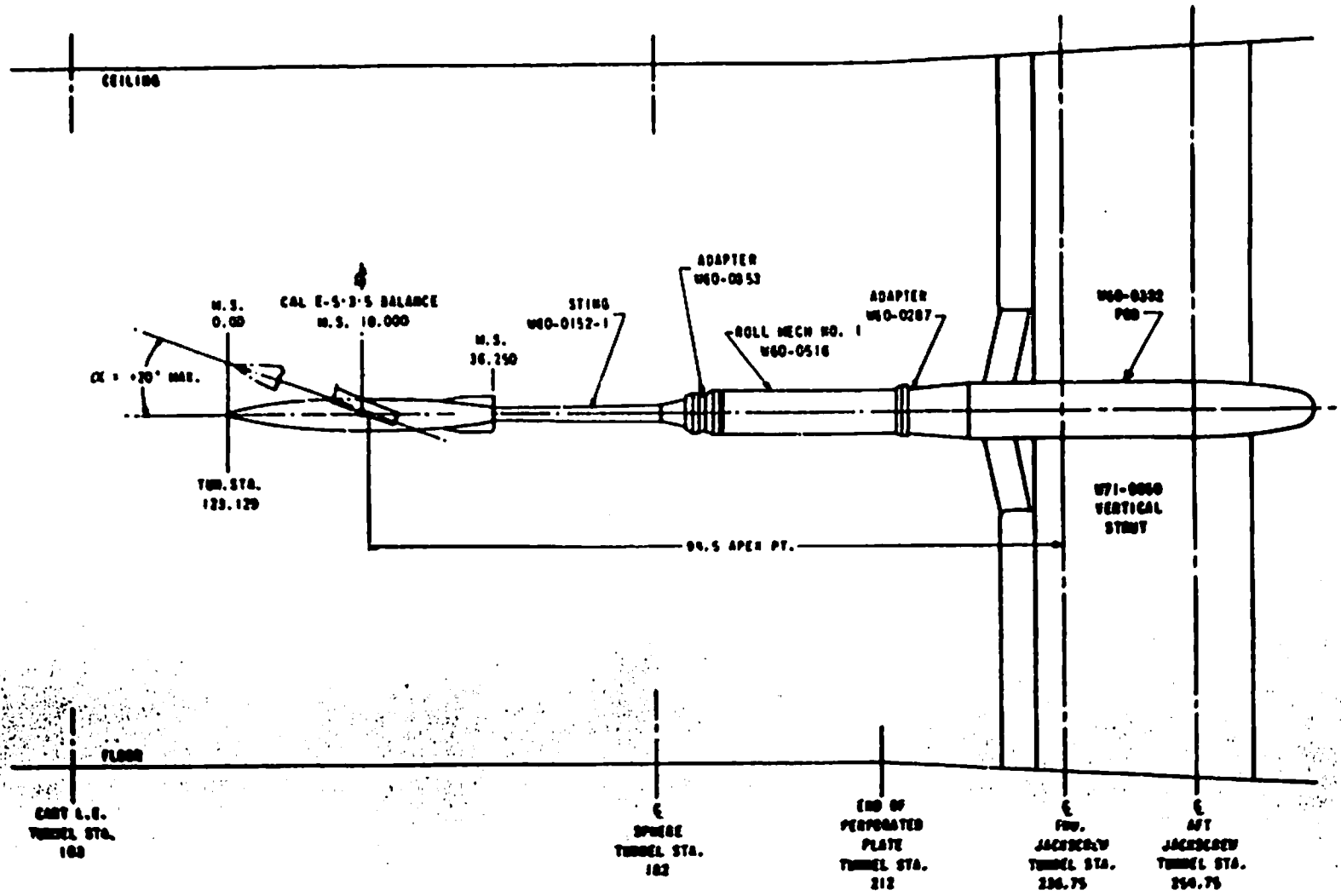


MODEL PHOTOGRAPH

SANDIA SAUTERNE MODEL

Figure 1h

UNCLASSIFIED



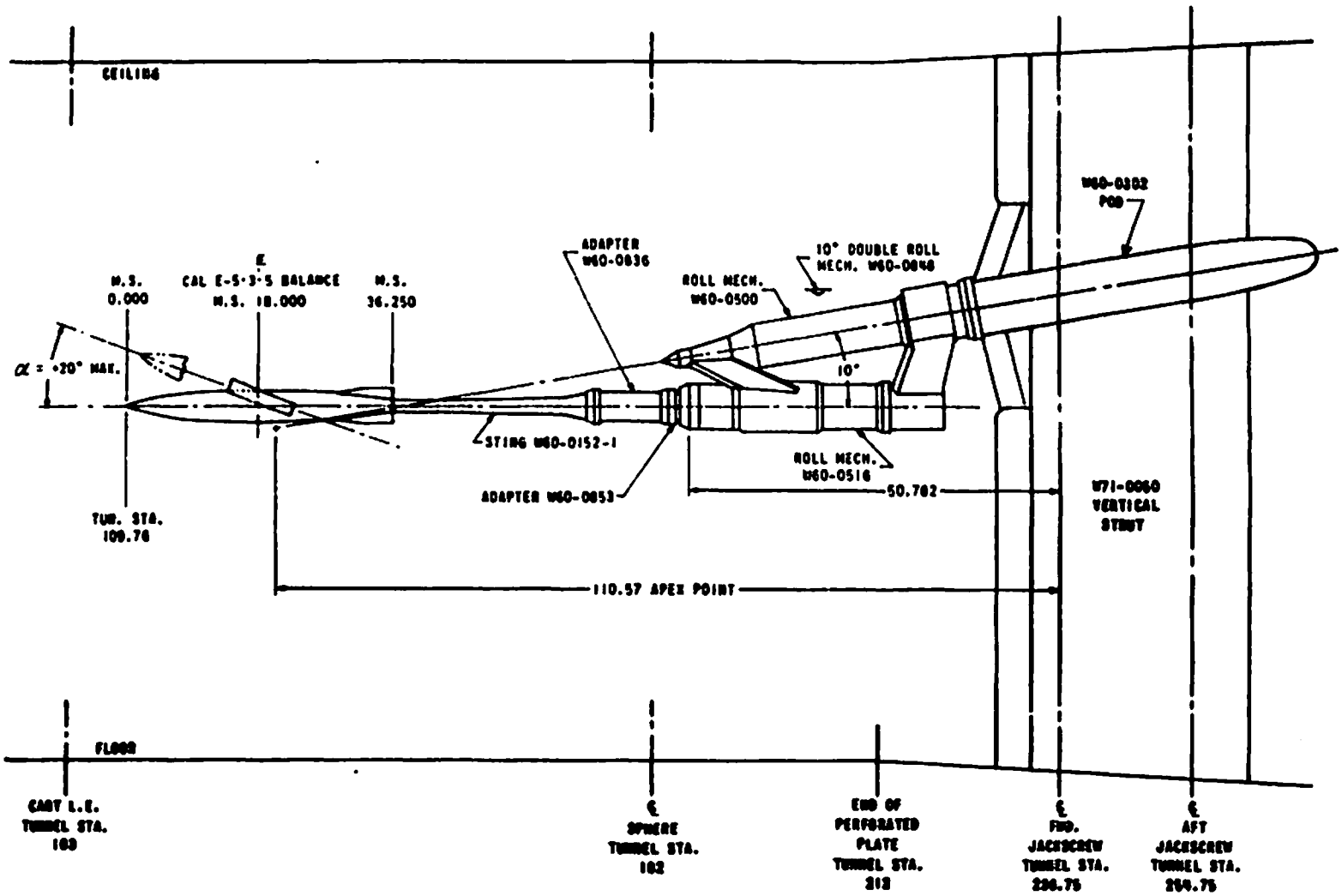
INSTALLATION DRAWING - SANDIA SAUTERNE MODEL

SERIES I TESTS: SINGLE ROLL MECHANISM

Figure 2a

UNCLASSIFIED

UNCLASSIFIED

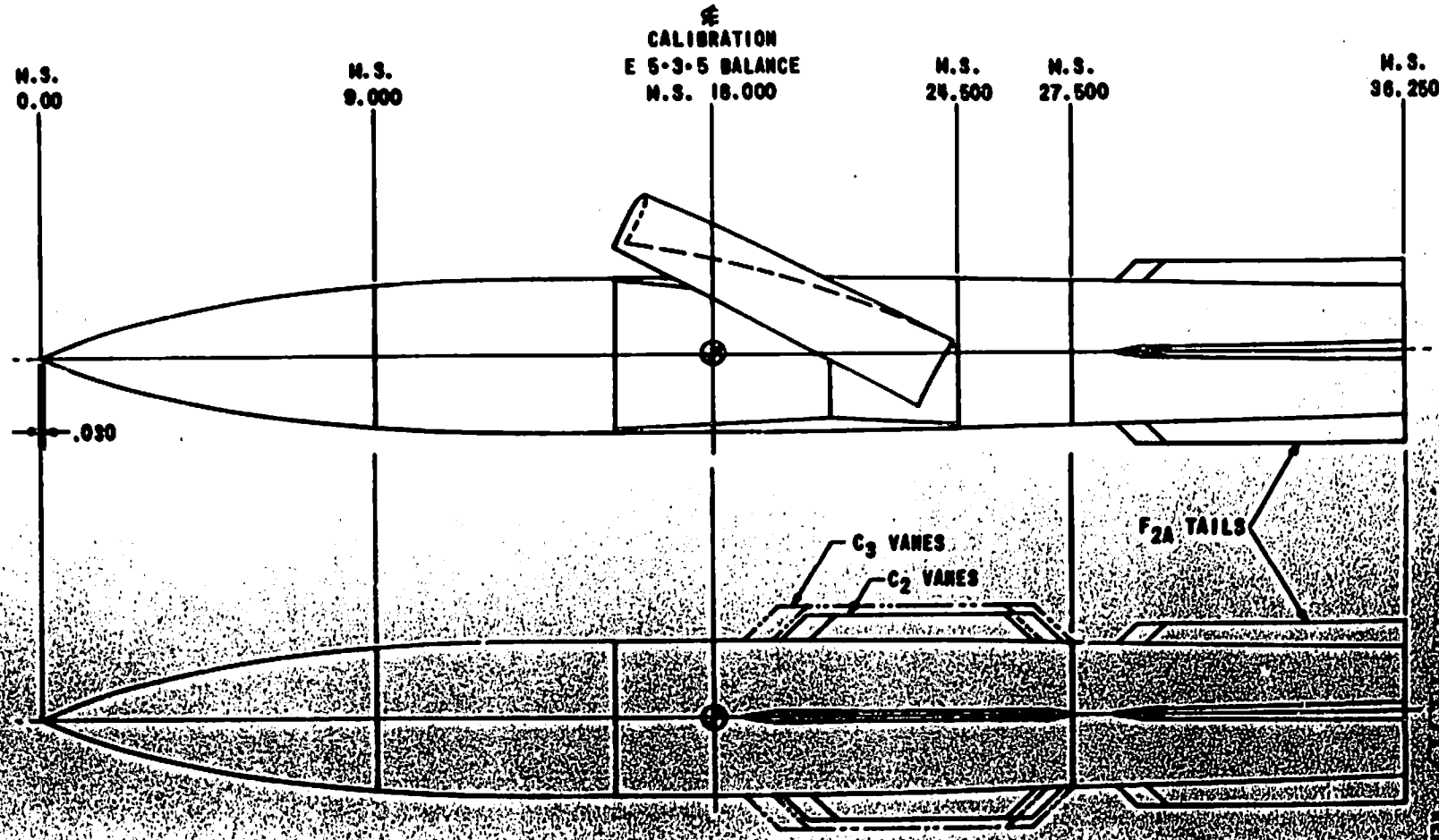


INSTALLATION DRAWING - SANDIA SAUTERNE MODEL

SERIES II TESTING: DOUBLE ROLL MECHANISM

Figure 2b

UNCLASSIFIED



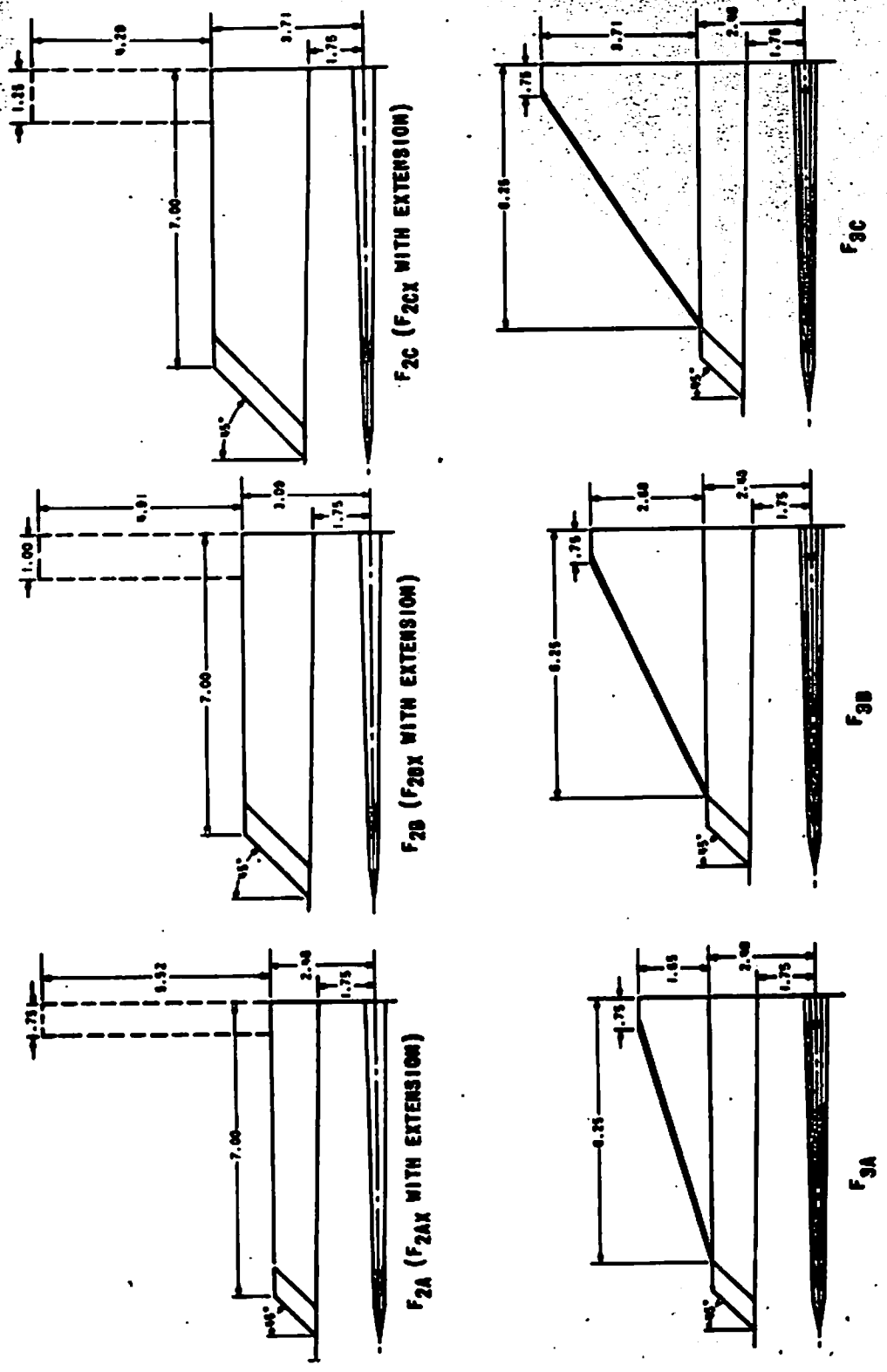
MODEL DRAWING - SANDIA SAUTERNE MODEL

BODY WITH WINGS AND VANES

Figure 3a

UNCLASSIFIED

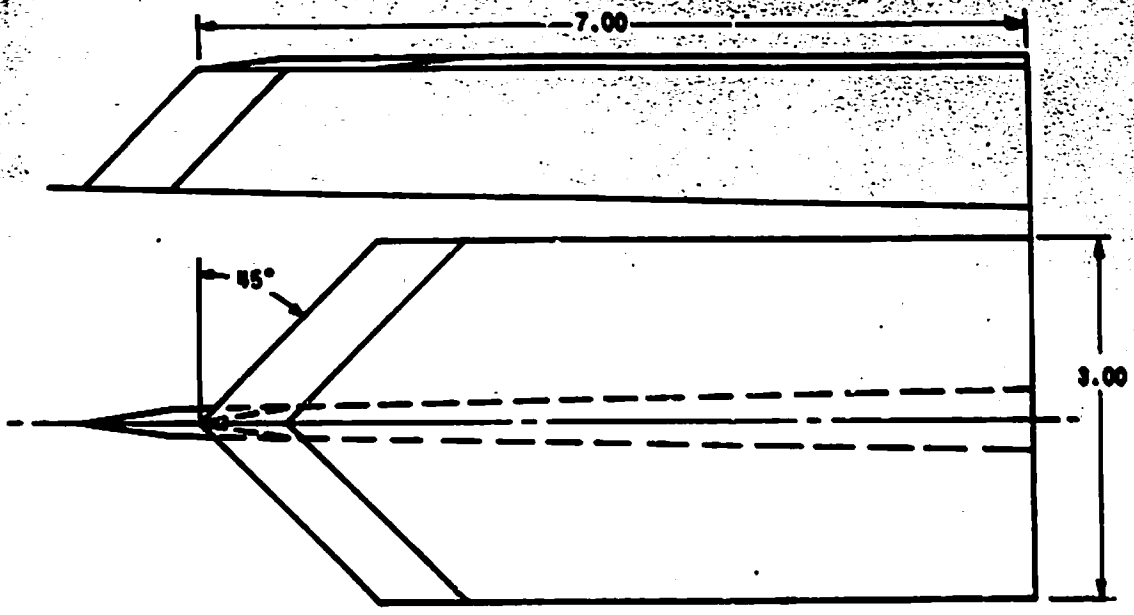
UNCLASSIFIED



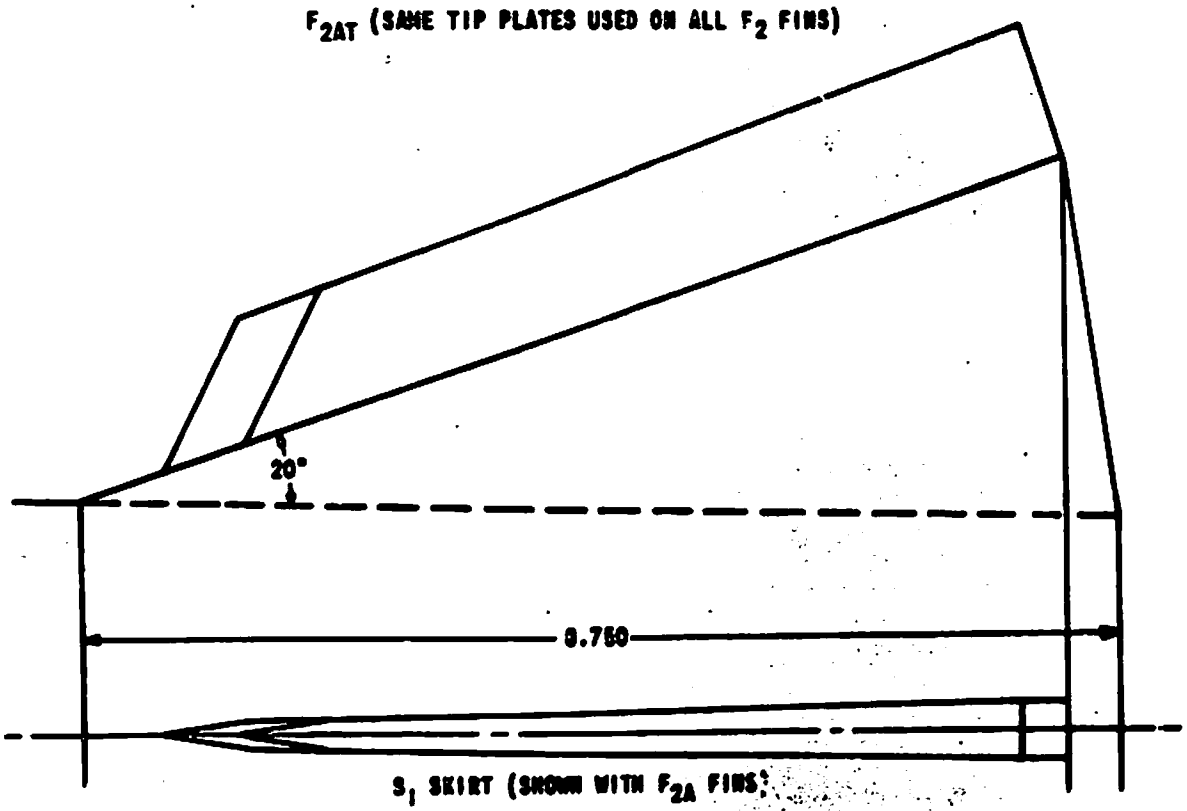
MODEL DRAWING - SANDIA SAUTERNE MODEL

TAIL FINS

Figure 3b

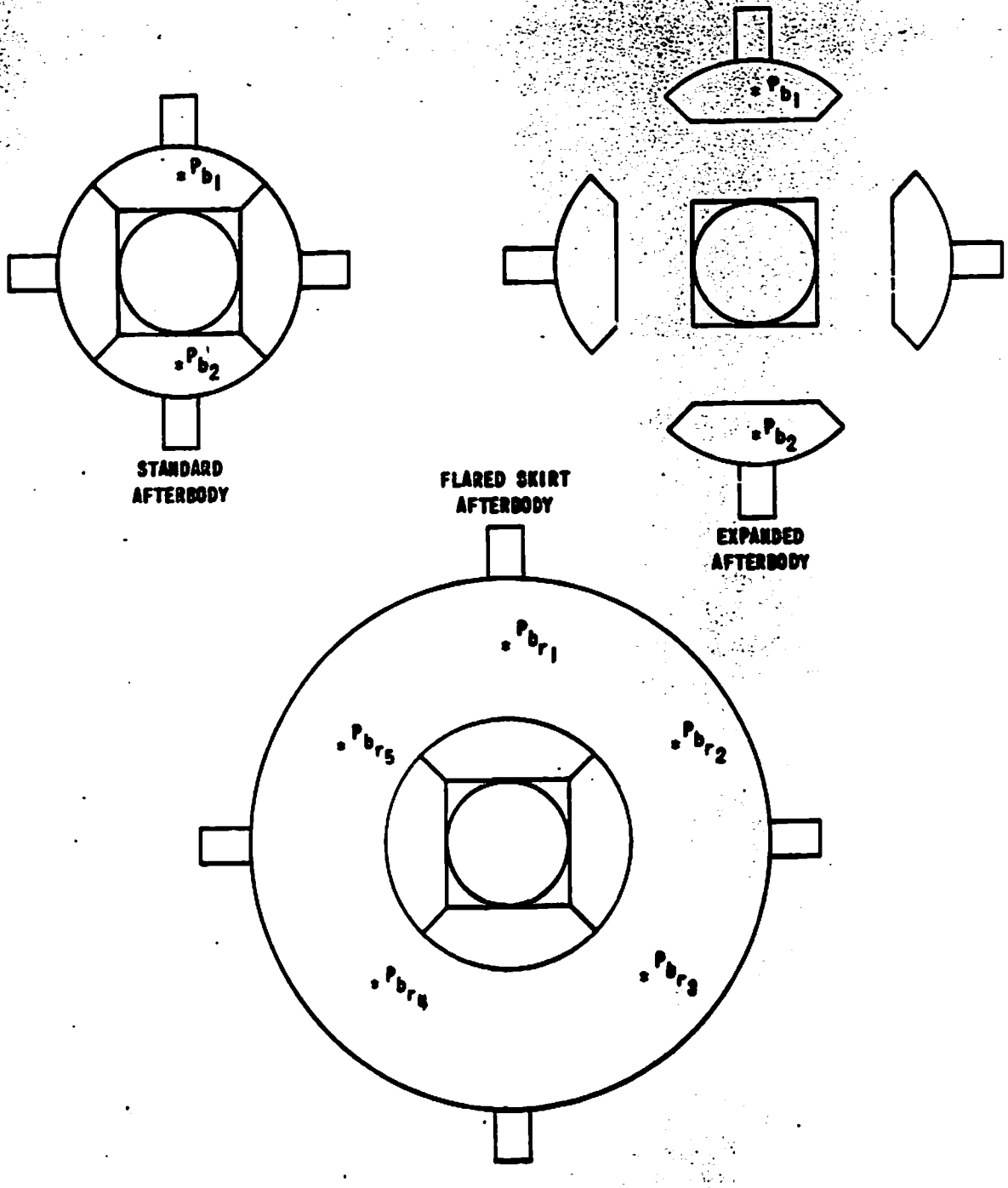


F_{2AT} (SAME TIP PLATES USED ON ALL F_2 FINS)



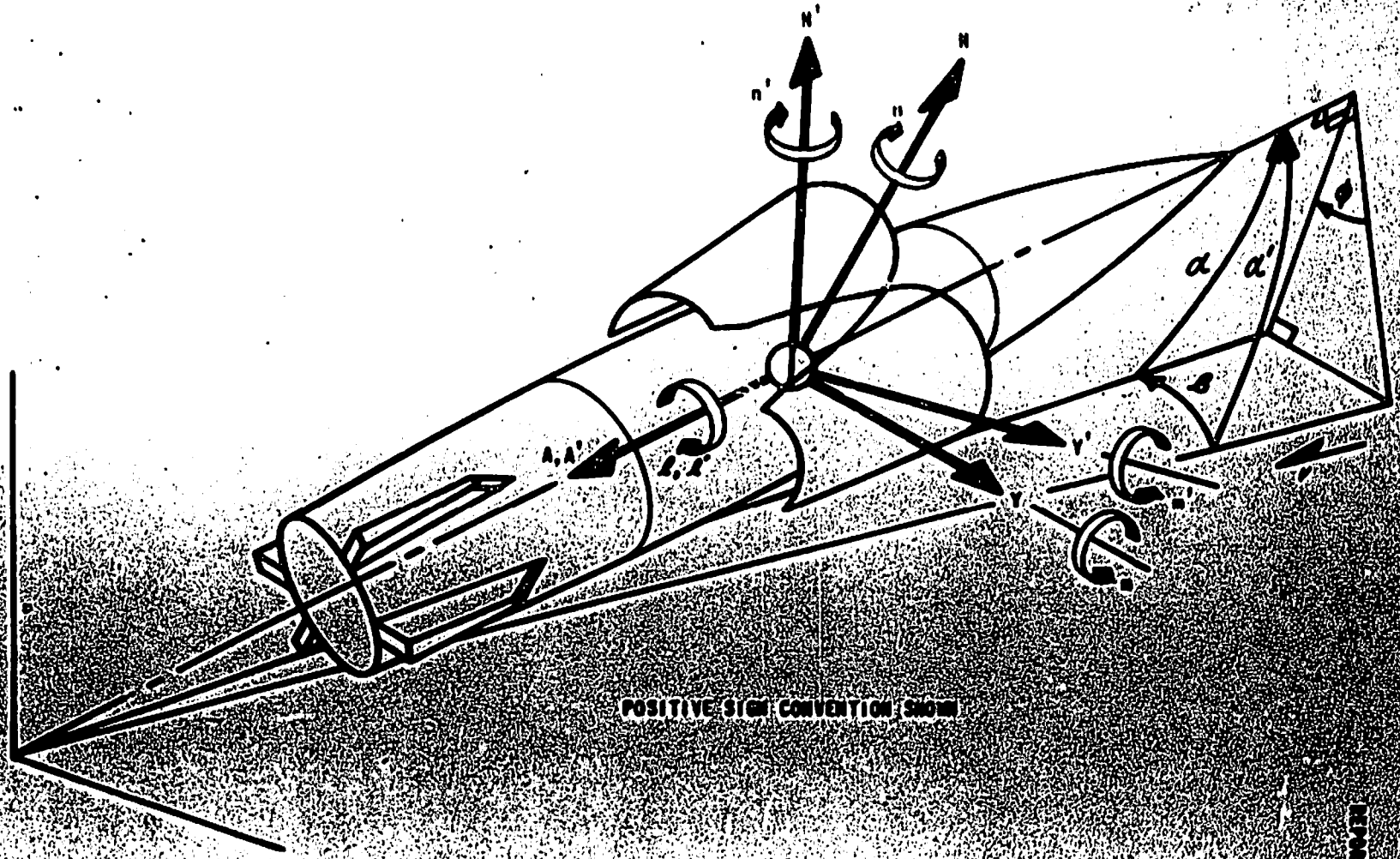
S_1 SKIRT (SHOWN WITH F_{2A} FINS)

MODEL DRAWING - SANDIA SAUTERNE MODEL
TIP PLATES AND SKIRT
Figure 3c



MODEL DRAWING - SANDIA SAUTERNE MODEL
BASE PRESSURE ORIFICE LOCATIONS
Figure 3d

UNCLASSIFIED



POSITIVE SIGN CONVENTION SHOWN

SANDIA SAUTERNE MODEL

AXIS SYSTEM AND SIGN CONVENTIONS

Figure 4

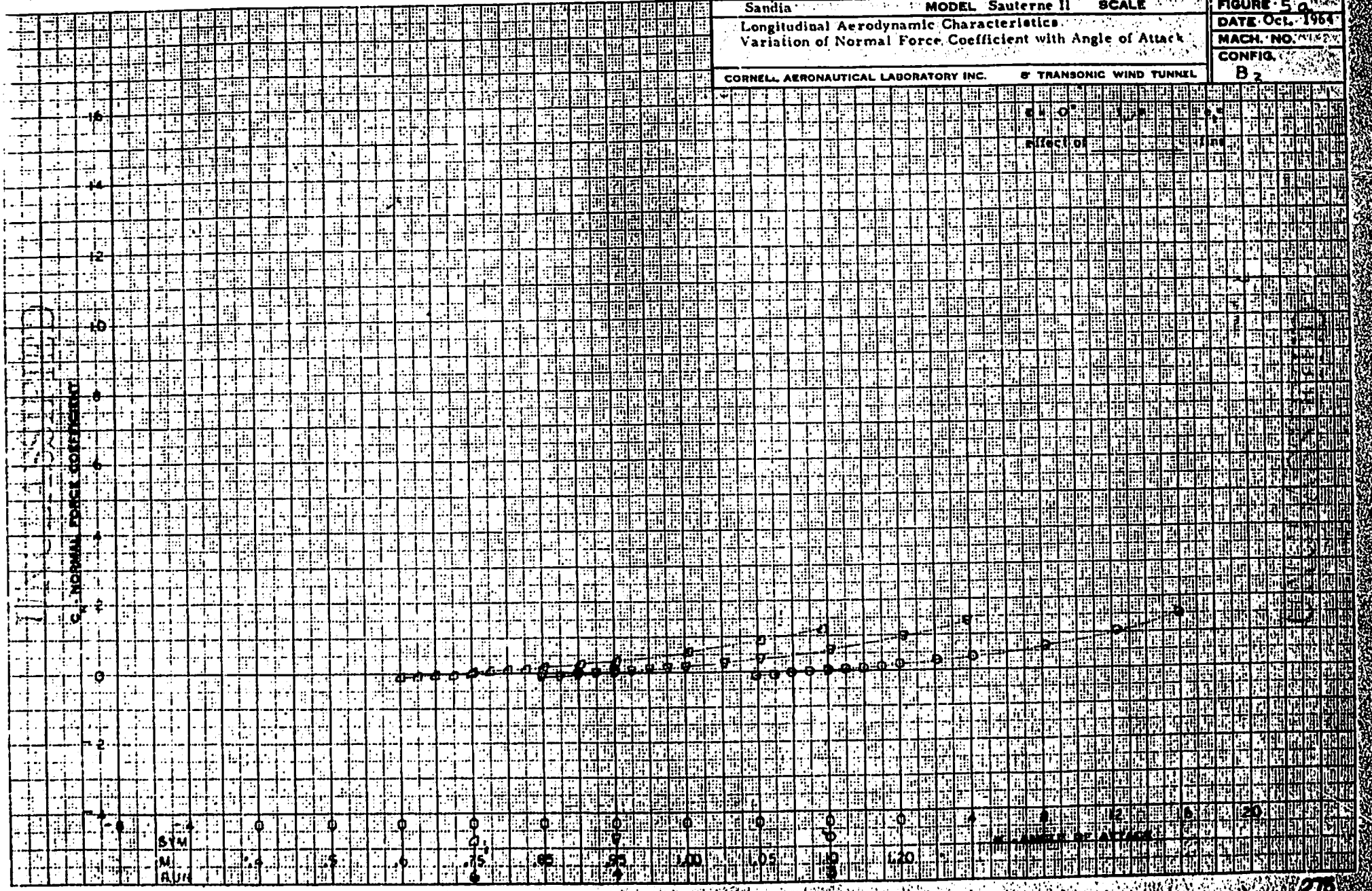
UNCLASSIFIED

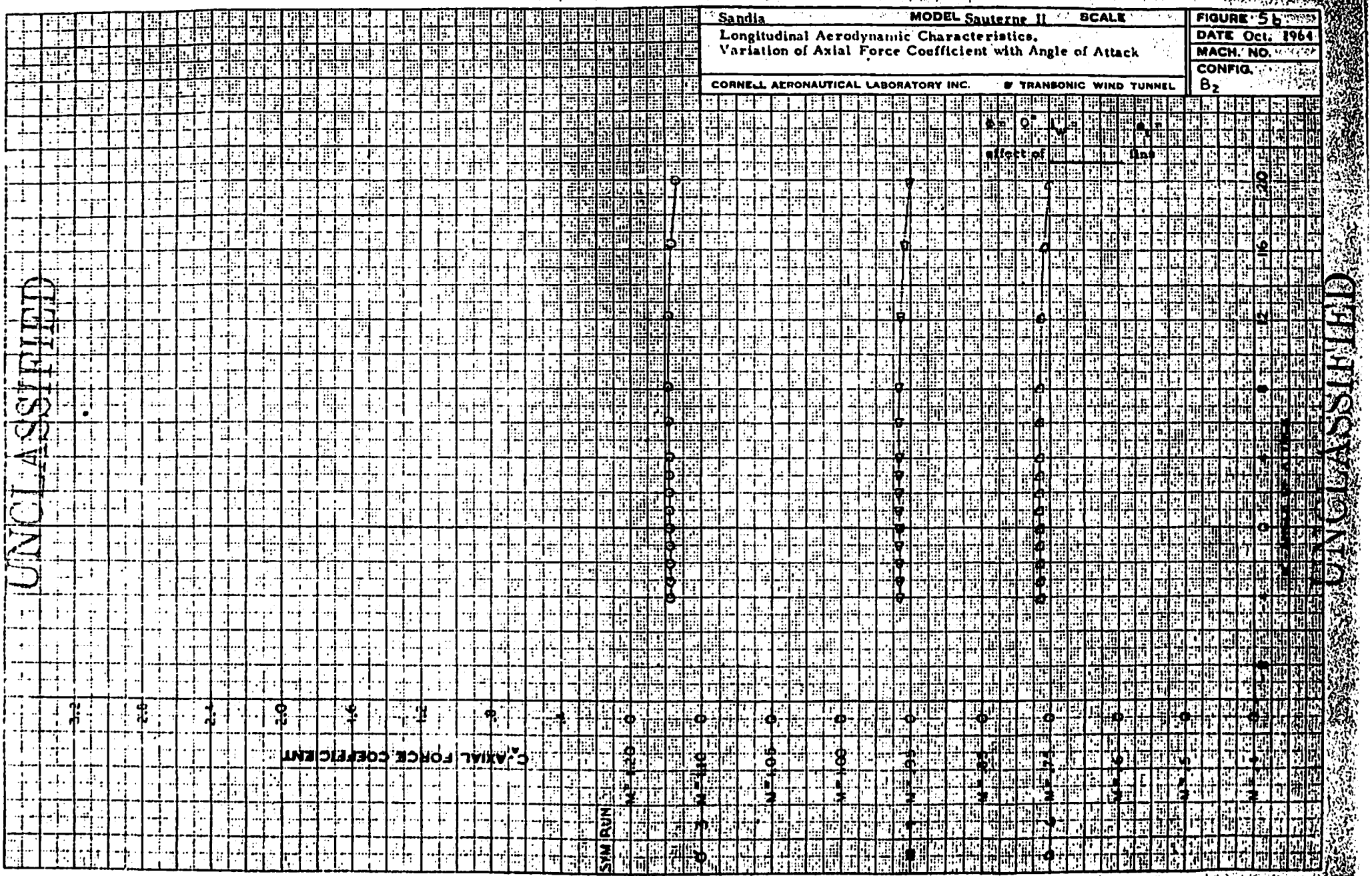
Sandia MODEL Sauterne II SCALE

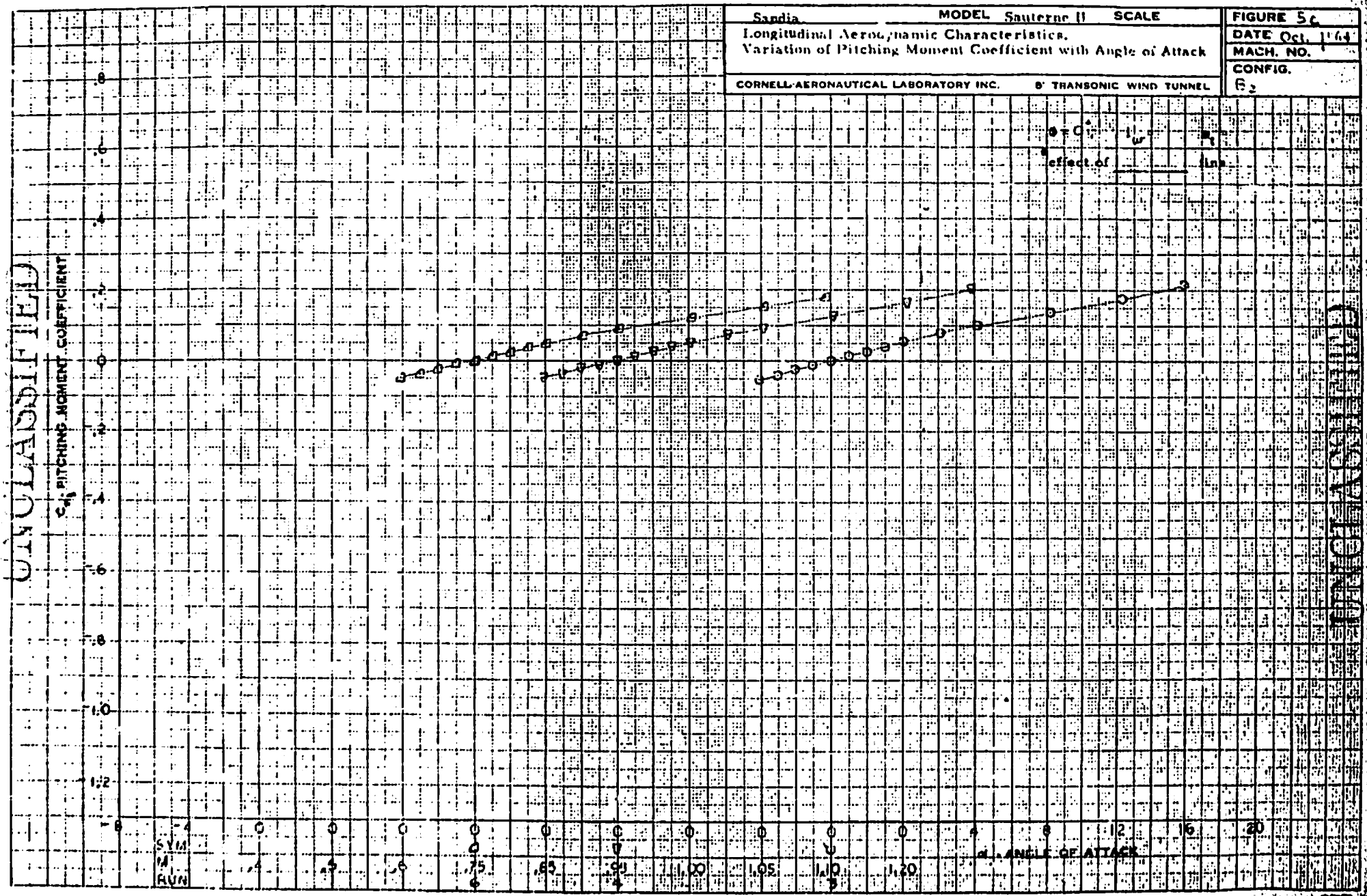
Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 5a
DATE Oct. 1964
MACH. NO.
CONFIG. B_2




Sandia
MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 56
DATE Oct. 1964
MACH. NO.
CONFIG.
B2
UNCLASSIFIED
UNCLASSIFIED
C_A AXIAL FORCE COEFFICIENT
SYM RUN
276


Sandia
MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 5c
DATE Oct. 1964
MACH. NO.
CONFIG.
B2
UNCLASSIFIED
C_m PITCHING MOMENT COEFFICIENT
α, ANGLE OF ATTACK
SYM
M
RUN
.75
.85
.90
1.00
1.05
1.10
1.20
effect of
UNCLASSIFIED

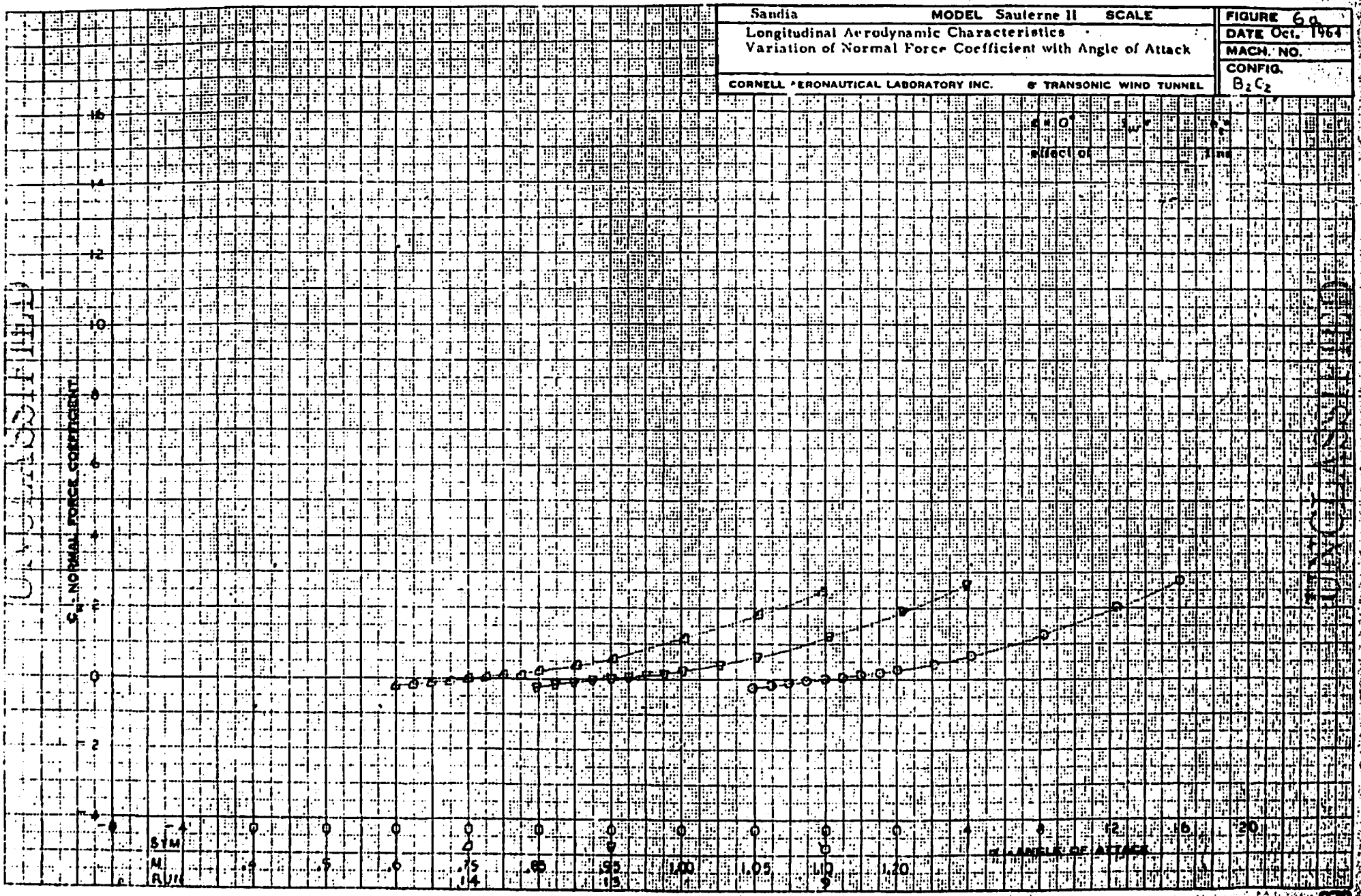
Sandia MODEL Sauterne II SCALE

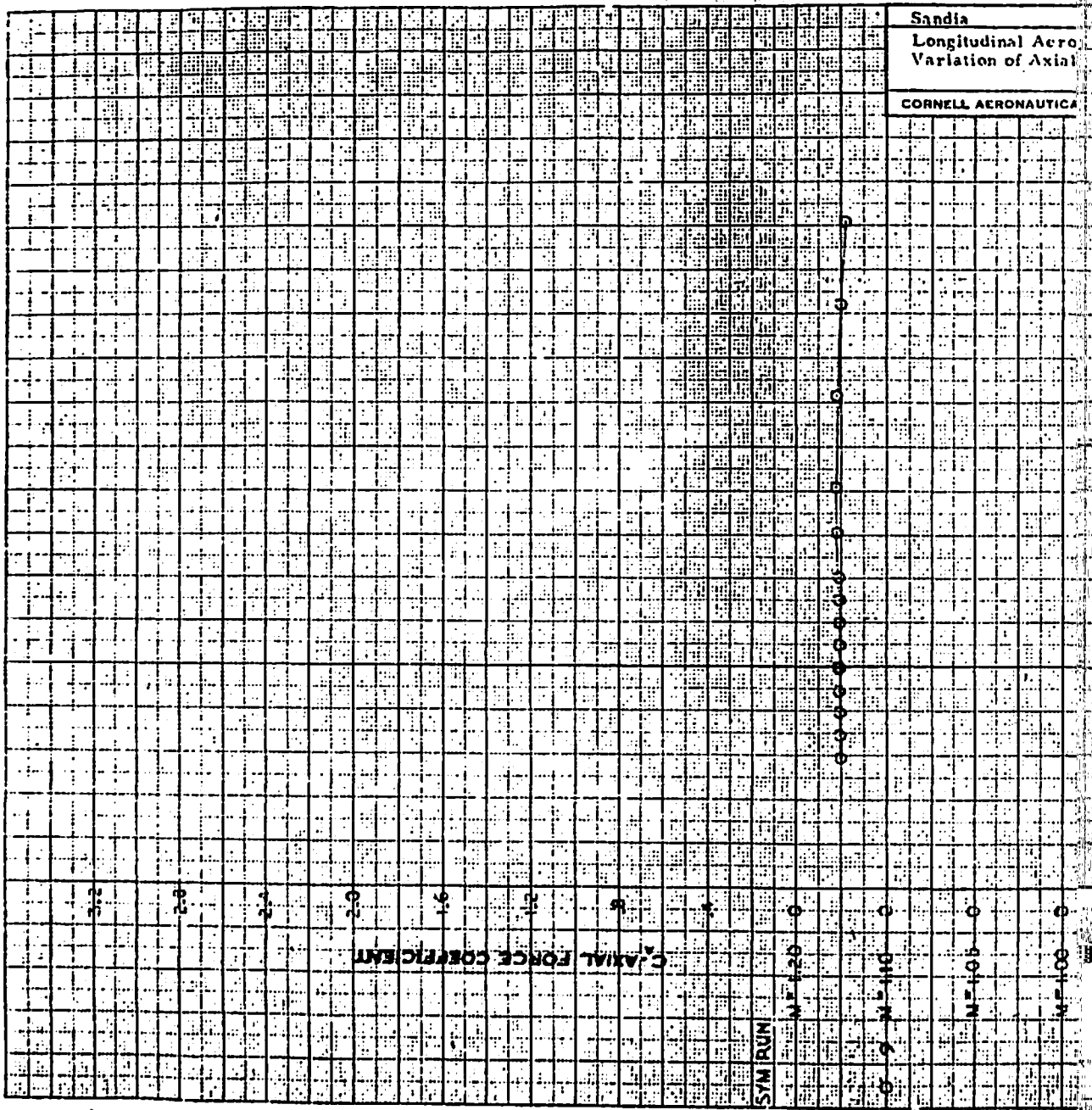
Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

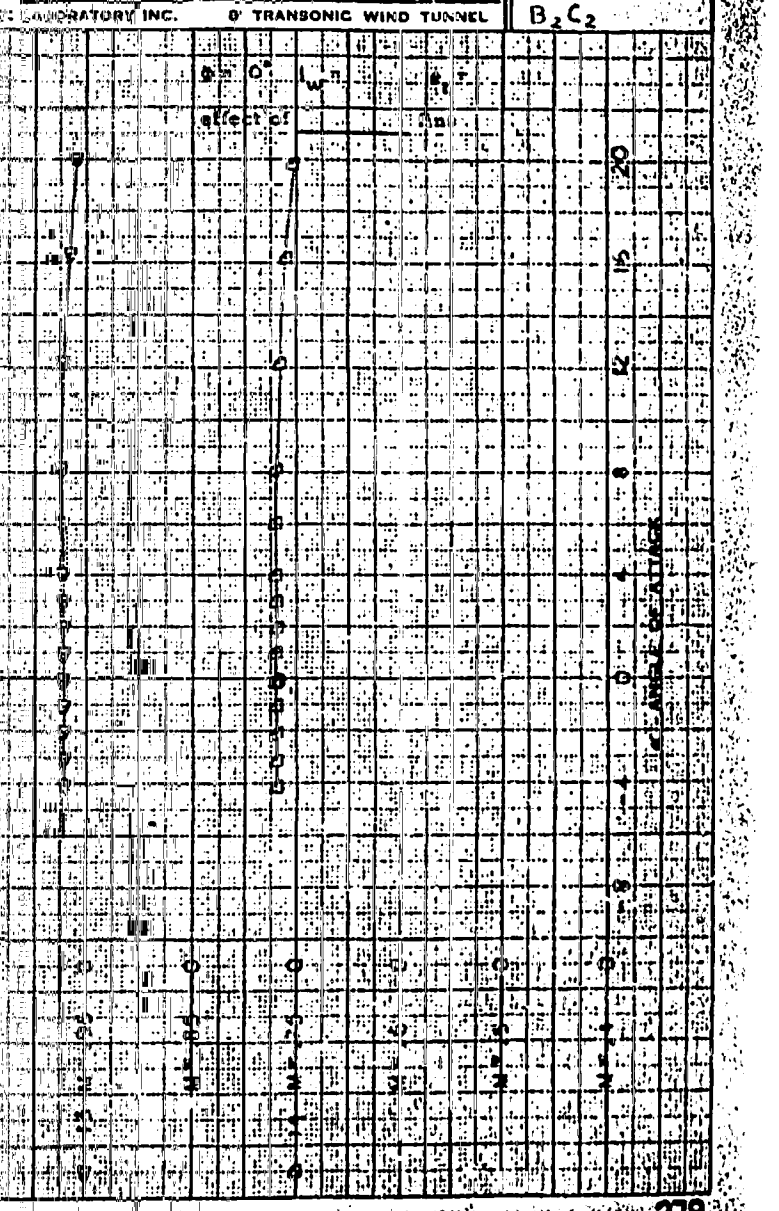
FIGURE 6a
DATE Oct. 1964
MACH. NO.
CONFIG. B_2C_2

$\delta_H = 0°$
Effect of





LABORATORY INC. 8' TRANSONIC WIND TUNNEL B_2C_2



279

MODEL Sauterne II SCALE

dynamic Characteristics.
Force Coefficient with Angle of Attack

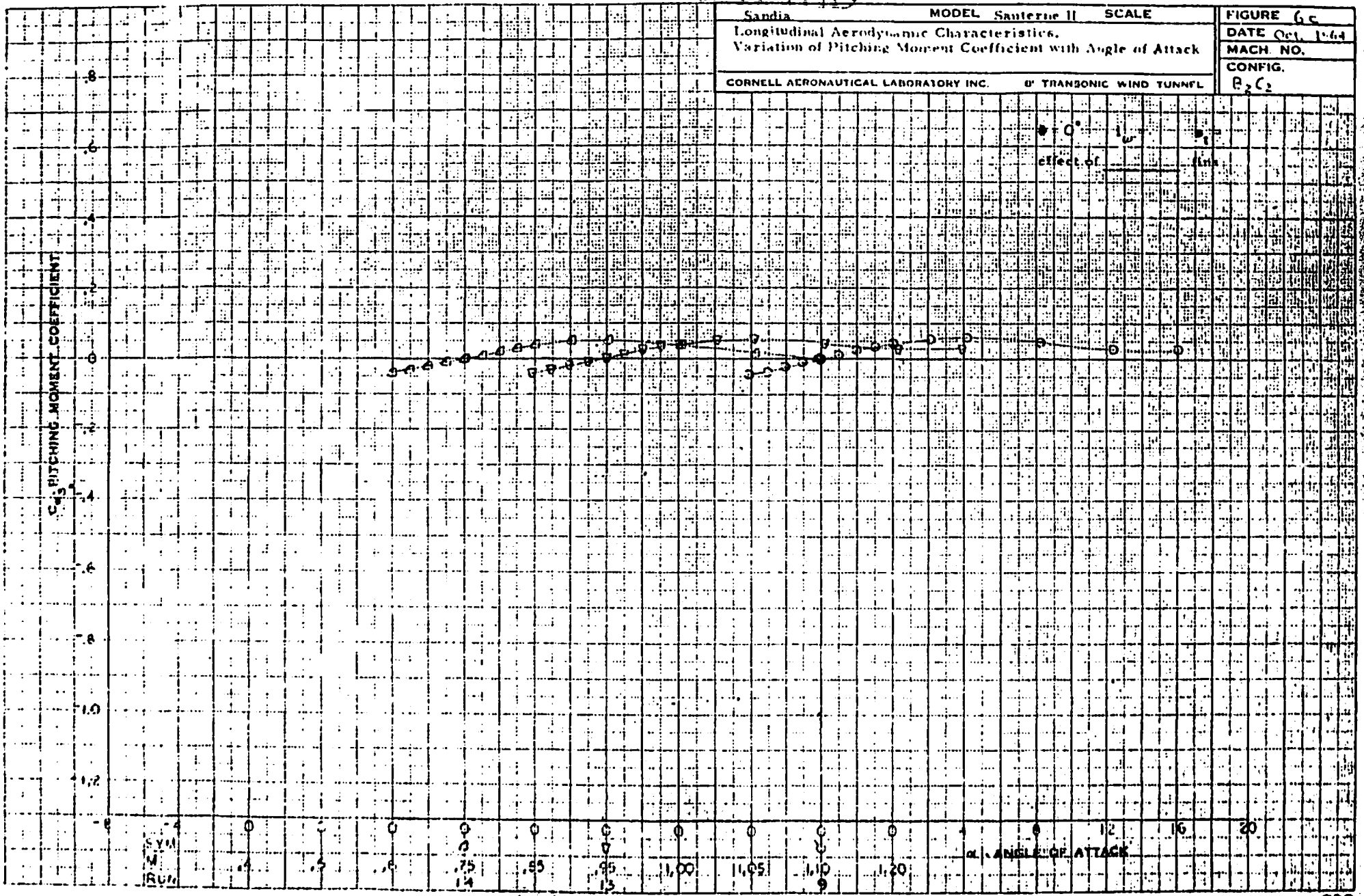
FIGURE	6 b
DATE	Oct. 1964
MACH. NO.	
CONFIG.	

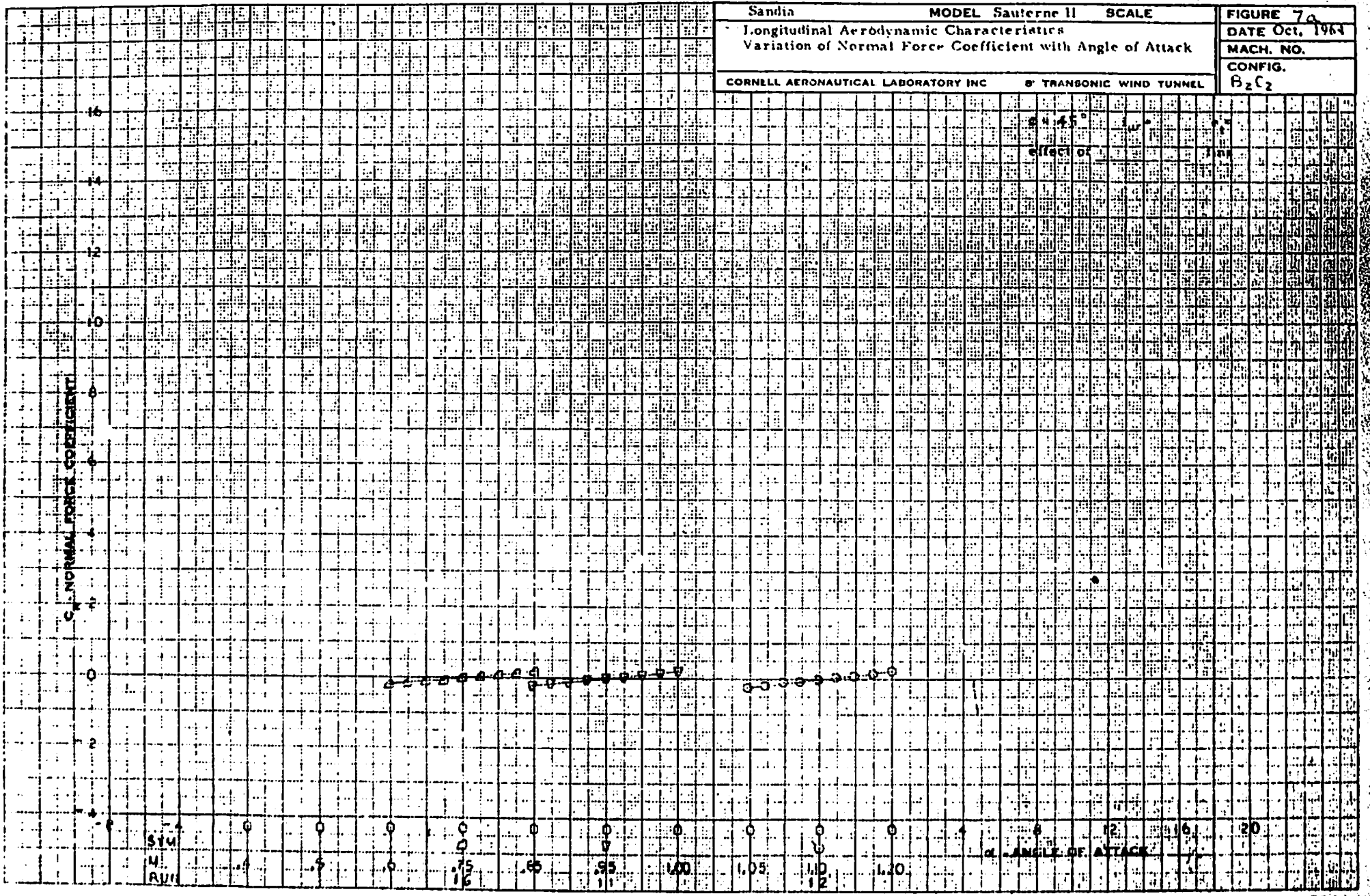
Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 6c
DATE Oct. 1964
MACH. NO.
CONFIG. B_2C_2



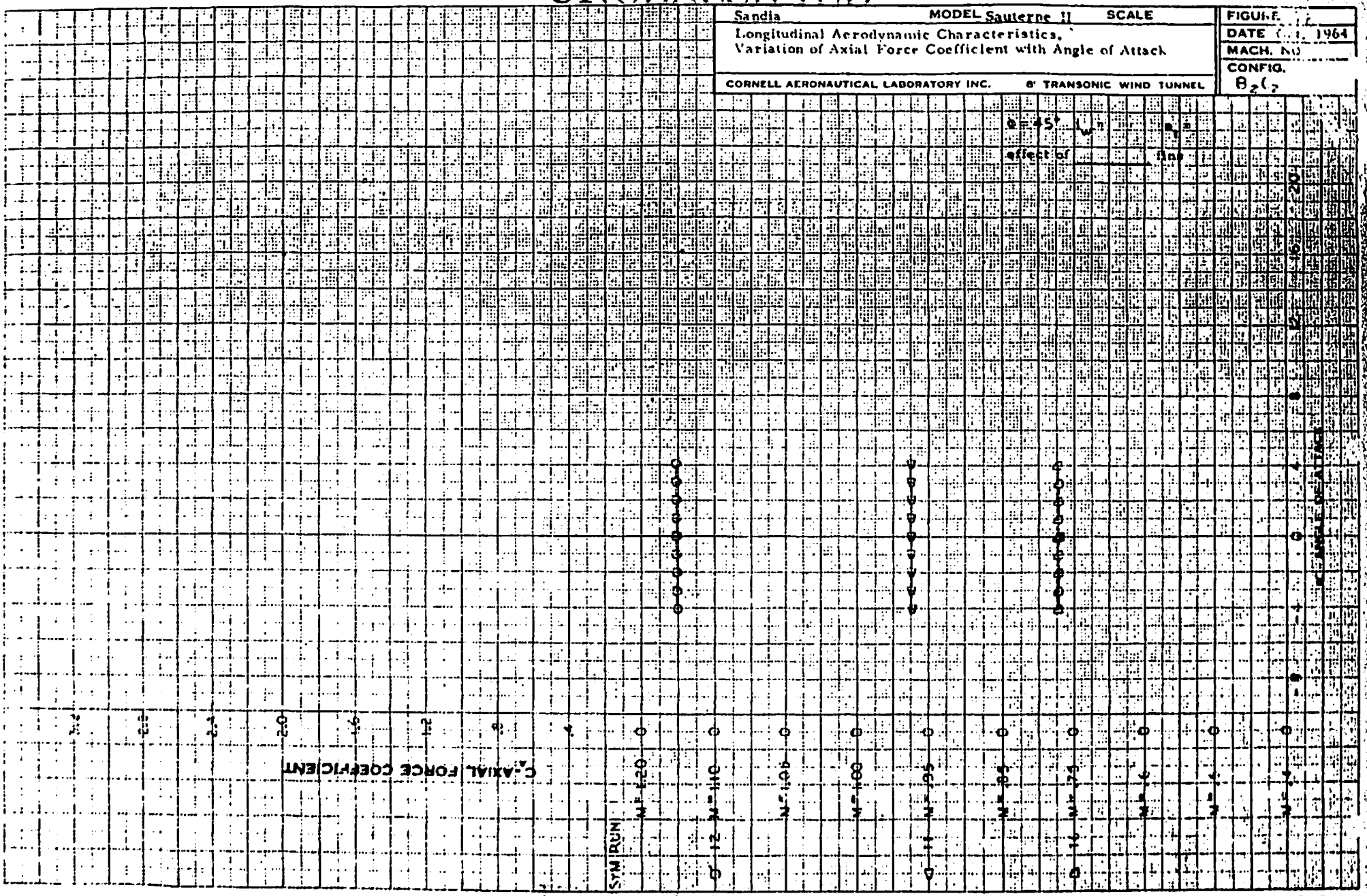

Sandia
MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC
8' TRANSONIC WIND TUNNEL
FIGURE 7a
DATE Oct. 1964
MACH. NO.
CONFIG.
B2C2
δH 45°
effect of
C_N NORMAL FORCE COEFFICIENT
α, ANGLE OF ATTACK
16
14
12
10
8
6
4
2
0
-2
-4
-8
-4
0
4
8
12
16
20
.75
.95
1.00
1.05
1.10
1.20

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics,
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE
DATE (illegible), 1964
MACH. No.
CONFIG.
B_2C_2



Sandia MODEL. Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 7c
DATE Oct. 1964
MACH. NO.
CONFIG. B_2C_2

$\bullet$ - 45° l_w = R_t =

effect of flap

C_m, PITCHING MOMENT COEFFICIENT

.8 .6 .4 .2 0 -.2 -.4 -.6 -.8 -1.0 -1.2

-8 -4 0 4 8 12 16 20

α, ANGLE OF ATTACK

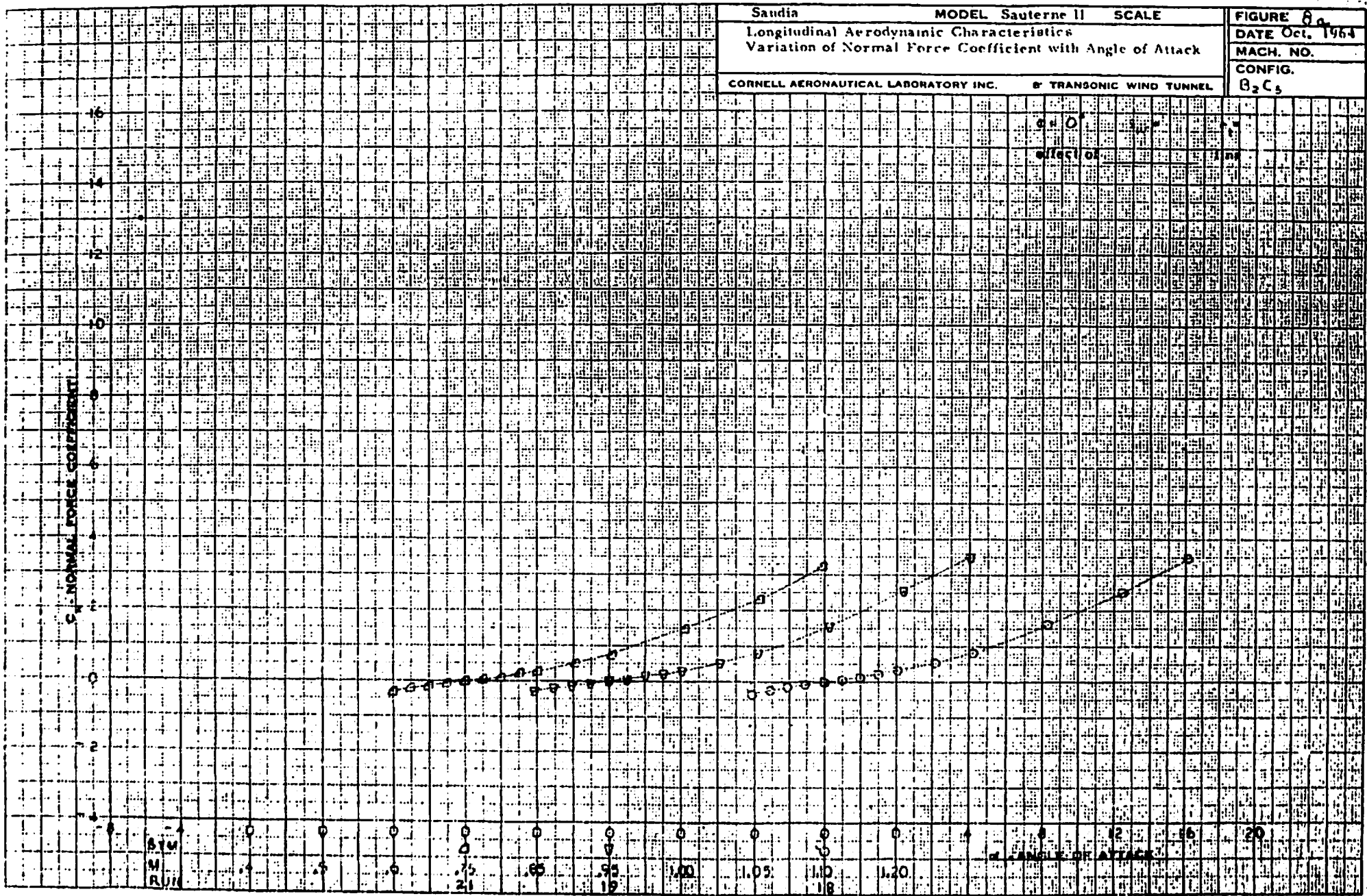
SYM	M	RUN
	.4	
	.5	
	.6	
	.85	16
	.95	11
	1.00	
	1.05	
	1.10	12
	1.20	

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 8a
DATE Oct. 1964
MACH. NO.
CONFIG. B_2C_5



Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 8b
DATE Oct. 1964
MACH. NO.
CONFIG. B_2C_3

$\Phi = 0°$ l_w = effect of δ_{tab}

C_A AXIAL FORCE COEFFICIENT

α ANGLE OF ATTACK, DEG

SYM RUN

Sandia — MODEL Sauterne II — SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. — 8' TRANSONIC WIND TUNNEL

FIGURE 8c
DATE Oct. 1964
MACH. NO.
CONFIG. B-C3

C_m PITCHING MOMENT COEFFICIENT

.8
.6
.4
.2
0
-.2
-.4
-.6
-.8
-1.0
-1.2

-4 -2 0 2 4 6 8 12 16 20

α, ANGLE OF ATTACK

SYM	M	RUN
○	.4	
○	.5	
○	.6	
○	.75	21
○	.85	
▽	.95	19
▽	1.00	
▽	1.05	
▽	1.10	18
▽	1.20	

effect of fins

UNCLASSIFIED

Sandia — MODEL Sauterne II — SCALE

FIGURE 9a

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

DATE Oct. 1964

MACH NO.

CONFIG. B₂C₁

CORNELL AERONAUTICAL LABORATORY INC. — 8' TRANSONIC WIND TUNNEL

C_N - NORMAL FORCE COEFFICIENT

α - ANGLE OF ATTACK

UNCLASSIFIED

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 9b
DATE Oct. 1964
MACH. NO.
CONFIG. B_2C_3

ϕ = 45° ω = δ_f =
effect of fins

C_A AXIAL FORCE COEFFICIENT

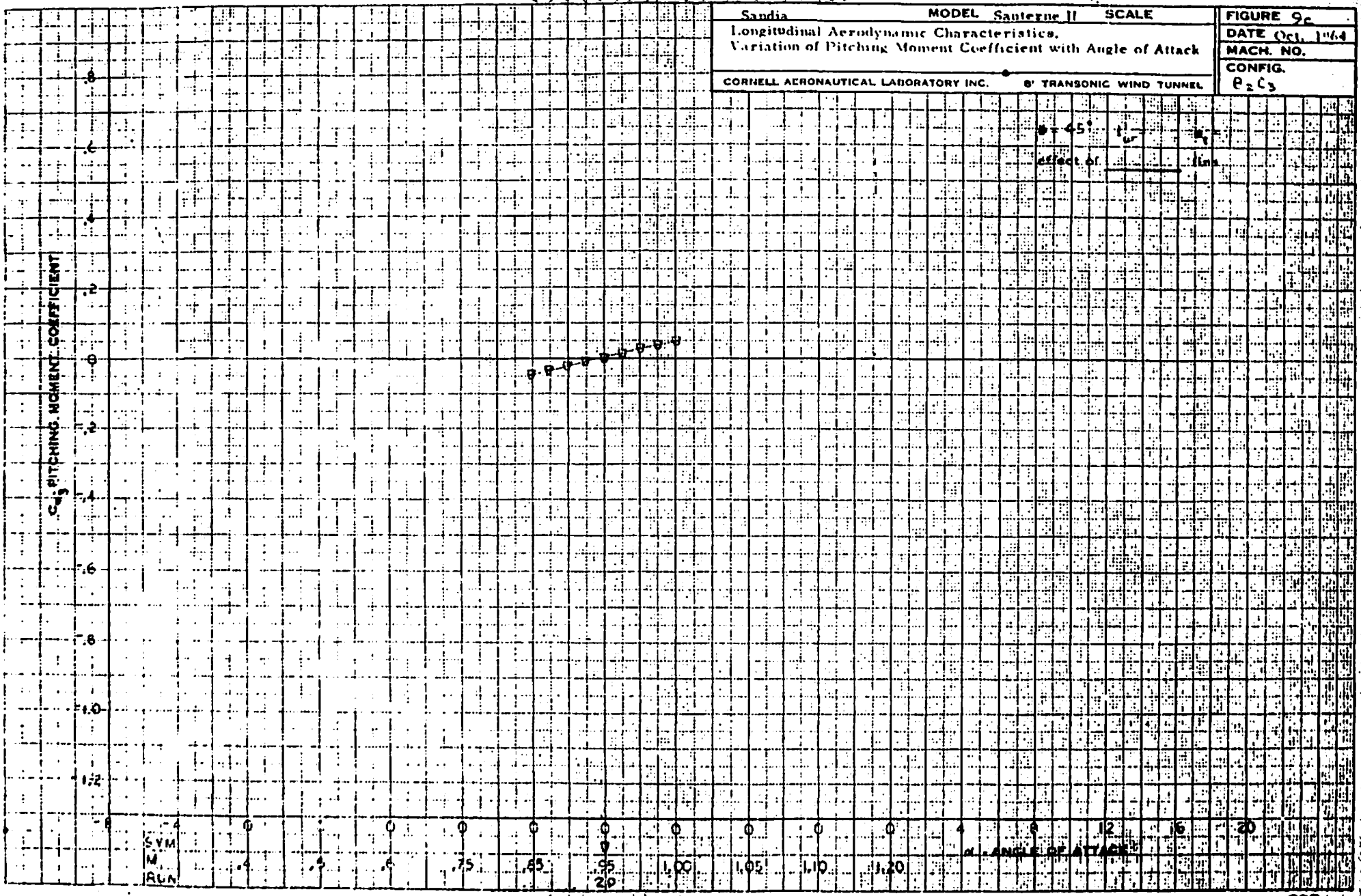
SYM. RUN

Sandia MODEL Santeyne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 9c
DATE Oct. 1964
MACH. NO.
CONFIG. B_2C_3



Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 100
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_2A/2B$

C_N NORMAL FORCE COEFFICIENT

α, ANGLE OF ATTACK

STM
M
RUN

.4 .6 .75 .85 .95 1.00 1.05 1.10 1.20

24

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 10b
DATE Oct. 1964
MACH. NO.
CONFIG. B2C2F2A/2B

$\phi = 90°$ $\omega =$ $\delta_f =$
effect of 2A fins

C_A AXIAL FORCE COEFFICIENT

SYM RUN

Sandia — MODEL Sauterne II — SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. — 8' TRANSONIC WIND TUNNEL

FIGURE 10c
DATE Oct. 1964
MACH. NO.
CONFIG. B₂C₂F₂A/2Q

ϕ = 90° t/c = R_e =
effect of 2A Ins

C_m PITCHING MOMENT COEFFICIENT

.8 .6 .4 .2 0 -.2 -.4 -.6 -.8 -1.0 -1.2

-8 -4 0 4 8 12 16 20

α ANGLE OF ATTACK

SYM	M	RUN
○	.50	2A
□	.75	
◇	.85	
▽	.95	
○	1.00	
□	1.05	
◇	1.10	
▽	1.20	

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
- Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 11c
DATE Oct. 1964
MACH. NO.
CONFIG. B-C-F 20/28

C_N, NORMAL FORCE COEFFICIENT

α, ANGLE OF ATTACK

SYM	M	RUN
	.75	
	.85	
	.95	25
	1.00	
	1.05	
	1.10	
	1.20	

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 11b
DATE Oct. 1964
MACH NO.
CONFIG. $B_2 C_2 I_{2A/2R}$

ϕ = 0° l_w = R_1 =
effect of 2B fins

C_A AXIAL FORCE COEFFICIENT

-2.2 -2.0 -1.8 -1.6 -1.4 -1.2 -1.0 -.8 -.6 -.4 -.2 0 .2 .4 .6 .8 1.0 1.2 1.4 1.6 1.8 2.0 2.2

α ANGLE OF ATTACK

-4 -2 0 2 3 4 6 8 12 15 20

SYM	RUN	N =
○	20	2.0
○	10	1.8
○	05	1.5
○	03	1.3
○	23	1.2
○	25	1.0
○	06	.85
○	24	.75
○	26	.6
○	04	.4
○	07	.2

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics,
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC., 8' TRANSONIC WIND TUNNEL

FIGURE 11c
DATE Oct. 1964
MACH. NO.
CONFIG. B₂C₂F₂A/2B

ϕ = 0° i_t = δ_t =
effect of 2B fins

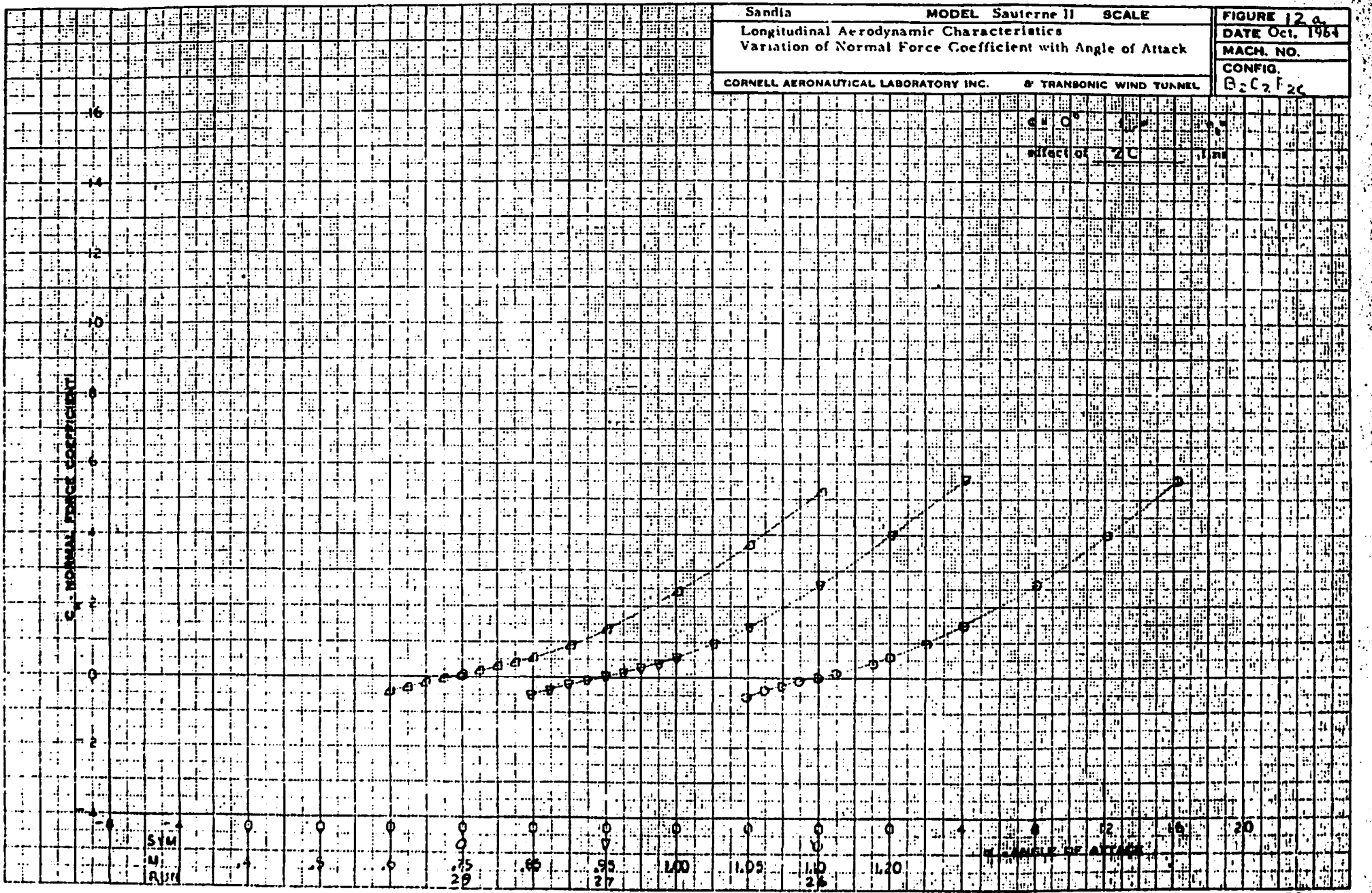
C_m, PITCHING MOMENT COEFFICIENT

.8 .6 .4 .2 0 .2 .4 .6 .8 1.0 1.2

-8 -4 0 4 8 12 16 20

α, ANGLE OF ATTACK

SYM	M	RUN
○	.75	23
○	.85	23
▽	.95	23
○	1.00	23
○	1.05	23
○	1.10	23
○	1.20	23


Sandia
MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 12 a
DATE Oct. 1964
MACH. NO.
CONFIG.
B2C2F2C
C_N, NORMAL FORCE COEFFICIENT
α, ANGLE OF ATTACK
SIM
M
RUN
.75
29
.85
.95
27
1.00
1.05
1.10
26
1.20

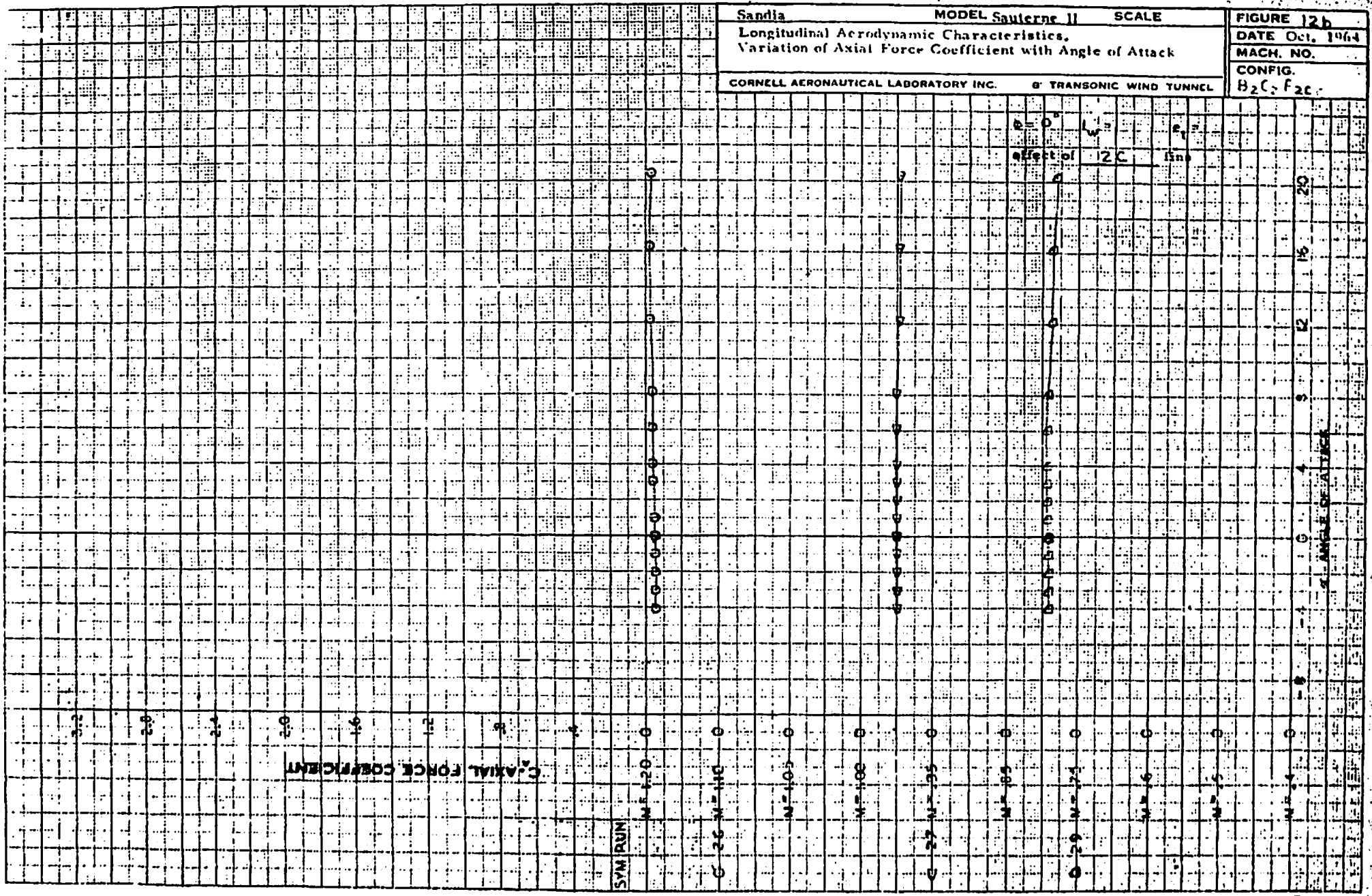
Sandia MODEL Sauterne II SCALE

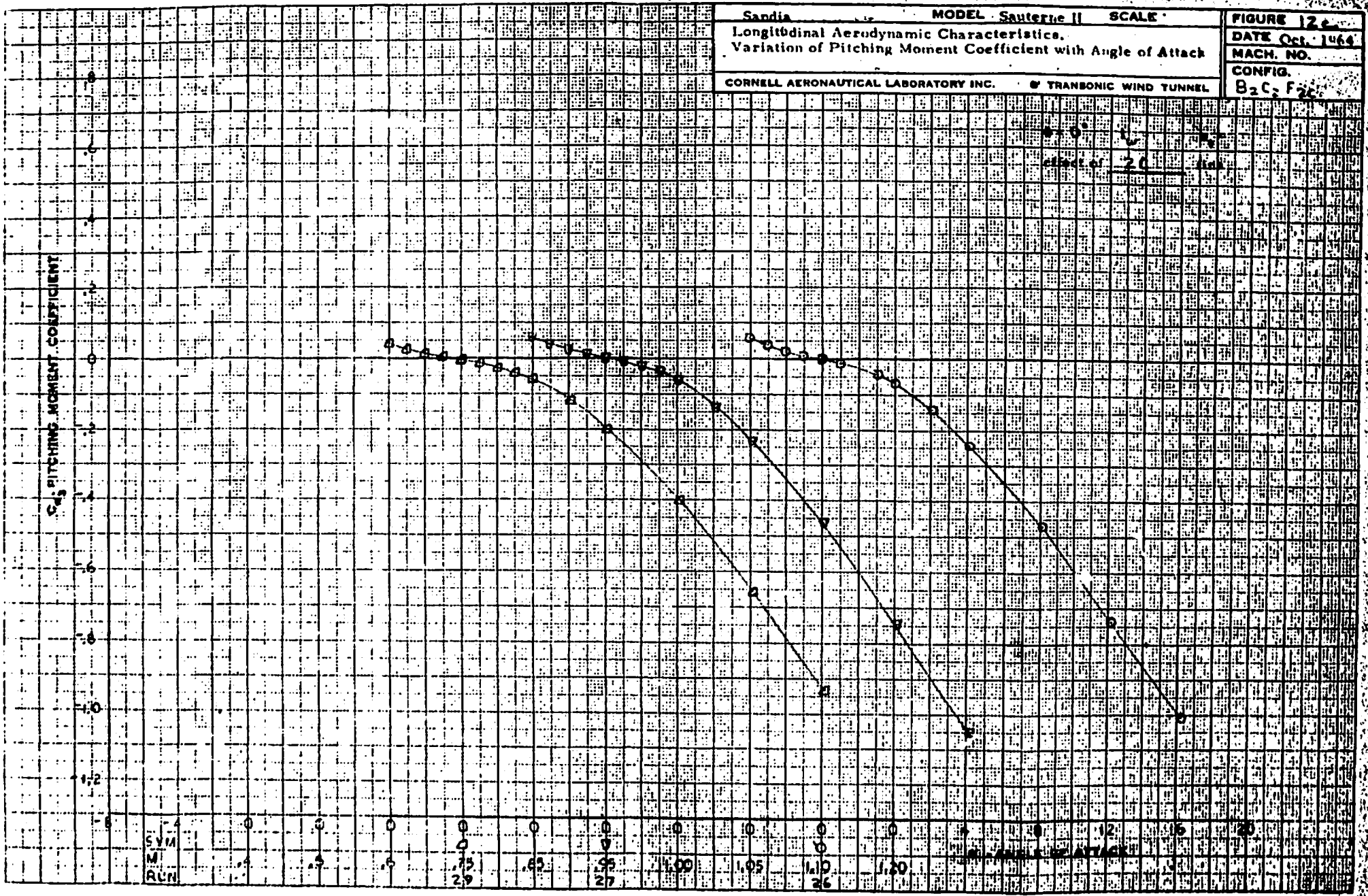
Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 12b
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{2C}$

$\phi = 0°$ $L_w =$ $F_t =$
effect of 12 C fins




Sandia MODEL Sauterne II SCALE
Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL
FIGURE 12c
DATE Oct. 1964
MACH. NO.
CONFIG. B2C2F2c
δ = 0°
effect of -2°
C_m, PITCHING MOMENT COEFFICIENT
α, ANGLE OF ATTACK
M
RUN

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 13a.
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_2C_2$

$\alpha = 45°$
effect of 2°

C_N NORMAL FORCE COEFFICIENT

16
14
12
10
8
6
4
2
0
-2
-4

SYM
M
RUN

-.4 -.2 0 .2 .4 .6 .8 .95 1.00 1.05 1.10 1.20

4 8 12 16 20

α - ANGLE OF ATTACK

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics,
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 13b
DATE Oct, 1964
MACH. NO.
CONFIG. $B_2C_2F_{2c}$

$\phi = 45°$ L_w R_n =
effect of 2C $\Delta\alpha_{ac}$

C_A AXIAL FORCE COEFFICIENT

SYM RUN

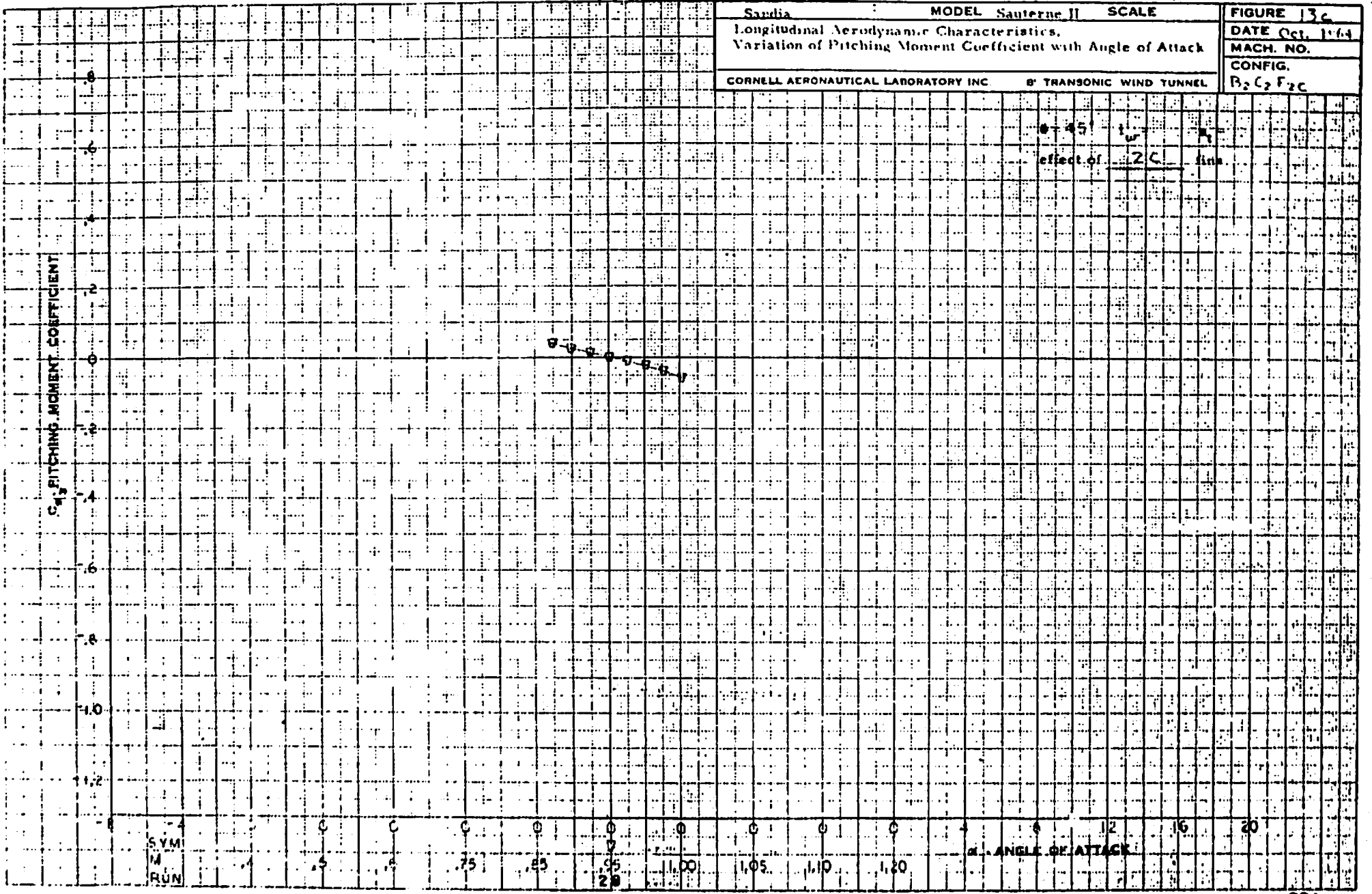
Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 13c
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{22}C$

$\phi = 45°$ t_{up} = R_1 =
effect of 2C link



Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 14a
DATE Oct. 1964
MACH. NO.
CONFIG. B_2C_7 $\Gamma_{ZAY/ZAX}$

β = 90°

Effect of ZAX

C_N NORMAL FORCE COEFFICIENT

16
14
12
10
8
6
4
2
0
-2
-4

-8 -4 0 4 8 12 16 20

α, ANGLE OF ATTACK

SYM	RUN	.4	.6	.75	.85	.95	1.00	1.05	1.10	1.20
○	41	○	○	○	○	○	○	○	○	○
	42					○				

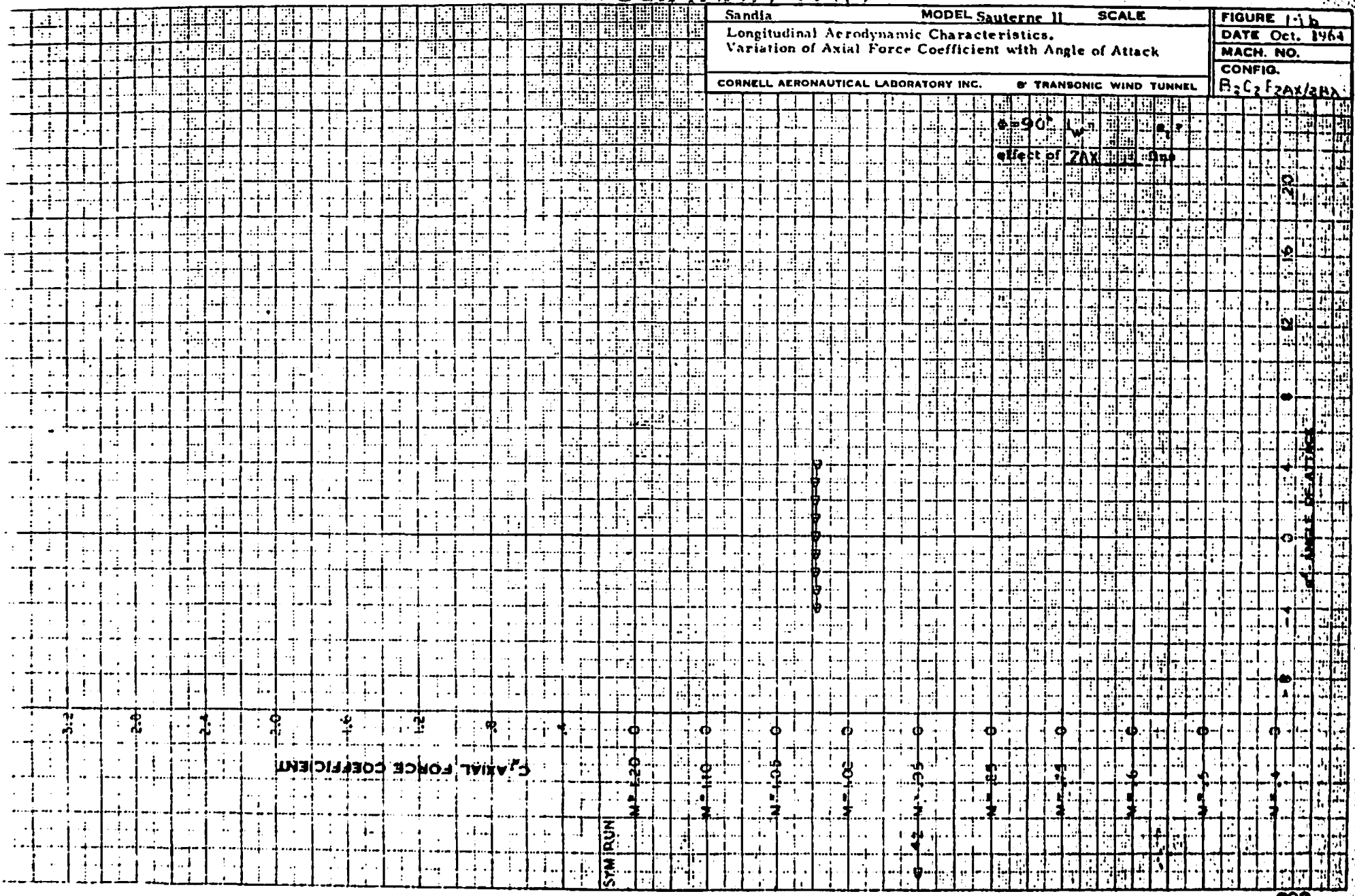
Sandia MODEL Sauterne II SCALE

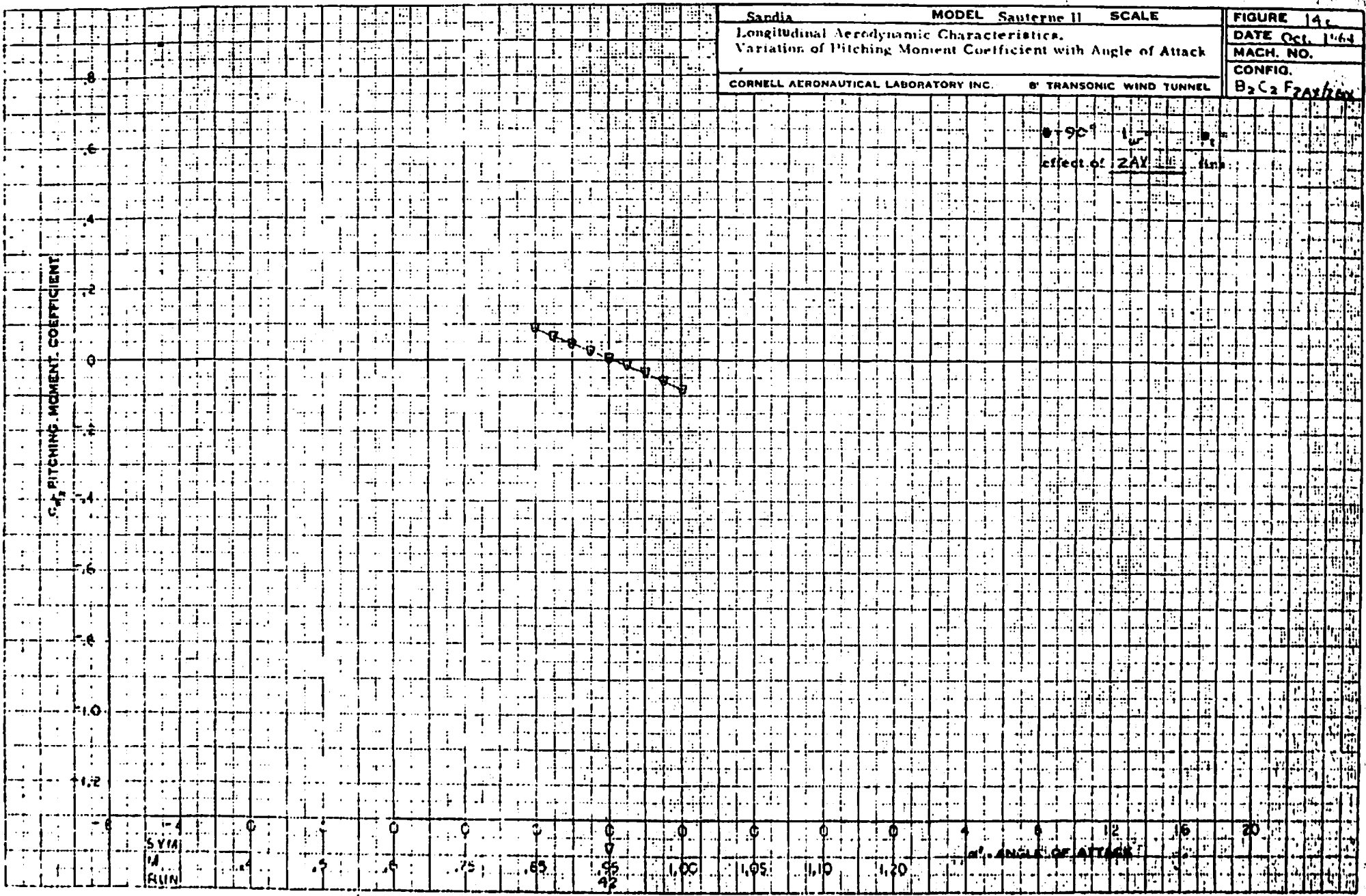
Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 1-1b
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_2AX/2HX$

$\phi = 90°$ L_{w_n} a_1?
effect of ZAX One




Sandia
MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 14c
DATE Oct. 1964
MACH. NO.
CONFIG.
B2C2 F2AX/F6X
effect of ZAY
C_{m_s} PITCHING MOMENT COEFFICIENT
α', ANGLE OF ATTACK
SYM
M
RUN

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 15c
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{2AX/2RX}$

C_N, NORMAL FORCE COEFFICIENT

α, ANGLE OF ATTACK

SYM
M
RUN

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 15b
DATE Oct. 1964
MACH. NO.
CONFIG. $H_2 r_2 F_{2A} x/z_{BX}$

$\phi = 0°$ $i_w =$ $e_{T.E.}$
effect of z_{BX} δ_{HS}

C_A, AXIAL FORCE COEFFICIENT

SYM RUN

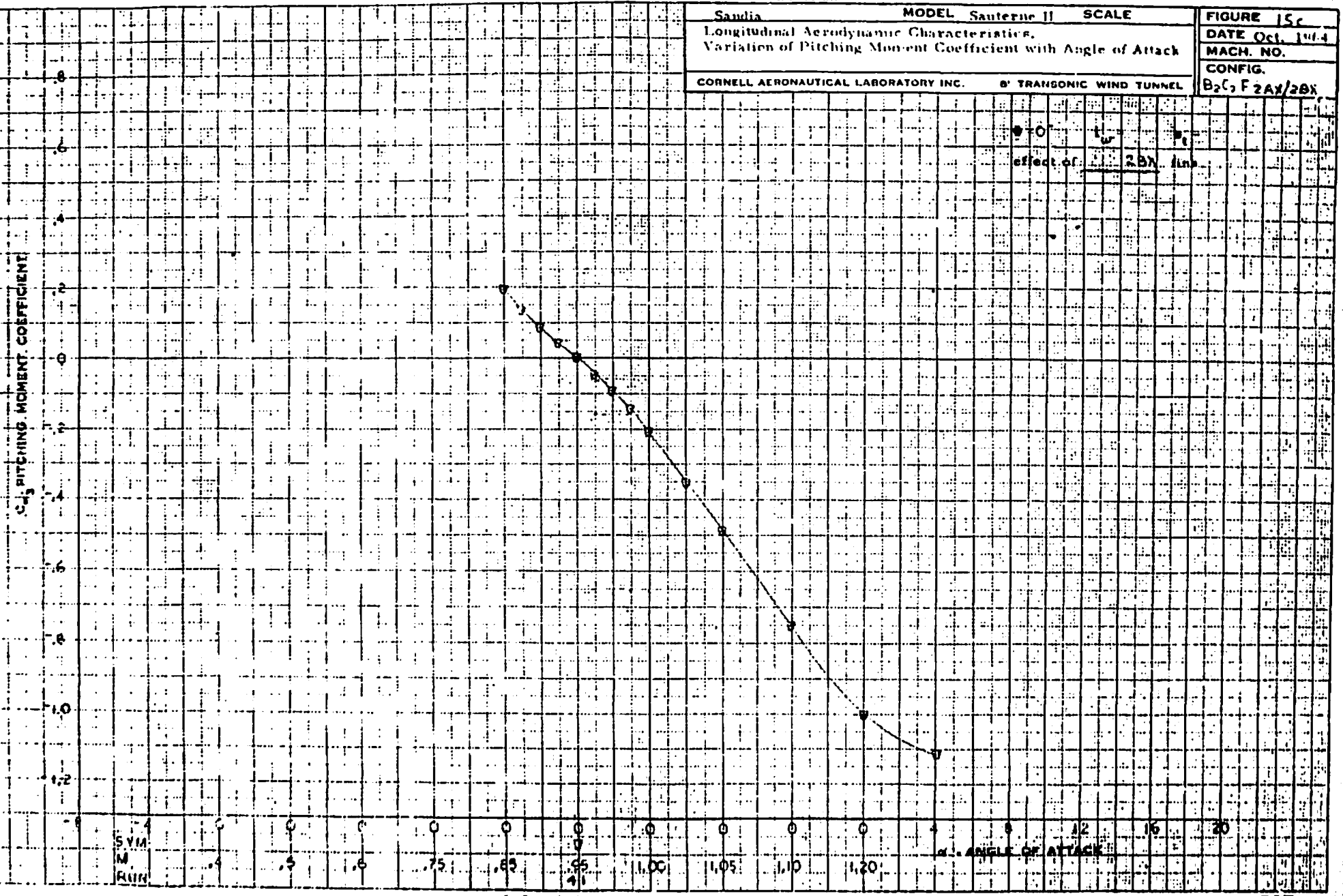
Saudia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 15c
DATE Oct. 1964
MACH. NO.
CONFIG.
$B_2C_2F_{2A}/_{2B}$

$\phi = 0°$ $t_w =$ $t_t =$
effect of 2B/ fins



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8-FOOT TRANSONIC WIND TUNNEL

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REPORT NO. II4-013
VOL. II of II

TRANSONIC WIND TUNNEL TESTS OF A MODEL OF THE SANDIA SAUTERNE SHAPE-PHASE II

OCTOBER/NOVEMBER 1964

PROJECT NO. AA-1974-Y
CONTRACT NO. P.O. 4804-C01

CORNELL AERONAUTICAL LABORATORY, INC.
OF CORNELL UNIVERSITY, BUFFALO 21, N.Y.

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CORNELL AERONAUTICAL LABORATORY, INC.
BUFFALO 21, NEW YORK

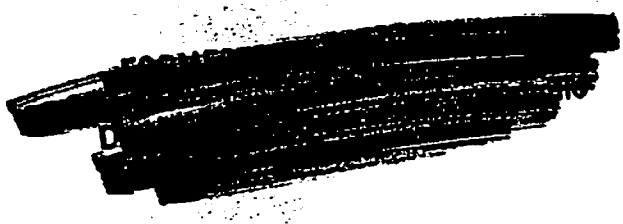
REPORT NO. II4-013

TRANSONIC WIND TUNNEL TESTS OF A MODEL
OF THE SANDIA SAUTERNE SHAPE-PHASE II

OCTOBER/NOVEMBER 1964

PROJECT NO. AA-1974-Y
CONTRACT NO. P.O. 4804-001

INVENTORIED
DATE 5/13/69



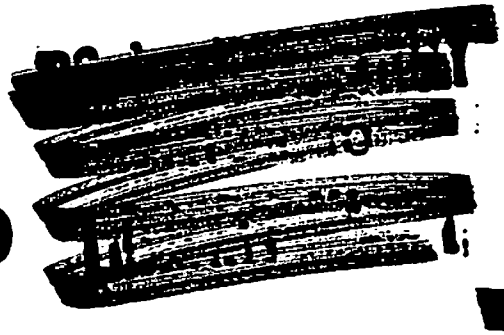
BY _____
C.F. Ruoff, Jr.

APPROVED R.J. Buffington
R.J. Buffington

DATE January 20, 1965

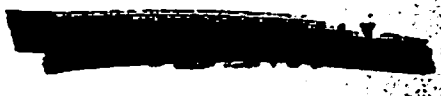
APPROVED _____
J.P. Andes

DATE January 21, 1965



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Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 16.0
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_2CX$

$\delta_e = 0°$ $i_w = 1°$ $i_t = 1°$
effect of ΔCX i_{ns}

C_N, NORMAL FORCE COEFFICIENT

α, ANGLE OF ATTACK, DEG

SYM	M	RUN
○	.75	35
○	.95	33
○	1.10	32

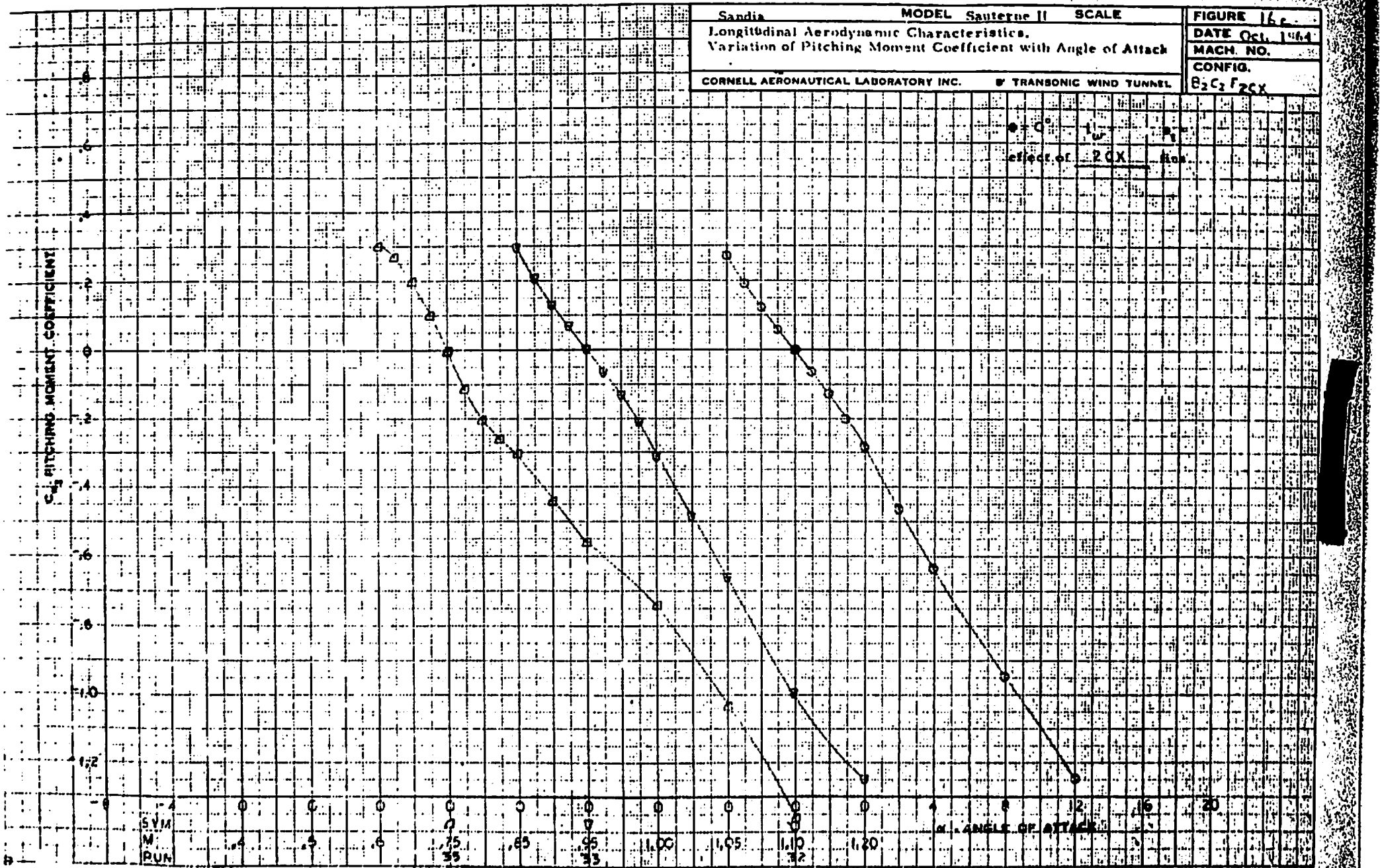
Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 16b
DATE Oct. 1964
MACH. NO.
CONFIG.
B₂C₂F₂CX




Sandia
MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 16c
DATE Oct. 1964
MACH. NO.
CONFIG.
B2C2F2CX
δ = 0°
effect of 2 CX flaps
C_m, PITCHING MOMENT COEFFICIENT
α, ANGLE OF ATTACK
SYM
M
RUN
.75
35
.85
.95
33
1.00
1.05
1.10
32
1.20

Sandia — MODEL Sauterne II — SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. — 8' TRANSONIC WIND TUNNEL

FIGURE 17c
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2L_2F_2CX$

$\phi = 45°$ $\alpha = 0°$
effect of 2 LX fins

C_N - NORMAL FORCE COEFFICIENT

+16, +14, +12, +10, +8, +6, +4, +2, 0, -2, -4

STM RUN: 34

.75, .90, .95, 1.00, 1.05, 1.10, 1.20

-4, -2, 0, 2, 4, 8, 12, 16, 20

α - ANGLE OF ATTACK

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics,
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 17b
DATE Oct. 1964
MACH. NO.
CONFIG.
$B_2C_2F_2C_K$

ϕ = 45° i_w = δ_t =
effect of 2CK Bas

C_A, AXIAL FORCE COEFFICIENT

3.2 2.8 2.4 2.0 1.6 1.2 .8 .4 0 -.4 -.8 -1.2 -1.6 -2.0 -2.4 -2.8 -3.2

α, ANGLE OF ATTACK, DEG.

-4 0 4 8 12 16 20 24 28 32 36 40 44 48 52 56 60

SYM	RUN	M =
○		4.20
○		4.10
○		4.05
○		4.00
○		3.90
○		3.85
○		3.74
○		3.60
○		3.50
○		3.40
○		3.30
○		3.20

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 17c
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{20\%}$

Φ = 45° t_w = R_1 =
effect of .20 fins

C_m, PITCHING MOMENT COEFFICIENT

8 6 4 2 0 -.2 -.4 -.6 -.8 -1.0 -1.2

-8 -4 0 4 8 12 16 20

α, ANGLE OF ATTACK

SYM	M	RUN
	.4	
	.5	
	.6	
	.75	
	.85	
	.95	34
	1.00	
	1.05	
	1.10	
	1.20	

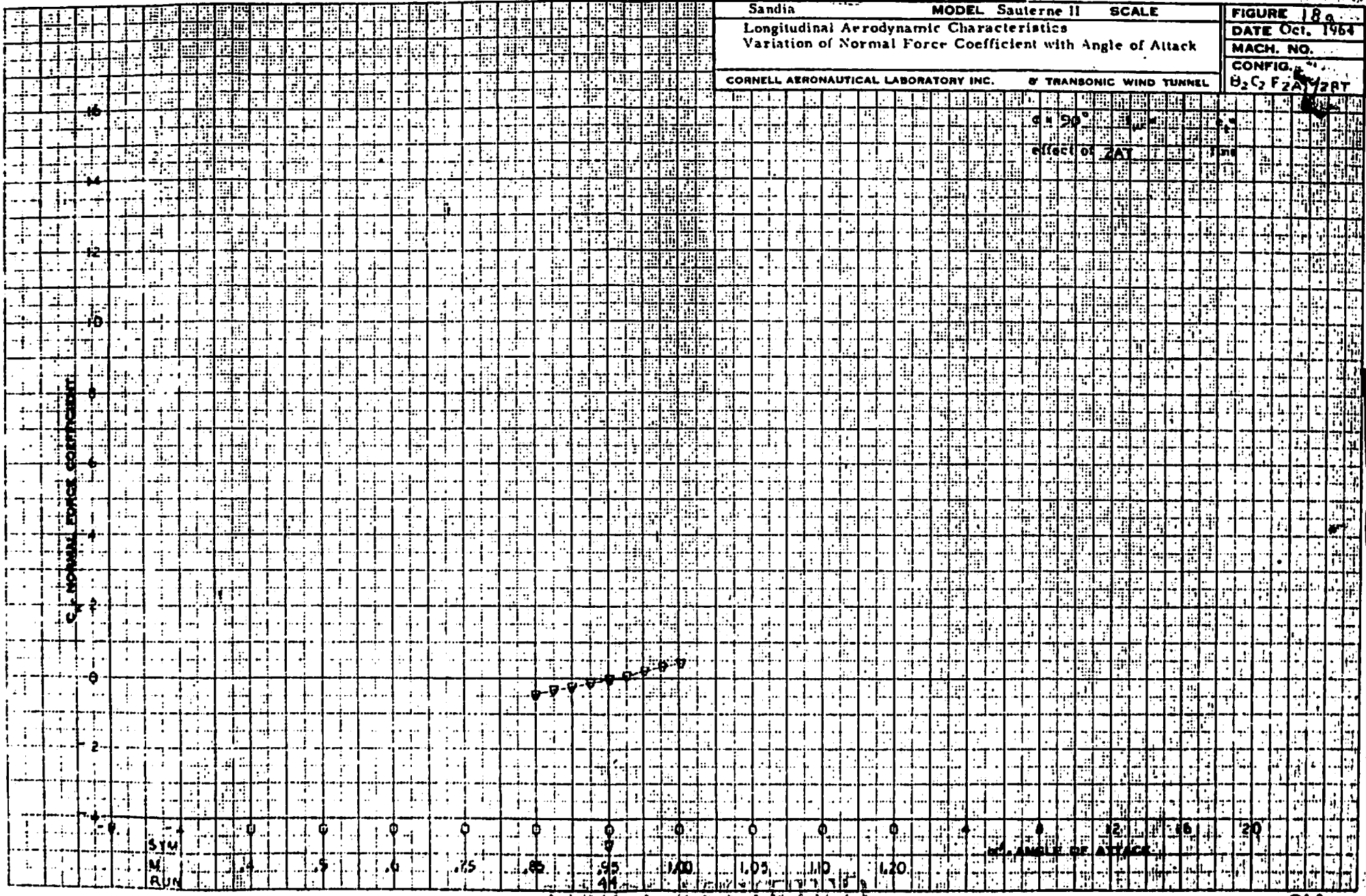
Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 18a
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_2A_2I_2RT$

$\phi = 90°$ C_{N_α} C_{N_q}
effect of ΔT Trim



Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 18b
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{2AT}/_{2BT}$

$\phi = 90°$ ζ_T $\Delta\zeta_T$
effect of $2AT$ = .8mm

C_A AXIAL FORCE COEFFICIENT

SYM RUN

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 18c
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2T_2A_1/2BT$

$\phi = 90°$ Up

effect of ZAT flow

C_{m_y} PITCHING MOMENT COEFFICIENT

.8 .6 .4 .2 0 .2 .4 .6 .8 1.0 1.2

-8 -4 0 4 8 12 16 20

α, ANGLE OF ATTACK

SYM	M	RUN
○	.4	43
○	.5	44
○	.6	45
○	.75	46
○	.85	47
○	.95	48
○	1.00	49
○	1.05	50
○	1.10	51
○	1.20	52

Sandia

MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 19
DATE Oct. 1964
MACH. NO.
CONFIG.
$B_1 C_2 F_{RAT/2BT}$

C_N NORMAL FORCE COEFFICIENT

16
14
12
10
8
6
4
2
0
-2
-4

STM RUN

-4 0 0 0 0 0 0 0 0 0 0 4 8 12 16 20

.4 .5 .6 .75 .85 .95 1.00 1.05 1.10 1.20

α, ANGLE OF ATTACK

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 19b
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{ZAT}I_{ZBT}$

$\phi = 0°$ I_W = B_1 =
effect of 28° flap

C_A, AXIAL FORCE COEFFICIENT

SYM RUN

Sandia — MODEL Sauterne II — SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. — 8' TRANSONIC WIND TUNNEL

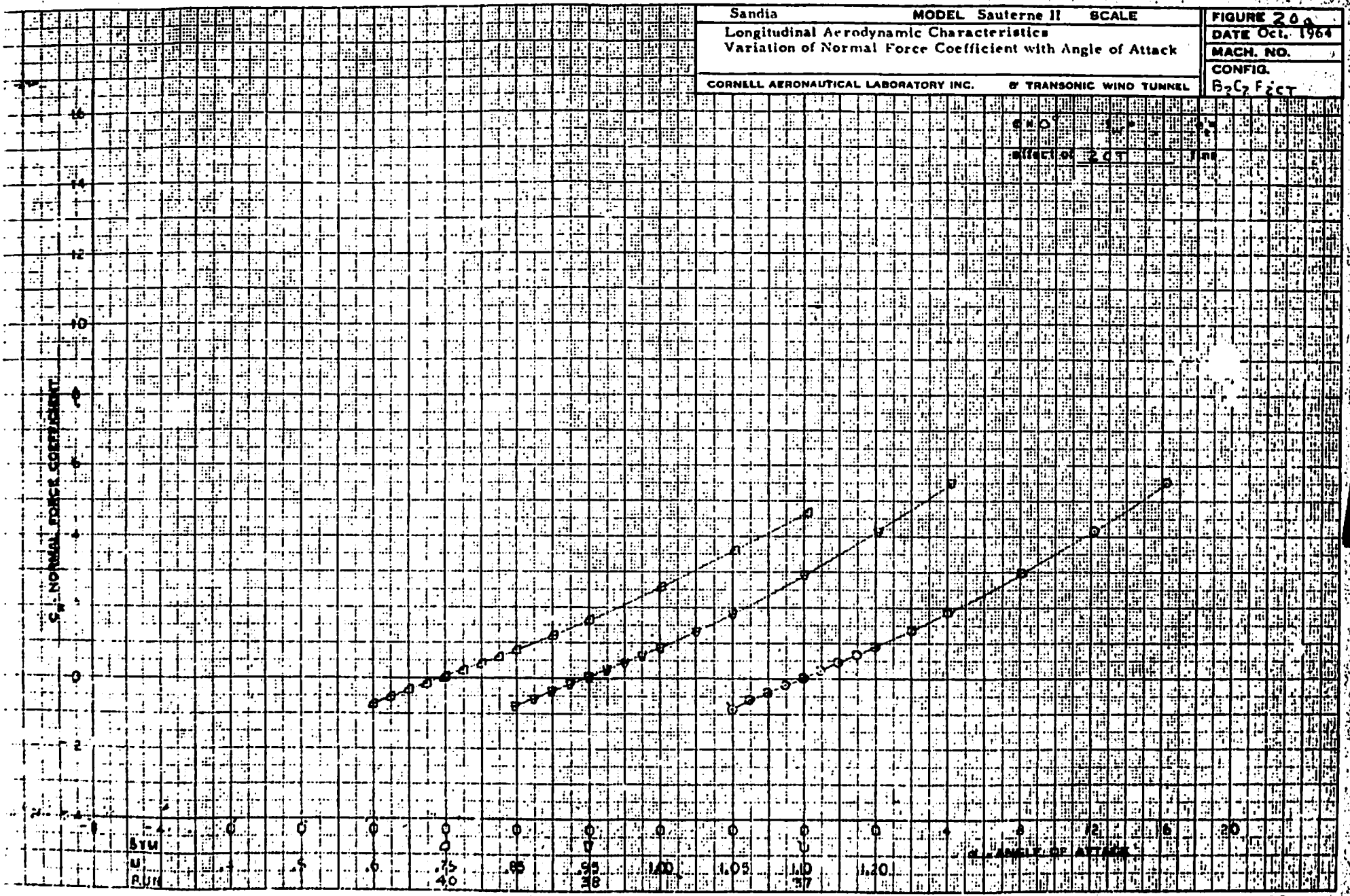
FIGURE 19c
DATE Oct. 1964
MACH. NO.
CONFIG. B_2C_2F 2AT/2BT

● T=0° — effect of 2BT fins

C_{m_p} - PITCHING MOMENT COEFFICIENT

α - ANGLE OF ATTACK

SYM	M	RUN
	.4	
	.5	
	.6	
	.75	
	.85	
	.95	43
	1.00	
	1.05	
	1.10	
	1.20	


Sandia
MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 20
DATE Oct. 1964
MACH. NO.
CONFIG.
B2C2 F2CT
Effect of F2CT
C_N, NORMAL FORCE COEFFICIENT
α, ANGLE OF ATTACK
SYM
RUN
40
38
37

Sandia

MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 20 b
DATE Oct. 1964
MACH. NO.
CONFIG.
$B_2C_2F_{2CT}$

$\phi = 0°$ $L_w =$ $e_t =$
effect of 2 CT fins

C_A, AXIAL FORCE COEFFICIENT

STANDARD $M_\infty = 0$

$M_\infty = .40$ $M_\infty = .60$ $M_\infty = .80$ $M_\infty = .95$ $M_\infty = 1.05$ $M_\infty = 1.10$ $M_\infty = 1.25$ $M_\infty = 1.40$ $M_\infty = 1.60$ $M_\infty = 1.80$ $M_\infty = 2.00$ $M_\infty = 2.20$ $M_\infty = 2.40$ $M_\infty = 2.60$

α, ANGLE OF ATTACK, DEGREES

Sandia — MODEL Sauterne II — SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. — 8' TRANSONIC WIND TUNNEL

FIGURE 20c
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{2CT}$

i_w = 0°
Effect of 2CT

C_m, PITCHING MOMENT COEFFICIENT

α, ANGLE OF ATTACK

SYM	M	RUN
○	.75	40
□	.95	38
△	1.00	
▽	1.05	
◇	1.10	37
⬡	1.20	

Sandia — MODEL Sauterne II — SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. — 8' TRANSONIC WIND TUNNEL

FIGURE 21a
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_2CT$

ϕ = 45°

Effect of ZCT

C_N NORMAL FORCE COEFFICIENT

16
14
12
10
8
6
4
2
0
-2
-4

STM RUN

-.4 -.2 0 .2 .4 .6 .75 .85 .95 .99 1.00 1.05 1.10 1.20

α - ANGLE OF ATTACK

-4 0 4 8 12 16 20

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 21b
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{2CT}$

$\phi = 45°$ l_{ref} = S_{ref} =

effect of LCT fins

C_A AXIAL FORCE COEFFICIENT

SYM RUN

Sandia MODEL Sauterne II SCALE

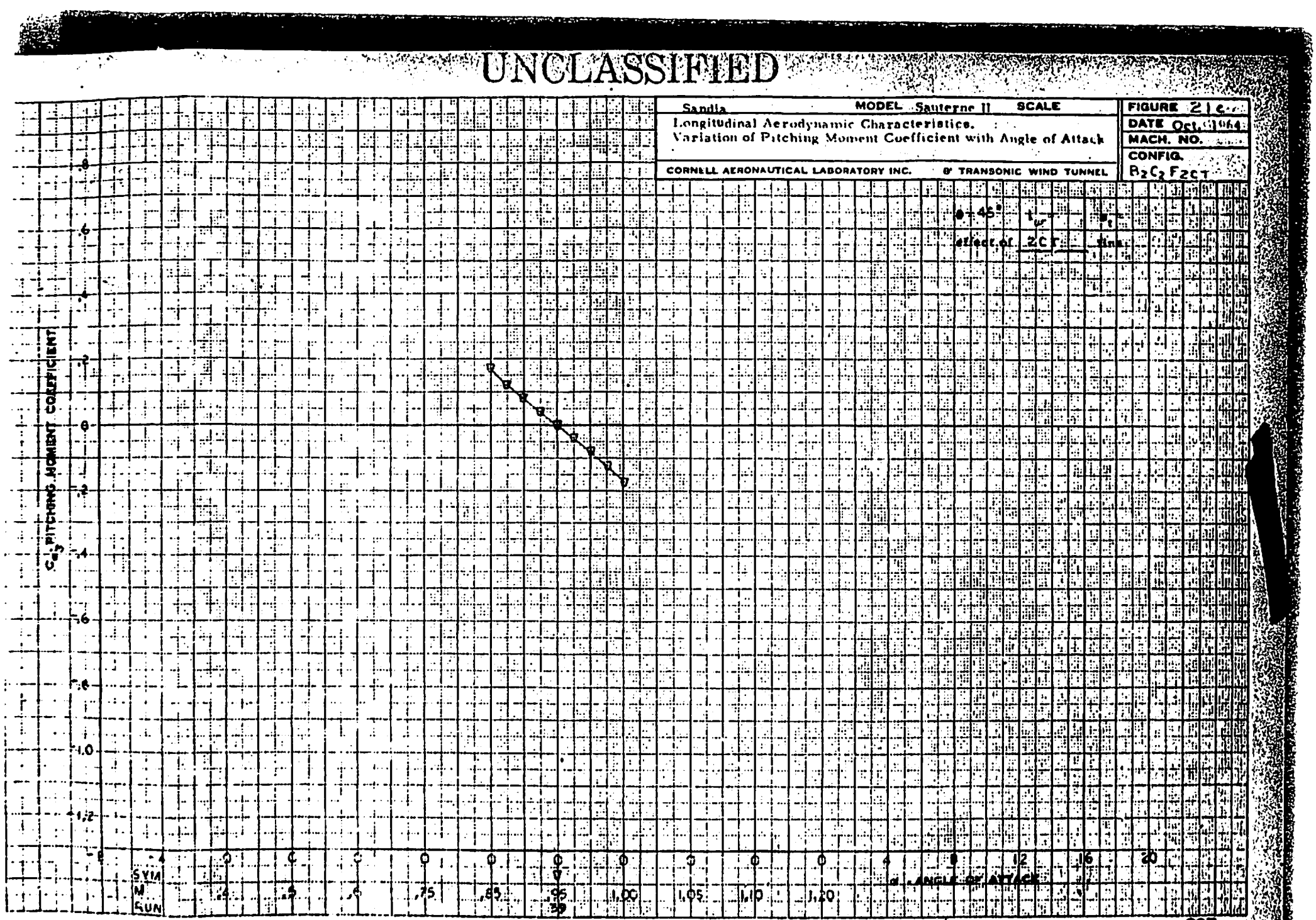
Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 21c
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_2C_T$

$\phi = 45°$ t_w $\frac{t}{c}$

effect of F_2C_T fins



Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 22a
DATE Oct., 1964
MACH. NO.
CONFIG. B2C-1/5F-1/2CT

C_N NORMAL FORCE COEFFICIENT

16
14
12
10
8
6
4
2
0
-2

STM RUN

.4 .5 .6 .75 .85 .95 1.00 1.05 1.10 1.20

α - ANGLE OF ATTACK

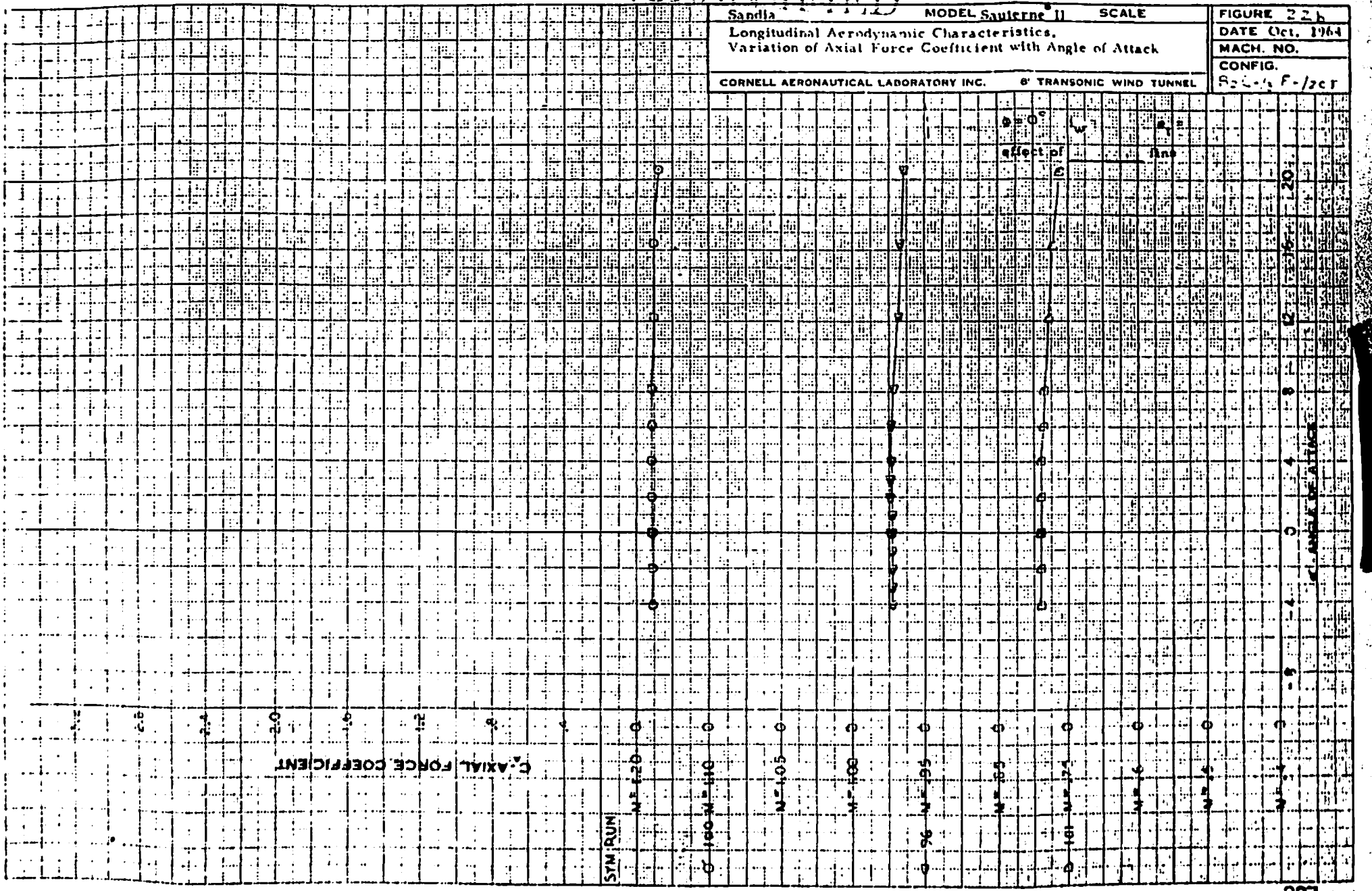
0 4 8 12 16 20

Sandia [illegible] MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics,
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 22b
DATE Oct. 1964
MACH. NO.
CONFIG. Basic F-1207

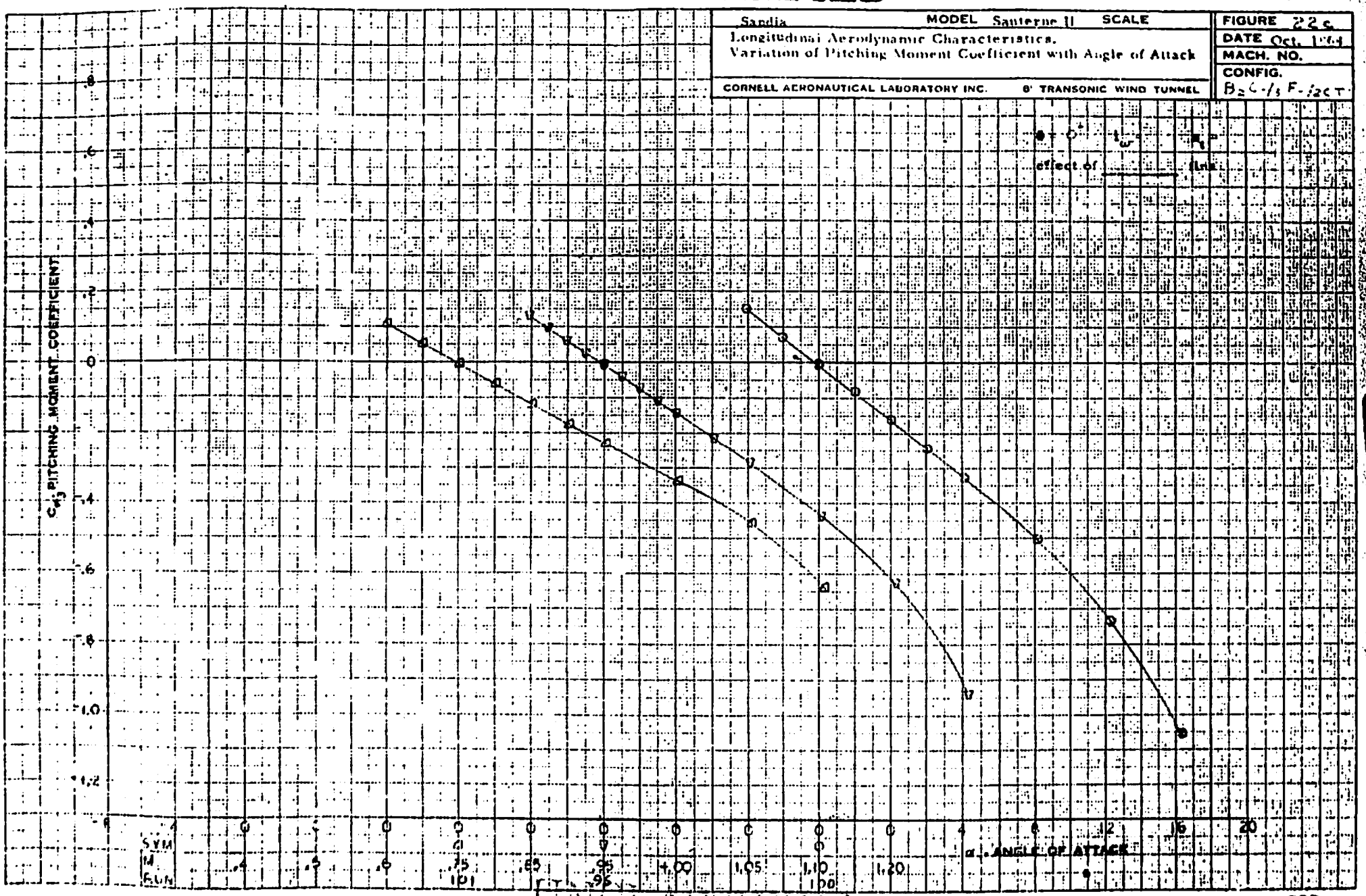


Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 22c
DATE Oct. 1964
MACH. NO.
CONFIG. B2C-1S F-12CT



Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE No.
DATE [illegible] 1964
MACH. No.
CONFIG.
B, C, & F

$\delta_H = 22.5°$ δ_F =
effect of [illegible]

C_N, NORMAL FORCE COEFFICIENT

16
14
12
10
8
6
4
2
0
-2
-4

-8 -4 0 4 8 12 16 20

α, ANGLE OF ATTACK

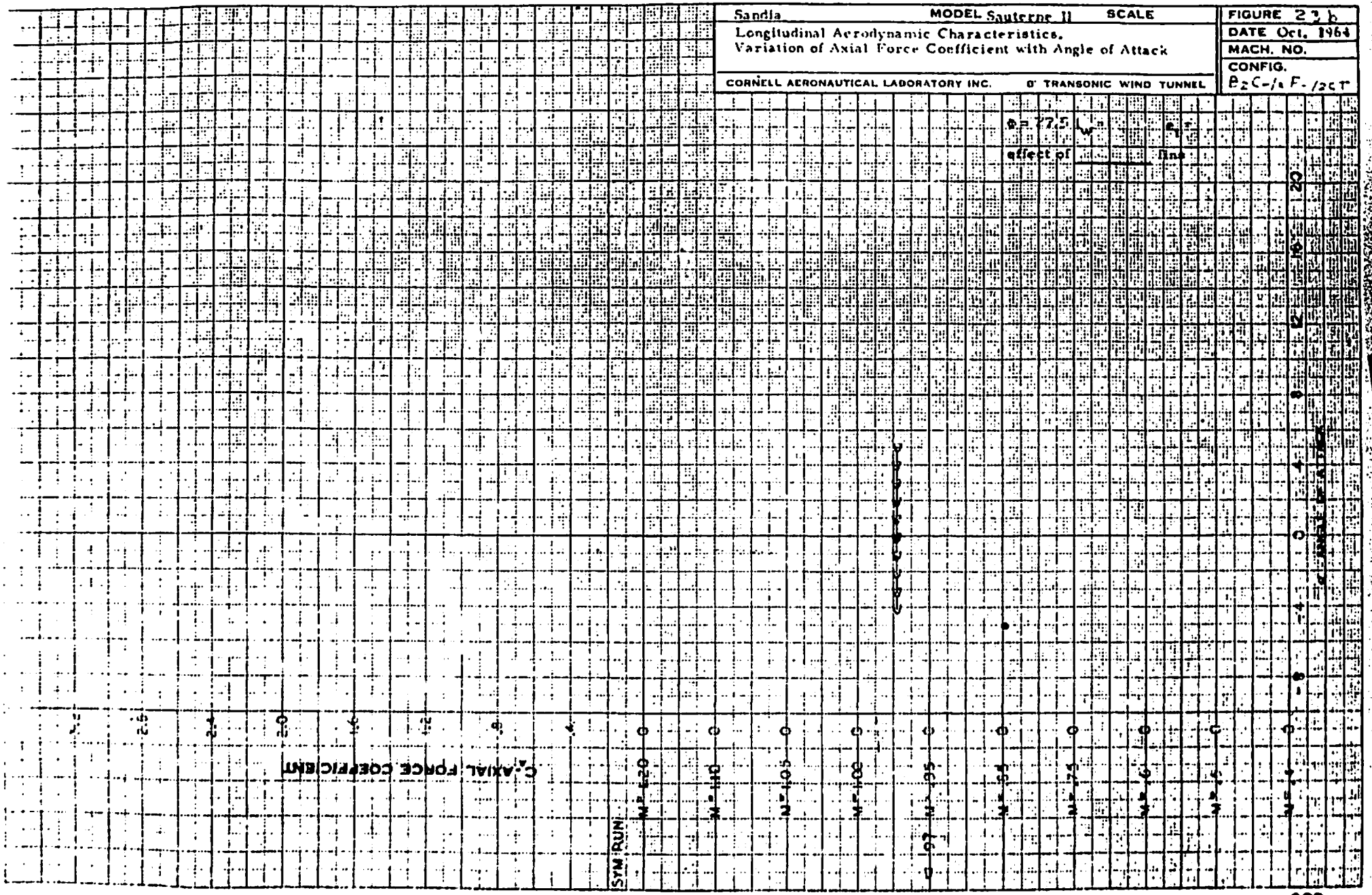
SYM	M	R
○	.4	
○	.5	
○	.6	
○	.75	
○	.90	
▽	.95	9M
○	1.00	
○	1.05	
○	1.10	
○	1.20	

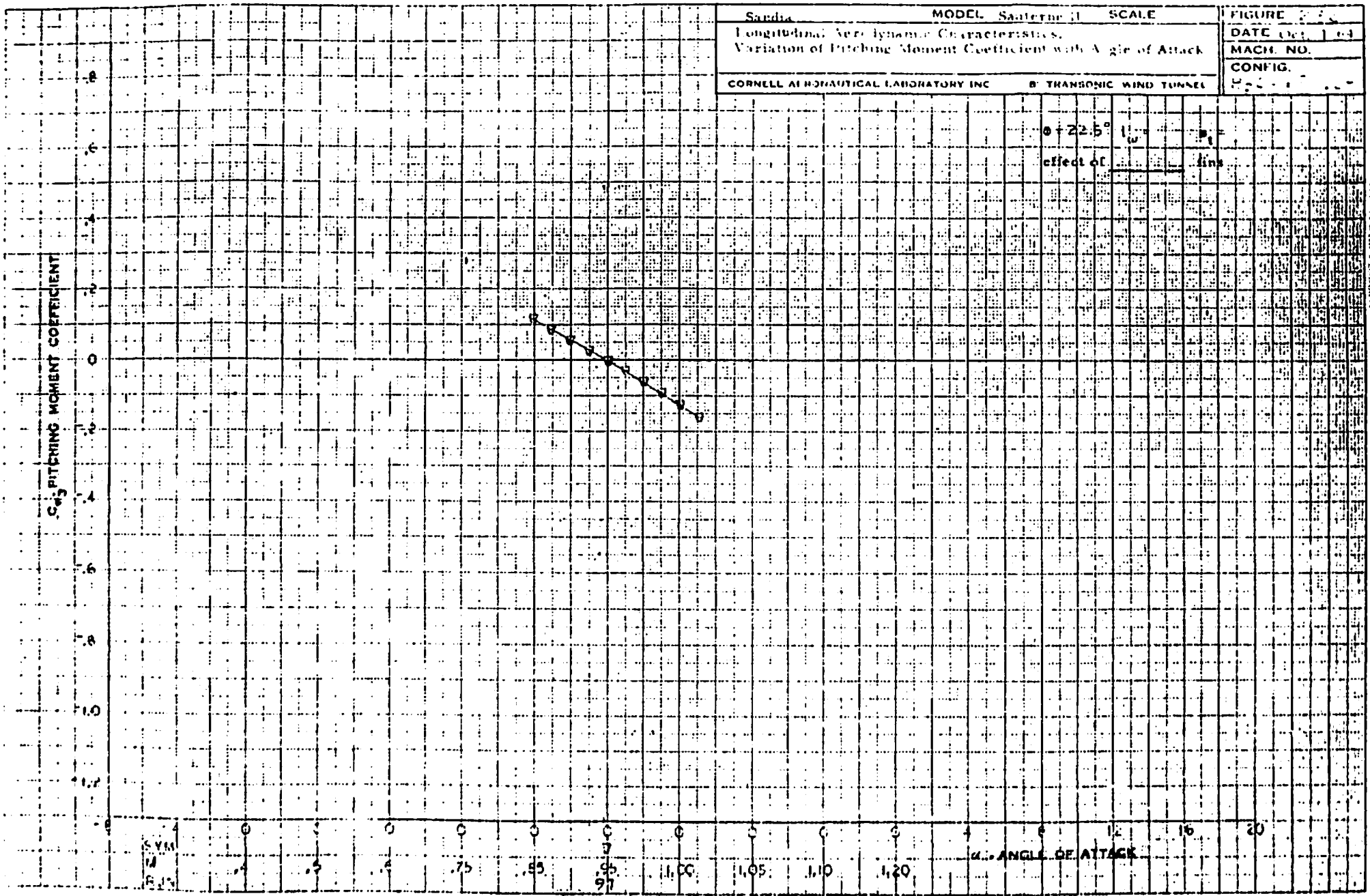
Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 23b
DATE Oct. 1964
MACH. NO.
CONFIG. B2C-1a F-12CT




Sandia
MODEL Sauterne II
SCALE
FIGURE
Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack
DATE Oct. 1 64
MACH. NO.
CONFIG.
CORNELL AERONAUTICAL LABORATORY INC
8' TRANSONIC WIND TUNNEL
C_{m_3} PITCHING MOMENT COEFFICIENT
α, ANGLE OF ATTACK
SYM
M
.75
.85
.95
.97
1.00
1.05
1.10
1.20

Sandia | MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

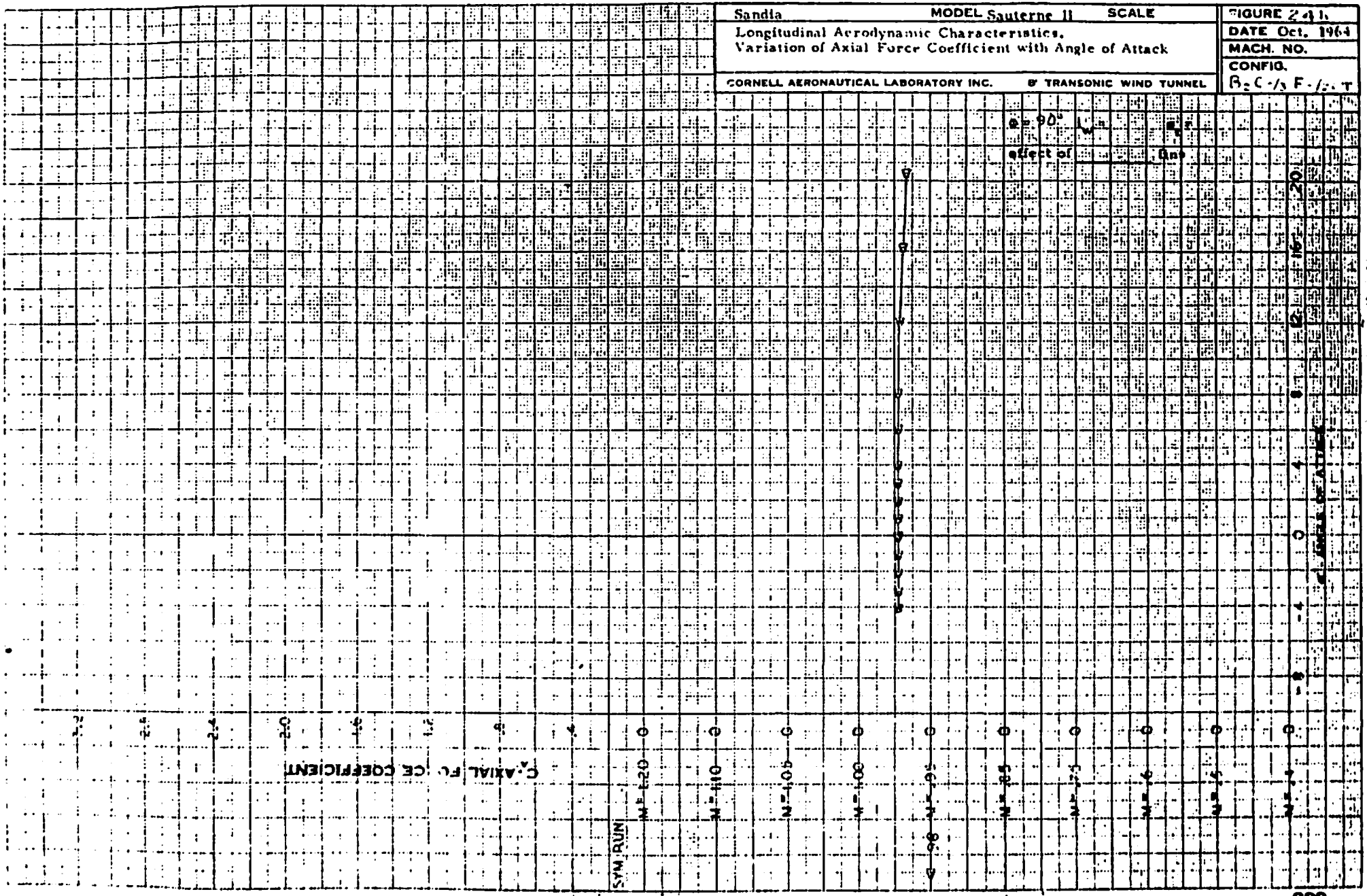
CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

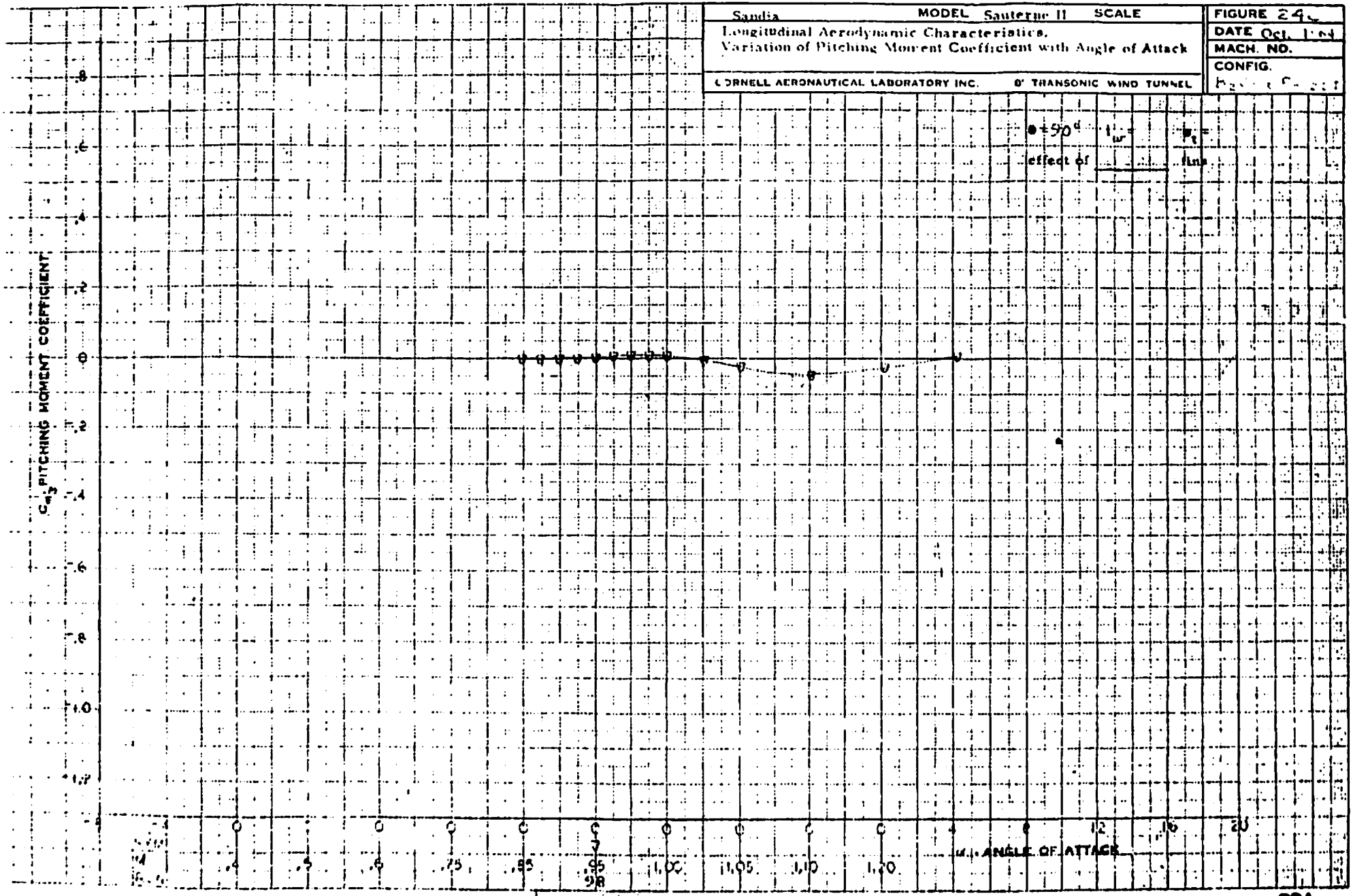
FIGURE 24(f)
DATE Oct. 1964
MACH. NO.
CONFIG. [illegible]

C_N NORMAL FORCE COEFFICIENT

α ANGLE OF ATTACK

SIM M	.4	.5	.6	.75	.85	.95 .98	1.00	1.05	1.10	1.20
RUN										


Sandia
MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics,
Variation of Axial Force Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 24 b
DATE Oct. 1964
MACH. NO.
CONFIG.
B2 C-3 F-1 T
α = 90°
effect of
C_A, AXIAL FORCE COEFFICIENT
SYM RUN
M=1.20
M=1.10
M=1.05
M=1.00
M=.95
M=.90
M=.85
M=.75
M=.6
M=.5
M=.4
2.8
2.4
2.0
1.6
1.2
.8
.4
20
16
12
8
4
0
-4
-8


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MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 24
DATE Oct. 1954
MACH. NO.
CONFIG.
δ=50°
effect of
$C_{m_{\alpha}}$ PITCHING MOMENT COEFFICIENT
α, ANGLE OF ATTACK
.8
.6
.4
.2
0
-.2
-.4
-.6
-.8
-1.0
-1.2
0
4
8
12
16
20
.75
.85
.95
.98
1.00
1.05
1.10
1.20

Sandia — MODEL Sauterne II — SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. — 8' TRANSONIC WIND TUNNEL

FIGURE 25
DATE Oct. 1961
MACH. NO.
CONFIG. B_2C_1

$\phi = 90°$

Effect of

C_N NORMAL FORCE COEFFICIENT

+6 +4 +2 +0 -2 -4

-4 0 4 8 12 16 20

α, ANGLE OF ATTACK

SYM	M	R/ft
	.65	2.55
	1.00	
	1.05	
	1.10	
	1.20	

Sandia MODEL Sauterne II SCALE

FIGURE 25 b

DATE Oct. 1964

MACH. NO.

CONFIG. B2-W-F-ACT

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

$\phi = 90°$ $l_w =$ $R_T =$

effect of $\sin\phi$

C_A AXIAL FORCE COEFFICIENT

ANGLE OF ATTACK, α

STN RUN

M=.620

M=.710

M=.805

M=.900

M=.965

M=.85

M=.75

M=.6

M=.5

M=.4

Sandia — MODEL Sauterne II — SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. — 8' TRANSONIC WIND TUNNEL

FIGURE 25c
DATE Oct. 1964
MACH. NO.
CONFIG. B2C-1a F-12CT

δ_f = -90° / effect of i_w = / P_t = fins

C_{m_2} PITCHING MOMENT COEFFICIENT

.8 .6 .4 .2 0 -.2 -.4 -.6 -.8 -1.0 -1.2

-4 -2 0 2 4 6 8 12 16 20

α, ANGLE OF ATTACK

SYM	M	RUN
●	.4	99
	.5	
	.6	
	.75	
	.85	
	.95	
	1.00	
	1.05	
	1.10	
	1.20	

Sandia | MODEL Sauterne II | SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 263
DATE Oct. 1964
MACH. NO.
CONFIG. B2C2F3A/3H

δ_H 90°
effect of 3A

C_N NORMAL FORCE COEFFICIENT

16
14
12
10
8
6
4
2
0
-2
-4

STN 4, RUN 46

-.4 -.2 0 .2 .4 .6 .75 .85 .95 1.00 1.05 1.10 1.20

-4 0 4 8 12 16 20

α^1, ANGLE OF ATTACK

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8 TRANSONIC WIND TUNNEL

FIGURE 26 b
DATE Oct. 1964
MACH NO.
CONFIG. $B_2C_2T_{12}/_{12}H$

$\phi = 90°$ $l_w =$ $e_1 =$

effect of 3A fins

C_A AXIAL FORCE COEFFICIENT

ANGLE OF ATTACK, α

SYM	RUN	
	0	$M_\infty = 1.20$
	0	$M_\infty = 1.10$
	0	$M_\infty = 1.05$
	0	$M_\infty = 1.00$
	0	$M_\infty = .95$
	0	$M_\infty = .90$
	0	$M_\infty = .85$
	0	$M_\infty = .80$
	0	$M_\infty = .70$
	0	$M_\infty = .60$

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 26c
DATE Oct. 1964
MACH. NO.
CONFIG. B-C2 F3A/3B

$\delta_f = 50°$ δ_w δ_s
effect of 3A flaps

$C_{m_{c/4}}$ PITCHING MOMENT COEFFICIENT

.8 .6 .4 .2 0 .2 .4 .6 .8 1.0 1.2

-8 -4 0 4 8 12 16 20

α, ANGLE OF ATTACK

SYM
M
RUN

.4 .5 .6 .75 .85 .95 1.00 1.05 1.10 1.20

46

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 27a
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{2.4/3.8}$

$\alpha = 0°$ $\delta_f =$ $\delta_e =$
effect of 3.8 flap

C_N - NORMAL FORCE COEFFICIENT

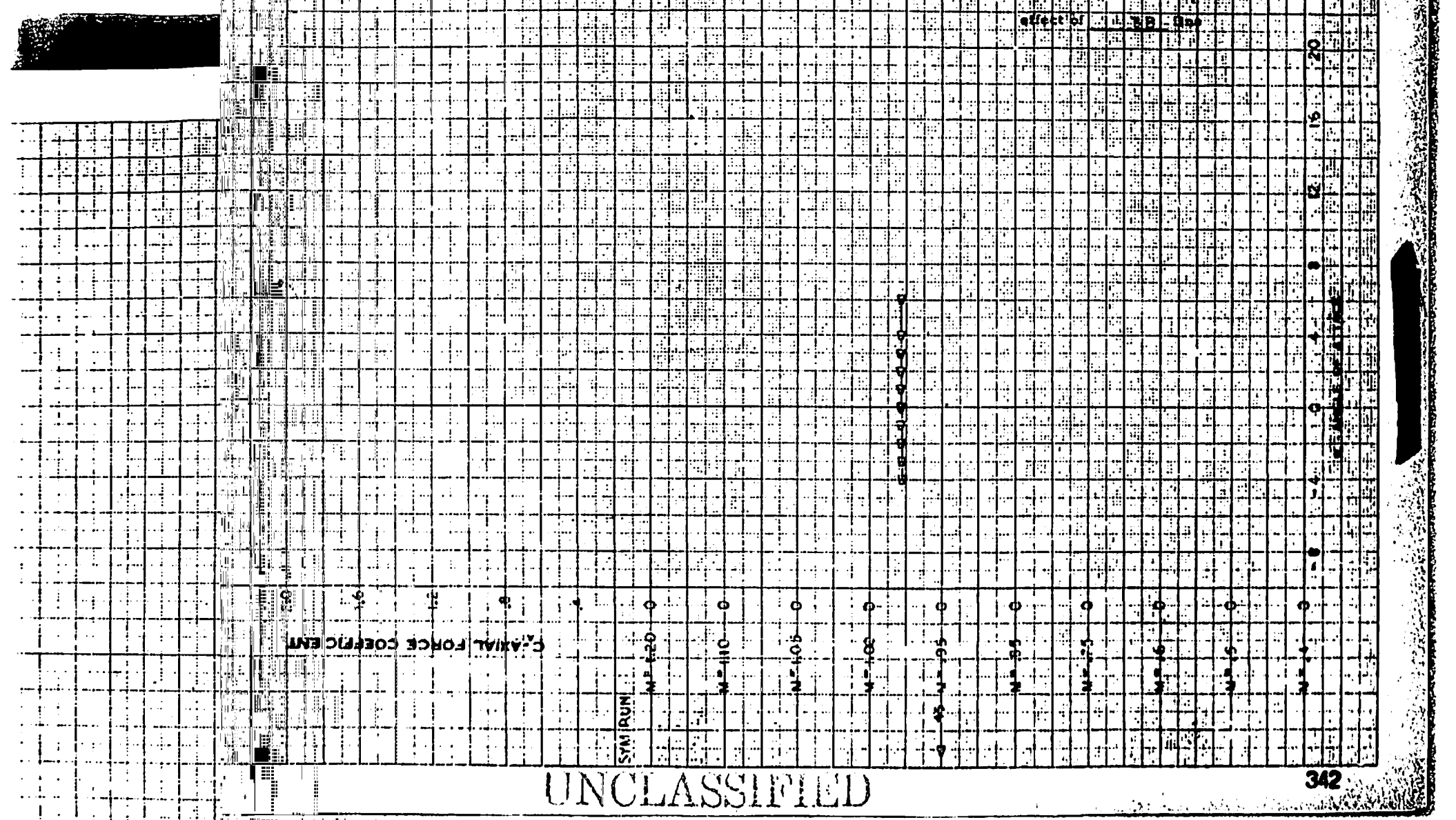
16
14
12
10
8
6
4
2
0
-2
-4

STM
M.
RUN

-.4 0 0 0 .6 .75 .85 .95 1.00 1.05 1.10 1.20

4 8 12 16 20

α - ANGLE OF ATTACK



UNCLASSIFIED

UNCLASSIFIED

Sandia MODEL Sauterne II SCALE Longitudinal Aerodynamic Characteristics, Variation of Axial Force Coefficient with Angle of Attack		FIGURE 276
		DATE Oct. 1964
		MACH. NO.
CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL		CONFIG. B2C2F10/3B

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 27.
DATE Oct. 1964
MACH. NO.
CONFIG. B2C2F1A/2B

$\phi = 0°$ i_w = R_c =
effect of 3B fins

C_m PITCHING MOMENT COEFFICIENT

.8 .6 .4 .2 0 -.2 -.4 -.6 -.8 -1.0 -1.2

-4 0 4 8 12 16 20

α, ANGLE OF ATTACK

SYM	RUN										
		-.4	.5	.6	.75	.85	.95 +.5	1.00	1.05	1.10	1.20

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 28a
DATE Oct., 1954
MACH. NO.
CONFIG. $B_2C_2F_{3c}$

$\delta = 0°$ $\delta_{tab} =$ $\delta_f =$
effect of 3c tabs

C_N NORMAL FORCE COEFFICIENT

16
14
12
10
8
6
4
2
0
-2
-4

STM RUN

-4 -2 0 .35 .65 .85 1.00 1.05 1.10 1.20

59 50 48

0 4 8 12 16 20

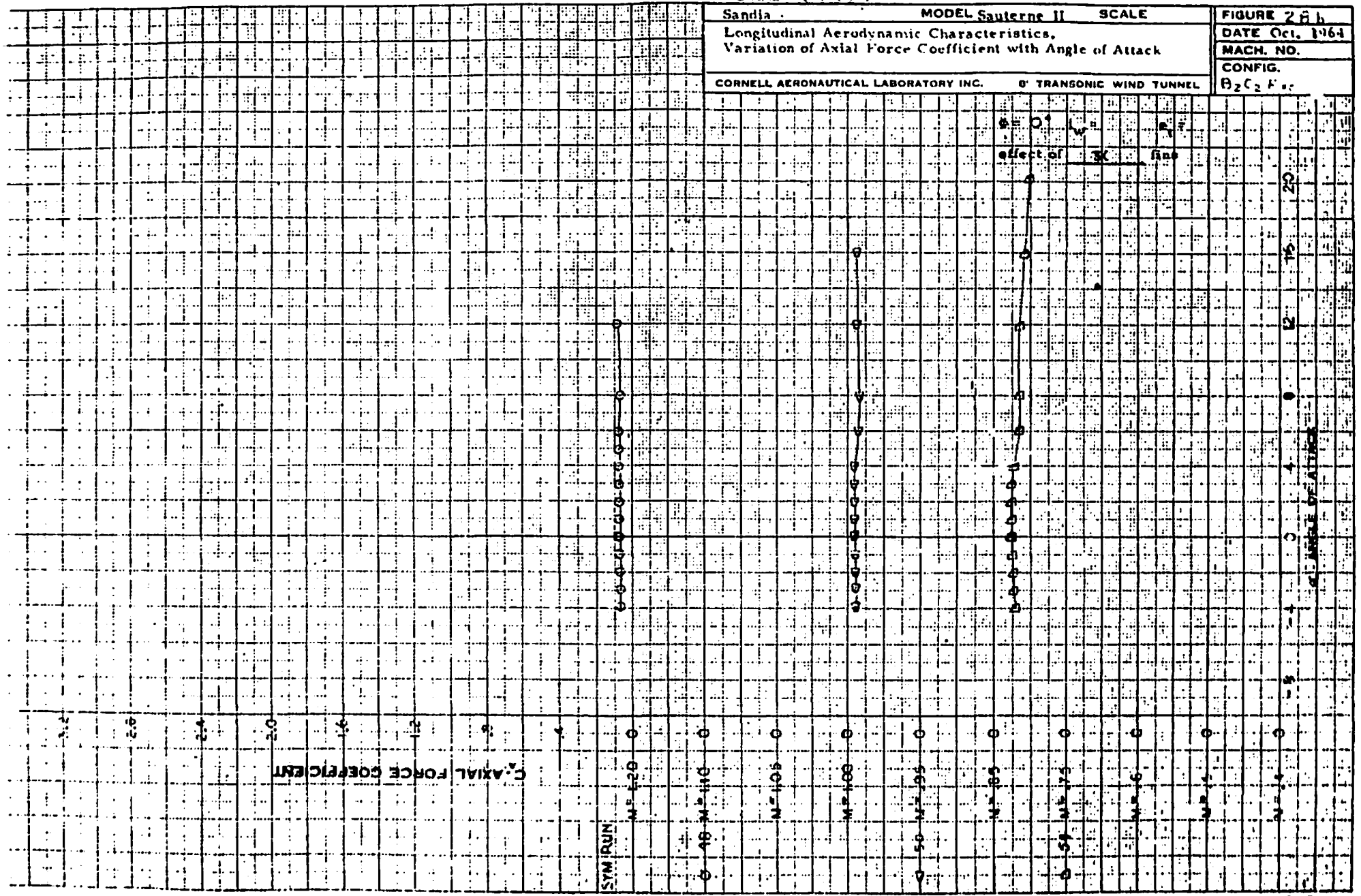
α - ANGLE OF ATTACK

Sandia — MODEL Sauterne II — SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. — 8' TRANSONIC WIND TUNNEL

FIGURE 28b
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{ac}$



Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 28c
DATE Oct. 1964
MACH NO.
CONFIG. $B_4 C_2 F_{3c}$

$\Phi = 0°$ $i_t =$ $\delta_t =$
effect of 3C fins

C_{m_3} PITCHING MOMENT COEFFICIENT

.8 .6 .4 .2 0 -.2 -.4 -.6 -.8 -1.0 -1.2

-4 0 4 8 12 16 20

α = ANGLE OF ATTACK

SYM							
M		.75	.85	.95	1.00	1.05	1.10	1.20
RUN		514		510			511	

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 29a
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2 C_2 F_{SC}$

ϕ = 45°
effect of SC

C_N NORMAL FORCE COEFFICIENT

α, ANGLE OF ATTACK

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 29b
DATE Oct. 1964
RUN NO.
CONFIG. $B_2C_2F_2C$

$\phi = 45°$ $\zeta =$ $\beta =$
effect of δC δn

C_A, AXIAL FORCE COEFFICIENT

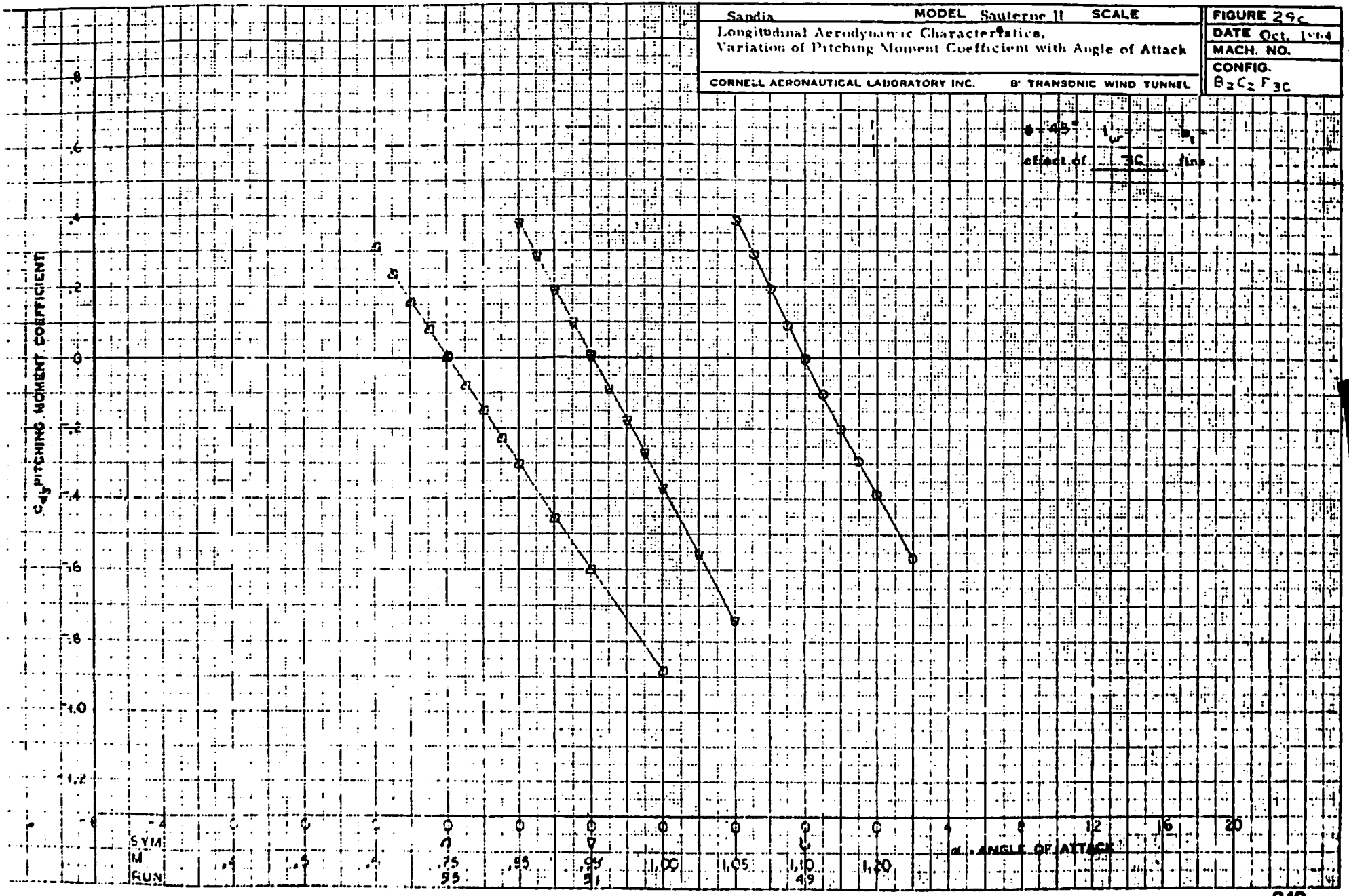
2.2 2.0 .6 .4

STN RUN

M=1.20 M=1.10 M=1.05 M=1.00 M=.95 M=.90 M=.85 M=.80 M=.75 M=.60 M=.40

20 16 12 8 4 0 -4 -8

α, ANGLE OF ATTACK


Sandia
MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 29c
DATE Oct. 1954
MACH. NO.
CONFIG.
B2C2F3C
Φ = 45°
effect of 3C fins
C_{m_B} PITCHING MOMENT COEFFICIENT
α, ANGLE OF ATTACK
SYM
M
RUN
.75
55
.95
91
1.00
1.05
1.10
49
1.20

Sandia

MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 35a
DATE Oct. 1964
MACH. NO.
CONFIG. $H_2C_2F_{2L}$

$\phi = 0°$ $\omega =$ $\epsilon = 5°$

effect of ——

C_N NORMAL FORCE COEFFICIENT

16
14
12
10
8
6
4
2
0
-2

STN 4 RUN

.4 .7 .0 .75 .80 .85 .90 .95 1.00 1.05 1.10 1.15 1.20

0 4 8 12 16 20

α, ANGLE OF ATTACK

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

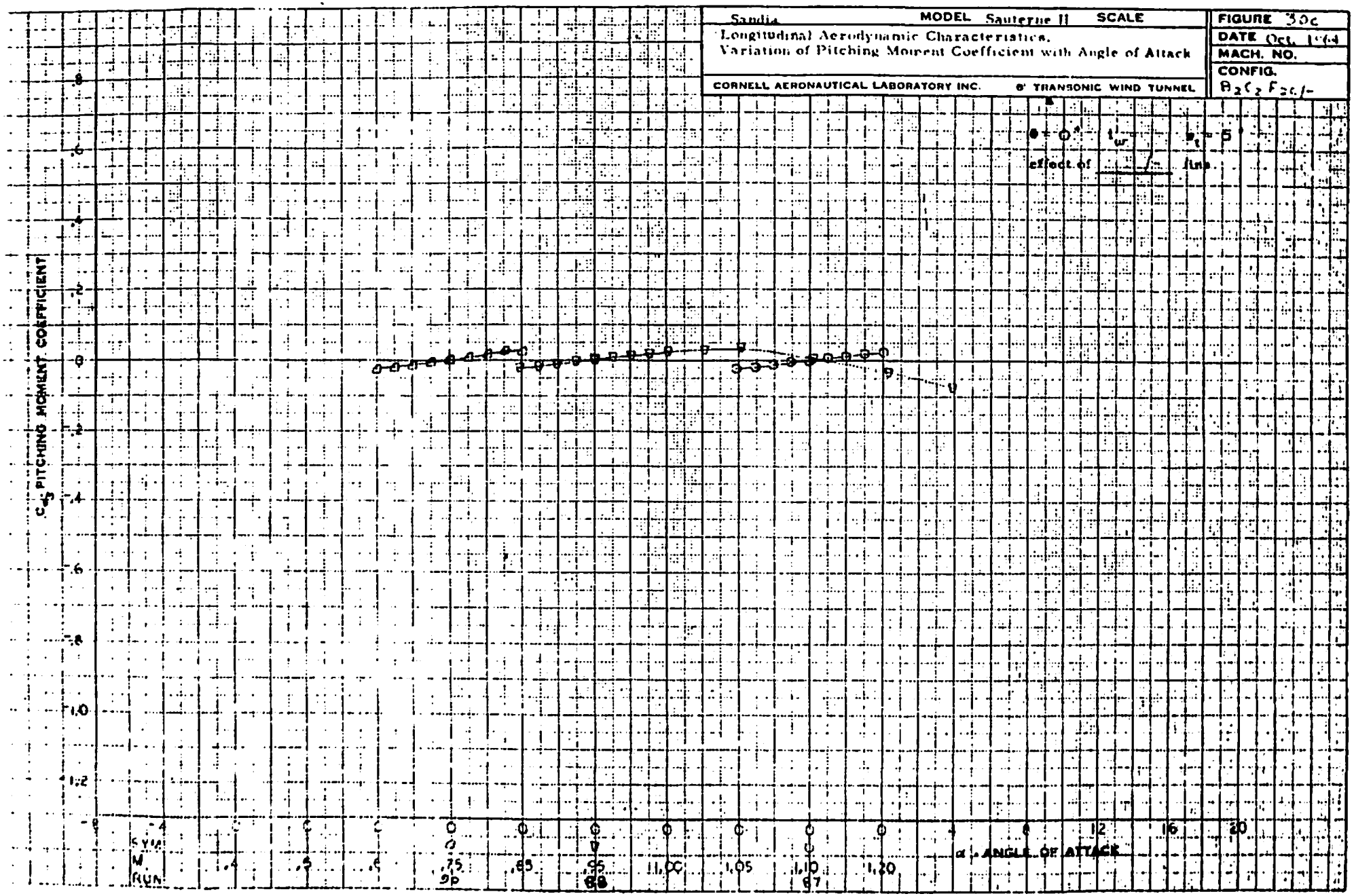
CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 30 b
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{2c/-}$

$\phi = 0°$ L_w $\delta_f = 5°$
effect of ——— flap

C_A AXIAL FORCE COEFFICIENT

SYM RUN


Sandia
MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 30c
DATE Oct. 1964
MACH. NO.
CONFIG.
B2C2F2c1-
C_m PITCHING MOMENT COEFFICIENT
α, ANGLE OF ATTACK
SYM
M
RUN
.75
.85
.95
1.00
1.05
1.10
1.20
9P
68
87

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 210
DATE Oct. 1964
MACH. NO.
CONFIG. B2C2E2A/2H

ϕ_W 20° ϕ_H ϕ_t 5°
effect of 2A Inc

C_N NORMAL FORCE COEFFICIENT

α ANGLE OF ATTACK

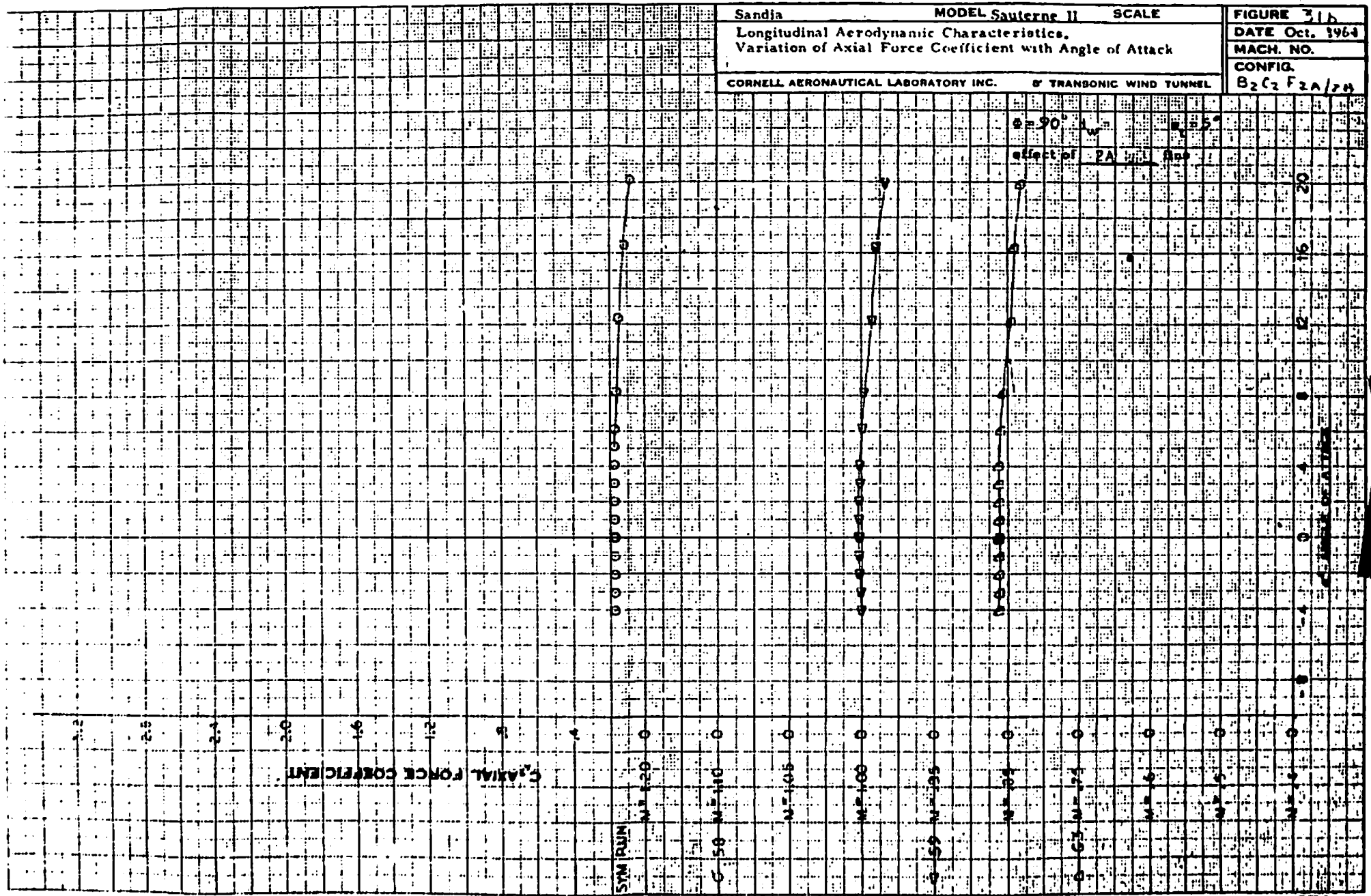
STM
M.
RUN

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics,
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 31b
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{2A/2B}$



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Sandia — MODEL Sauterne II — SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. — 8' TRANSONIC WIND TUNNEL

FIGURE 31c
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_2A/2B$

$\phi = 90°$ t/c $\delta_f = 5°$
effect of ΔA sins

C_m, PITCHING MOMENT COEFFICIENT

α, ANGLE OF ATTACK

SYM	M	RUN
	.45	
	.65	63
	.85	59
	1.00	
	1.05	
	1.10	58
	1.20	

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Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 32a
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_2A/_2B$

$\delta = 0°$ δ_f δ_e 6°
effect of 26

C_N NORMAL FORCE COEFFICIENT

α ANGLE OF ATTACK

STA														
M					.75	.65	.95	1.00	1.05	1.10	1.20			
RUN					62		60			57				

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRAI-SONIC WIND TUNNEL

FIGURE 32 b
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_2A_2B$

$\delta = 0°$

effect of -B fins

C_A AXIAL FORCE COEFFICIENT

SYM RUN

Sandia — MODEL Sauterne II — SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. — 8' TRANSONIC WIND TUNNEL

FIGURE 32c
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{20}/_{21}$

$\delta_f = 0°$ $\frac{l}{\omega} =$ $\delta_s = 5°$

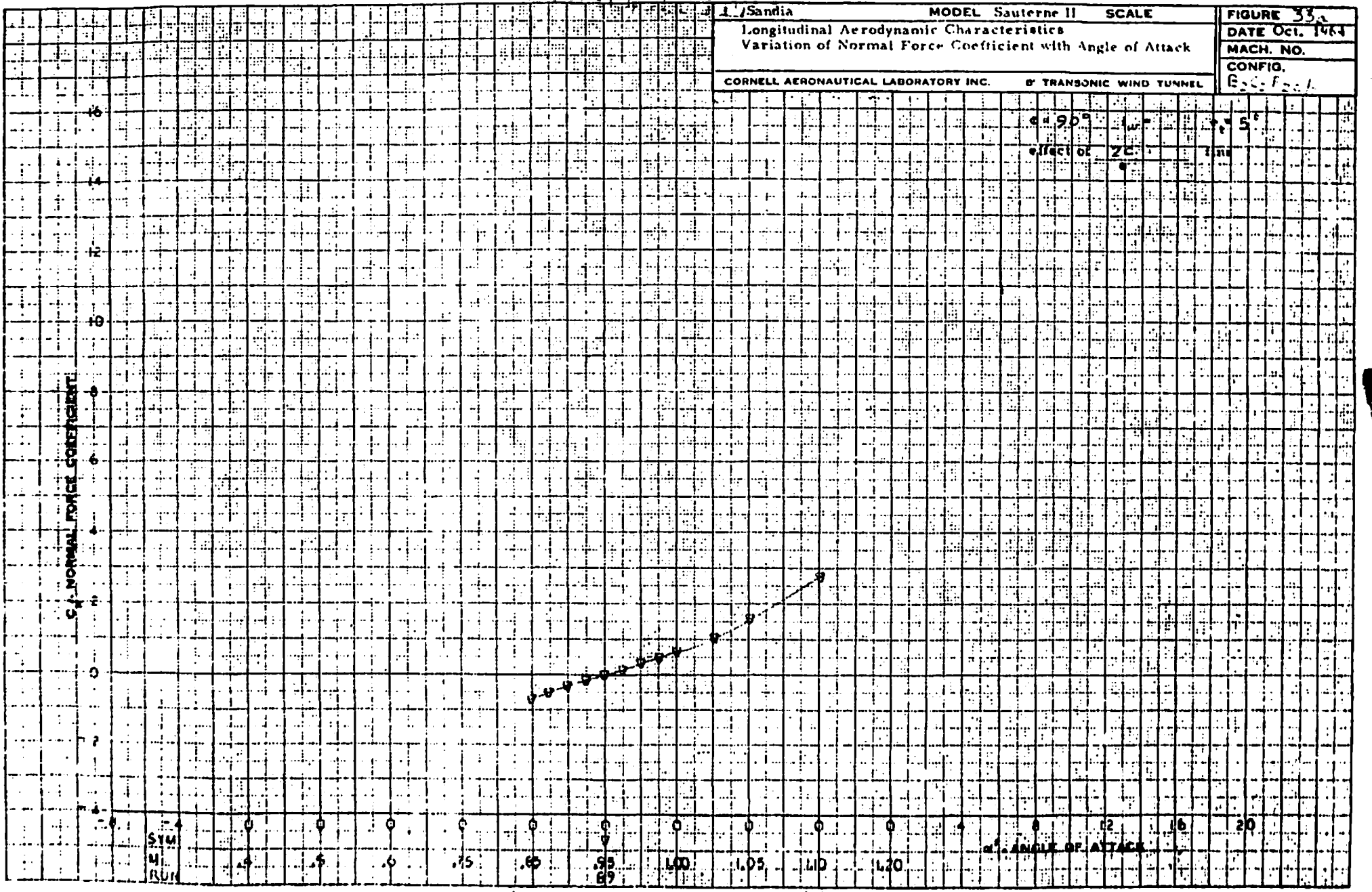
effect of $\frac{x_{cg}}{c} = .28$ data

C_m, PITCHING MOMENT COEFFICIENT

α, ANGLE OF ATTACK, deg

SYM	M	RUN
△	.75	62
○	.95	60
▽	1.00	
◇	1.05	
□	1.10	97
○	1.20	

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Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 33b
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{2C}I_-$

$\phi = 90°$ $i_w =$ $\delta_f = 5°$
effect of 2C/— flap



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MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 33c
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{2c/-}$

$\phi = 90°$ i_w $\alpha_t = 5°$
effect of 2c/- fins

C_{m_3} PITCHING MOMENT COEFFICIENT

.8
.6
.4
.2
0
-.2
-.4
-.6
-.8
1.0
1.2

-8 -4 0 4 8 12 16 20

α_1, ANGLE OF ATTACK

SYM
M
RUN

.75 .85 .95 .99 1.00 1.05 1.10 1.20

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Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 34a
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2 C_2 F_{2c}$

C_N - NORMAL FORCE COEFFICIENT

α - ANGLE OF ATTACK

STM
RUN

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 34b
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{2c}$

$\phi = 0°$ $\delta_e = 5°$
effect of $2c_{flap}$

C_A, AXIAL FORCE COEFFICIENT

α, ANGLE OF ATTACK, DEG

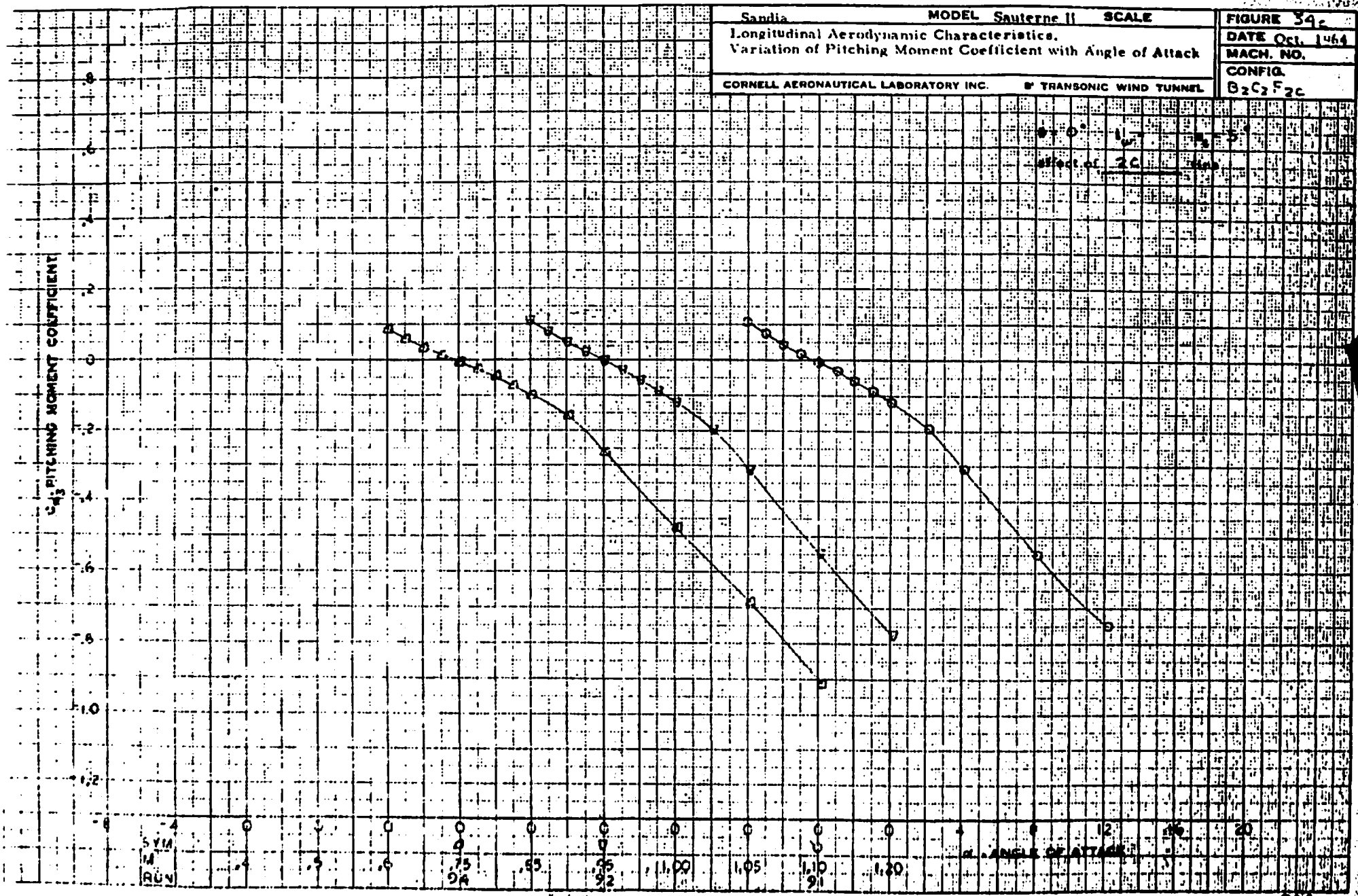
SYM RUN M_∞ δ_e

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 34c
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{2c}$



Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. ◆ TRANSONIC WIND TUNNEL

FIGURE 35a.
DATE Oct. 1964
MACH. NO.
CONFIG.
B2C2F2c

$\phi = 45°$ $\delta_e = 5°$

Effect of ZC

C_N, NORMAL FORCE COEFFICIENT

16 14 12 10 8 6 4 2 0 -2 -4

SYM
M
RUN

.45 .45 .60 .75 .85 .93 95 1.00 1.05 1.10 1.20

α, ANGLE OF ATTACK, DEG

4 8 12 16 20

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 35 b
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{2C}$

$\beta = 45°$ $L_w =$ $a = 5°$
effect of 2C flap

C_A AXIAL FORCE COEFFICIENT

α ANGLE OF ATTACK

SYM	RUN	
●	95	M_∞ 1.20
○		M_∞ 1.10
○		M_∞ 1.05
○		M_∞ 1.00
○		M_∞ .95
○		M_∞ .90
○		M_∞ .75
○		M_∞ .6
○		M_∞ .4
○		M_∞ .2

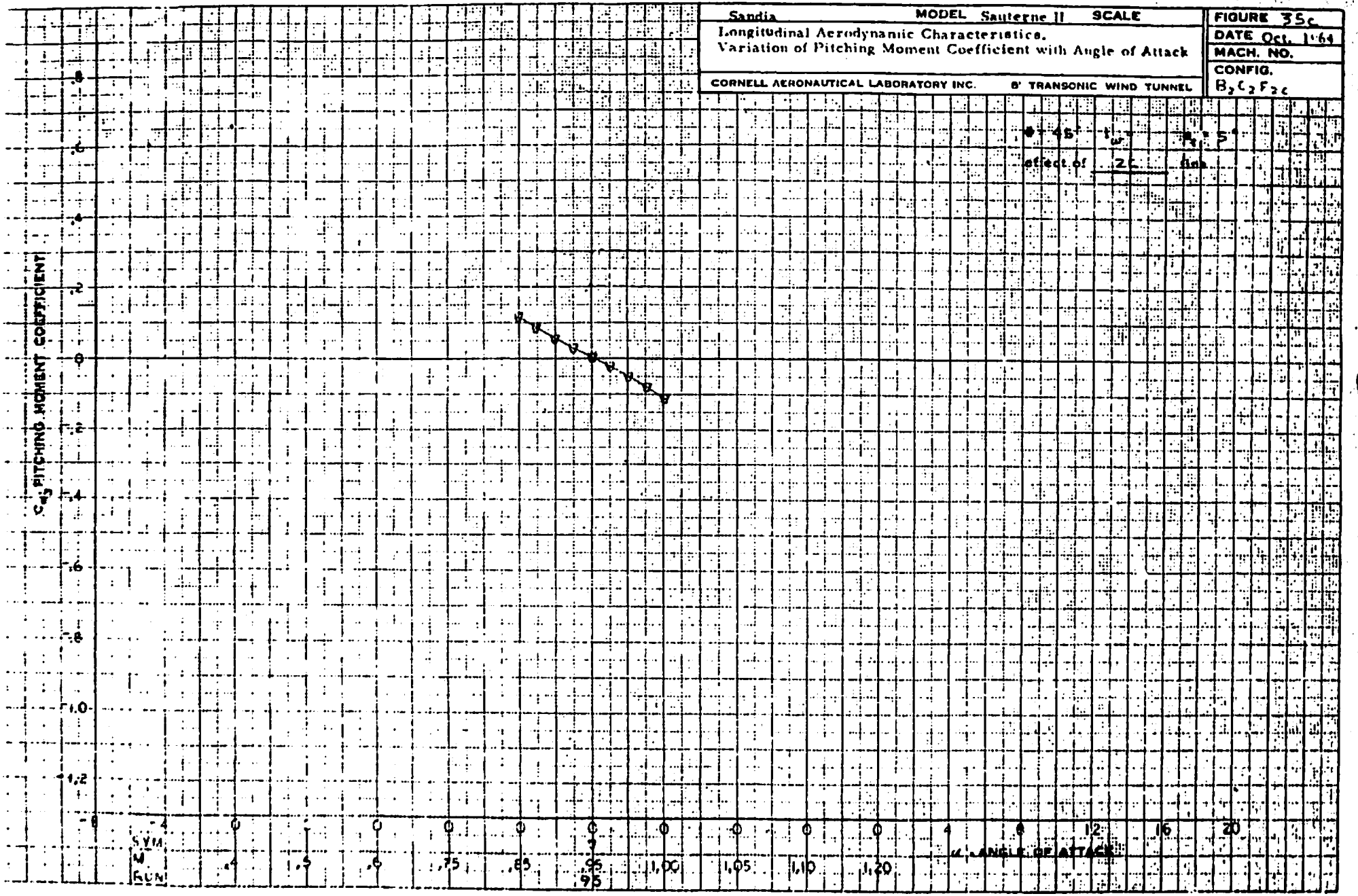
Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 35c
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{2c}$

$\Phi = 45°$ $t_w =$ $R_t = 5'$
effect of 2c fins



Sandia MODEL. Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 36a
DATE Oct. 1964
MACH. NO. .950
CONFIG. $B_2C_2F_2$

$\delta_e = 30°$ $\delta_a = -5°$
effect of α_c

C_N, NORMAL FORCE COEFFICIENT

16
14
12
10
8
6
4
2
0
-2

-4 -2 0 2 4 6 8 10 12 16 20

α, ANGLE OF ATTACK

STM RUN														
M	.4	.5	.6	.75	.85	.95	1.00	1.05	1.10	1.20				
						93								

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 36 b
DATE Oct. 1964
MACH. NO. .950
CONFIG. $B_2C_2F_2S$



Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 36c
DATE Oct. 1964
MACH. NO. .950
CONFIG. $B_2 C_2 F_2 c$

$\phi = 90°$ ω $\delta_f = 8°$

effect of $\frac{z_c}{l_m}$

C_m, PITCHING MOMENT COEFFICIENT

.8 .6 .4 .2 0 -.2 -.4 -.6 -.8 -1.0 -1.2

SYM | M | RUN

SYM	M	RUN
	.75	
	.85	
	.95	
	1.00	
	1.05	
	1.10	
	1.20	

-4 -2 0 2 4 6 8 12 16 20

α, ANGLE OF ATTACK

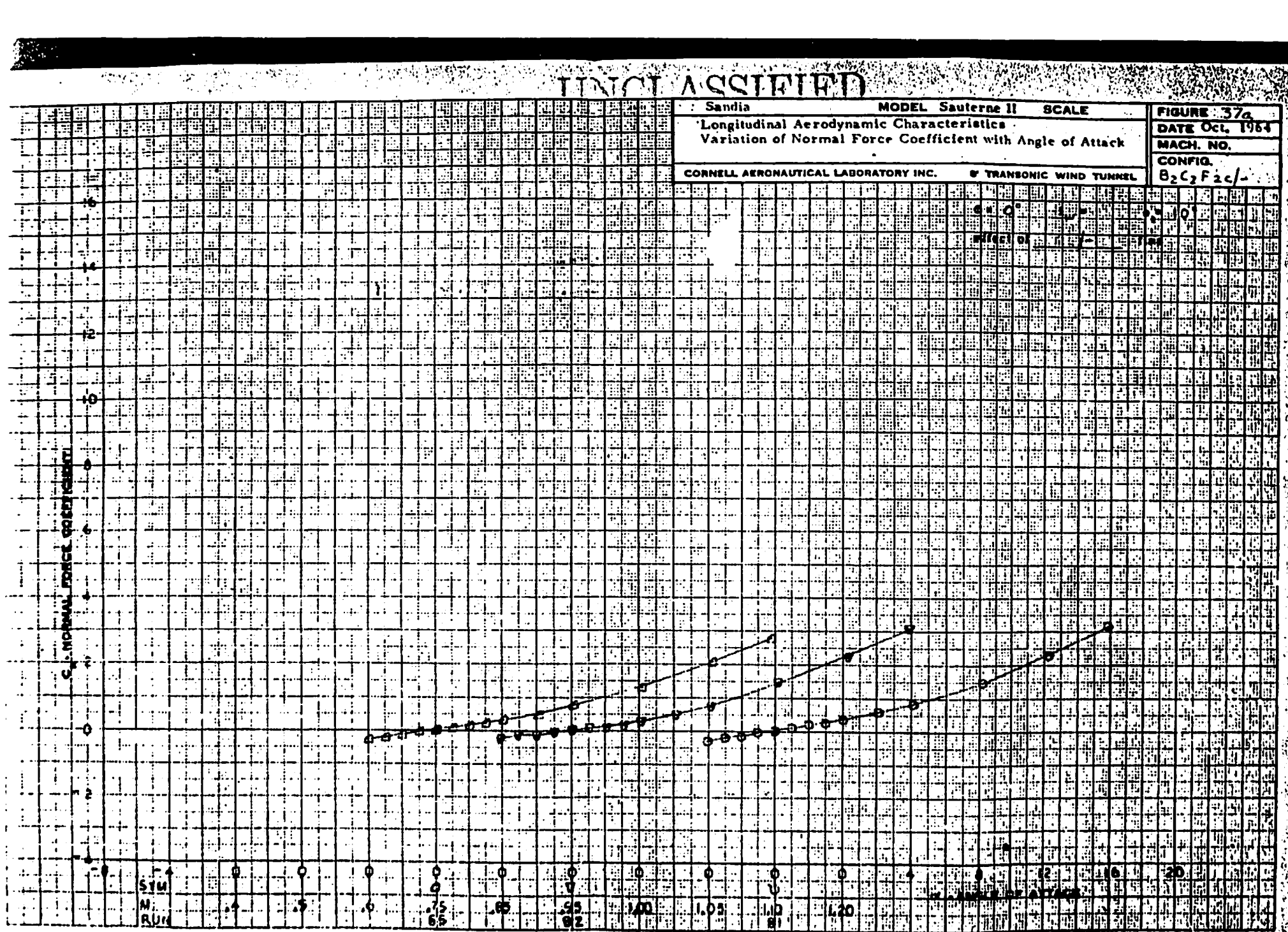
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Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 37a
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{2c}$



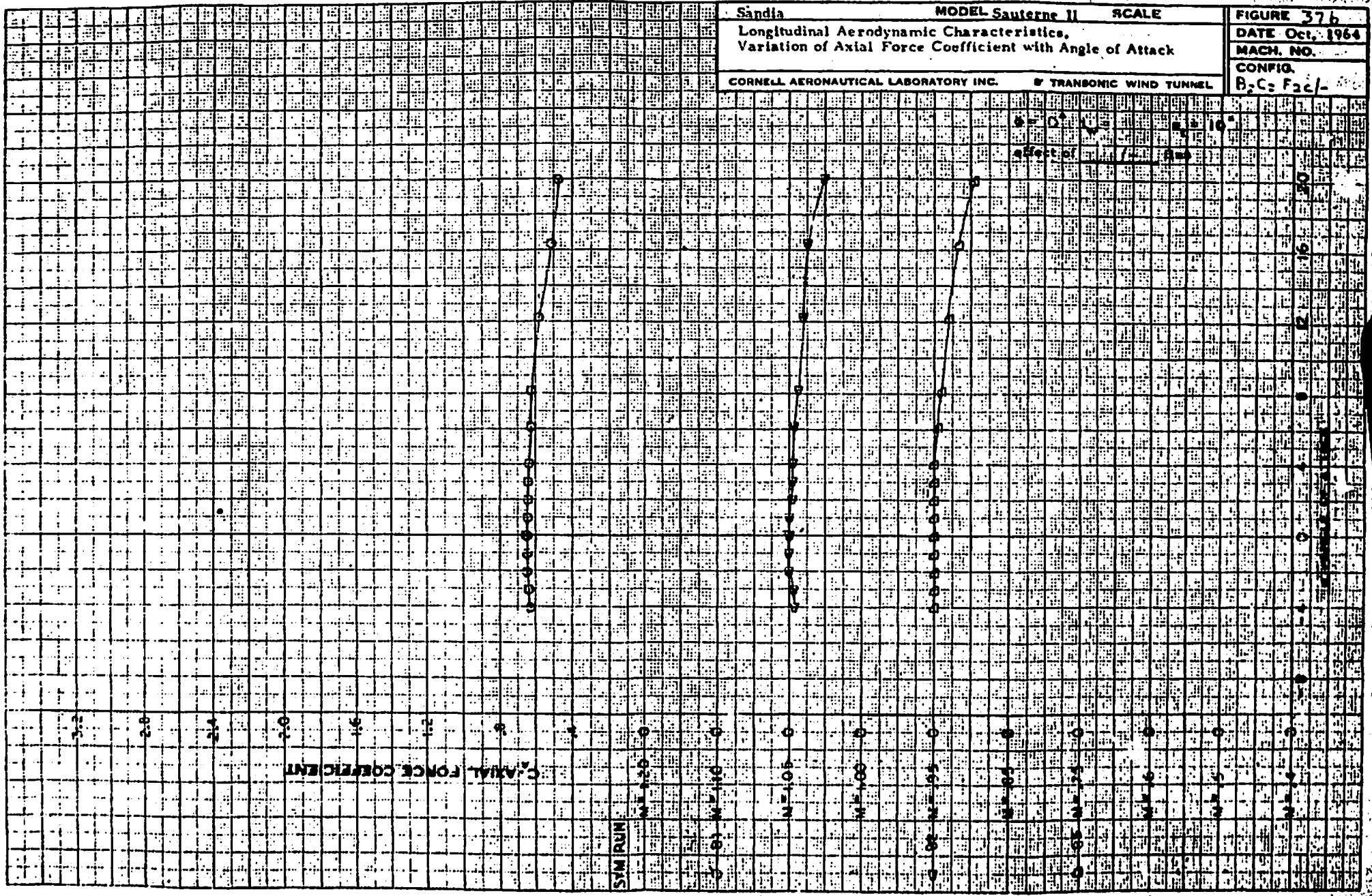
Sandia — MODEL Sauterne II — SCALE

Longitudinal Aerodynamic Characteristics,
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. — TRANSONIC WIND TUNNEL

FIGURE 37b
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{2c}/-$

$\phi = 0°$ $\delta_e =$ $\delta_a = 10°$
effect of f — β_{max}



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Sandia — MODEL Sauterne II — SCALE

FIGURE 37c

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

DATE Oct. 1964

MACH. NO.

CONFIG. $B_2C_2F_{2c}$

CORNELL AERONAUTICAL LABORATORY INC. — 8' TRANSONIC WIND TUNNEL

$\phi = 0°$ $i_w =$ $i_t =$ $0°$ effect of / trim

C_m, PITCHING MOMENT COEFFICIENT

.8 .6 .4 .2 0 -.2 -.4 -.6 -.8 -1.0 -1.2

-8 -4 0 4 8 12 16 20

α, ANGLE OF ATTACK

SYM	M	RUN
○	.75	65
▽	.85	67
□	.90	68
◇	1.00	69
△	1.05	70
○	1.10	81
▽	1.20	

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Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 8a
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_2A_2$

$\alpha = 50°$ $\delta_f = 0°$
Effect of ZA Fins

C_N, NORMAL FORCE COEFFICIENT

16
14
12
10
8
6
4
2
0
-2

SYM
M
RUN

-4 -2 0 2 4 6 8 10 12 14 16 18 20

.75 .85 .95 1.00 1.05 1.10 1.20
71 68 67

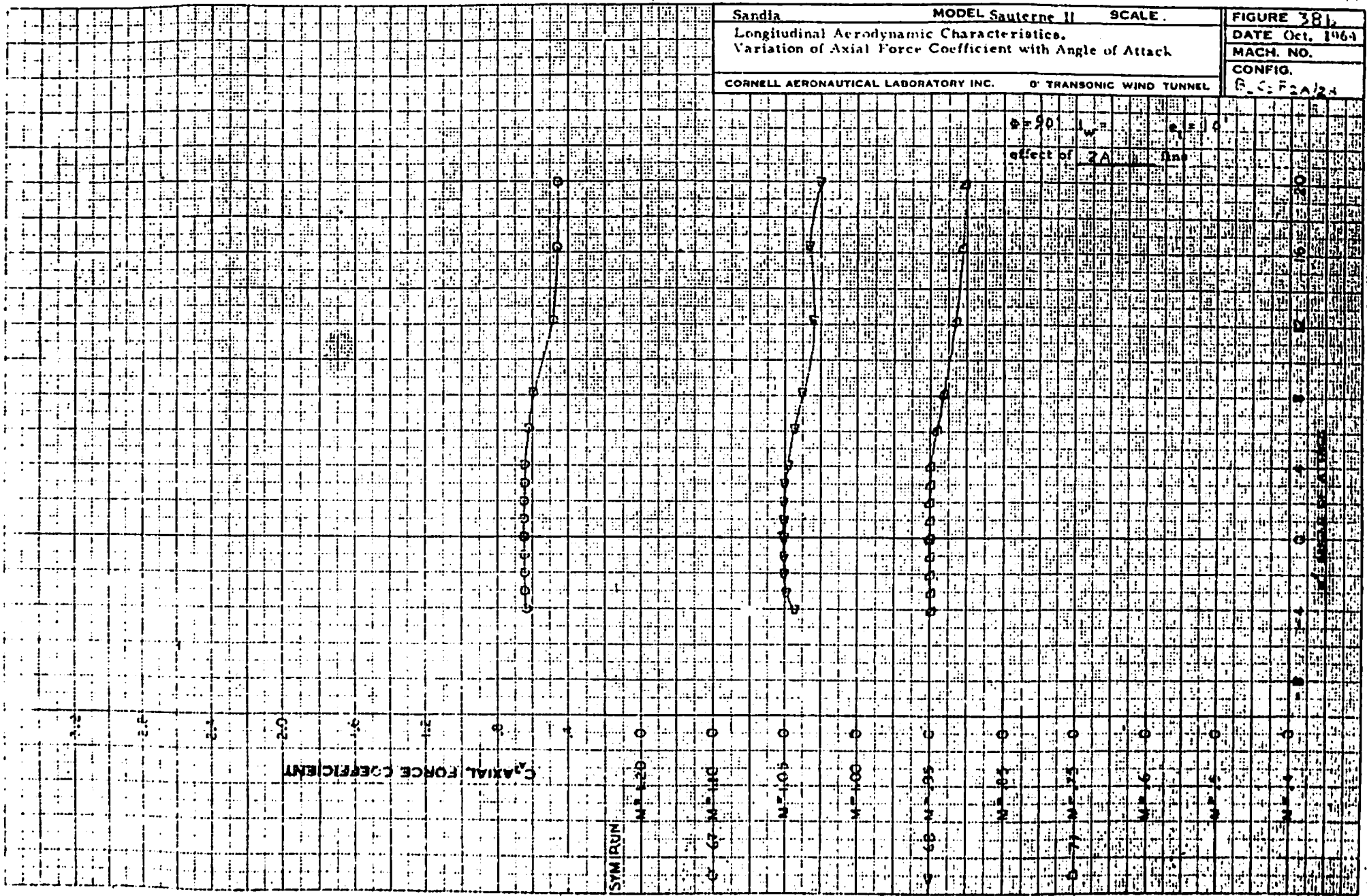
α, ANGLE OF ATTACK

Sandia MODEL Sauterne II SCALE.

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 38
DATE Oct. 1964
MACH. NO.
CONFIG.



Sandia — MODEL Sauterne II — SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. — 8' TRANSONIC WIND TUNNEL

FIGURE 3.8c
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_2A/2B$

$\phi = 90°$ $\frac{1}{rev}$ $R_e = 10^6$

effect of $\frac{z}{A}$ line

C_{m_3}, PITCHING MOMENT COEFFICIENT

α°, ANGLE OF ATTACK

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. & TRANSONIC WIND TUNNEL

FIGURE 390
DATE Oct. 1964
MACH NO.
CONFIG. $B_2 C_2$

$\phi = 0°$ $\delta_f = 10°$
effect of 28 fins

C_N NORMAL FORCE COEFFICIENT

ANGLE OF ATTACK, α

SIM M. RUN

.75 70 .85 .95 69 1.00 1.05 1.10 46 1.20

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 39b
DATE Oct. 1964
MACH. NO.
CONFIG. Body Base

$\delta_e = 0°$ $i_t = -1.6°$
effect of 2B Base

C_A, AXIAL FORCE COEFFICIENT

ANGLE OF ATTACK, α, DEG

SYM RUN

Sandia MODEL Santerne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 39c
DATE Oct. 1964
MACH. NO.
CONFIG. B.C.F.2/2B

$\delta_f = 0°$ δ_{tr} = $\delta_t = 10°$
effect of 28 tabs

C_{m_B} PITCHING MOMENT COEFFICIENT

α, ANGLE OF ATTACK

SYM	M	RUN
○	.4	
○	.5	
○	.6	
○	.75	70
○	.85	
○	.95	69
○	1.00	
○	1.05	
○	1.10	66
○	1.20	

Sandia MODEL Santerne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. TRANSONIC WIND TUNNEL

FIGURE 100
DATE Oct. 1964
MACH. NO.
CONFIG.

$\phi = 90°$ i_w [illegible] i_t [illegible]

effect of 2L Trim

C_N, NORMAL FORCE COEFFICIENT

α, ANGLE OF ATTACK

SYM
M
RUN

.45
.83

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 40b
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_{32}$

$\phi = 90°$ α_T R.P. 10

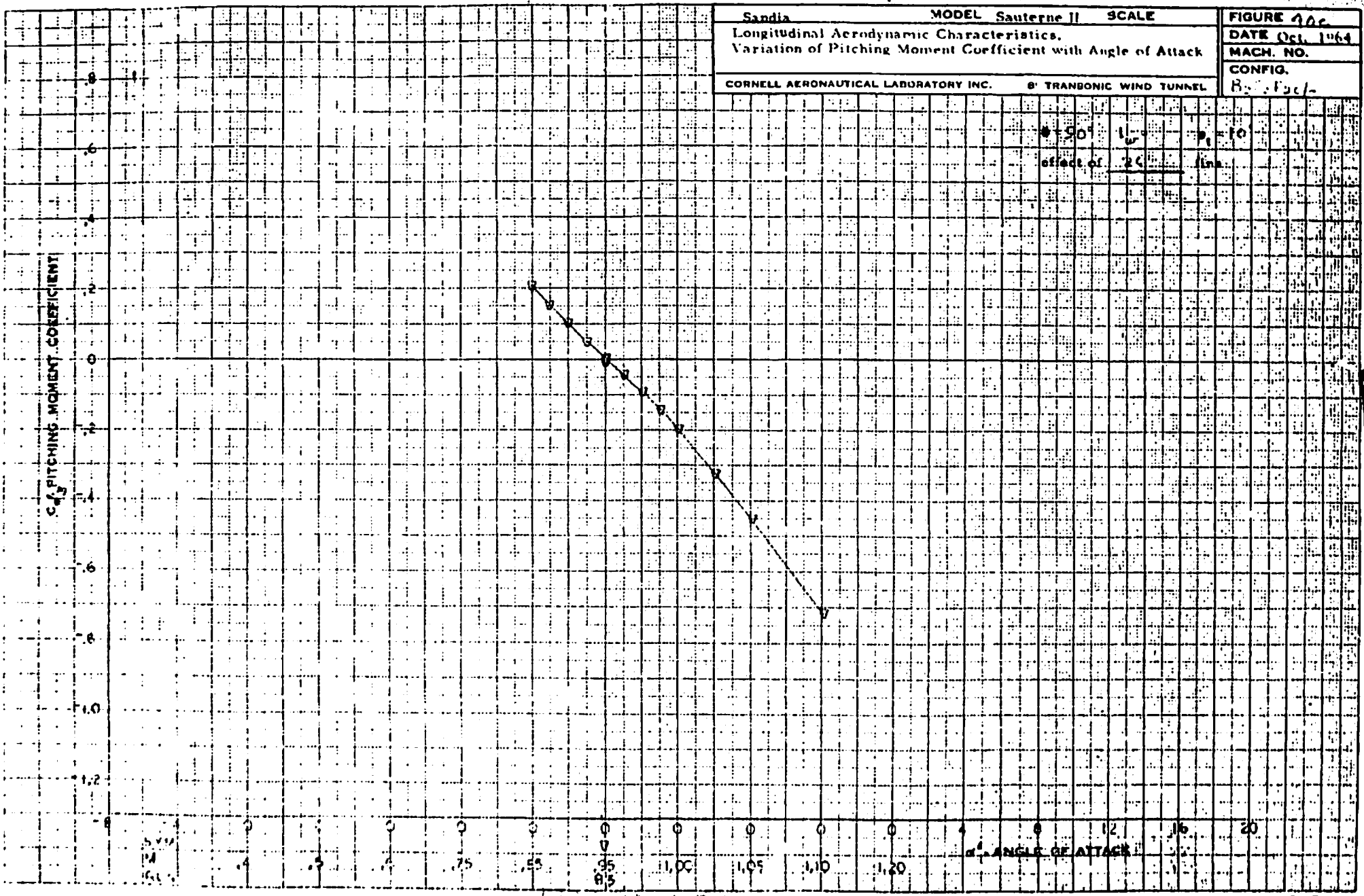
effect of RC ins

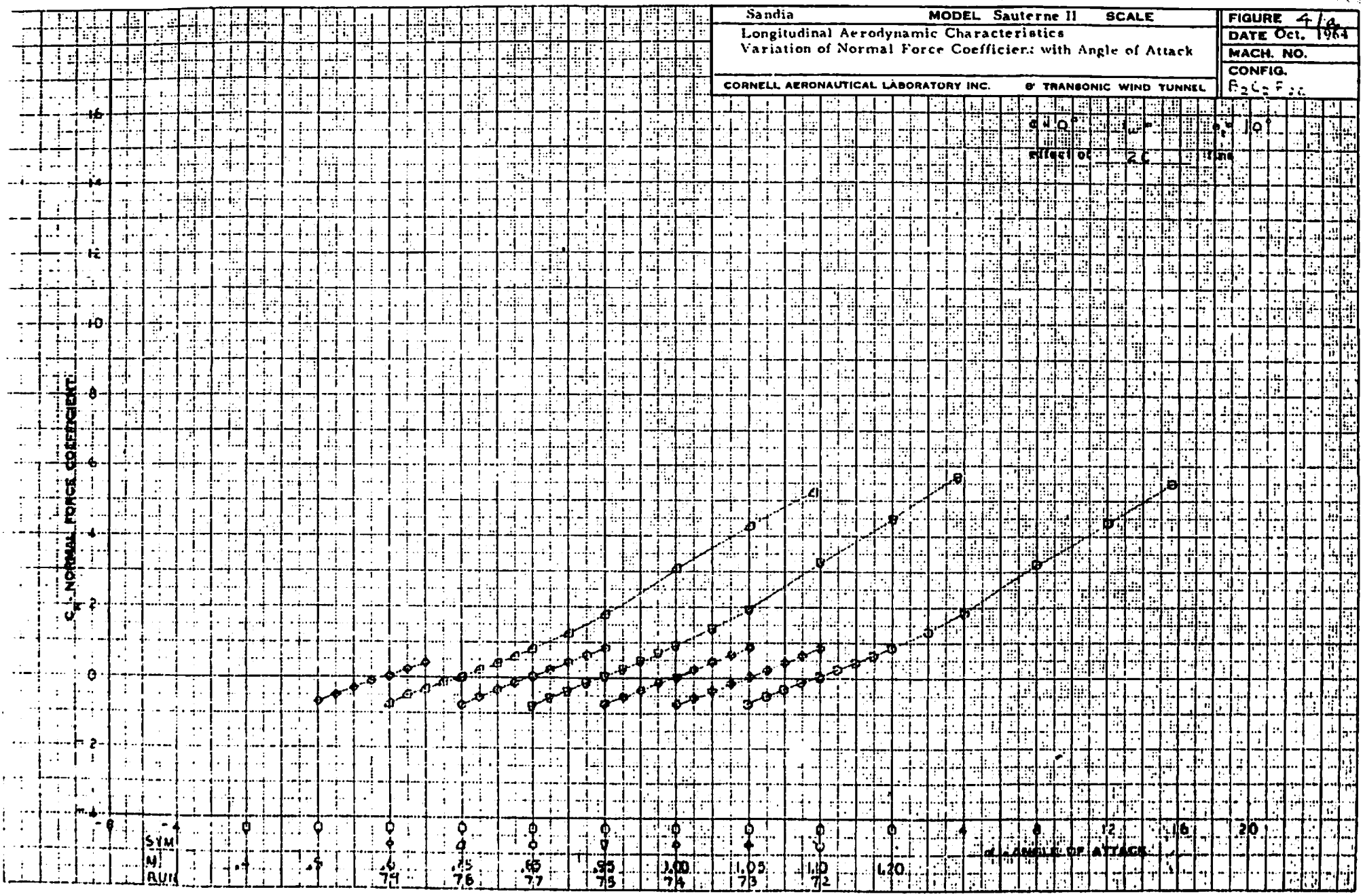
C_A AXIAL FORCE COEFFICIENT

SYM RUN

M=1.20 M=1.10 M=1.05 M=1.00 M=.95 M=.89 M=.74 M=.6 M=.45 M=.4

α_T ANGLE OF ATTACK


Sandia
MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 10c.
DATE Oct. 1964
MACH. NO.
CONFIG.
B. Fuel
ϕ = 90°
i_w =
P_t = 10
effect of 2C
fins
$C_{m_{\frac{c}{4}}}$ PITCHING MOMENT COEFFICIENT
α - ANGLE OF ATTACK
.8
.6
.4
.2
0
-.2
-.4
-.6
-.8
-1.0
-1.2
-8
-4
0
4
8
12
16
20
.75
.85
.95
1.00
1.05
1.10
1.20


Sandia
MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 4
DATE Oct. 1964
MACH. NO.
CONFIG.
C_N - NORMAL FORCE COEFFICIENT
α - ANGLE OF ATTACK
SYM
M
RUN
.75
76
.85
77
.95
75
1.00
74
1.05
73
1.10
72
1.20

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics,
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 41b
DATE Oct. 1964
MACH. NO.
CONFIG. B_C_F_ac

$\phi = 0°$ α_T $\phi = 10°$
effect of $\Delta C_{A_{BAS}}$

C_A, AXIAL FORCE COEFFICIENT

SYM RUN

Sandia — MODEL Sauterne II — SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. — 8' TRANSONIC WIND TUNNEL

FIGURE 41c
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2F_2C$

C_{m_3} PITCHING MOMENT COEFFICIENT

α, ANGLE OF ATTACK

RUN	.75	.85	.95	1.00	1.05	1.10	1.20
	79	78	77	75	74	73	72

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC 8' TRANSONIC WIND TUNNEL

FIGURE 42a
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2 C_2 F_2 c$

ϕ = 45°

effect of ZC

C_N NORMAL FORCE COEFFICIENT

16 14 12 10 8 6 4 2 0 -2 -4

-6 -4 0 4 8 12 16 20

α, ANGLE OF ATTACK

SYM	M	RUN
	.4	
	.6	
	.75	
	.90	
	.95	76
	1.00	
	1.05	
	1.10	
	1.20	

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics. .
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 47 b.
DATE Oct. 1964
MACH. NO.
CONFIG.
B-C-T-...

$\phi = 15°$ l_w " $e_1 = 10°$
effect of 2C fins

C_A AXIAL FORCE COEFFICIENT

2.8 2.4 2.0 1.6 1.2 .8 .4

SYM. RUN

M=1.20 M=1.10 M=1.05 M=1.00 M=.95 M=.90 M=.75 M=.6 M=.4 M=.4

α ANGLE OF ATTACK

12 8 4 0 -4 -8 -12

Sandia — MODEL Sauterne II — SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC — 8' TRANSONIC WIND TUNNEL

FIGURE 42c
DATE Oct. 1964
MACH. NO.
CONFIG. $A_2C_2T_{2C}$

ϕ = 45° i_w = α_t = 10°
effect of 20 fins

C_{m_2} PITCHING MOMENT COEFFICIENT

-.8 -.6 -.4 -.2 0 .2 .4 .6 .8 1.0 1.2

-4 0 4 8 12 16 20

α, ANGLE OF ATTACK

SYM	M	RUN
▽	.75	76

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 4.4.19
DATE Oct. 1964
MACH. NO.
CONFIG. B, C2 S1 F-12c

ϕ = 90° i_w = δ_e =
effect of ... tips

C_N, NORMAL FORCE COEFFICIENT

16
14
12
10
8
6
4
2
0
-2
-4

-8 -4 0 4 8 12 16 20

α, ANGLE OF ATTACK

SYM
M
R/ft

.4 .5 .6 .75 .85 .95 1.00 1.05 1.10 1.20

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 43.b
DATE Oct. 1964
MACH. NO. .950
CONFIG. $B_2C_2S_1F-12c$

$\phi = 92°$ l_w $\beta_t = 1.0°$
effect of — tips

C_A AXIAL FORCE COEFFICIENT

SYM RUN
M=.920
M=.940
M=.905
M=.900
M=.895
M=.884
M=.874
M=.860
M=.845
M=.824

α ANGLE OF ATTACK, DEG

Sandia — MODEL Sauterne II — SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. — 8' TRANSONIC WIND TUNNEL

FIGURE 43c
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2S_1F-12c$

$\phi = 90°$ t/ω = R_t =
effect of ____ line

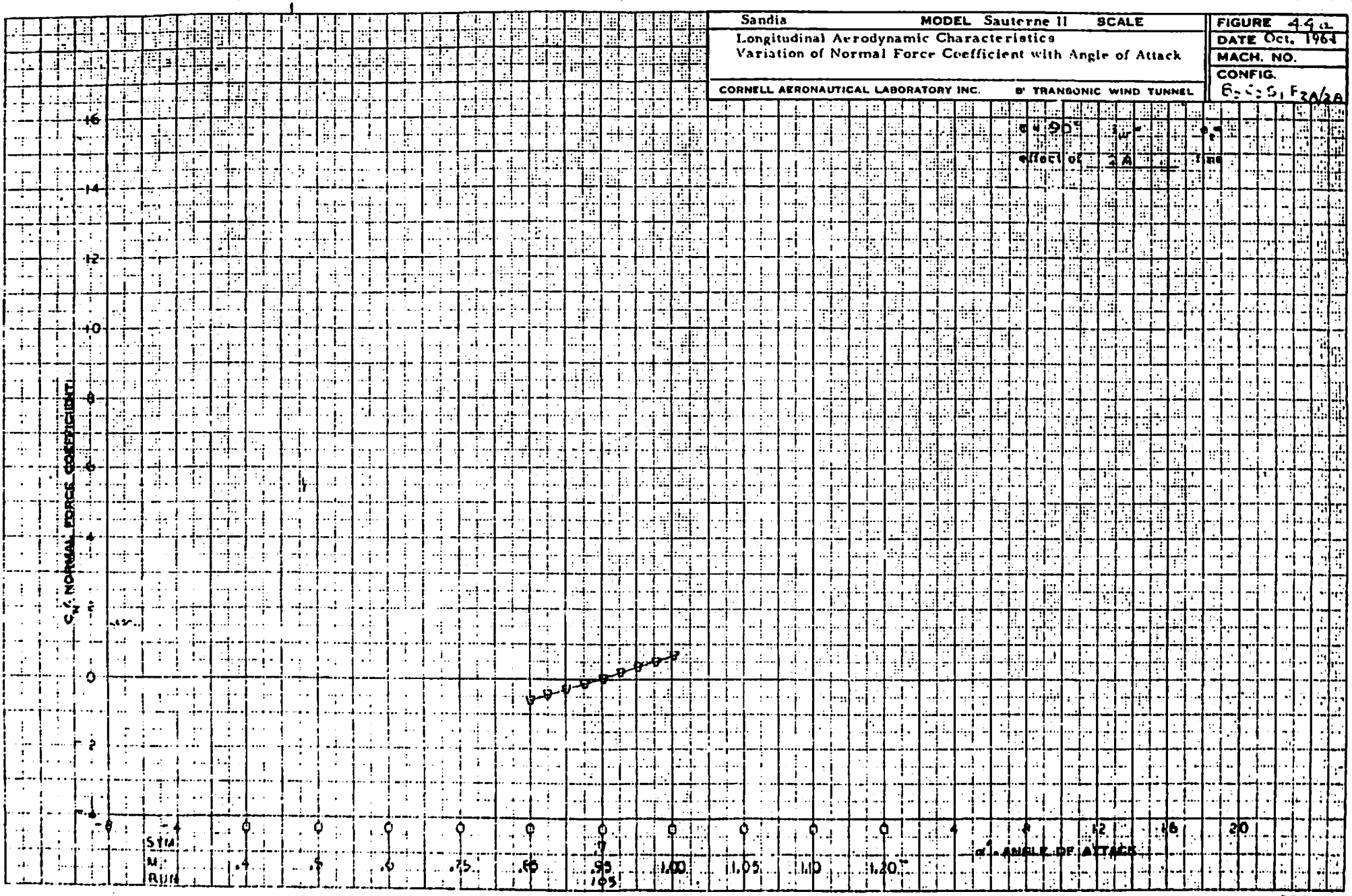
C_{m_3}, PITCHING MOMENT COEFFICIENT

.8 .6 .4 .2 0 .2 .4 .6 .8 1.0 1.2

-8 -4 0 4 8 12 16 20

α^1, ANGLE OF ATTACK

.5 .6 .75 .85 .95 1.00 1.05 1.10 1.20


Sandia
MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 44a
DATE Oct. 1964
MACH. NO.
CONFIG.
B S S1 F30/2A
δ = 0°
effect of
C_N, NORMAL FORCE COEFFICIENT
α, ANGLE OF ATTACK
STM
M
RUN

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Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC ⊕ TRANSONIC WIND TUNNEL

FIGURE 4.1b
DATE Oct. 1964
MACH. NO. .882
CONFIG. $B_2C_2S_1F_{3A/2B}$

$\phi = 90°$ $i_w =$ $\alpha_t = 10°$
effect of 2A flaps

C_A, AXIAL FORCE COEFFICIENT

α, ANGLE OF ATTACK

SYM	RUN	M =
○	20	.20
○	10	.10
○	03	.03
○	08	.80
○	05	.85
○	95	.95
○	75	.75
○	60	.60
○	45	.45
○	40	.40

UNCLASSIFIED

Sandia | MODEL Sauterne II | SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 49c
DATE Oct. 1964
MACH. NO.
CONFIG. B2C2S1F2A/2B

● = 90 | effect of 2A fins

$C_{m_{c/4}}$ PITCHING MOMENT COEFFICIENT

α^0, ANGLE OF ATTACK

SYM | M | RUN

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 45a
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2S_1F_2A/2B$

$\phi = 0°$ $i_w =$ $\delta_f =$
effect of 2B

C_N NORMAL FORCE COEFFICIENT

+16 +14 +12 +10 +8 +6 +4 +2 0 -2 -4

-6 -4 0 0 0 0 0 0 0 0 0 4 8 12 16 20

α, ANGLE OF ATTACK

SYM
M
RUN
.4 .5 .6 .75 .85 .95 1.00 1.05 1.10 1.20
168 104 107

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 15b
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2 C_2 S_1 F_{2A/2B}$

$\phi = 0°$ C_m $\alpha_T = 10°$
effect of $\Delta\beta$, $\Delta\alpha_T$

C_A AXIAL FORCE COEFFICIENT

SYM RUN
M = 2.0
M = 1.10
M = 1.05
M = 1.00
M = .95
M = .90
M = .85
M = .80
M = .75
M = .70

Sandia | MODEL Sauterne II | SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 45c
DATE Oct. 1964
MACH. NO.
CO. IFIG. $B_2C_2S_1F_3A_1Z_8$

$\Phi = 0°$ i_W F_1
effect of 28 fins

C_m PITCHING MOMENT COEFFICIENT

α, ANGLE OF ATTACK

SYM	M	RUN
□	.4	
○	.5	
△	.4	
◇	.75	108
▽	.85	
◁	.95	104
○	1.00	
○	1.05	
○	1.10	107
○	1.20	

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. @ TRANSONIC WIND TUNNEL

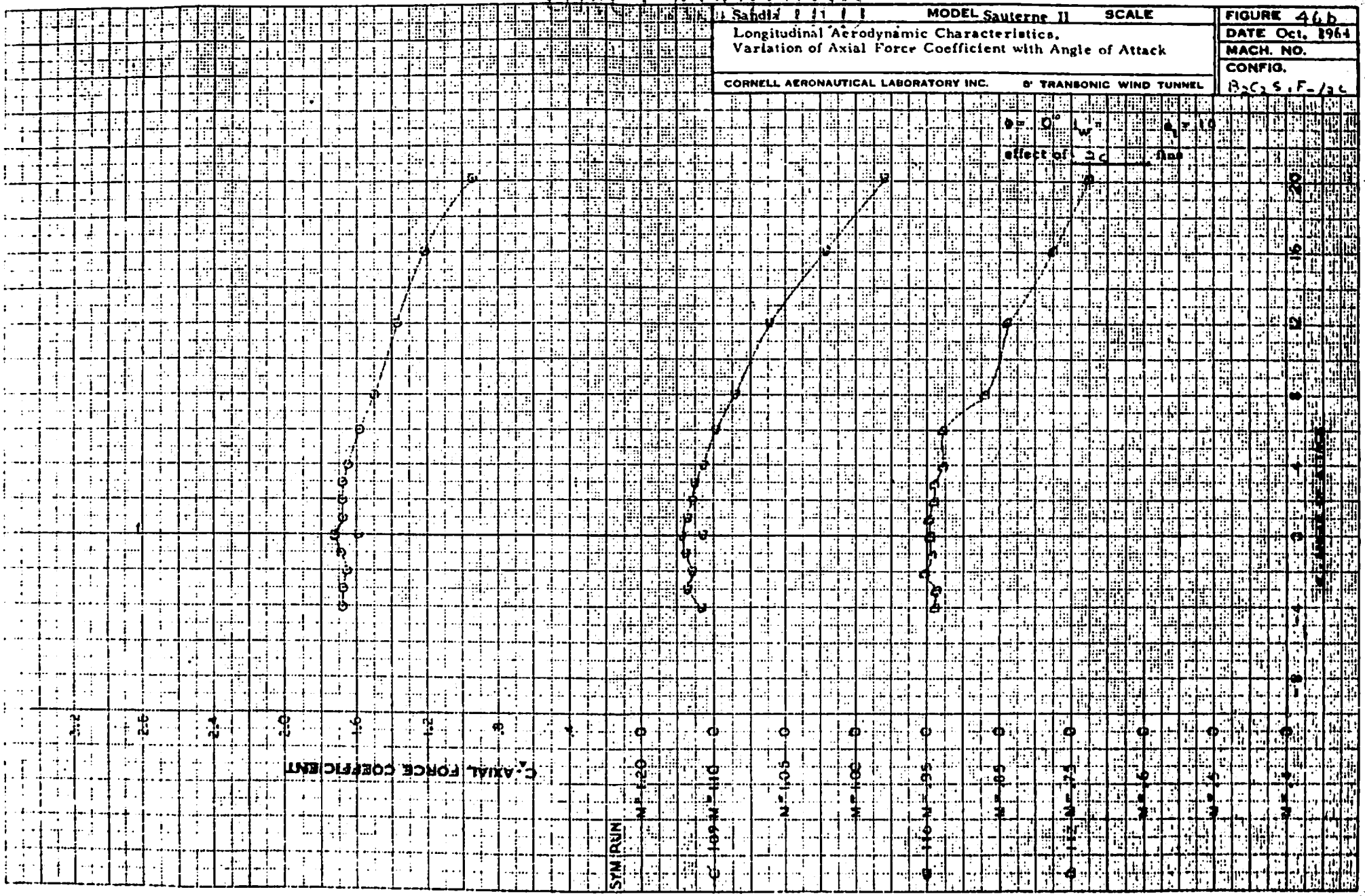
FIGURE 46a
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2C_2S_1F-/2c$

effect of 2c

C_N NORMAL FORCE COEFFICIENT

α ANGLE OF ATTACK

STM
M
RUN


MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 46b
DATE Oct. 1964
MACH. NO.
CONFIG.
B C2 S F-1 a c
δf = 0°
δs = 10
effect of Δc
flaps
C, AXIAL FORCE COEFFICIENT
SYM RUN
M = .20
M = .85
M = .95
M = 1.05
M = 1.10
M = 1.15
M = 1.25
M = 1.35
M = 1.45
M = 1.55
M = 1.65
M = 1.75
M = 1.85
M = 1.95
M = 2.05
M = 2.15
M = 2.25
M = 2.35
M = 2.45
M = 2.55
M = 2.65
M = 2.75
M = 2.85
M = 2.95
M = 3.05
M = 3.15
M = 3.25
M = 3.35
M = 3.45
M = 3.55
M = 3.65
M = 3.75
M = 3.85
M = 3.95
M = 4.05
M = 4.15
M = 4.25
M = 4.35
M = 4.45
M = 4.55
M = 4.65
M = 4.75
M = 4.85
M = 4.95

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 46c
DATE Oct. 1964
MACH. NO.
CONFIG. $B_3C_2S_1F_2A_{12B}$

$\phi = 0°$ i_w = i_t =
effect of ZC fins

$C_{m_{\frac{c}{4}}}$ PITCHING MOMENT COEFFICIENT

.8 .6 .4 .2 0 .2 .4 .6 .8 1.0 1.2

-8 -4 0 4 8 12 16 20

α, ANGLE OF ATTACK

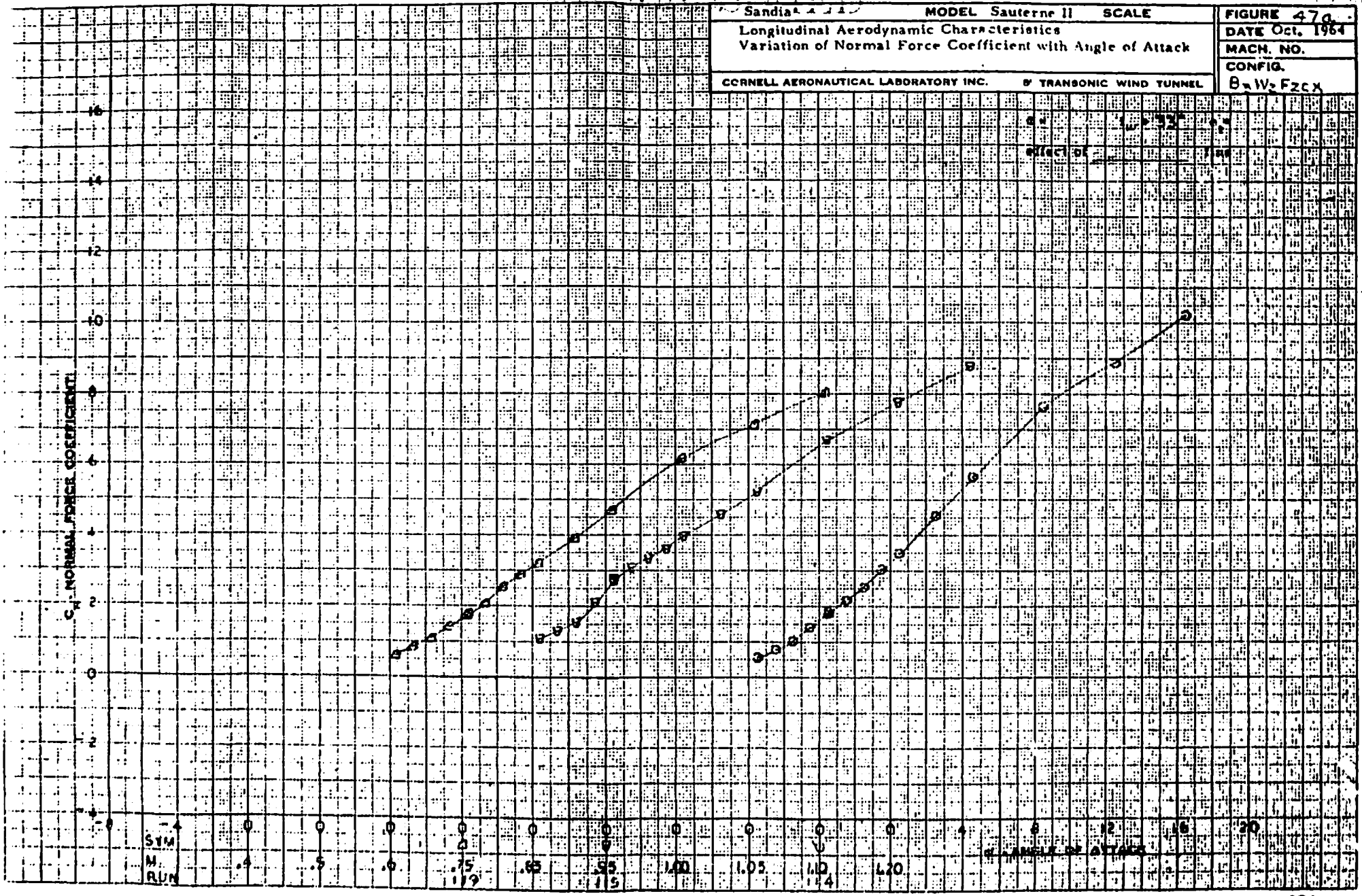
SYM
M
RE/ℓ
.4 .5 .6 .75 .85 .95 1.00 1.05 1.10 1.20
112 110 109

Sandia [redacted] MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 47a
DATE Oct. 1964
MACH. NO.
CONFIG. B+W+Fzcx



Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 17b
DATE Oct. 1964
MACH. NO.
CONFIG. $B_3 W_2 F_{2CX}$

$\phi =$ $\zeta = 35°$ $\delta_f =$
effect of fins

C_A, AXIAL FORCE COEFFICIENT

SYM RUN

UNCLASSIFIED

Sandia MODEL Sauterne II SCALE

FIGURE 47c

Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack

DATE Oct. 1964

MACH. NO.

CONFIG. $B_S W_2 F_{2CX}$

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

● $i_w = 35°$ B_1 effect of ____ fins

C_m, PITCHING MOMENT COEFFICIENT

.8 .6 .4 .2 0 -.2 -.4 -.6 -.8 -1.0 -1.2

SYM | M | RUN

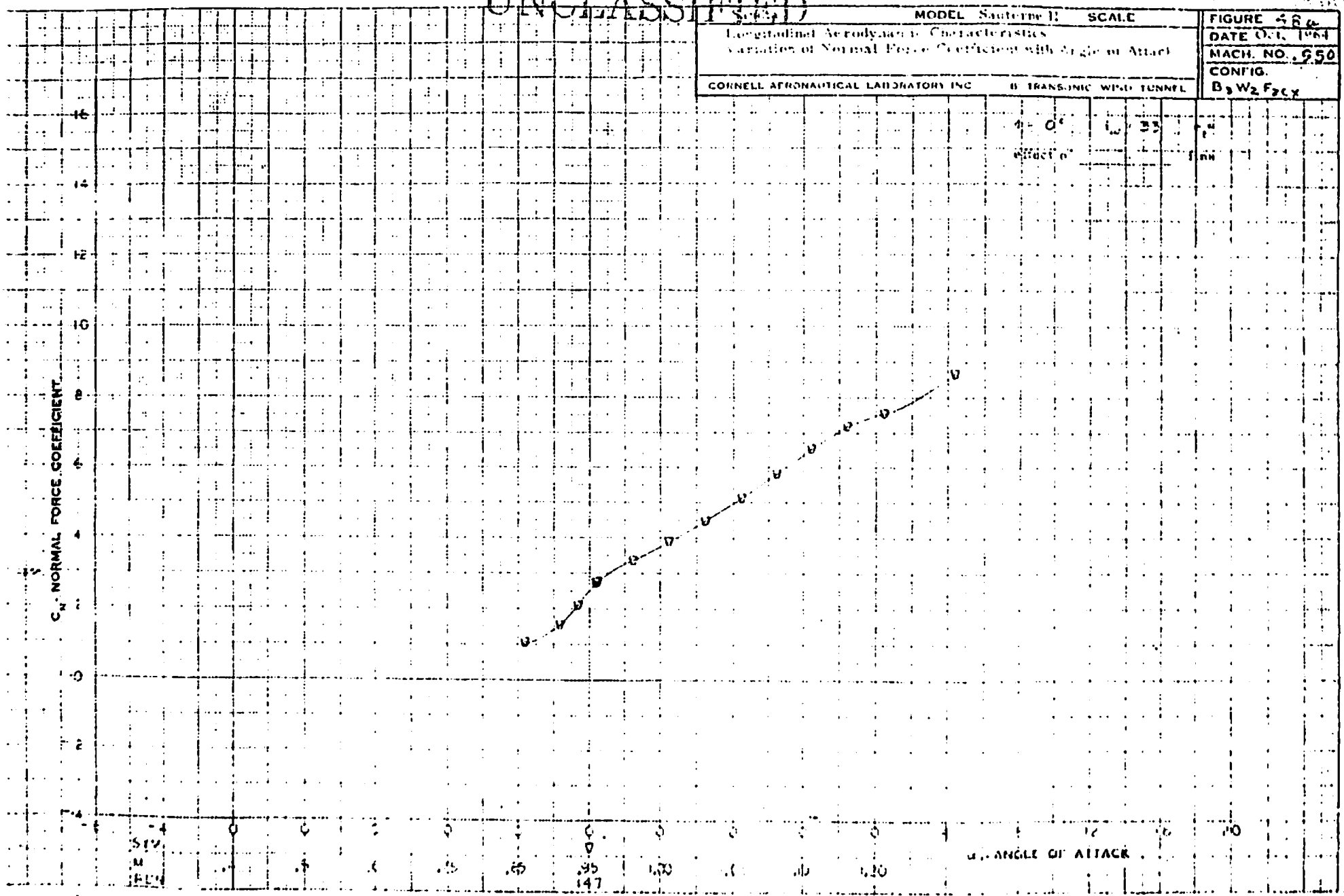
-.4 | 0 | 0 | 0

MODEL Sabrina II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC 8' TRANSONIC WIND TUNNEL

FIGURE 46
DATE Oct. 1964
MACH. NO. .950
CONFIG.
$B_3W_2F_{2C}$



Sandia MODEL Sandia II SCALE

Longitudinal Aerodynamic Characteristics,
Variation of Axial Force Coefficient with Angle of Attack

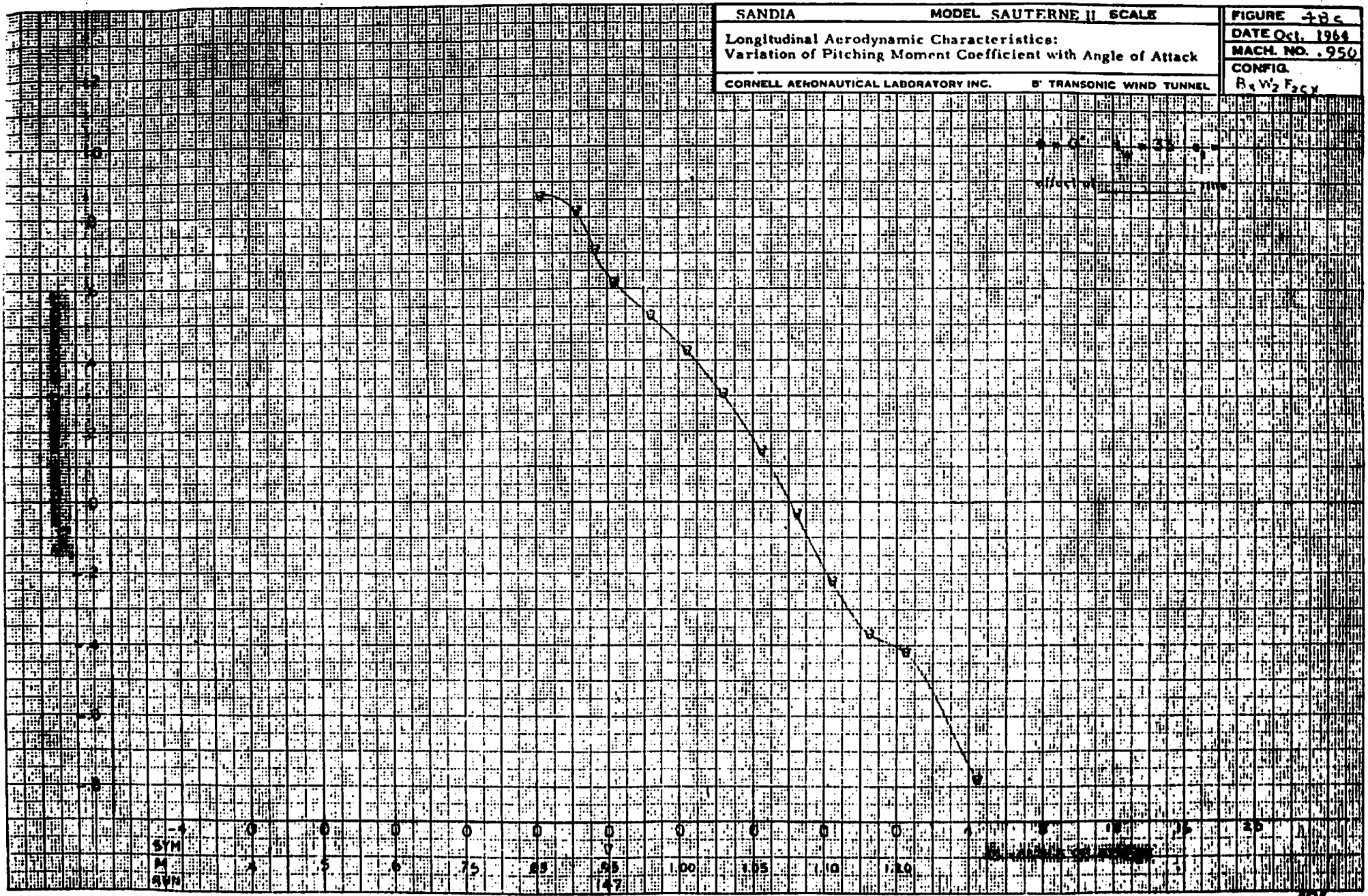
CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 18b
DATE Oct. 1964
MACH. NO. .950
CONFIG.
$F_B W_B F_{2CX}$

α = 0° δ_w = 33 ϵ_t =
effect of fan

C_A AXIAL FORCE COEFFICIENT

α ANGLE OF ATTACK


SANDIA
MODEL SAUTERNE II SCALE
Longitudinal Aerodynamic Characteristics:
Variation of Pitching Moment Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 48c
DATE Oct. 1964
MACH. NO. .950
CONFIG.
B₄ W₂ F₂₅ x
SYM
M
RUN
.75
.85
.95
1.00
1.05
1.10
1.20
147

Sandia | MODEL Sauterne II | SCALE | FIGURE 49a

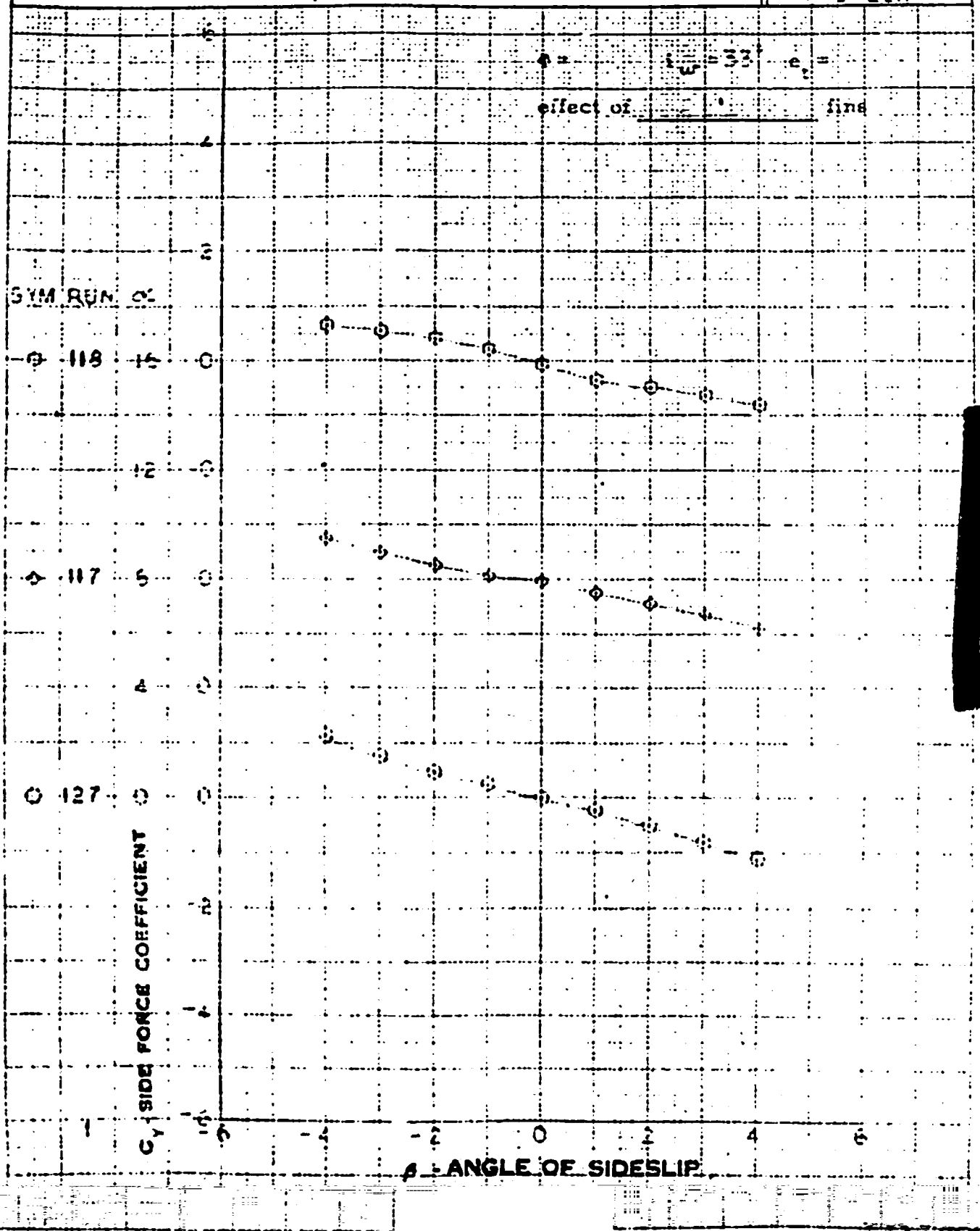
Lateral Aerodynamic Characteristics
Variation of Side Force Coefficient with Angle of Sideslip

DATE Oct. 1964

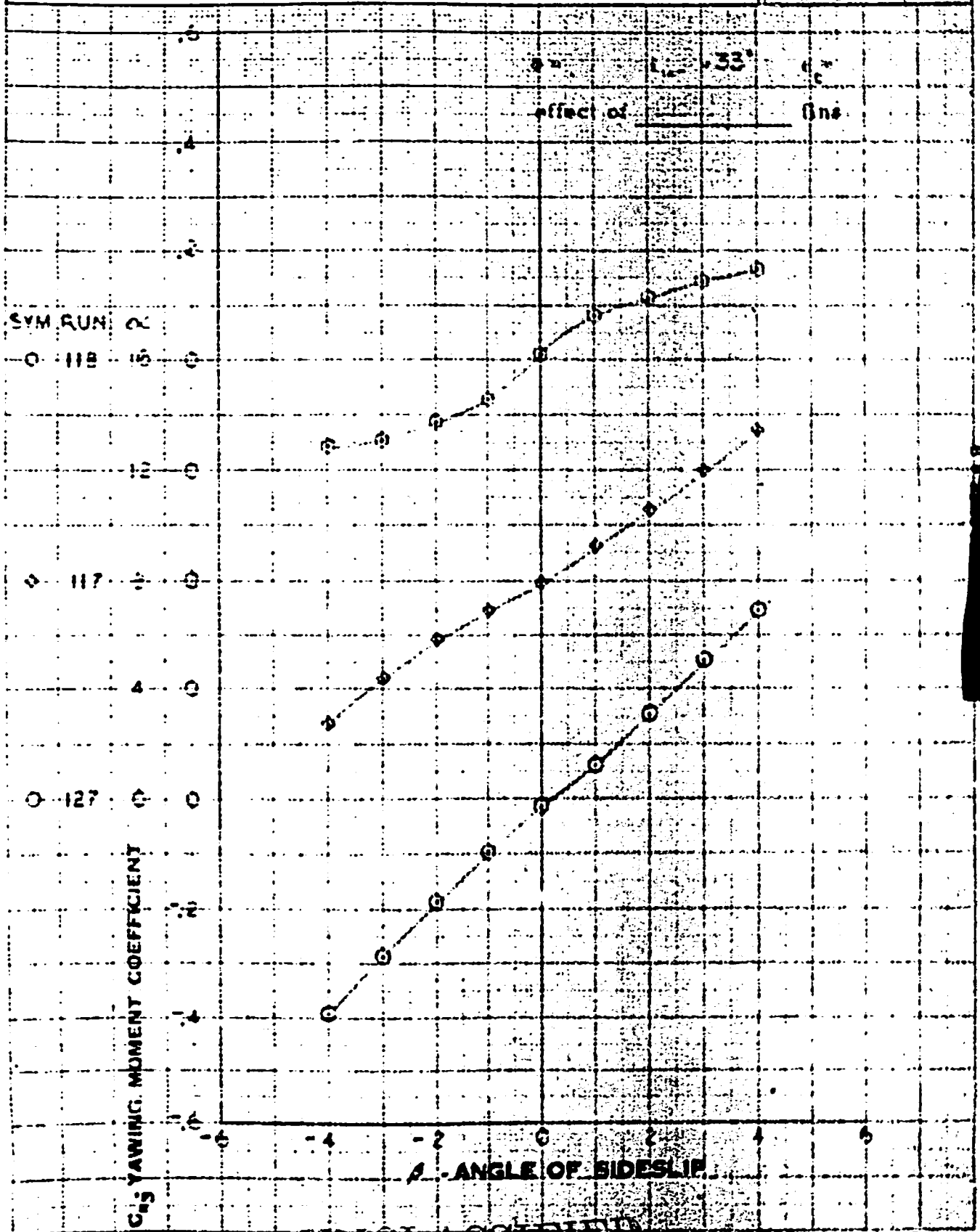
MACH. NO.

CONFIG. $B_3 W_2 F_{2C} X$

CORNELL AERONAUTICAL LABORATORY, INC. 8' TRANSONIC WIND TUNNEL



Sandia	MODEL Sauterne II	SCALE	FIGURE 45 b
Lateral Aerodynamic Characteristics Variation of Yawing Moment Coefficient with Angle of Sideslip			DATE Oct. 1964
			MACH. NO.
			CONFIG. $B_3 W_2 F_2 c_X$
CORNELL AERONAUTICAL LABORATORY, INC.	8' TRANSONIC WIND TUNNEL		

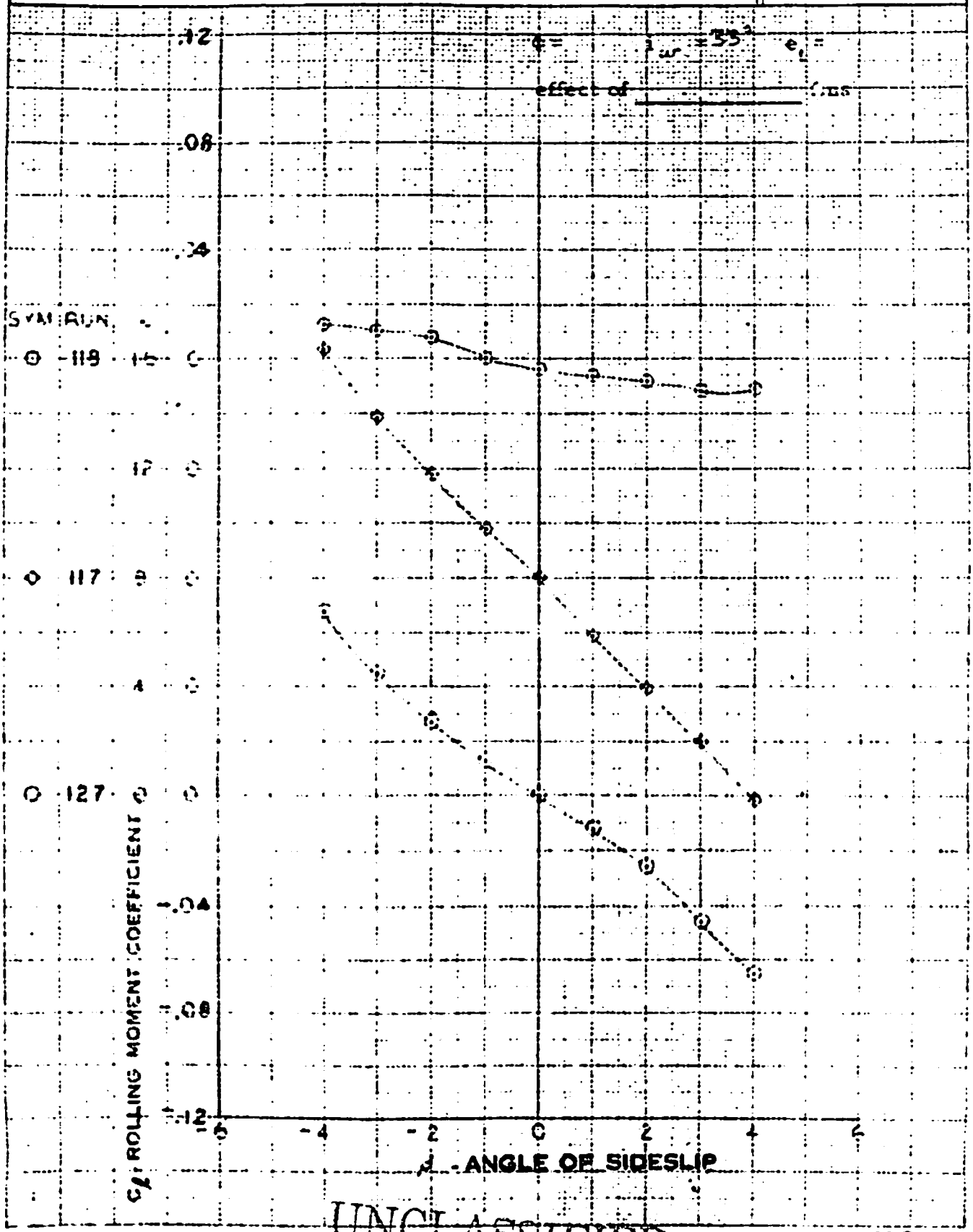


Sandia | MODEL Sauterne II | SCALE | FIGURE 49c

Lateral Aerodynamic Characteristics
Variation of Rolling Moment Coefficient with Angle of Sideslip

DATE Oct. 1964 | MACH. NO. | CONFIG. B₂W₂F₂C₂

CORNELL AERONAUTICAL LABORATORY, INC. 8' TRANSONIC WIND TUNNEL



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Sandia — MODEL SCALE

FIGURE 500
DATE Oct, 1964
MACH. NO. .950
CONFIG. $B_3W_2F_{20}$

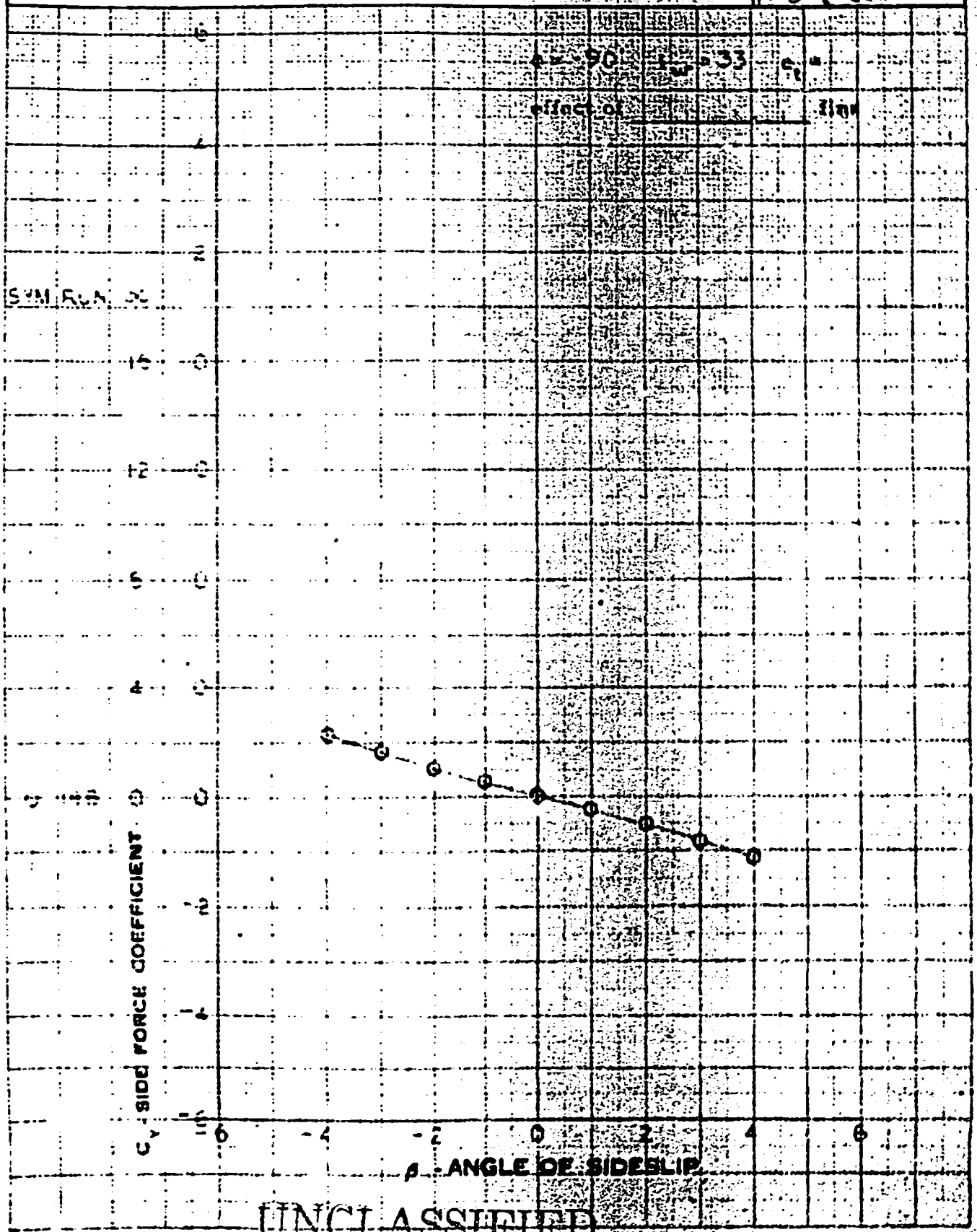
Lateral Aerodynamic Characteristics
Variation of Side Force Coefficient with Angle of Sideslip

CORNELL AERONAUTICAL LABORATORY, INC. — 8' TRANSONIC WIND TUNNEL

$\alpha = .90$ $i_w = .33$ $\epsilon_t =$

effect of

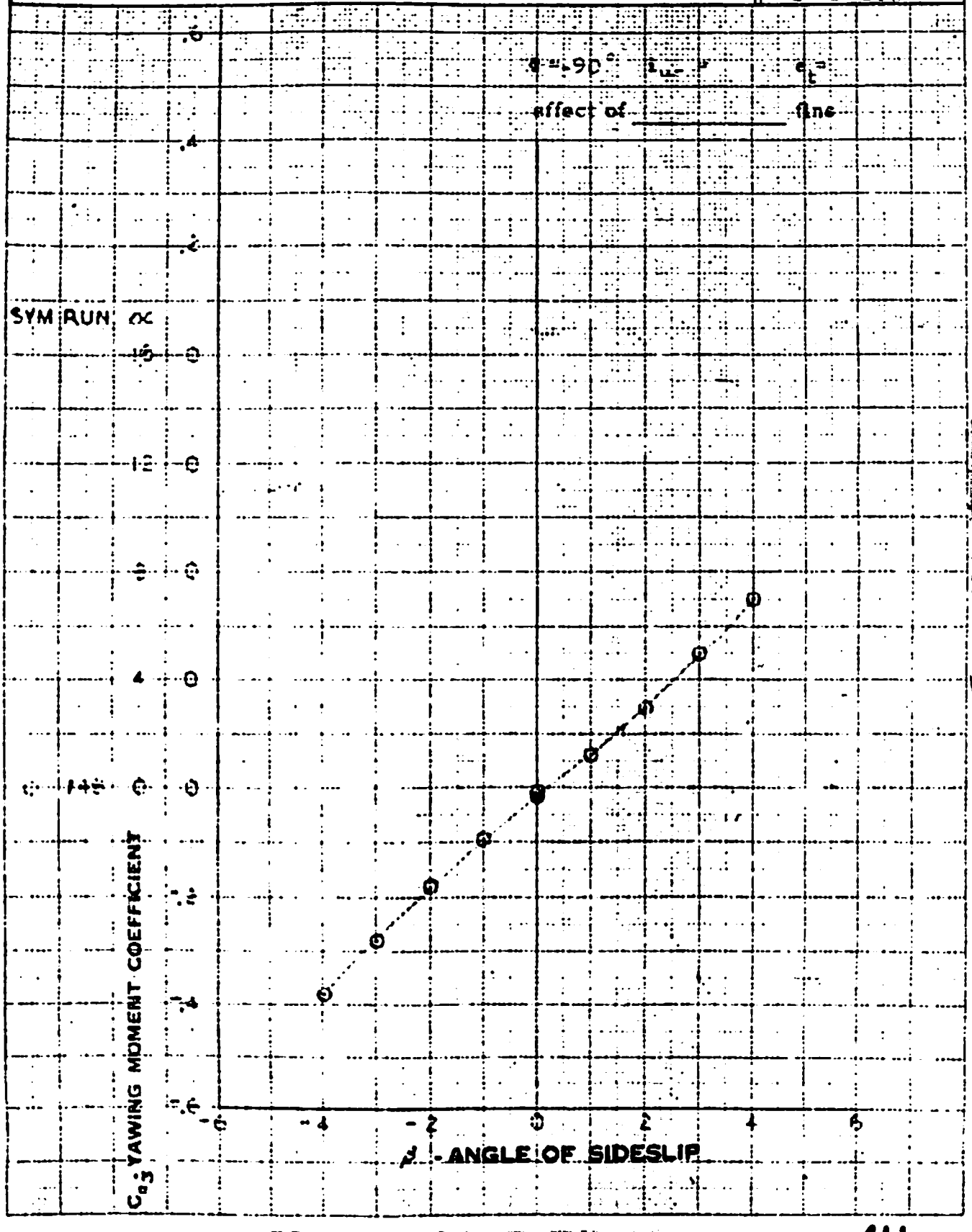
SYM RUN



UNCLASSIFIED

147

Sandia	MODEL Sauterne II	SCALE	FIGURE 50b
Lateral Aerodynamic Characteristics Variation of Yawing Moment Coefficient with Angle of Sideslip			DATE Oct. 1964
			MACH. NO. .950
			CONFIG. $B_3 W_2 F_{20x}$
CORNELL AERONAUTICAL LABORATORY, INC.	8' TRANSONIC WIND TUNNEL		



Sandia • MODEL Sauterne II - SCALE

FIGURE 50c

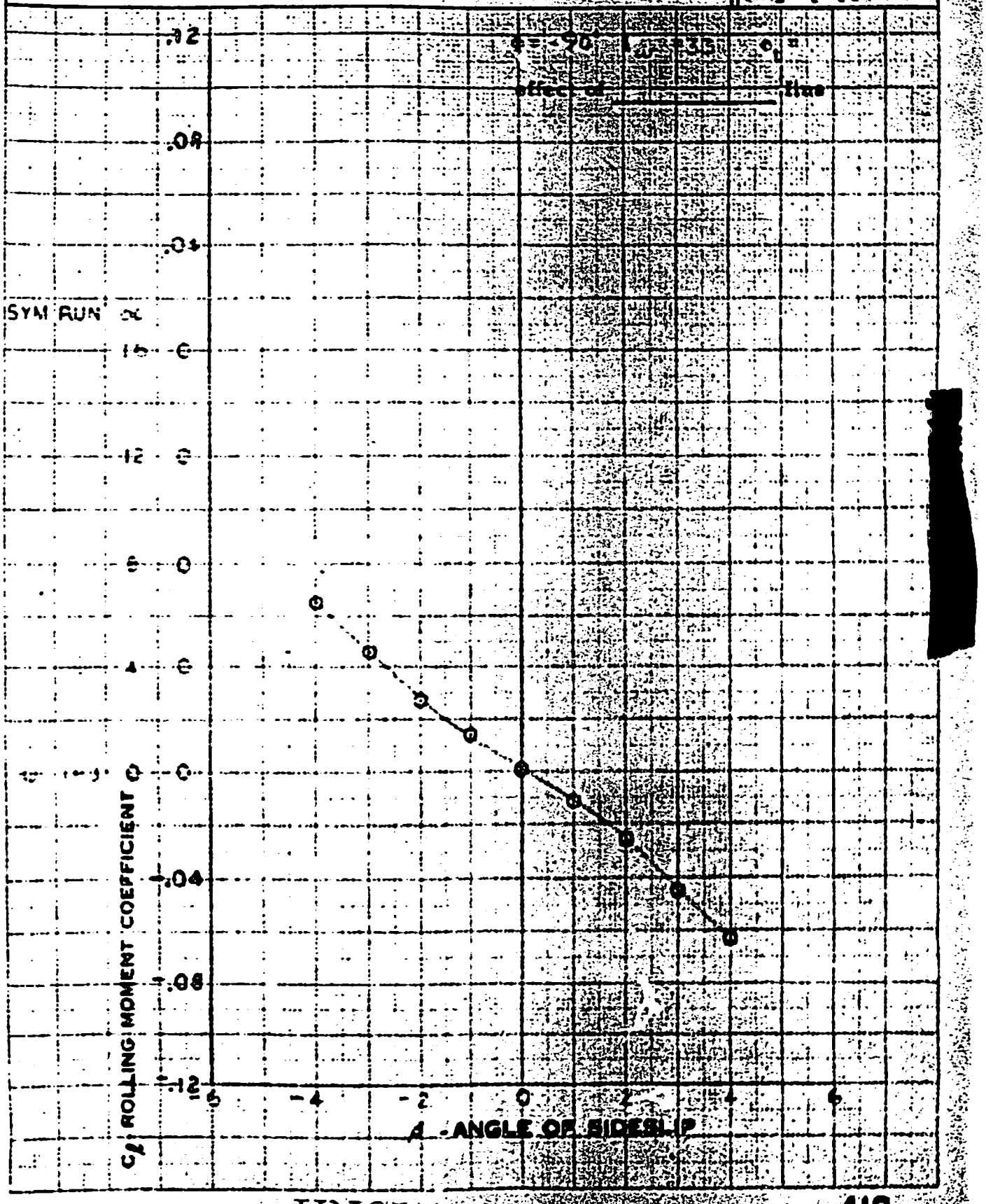
DATE Oct. 1961

MACH. NO. .950

CONFIG. B3 W2 F2Y

Lateral Aerodynamic Characteristics
Variation of Rolling Moment Coefficient with Angle of Sideslip

CORNELL AERONAUTICAL LABORATORY, INC. 8' TRANSONIC WIND TUNNEL



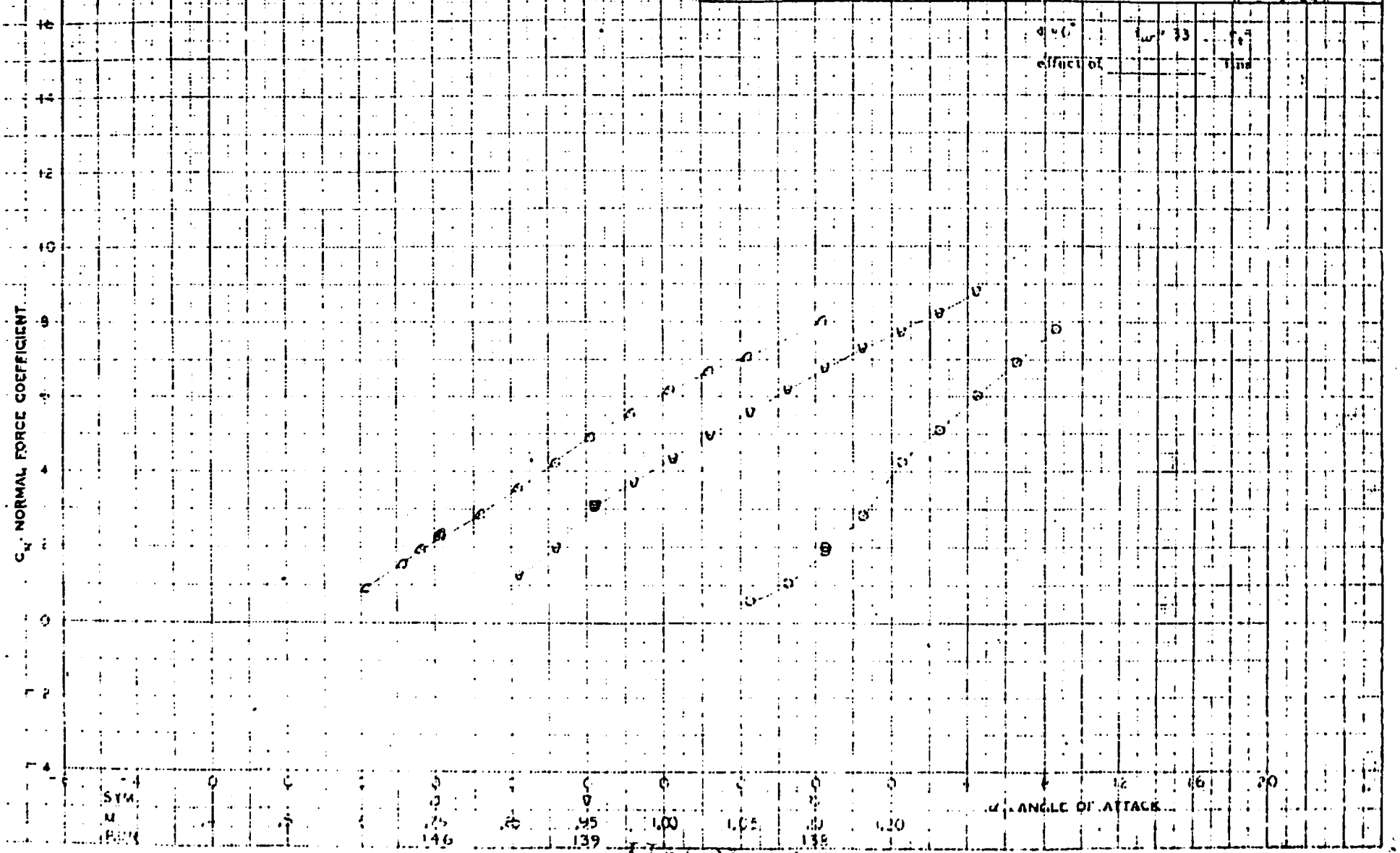
Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC 8' TRANSONIC WIND TUNNEL

FIGURE 51a
DATE Oct. 1964
MACH. NO.
CONFIG. B₁W₃F₂C₁X

$\alpha = 0°$ $i_w = 3.3$ $i_t =$
effect of Tail

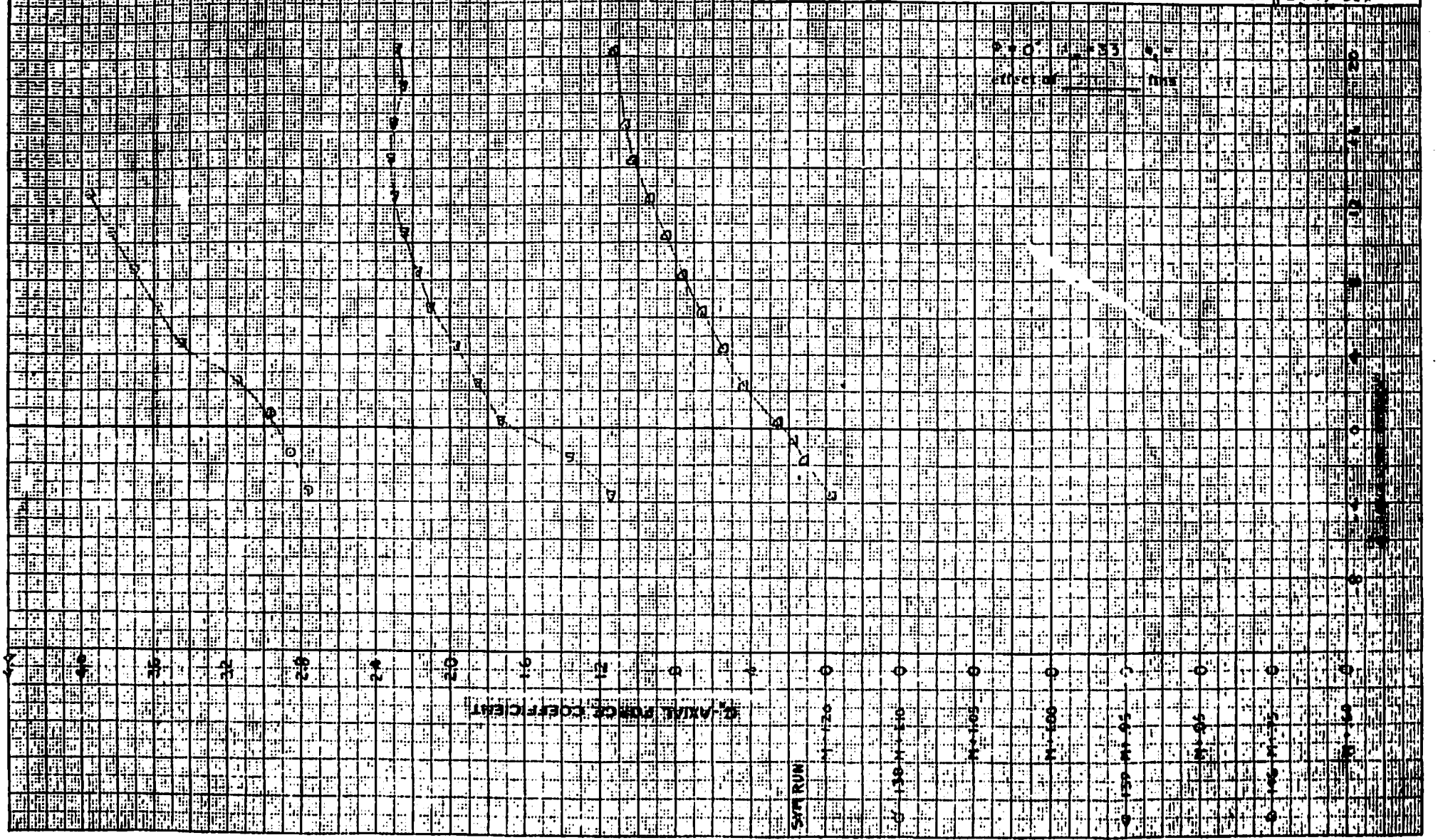


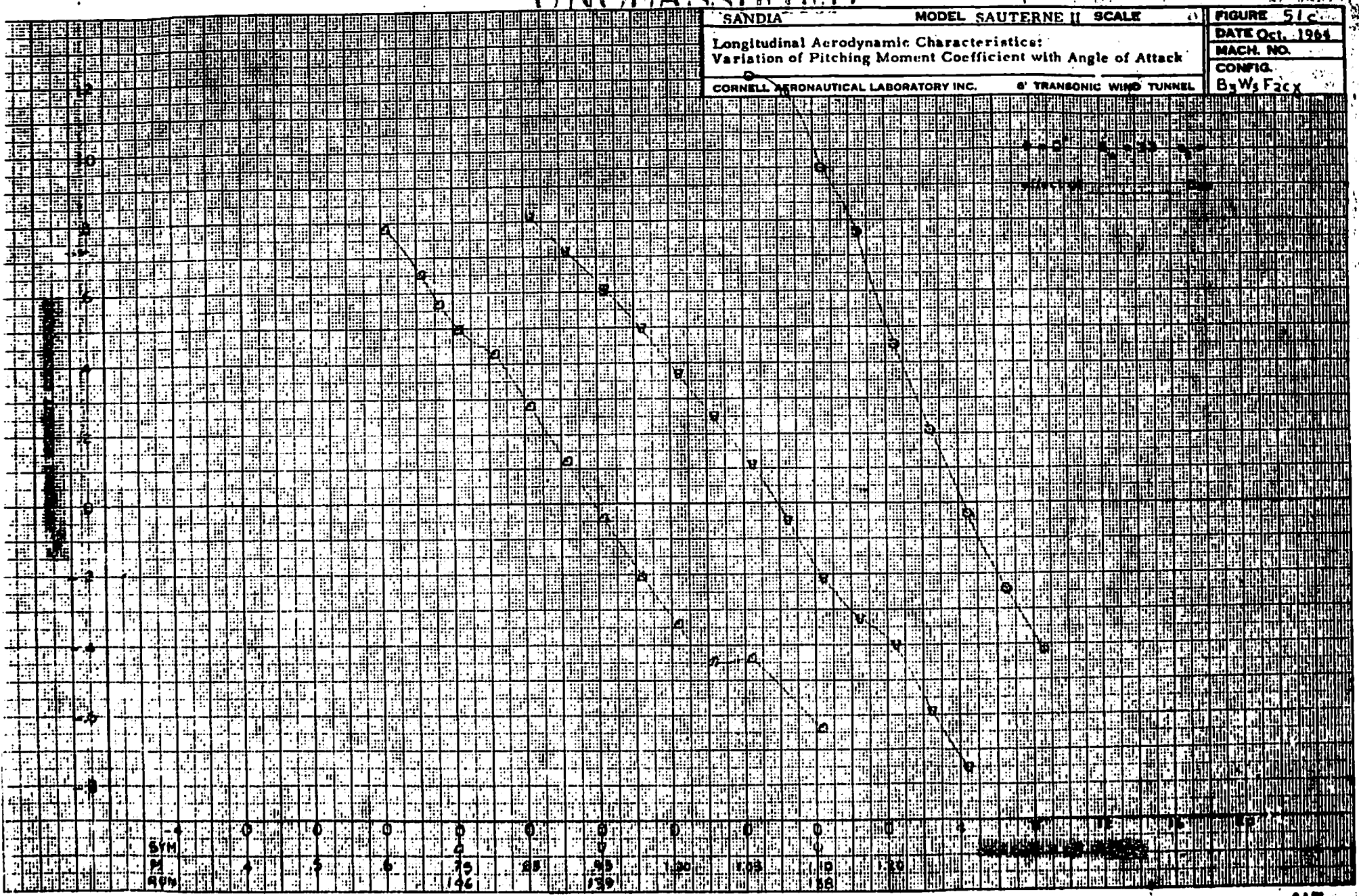
SANDIA MODEL SAUTERNE II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 51b
DATE Oct. 1964
MACH. NO.
CONFIG. B, W, F, ∝, x




SANDIA
MODEL SAUTERNE II SCALE
Longitudinal Aerodynamic Characteristics:
Variation of Pitching Moment Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL
FIGURE 51c
DATE Oct. 1964
MACH. NO.
CONFIG.
B3W3F2cX
12
10
8
6
4
2
0
-2
-4
-6
-8
SYM
M
ALPHA
4
5
6
.75
146
.85
.95
139
1.20
1.05
1.10
1.20

Sandia — MODEL Sanger II — SCALE

Longitudinal Aerodynamic Characteristics

Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC — 8' TRANSONIC WIND TUNNEL

FIGURE 52 a
DATE Oct. 1964
MACH NO. .950
CONFIG. $B_3W_3F_{2C}Y$

$\alpha = 10°$ $L = 33$ in

effect of

C_N, NORMAL FORCE COEFFICIENT

α, ANGLE OF ATTACK

SYM	RUN
	140

Sandia MODEL Sanger II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 52b
DATE Oct. 1964
MACH. NO. .950
CONFIG. Body Face

$\phi = 10°$ l_w 33 e_t F
effect of fins

C_A, AXIAL FORCE COEFFICIENT

α, ANGLE OF ATTACK, DEG

SYM RUN

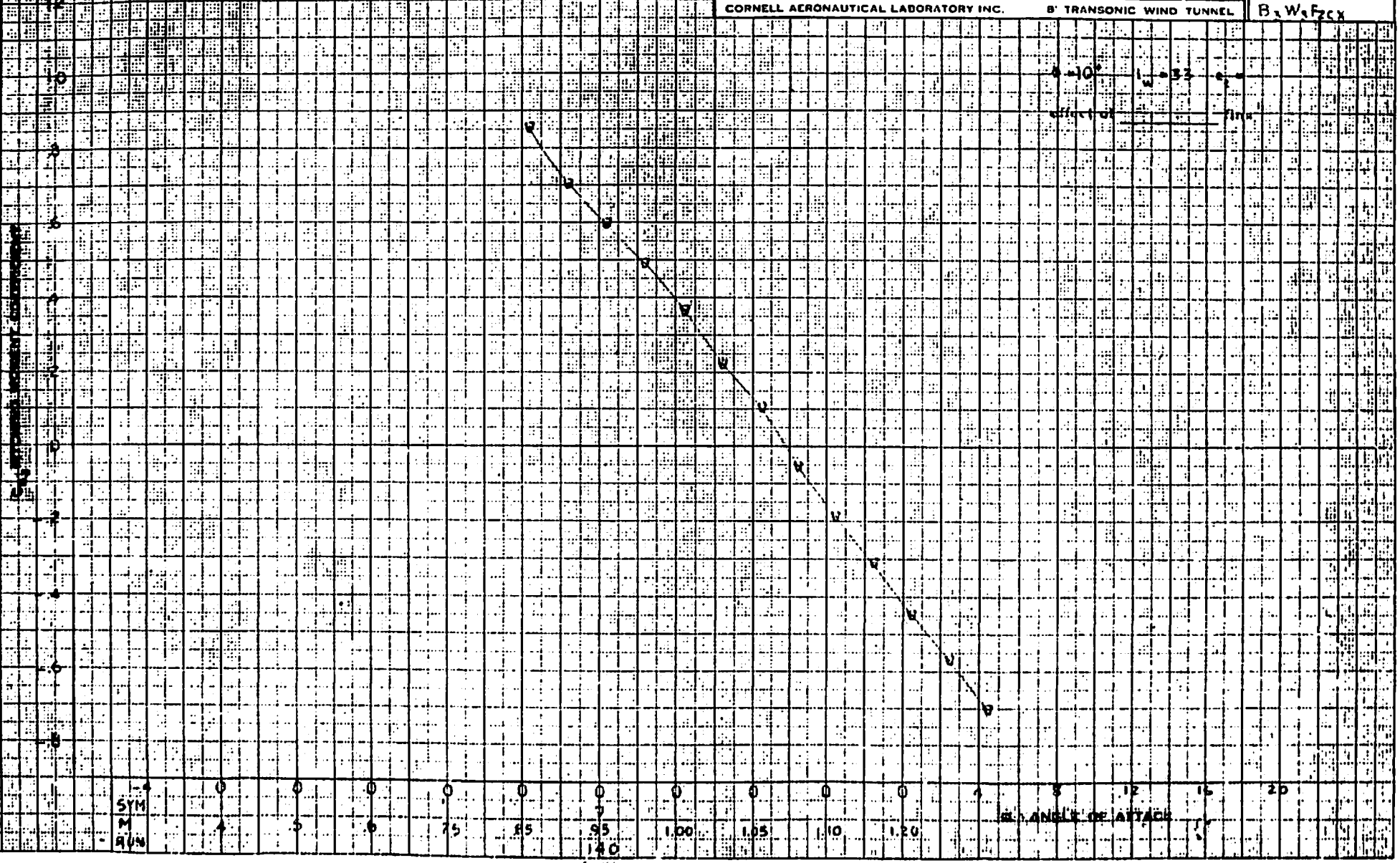
SANDIA MODEL SAUTERNE II SCALE

Longitudinal Aerodynamic Characteristics:
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 52c
DATE Oct. 1964
MACH. NO. .950
CONFIG.
B x W x F2cx

$\delta = 10°$ $i_w = 3.3$ $c_{l_{max}}$ =
effect of Flaps



Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics

Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC 8 TRANSONIC WIND TUNNEL

FIGURE 53a

DATE Oct. 1964

MACH. NO. .950

CONFIG $B_5W_5F_2C_X$

$\alpha = 2.0°$ $L = 33$ in

effect of Tail

C_N, NORMAL FORCE COEFFICIENT

16
14
12
10
8
6
4
2
0
-2
-4

SYM M

.95

-4 0 4 8 12 16 20

α, ANGLE OF ATTACK

Sandia MODEL Saturn II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC 8 TRANSONIC WIND TUNNEL

FIGURE 53b
DATE Oct. 1964
MACH. NO. .950
CONFIG.
$B_1W_3F_{2CY}$

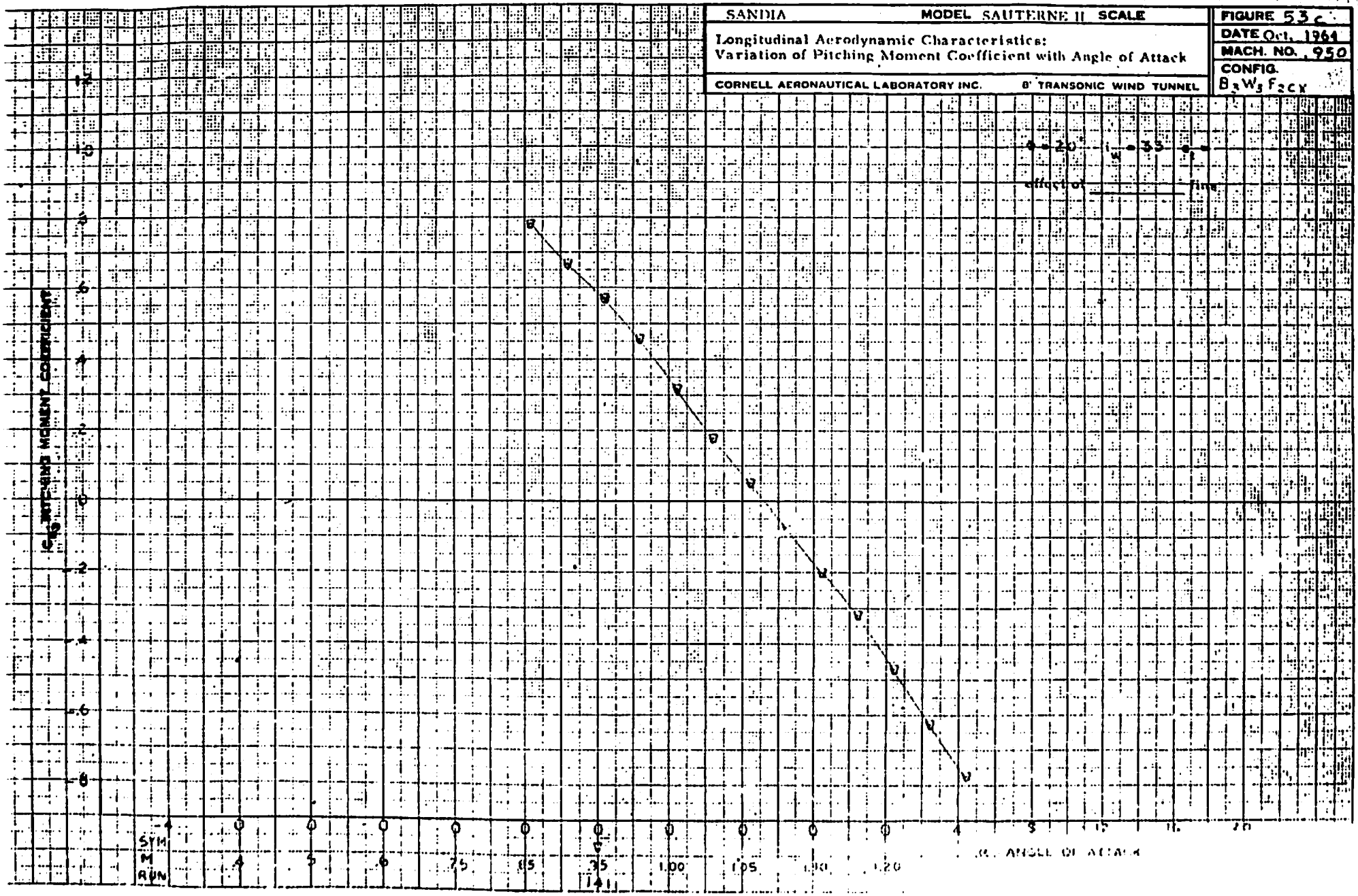
ϕ = 20° i_w = 33 e_1 =
effect of (in)

C_A, AXIAL FORCE COEFFICIENT

α, ANGLE OF ATTACK

STN RUN

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Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC 8' TRANSONIC WIND TUNNEL

FIGURE 54a
DATE Oct. 1964
MACH. NO. .950
CONFIG. $B_2W_3F_{2CX}$

ϕ = 30° L_T = 33 r_T

effect of Tail

C_N NORMAL FORCE COEFFICIENT

16
14
12
10
8
6
4
2
0
-2
-4

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8 TRANSONIC WIND TUNNEL

FIGURE 54b
DATE Oct. 1961
MACH. NO. .950
CONFIG. $B_3W_3F_{20X}$

ϕ = 30° l_w 33 le_1 =
effect of fins

C_A AXIAL FORCE COEFFICIENT

α ANGLE OF ATTACK

STN RUN

SANDIA — MODEL SAUTERNE II · SCALE

Longitudinal Aerodynamic Characteristics:
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. — 8' TRANSONIC WIND TUNNEL

FIGURE 54c
DATE Oct. 1964
MACH. NO. .950
CONFIG. $B_2 W_3 \Gamma_{25} X$

$\delta = 30°$ $i_w = 33$ $\delta_f =$

effect of Flap

C_M PITCHING MOMENT COEFFICIENT

12 10 8 6 4 2 0 −2 −4 −6 −8

−4 0 4 8 12 16 20 α ANGLE OF ATTACK

SYM	M	RUN
○	.75	85
○	.85	95
○	.95	142
○	1.00	
○	1.05	
○	1.10	
○	1.20	

Sandia | MODEL Sauterne II | SCALE

Lateral Aerodynamic Characteristics
Variation of Side Force Coefficient with Angle of Sideslip

CORNELL AERONAUTICAL LABORATORY, INC. 8' TRANSONIC WIND TUNNEL

FIGURE 55a.
DATE Oct. 1964
MACH. NO. .950
CONFIG. $B_2 W_3 F_{20x}$

ϕ = i_w = 33 e_t =

effect of _____ fins

SYM RUN α

◇ 145 16

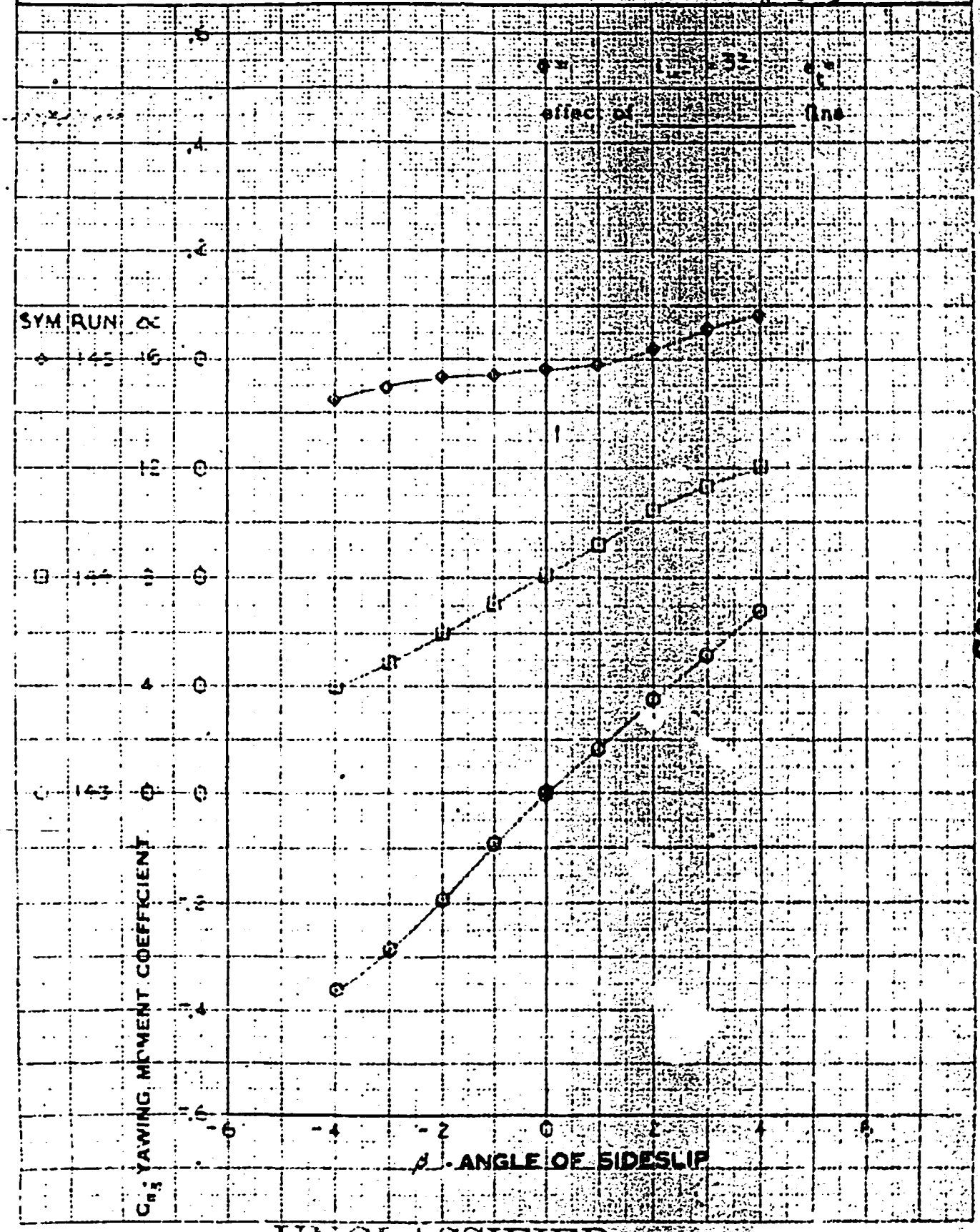
□ 144 5

○ 143 0

C_Y SIDE FORCE COEFFICIENT

β ANGLE OF SIDESLIP

Sandia	MODEL Sauterne II SCALE	FIGURE 55 b
Lateral Aerodynamic Characteristics Variation of Yawing Moment Coefficient with Angle of Sideslip		DATE Oct. 1964
		MACH. NO. .950
		CONFIG. $B_3 W_3 F_{2c} Y$
CORNELL AERONAUTICAL LABORATORY, INC.	8' TRANSONIC WIND TUNNEL	

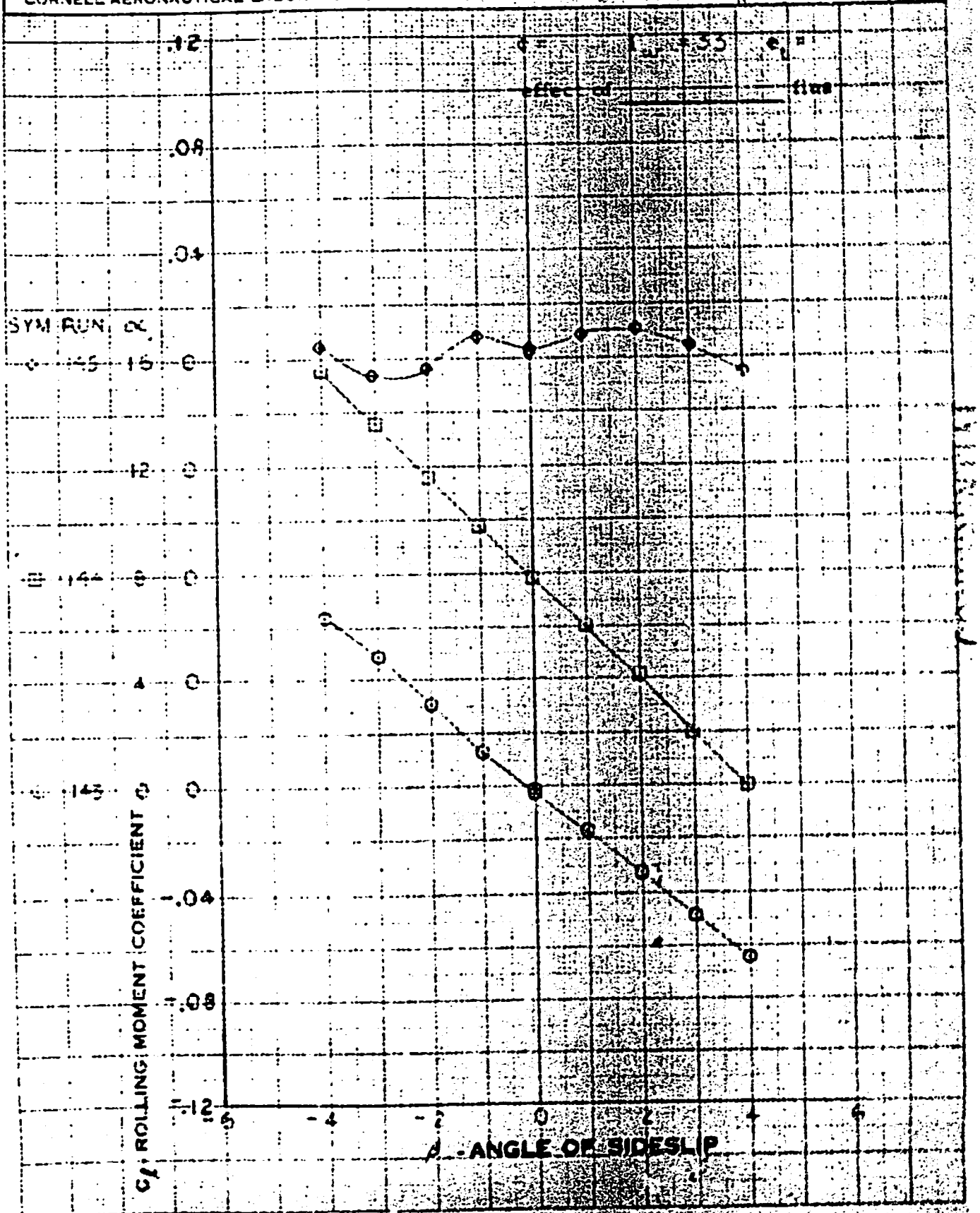


Sandia — MODEL Sauterne II — SCALE

FIGURE 55c
DATE Oct. 1954
MACH. NO. .950
CONFIG. B₂ W₂ F₂₁ ₁

Lateral Aerodynamic Characteristics
Variation of Rolling Moment Coefficient with Angle of Sideslip

CORNELL AERONAUTICAL LABORATORY, INC. — 8' TRANSONIC WIND TUNNEL



Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 568
DATE Oct. 1964
MACH. NO.
CONFIG. $B_2W_2F_{2CX}$

α_M = 1.26° δ_E = 0°
effect of Tare

C_N NORMAL FORCE COEFFICIENT

16
14
12
10
8
6
4
2
0
-2
-4

-8 -4 0 4 8 12 16 20

α - ANGLE OF ATTACK

SYM	M	RUN
○	.4	
□	.6	
◇	.6	
△	.75	126
▽	.85	
◇	.95	122
○	1.00	
□	1.05	
◇	1.10	121
△	1.20	

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

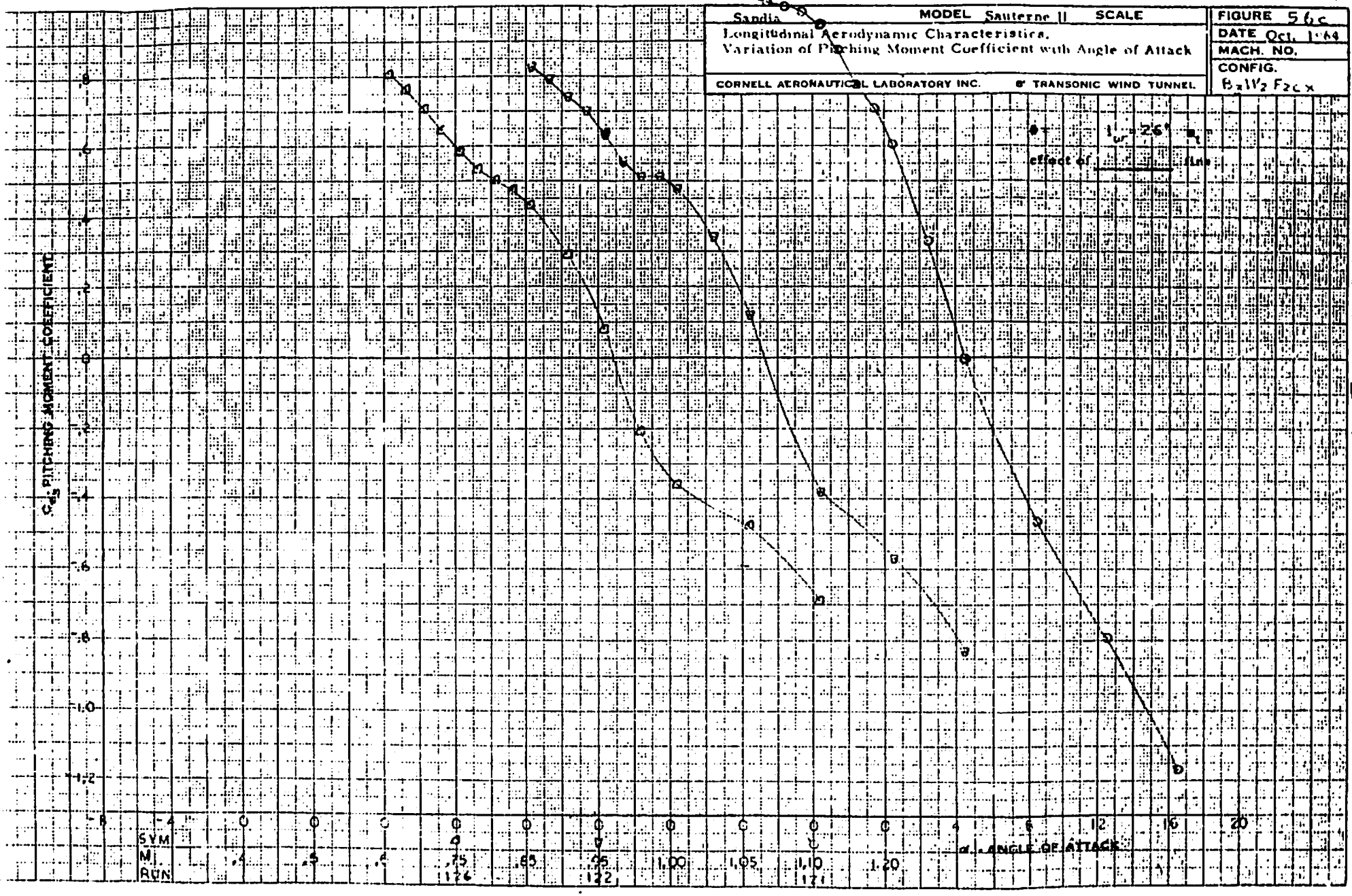
FIGURE 6b
DATE [illegible] 1964
MACH. NO
CONFIG.
B, W, F,

ϕ = effect of δ_w = 26° δ_f = [illegible] Ans

C_A AXIAL FORCE COEFFICIENT

-3.2 -2.8 -2.4 -2.0 -1.6 -1.2 -.8 -.4 0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2

SYM RUN


Sandia
MODEL Sauterne II SCALE
Longitudinal Aerodynamic Characteristics.
Variation of Pitching Moment Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL
FIGURE 56c
DATE Oct. 1964
MACH. NO.
CONFIG.
B₂W₂F₂C₂X
effect of
$C_{m_{cg}}$ PITCHING MOMENT COEFFICIENT
α, ANGLE OF ATTACK
SYM
M
RUN
.75
126
.85
.95
122
1.00
1.05
1.10
171
1.20

Sandia | MODEL Sauterne II | SCALE | FIGURE 57a

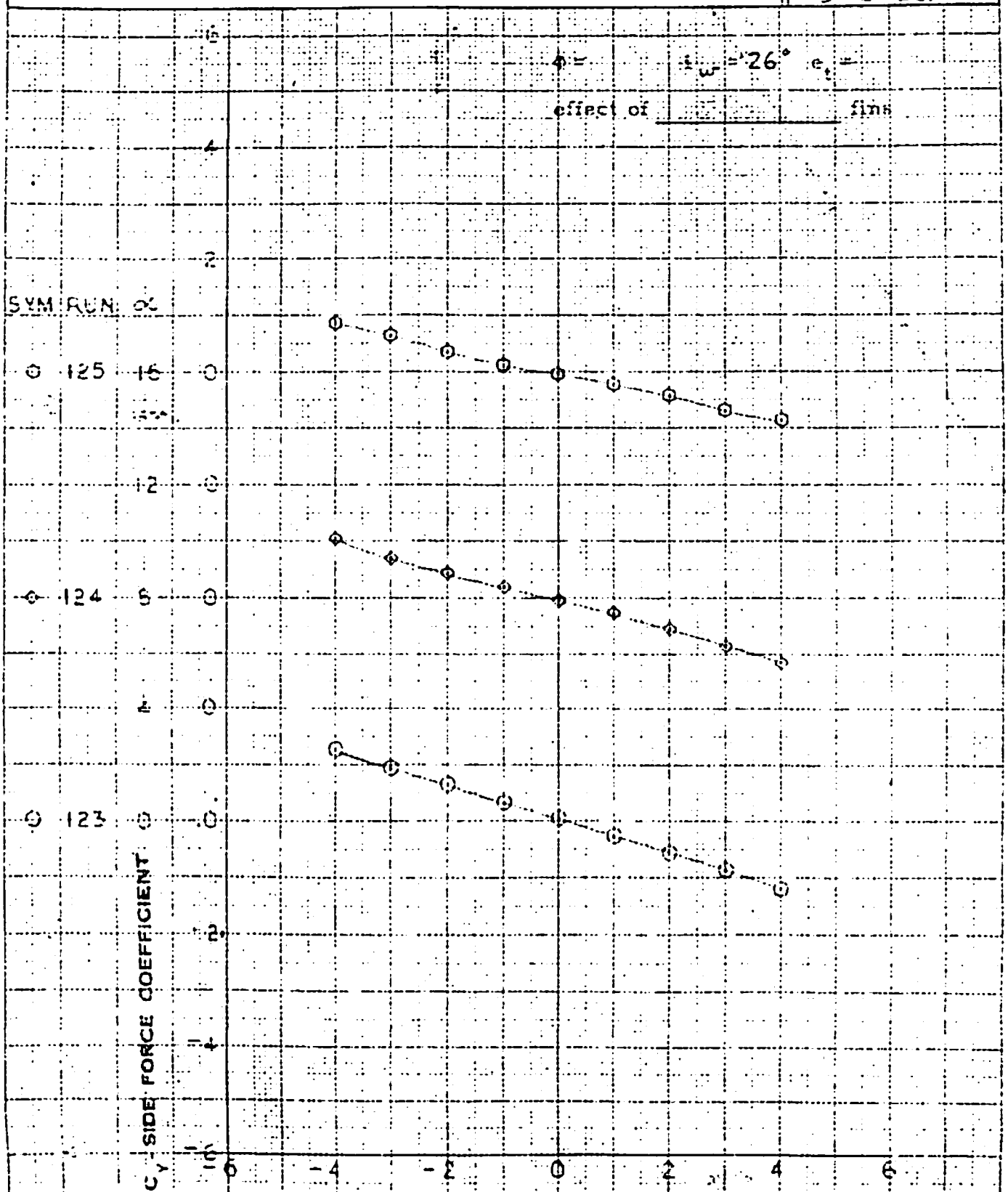
Lateral Aerodynamic Characteristics
Variation of Side Force Coefficient with Angle of Sideslip

DATE Oct. 1964
MACH. NO.
CONFIG. $B_3 W_2 F_{20x}$

CORNELL AERONAUTICAL LABORATORY, INC. 8' TRANSONIC WIND TUNNEL

$\phi =$ $i_w = 26°$ $e_t =$

effect of _____ fins



Sandia | MODEL Sauterne II | SCALE | FIGURE 57b

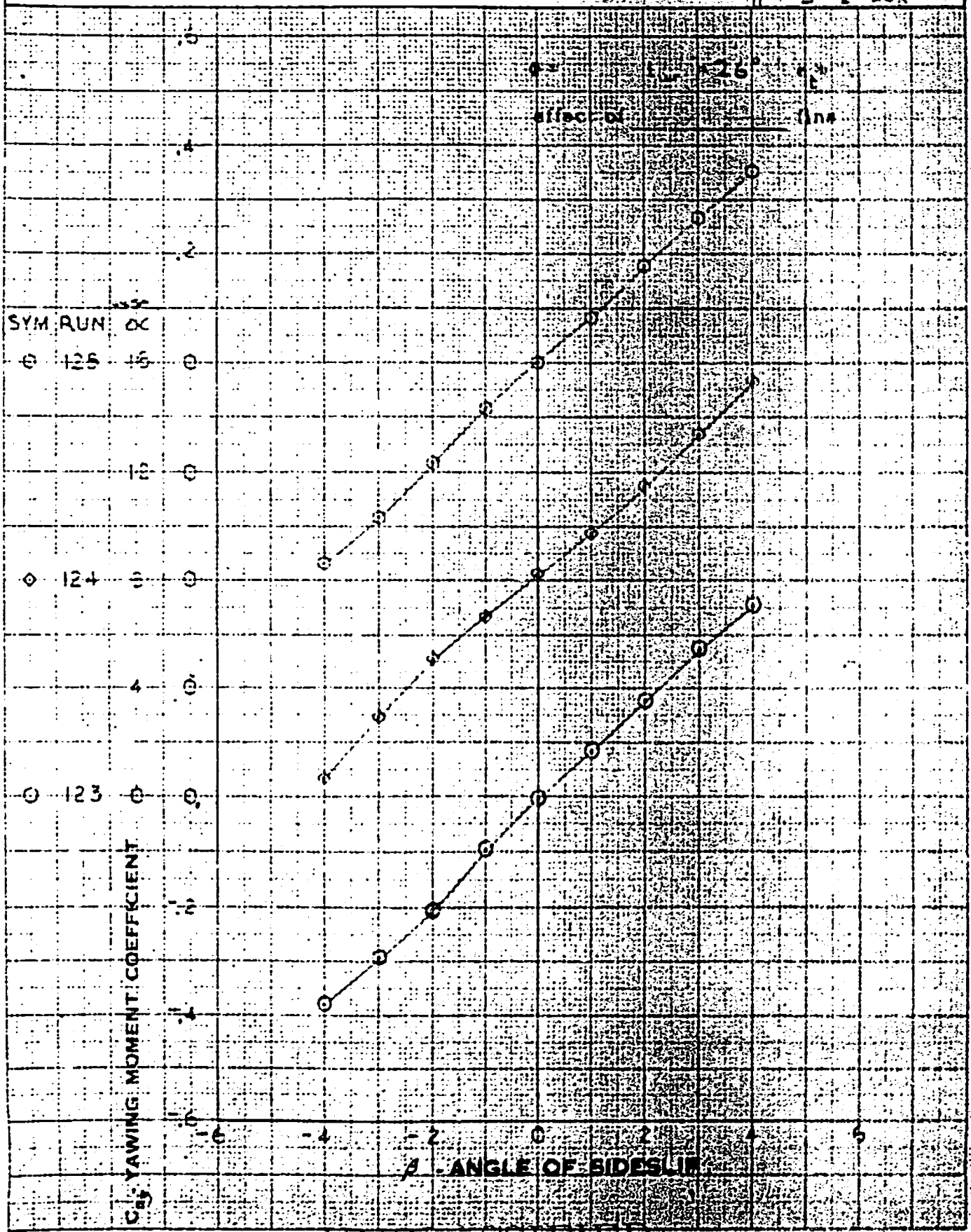
Lateral Aerodynamic Characteristics
Variation of Yawing Moment Coefficient with Angle of Sideslip

DATE Oct. 1964

MACH. NO.

CONFIG. $B_3W_2F_{20X}$

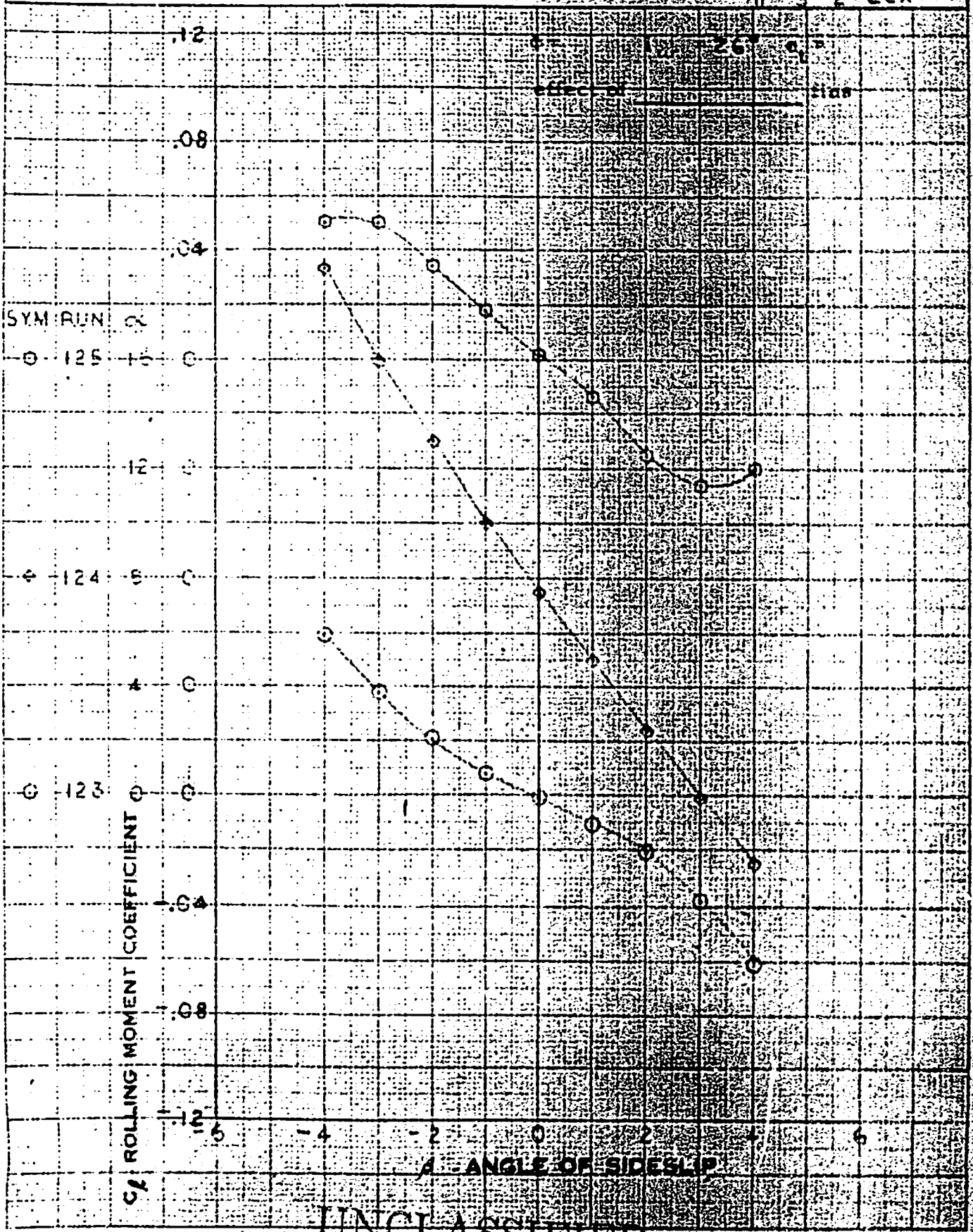
CORNELL AERONAUTICAL LABORATORY, INC. 8' TRANSONIC WIND TUNNEL



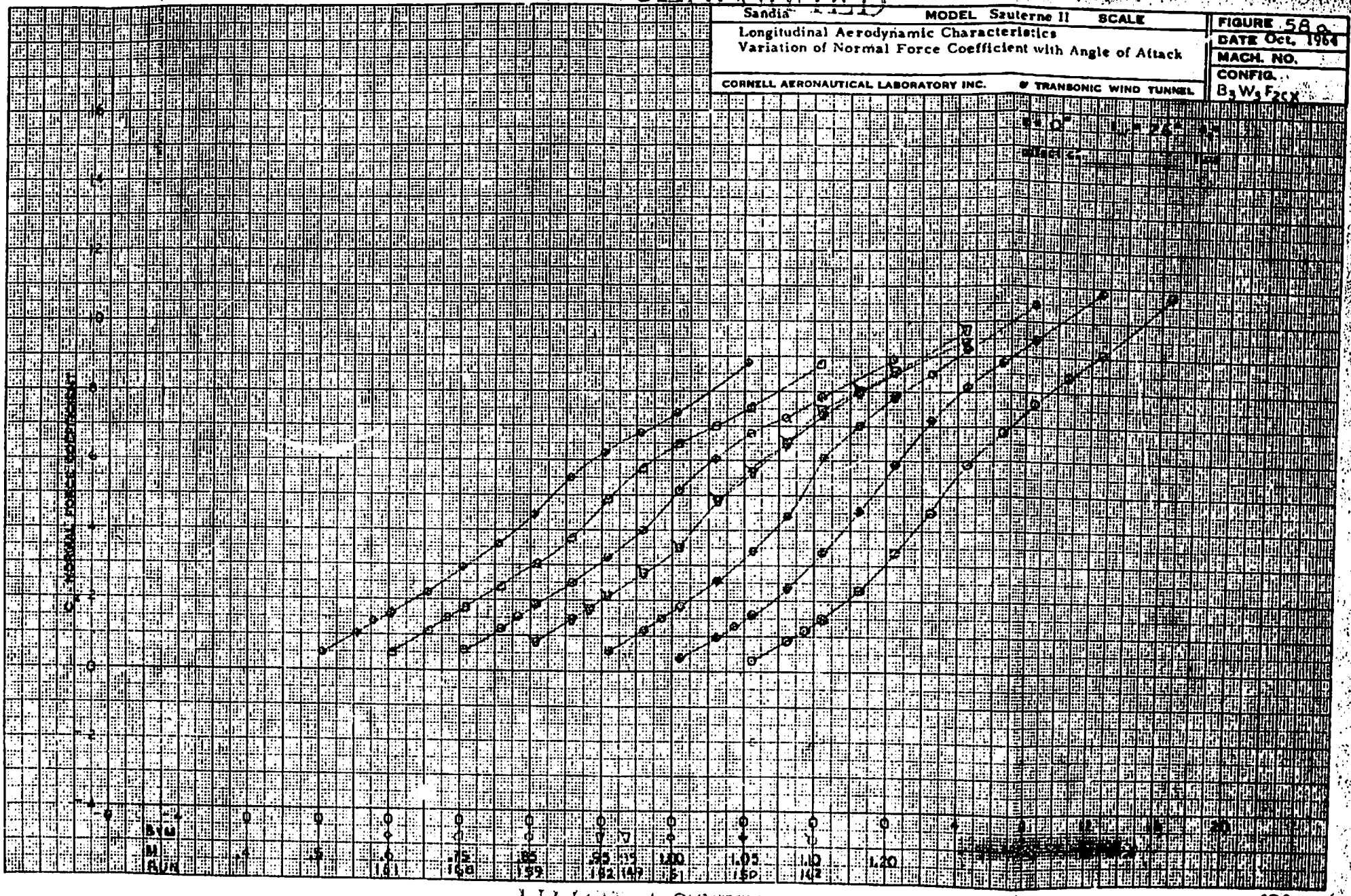
CONFIDENTIAL

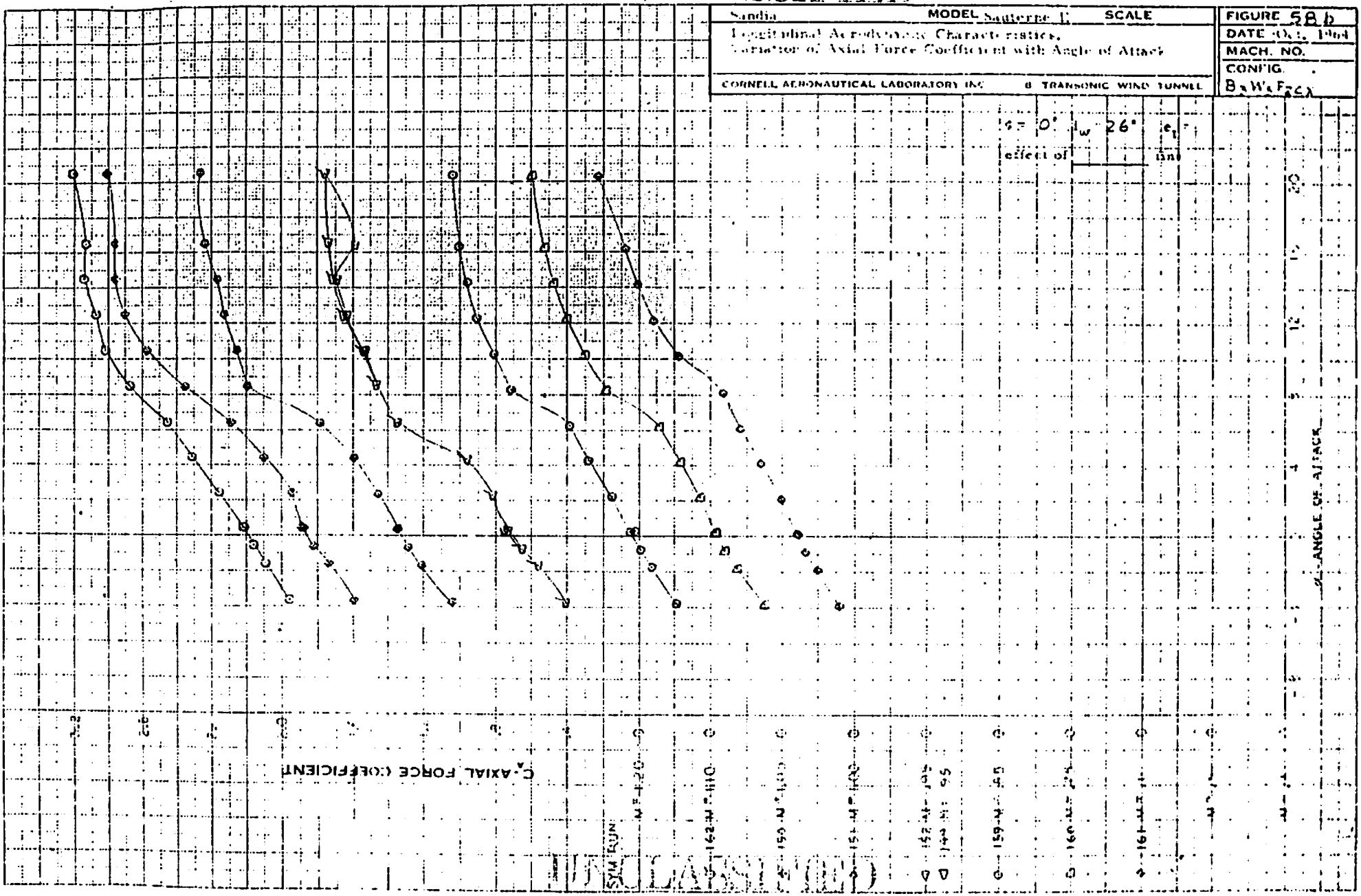
UNCLASSIFIED

Sandia	MODEL Sauterne II	SCALE	FIGURE 57c
Lateral Aerodynamic Characteristics Variation of Rolling Moment Coefficient with Angle of Sideslip			DATE Oct. 1964
			MACH. NO.
CORNELL AERONAUTICAL LABORATORY, INC.	8' TRANSONIC WIND TUNNEL		CONFIG. B_3W_2 Fcex



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Sandia
MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 58 a
DATE Oct. 1964
MACH. NO.
CONFIG.
B3W9F2CX
α = 0°
δ = 22½°
C_N NORMAL FORCE COEFFICIENT
RUN
.75
.85
.95
1.00
1.05
1.10
1.20
161
160
159
162
163
161
158
162

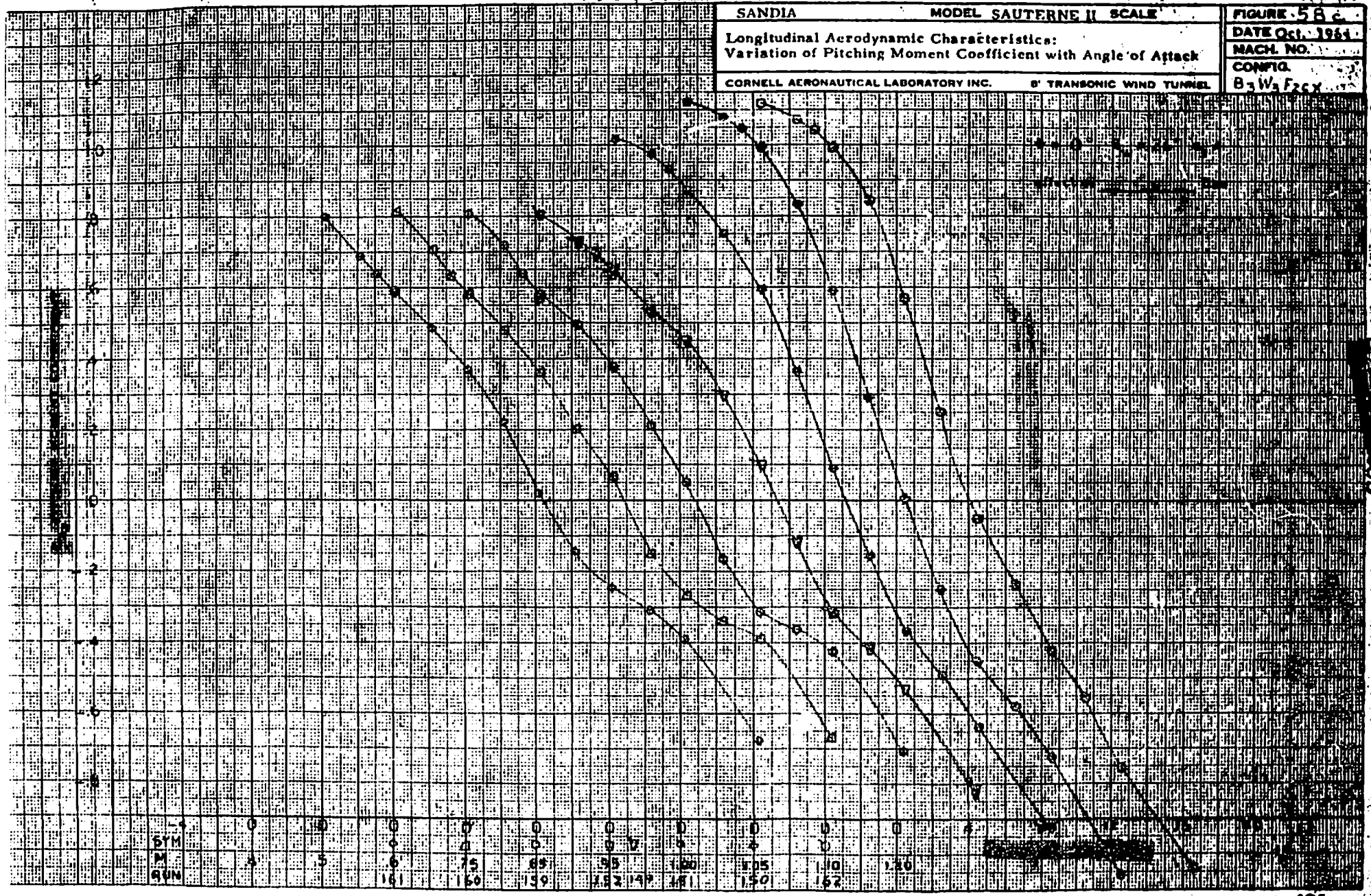

Sandia
MODEL Sagittarius I
SCALE
Longitudinal Aerodynamic Characteristics
Variation of Axial Force Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC
8 TRANSONIC WIND TUNNEL
FIGURE 58b
DATE Oct. 1964
MACH. NO.
CONFIG.
B & W's Fuse λ
δ = 0°
i_w 26°
e_l
effect of
int
C_A AXIAL FORCE COEFFICIENT
α ANGLE OF ATTACK
SYM RUN M
1.2
1.0
.8
.6
.4
.2
0
-.2
-.4
-.6
-.8
-1.0
-1.2
-1.4
-1.6
-1.8
-2.0
-2.2
-2.4
-2.6
-2.8
-3.0
-3.2
-3.4
-3.6
-3.8
-4.0
-4.2
-4.4
-4.6
-4.8
-5.0
-5.2
-5.4
-5.6
-5.8
-6.0
-6.2
-6.4
-6.6
-6.8
-7.0
-7.2
-7.4
-7.6
-7.8
-8.0
-8.2
-8.4
-8.6
-8.8
-9.0
-9.2
-9.4
-9.6
-9.8
-10.0
-10.2
-10.4
-10.6
-10.8
-11.0
-11.2
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-11.6
-11.8
-12.0
-12.2
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-14.0
-14.2
-14.4
-14.6
-14.8
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-15.2
-15.4
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-15.8
-16.0
-16.2
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-17.0
-17.2
-17.4
-17.6
-17.8
-18.0
-18.2
-18.4
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-19.0
-19.2
-19.4
-19.6
-19.8
-20.0
-20.2
-20.4
-20.6
-20.8
-21.0
-21.2
-21.4
-21.6
-21.8
-22.0
-22.2
-22.4
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-23.0
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-25.0
-25.2
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-25.8
-26.0
-26.2
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-26.6
-26.8
-27.0
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-27.6
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-28.0
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-28.4
-28.6
-28.8
-29.0
-29.2
-29.4
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-30.0
-30.2
-30.4
-30.6
-30.8
-31.0
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-32.0
-32.2
-32.4
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-35.2
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SANDIA MODEL SAUTERNE II SCALE

Longitudinal Aerodynamic Characteristics:
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 58c
DATE Oct. 1964
MACH. NO.
CONFIG. $B_3W_3F_{26X}$

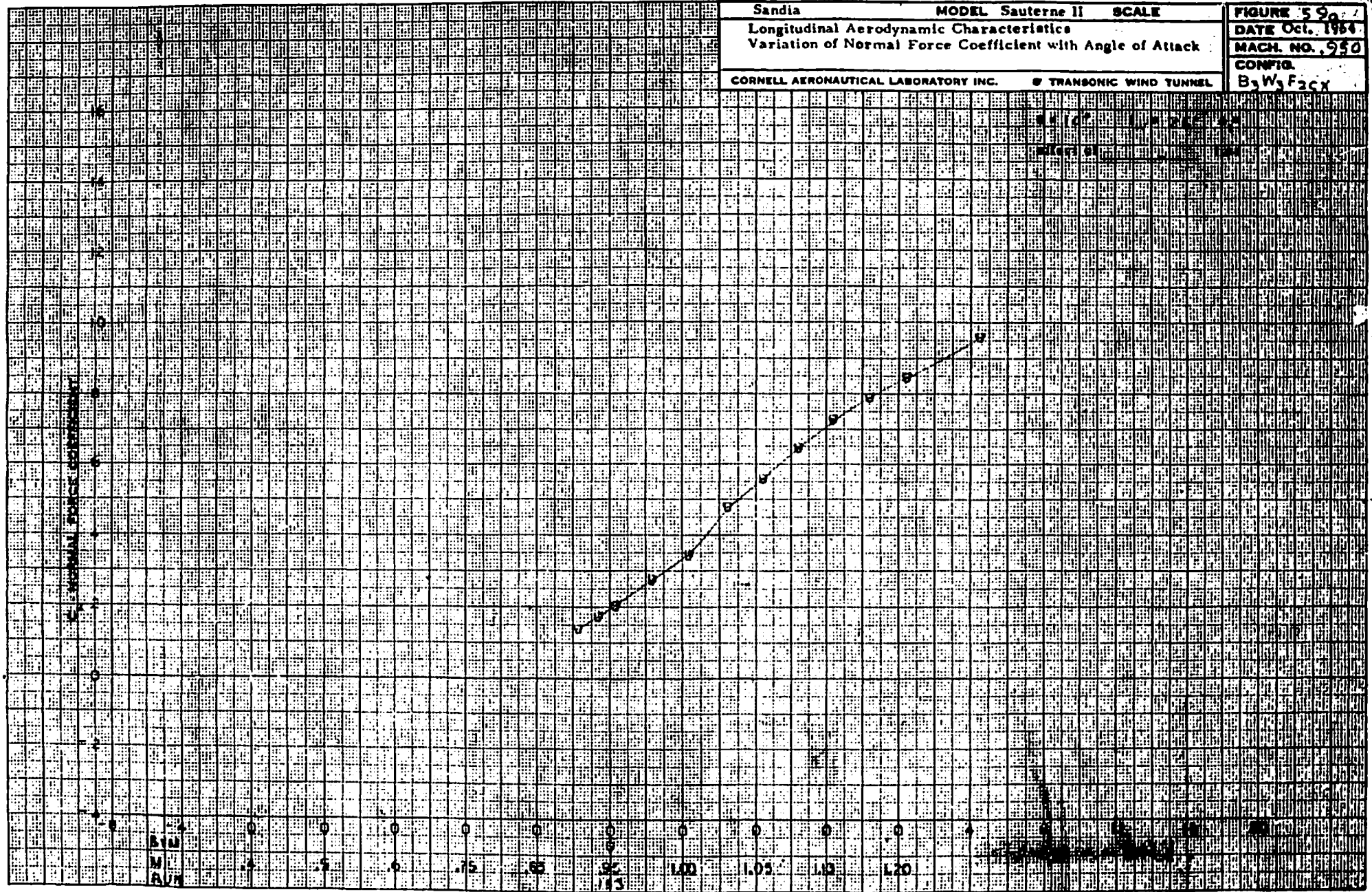


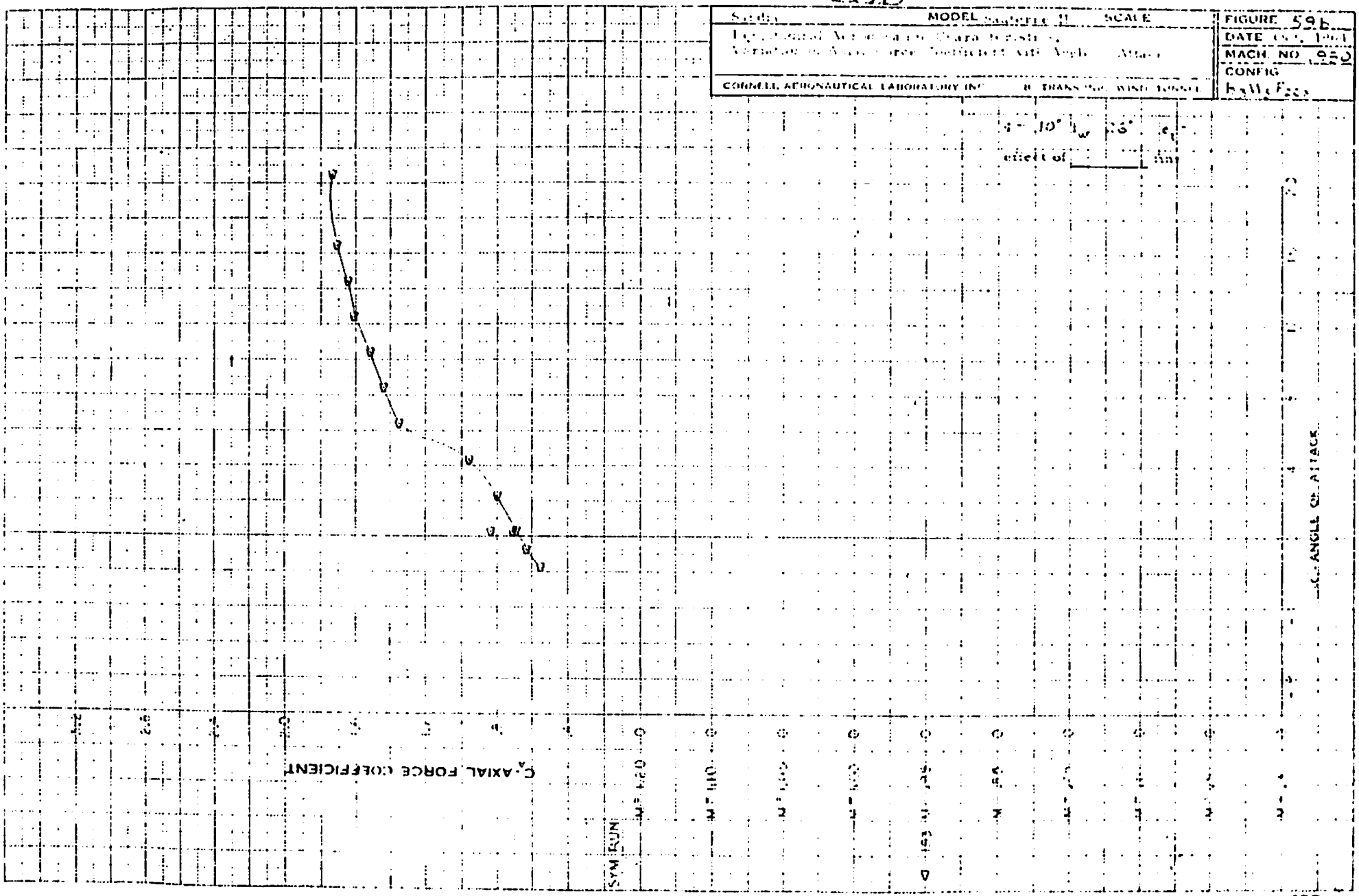
Sandia — MODEL Sauterne II — SCALE

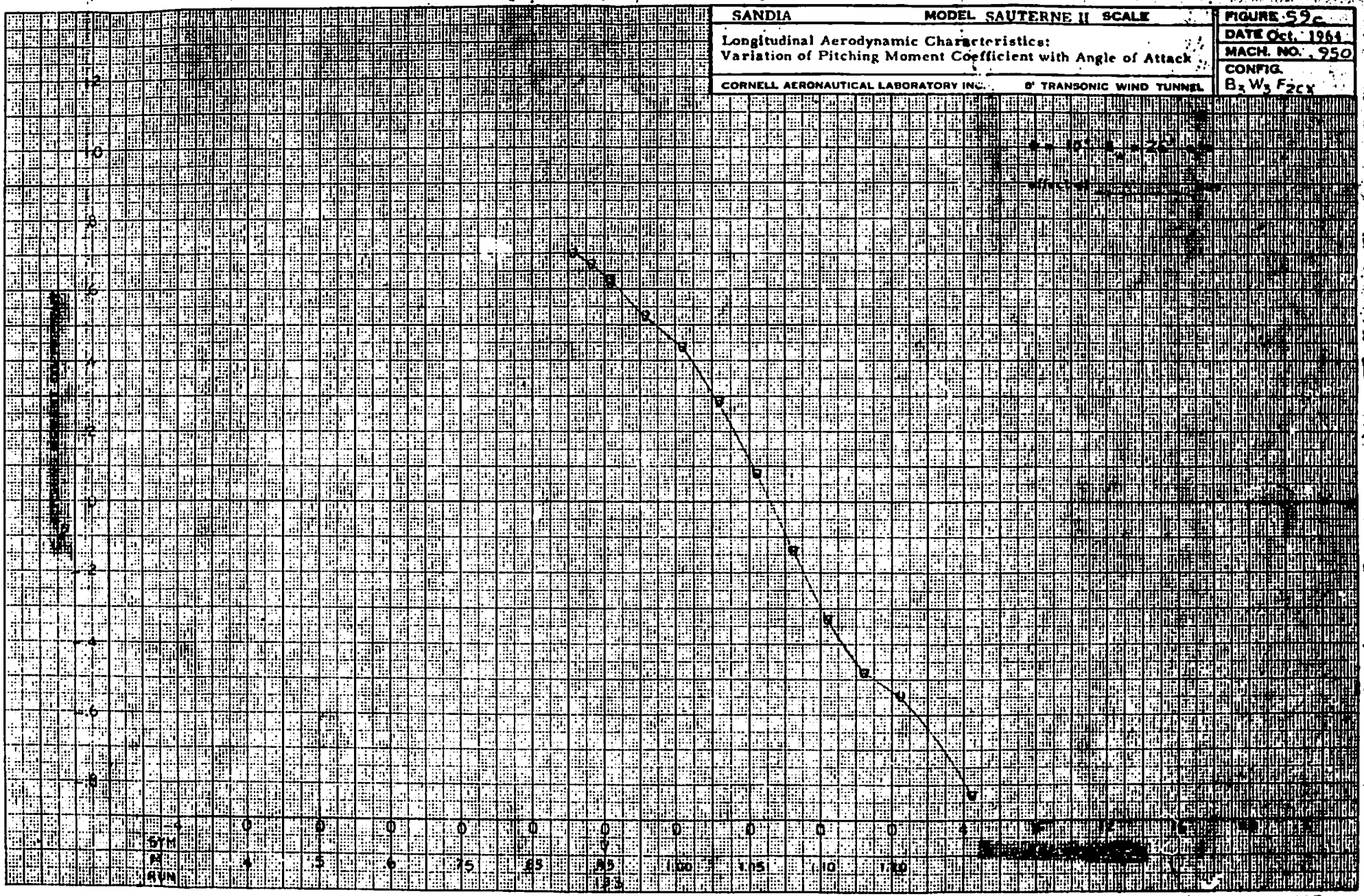
Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

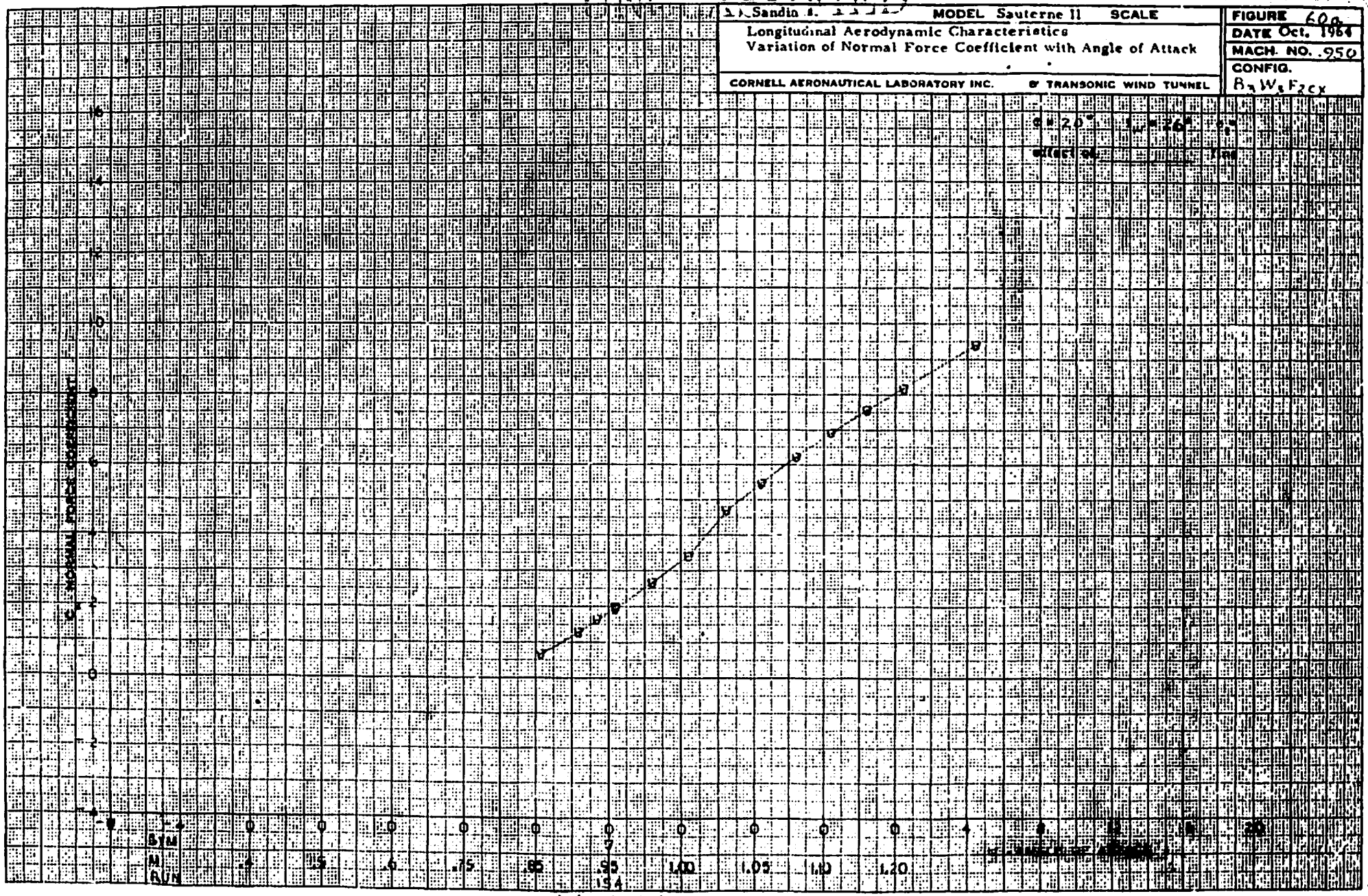
CORNELL AERONAUTICAL LABORATORY INC. — TRANSONIC WIND TUNNEL

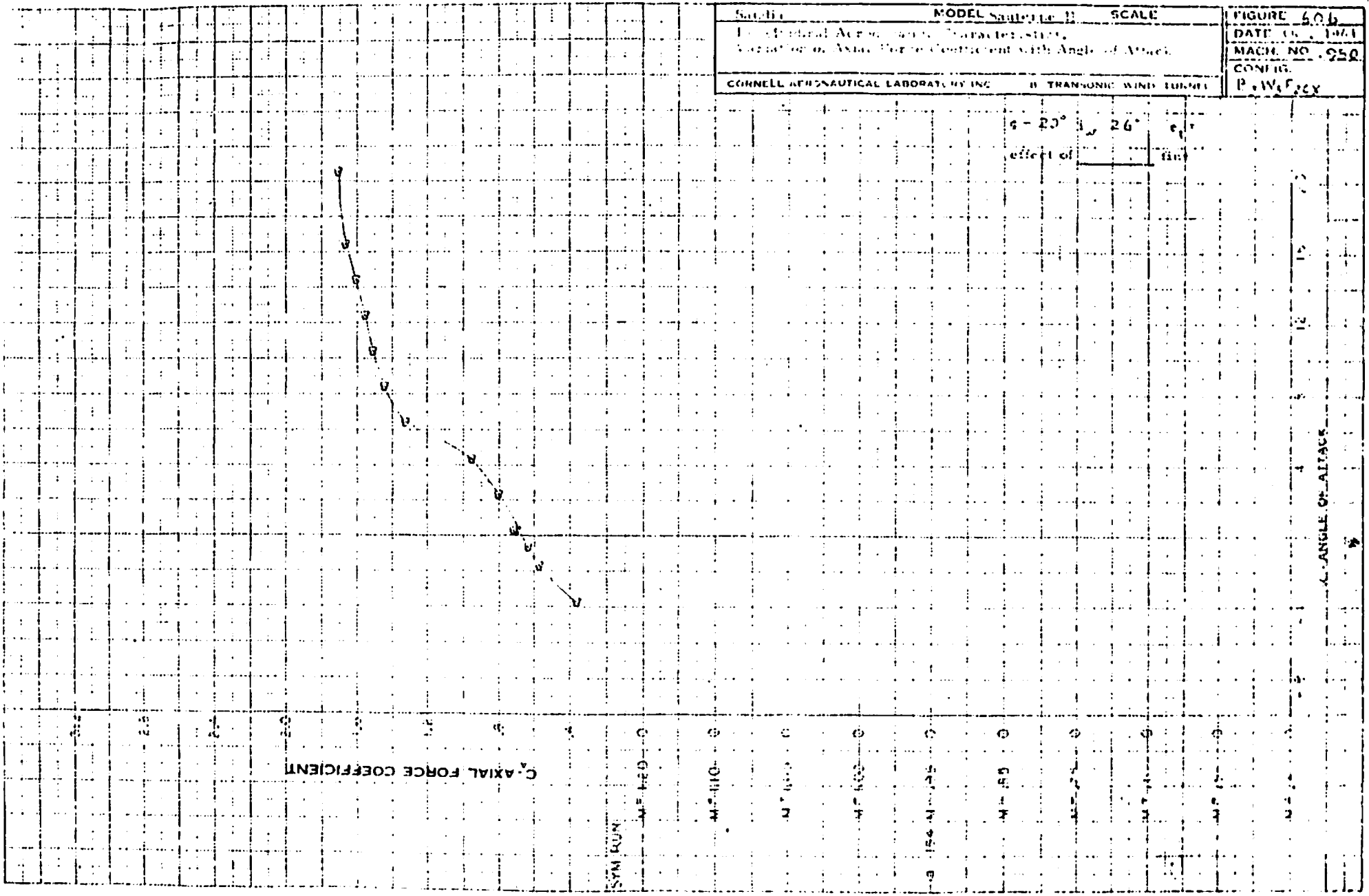
FIGURE 59
DATE Oct. 1954
MACH. NO. .950
CONFIG. $B_3W_3F_{3CX}$

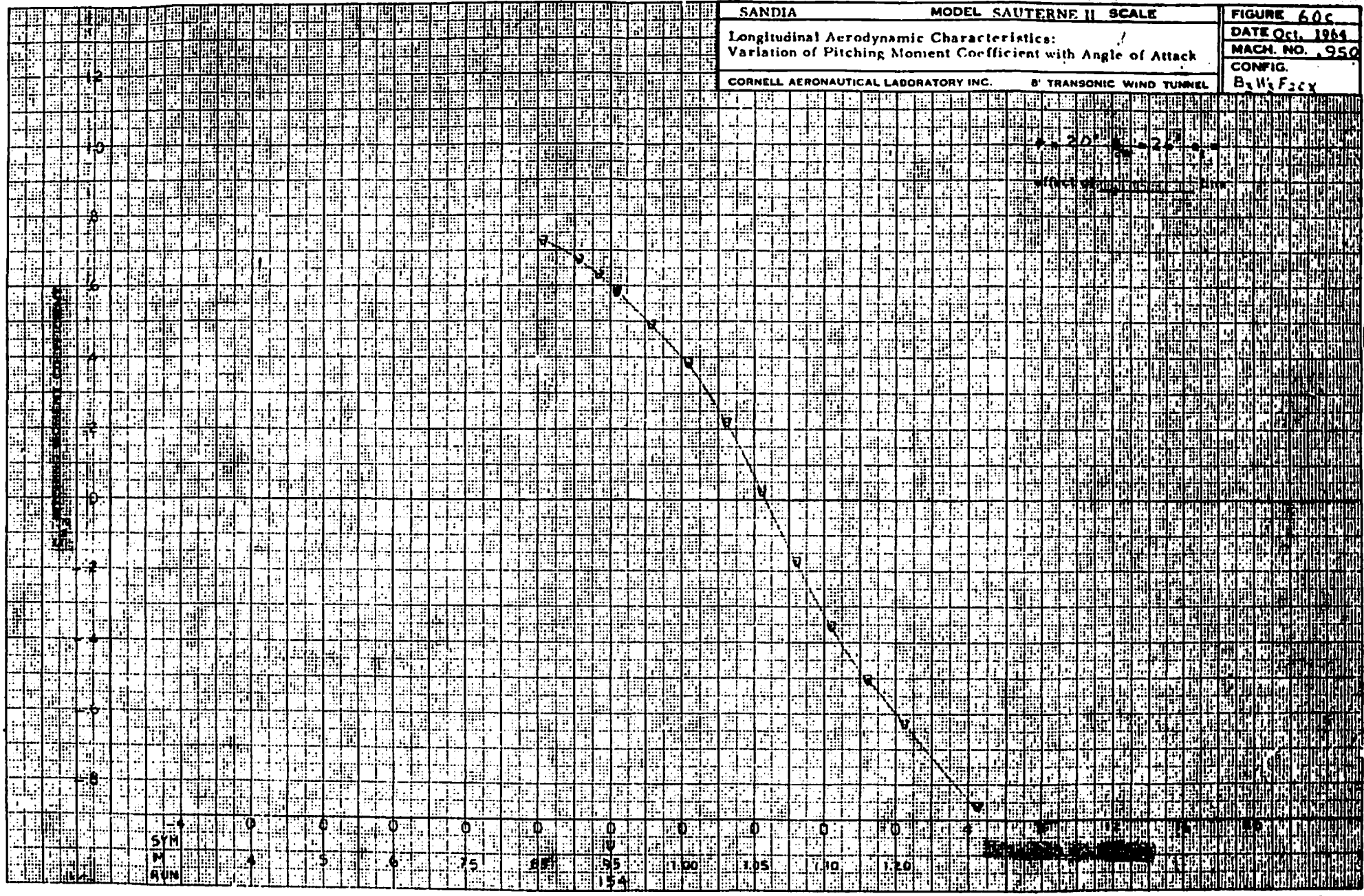


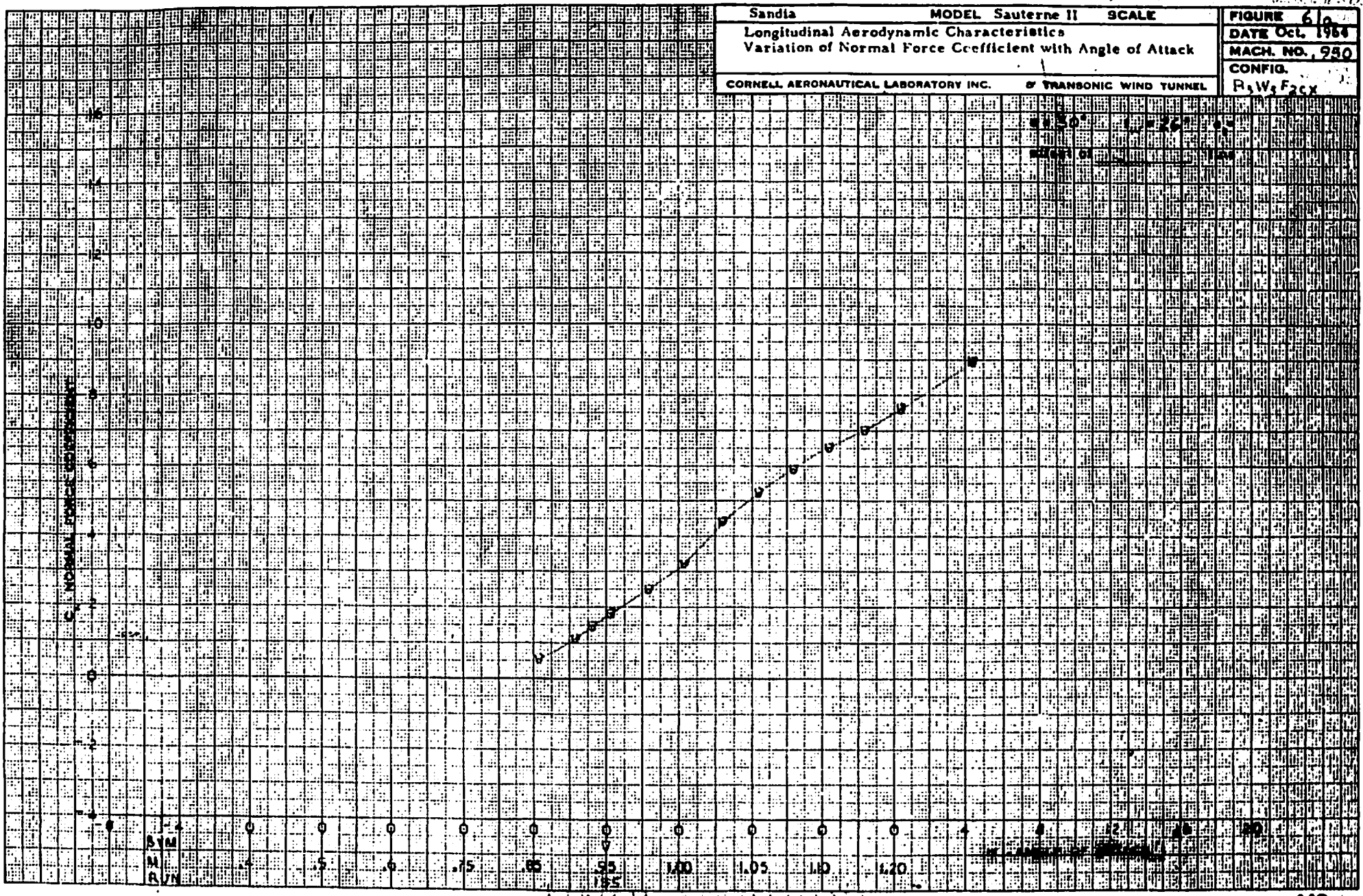

MODEL
SCALE
CORNELL AERONAUTICAL LABORATORY INC.
FIGURE 59b
DATE
MACH NO. .950
CONFIG
Body Flaps
δ = 10° δw 25° δf
effect of
ANGLE OF ATTACK, α
CA, AXIAL FORCE COEFFICIENT
SYM RUN
M = .920
M = .940
M = .960
M = .980
M = 1.00
M = 1.04
M = 1.08
M = 1.12

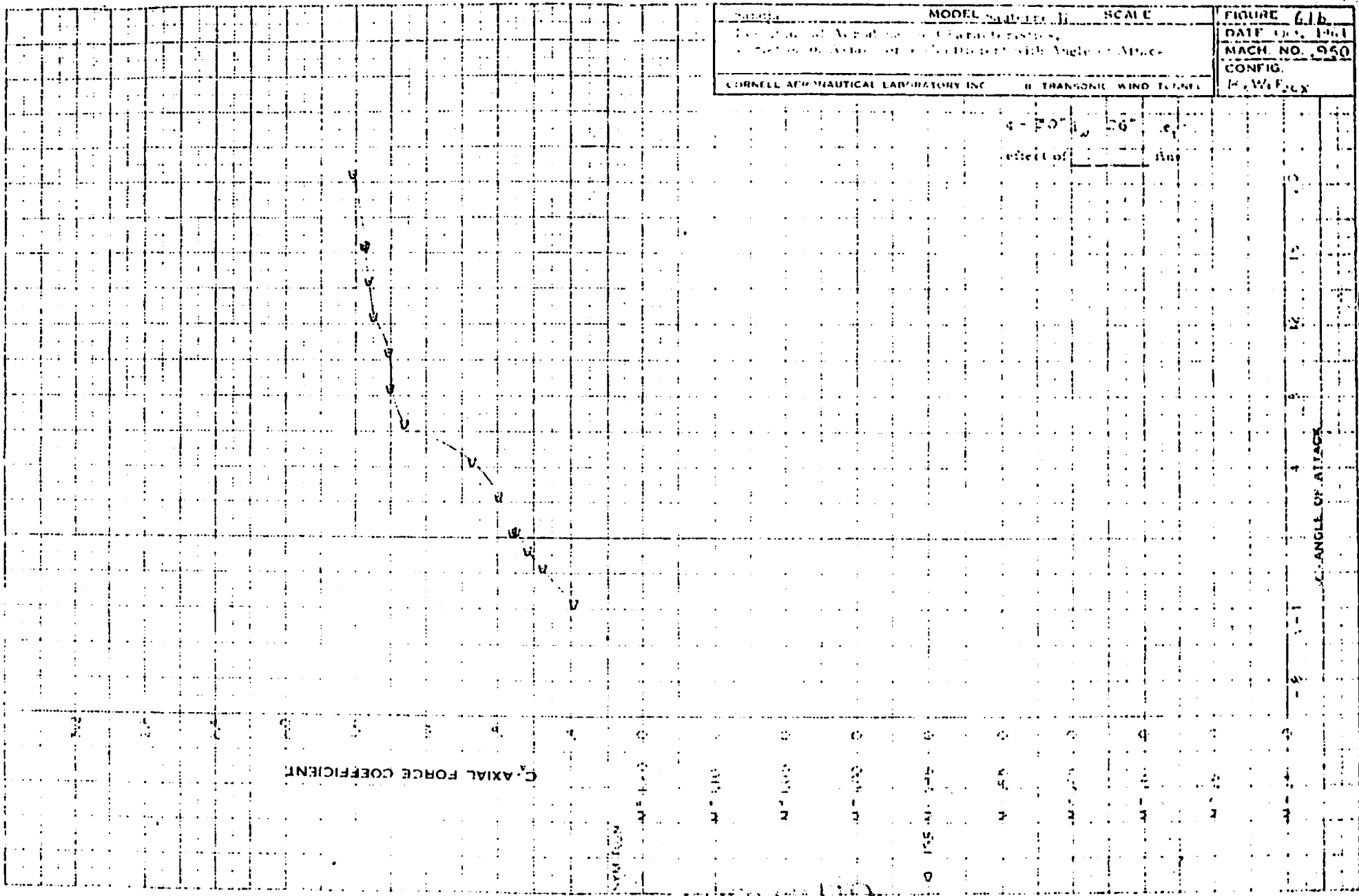

SANDIA
MODEL SAUTERNE II SCALE
Longitudinal Aerodynamic Characteristics:
Variation of Pitching Moment Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 59c
DATE Oct. 1961
MACH. NO. .950
CONFIG.
B2 W3 F2CX
α = 16°
α = 24°
SYM
RUN


Sandia
MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 60a
DATE Oct. 1964
MACH. NO. .950
CONFIG.
B W S F2 CX
α = 20°
α = 26°
NORMAL FORCE COEFFICIENT
SYM
M
RUN
.85
.95
194
1.00
1.05
1.10
1.20


MODEL Sabre II
SCALE
FIGURE 40b
DATE
MACH NO. .950
CONFIG.
CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL
α = 20° to 26°
effect of
fin
C_A AXIAL FORCE COEFFICIENT
ANGLE OF ATTACK
SYM RUN
M = .920
M = .940
M = .950
M = .960
M = .965
M = .975
M = .980
M = .985
M = .990


SANDIA
MODEL SAUTERNE II SCALE
Longitudinal Aerodynamic Characteristics:
Variation of Pitching Moment Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL
FIGURE 60c
DATE Oct. 1964
MACH. NO. .950
CONFIG.
B W F 2 c x
SYM
M
RUN
.95
154


Sandia
MODEL Sauterne II
SCALE
Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE 610
DATE Oct. 1964
MACH. NO. .950
CONFIG.
B W F2CX
C_N NORMAL FORCE COEFFICIENT
16
14
12
10
8
6
4
2
0
-2
-4
-6
-4
-2
0
2
4
6
8
10
12
14
16
18
20
.5
.6
.75
.85
.95
1.00
1.05
1.10
1.20
SYM
M
RUN
185


MODEL
SCALE
FIGURE 61b
DATE
MACH. NO. .950
CONFIG.
CORNELL AERONAUTICAL LABORATORY INC.
TRANSONIC WIND TUNNEL
α = 20°
δe = 20°
effect of
flap
C_A AXIAL FORCE COEFFICIENT
α, ANGLE OF ATTACK

SANDIA MODEL SAUTERNE II SCALE

Longitudinal Aerodynamic Characteristics:
Variation of Pitching Moment Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 61c
DATE Oct. 1964
MACH. NO. .950
CONFIG.
B, W, F, CX

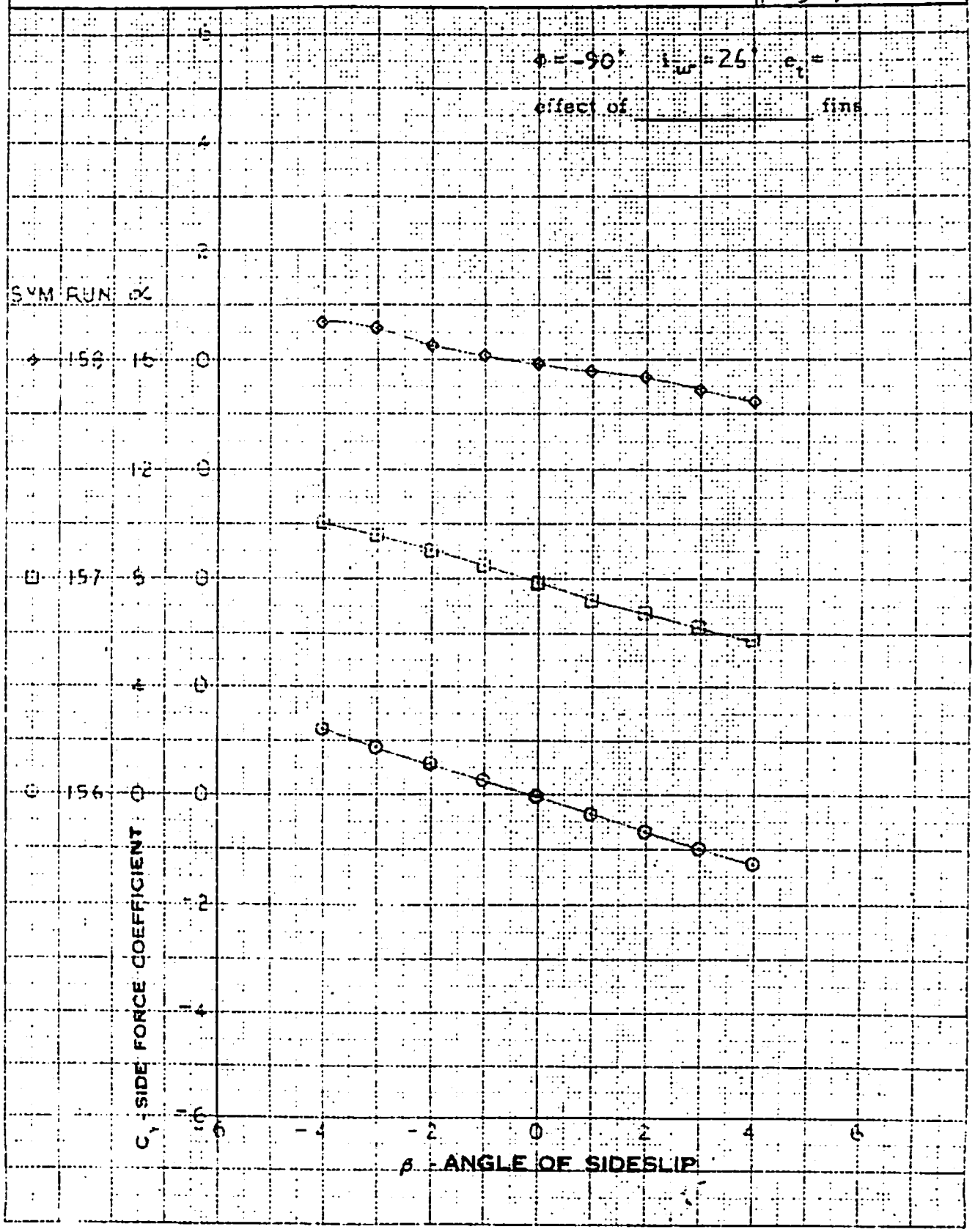
$\alpha = 30°$ $i_w = 26°$ $\epsilon_t =$

effect of Flap

C_m PITCHING MOMENT COEFFICIENT

SYM	M	RUN
○	.90	155
□	.95	155
▽	.98	155
◇	1.00	155
⊲	1.05	155
⊳	1.10	155
⬠	1.20	155

Sandia	MODEL Sauterne II SCALE	FIGURE 62
Lateral Aerodynamic Characteristics Variation of Side Force Coefficient with Angle of Sideslip		DATE Oct. 1964
		MACH. NO. .950
CORNELL AERONAUTICAL LABORATORY, INC.	8' TRANSONIC WIND TUNNEL	CONFIG. $B_2 W_3 F_{20} X$



Sandia | MODEL Sauterne II | SCALE | FIGURE 62 b

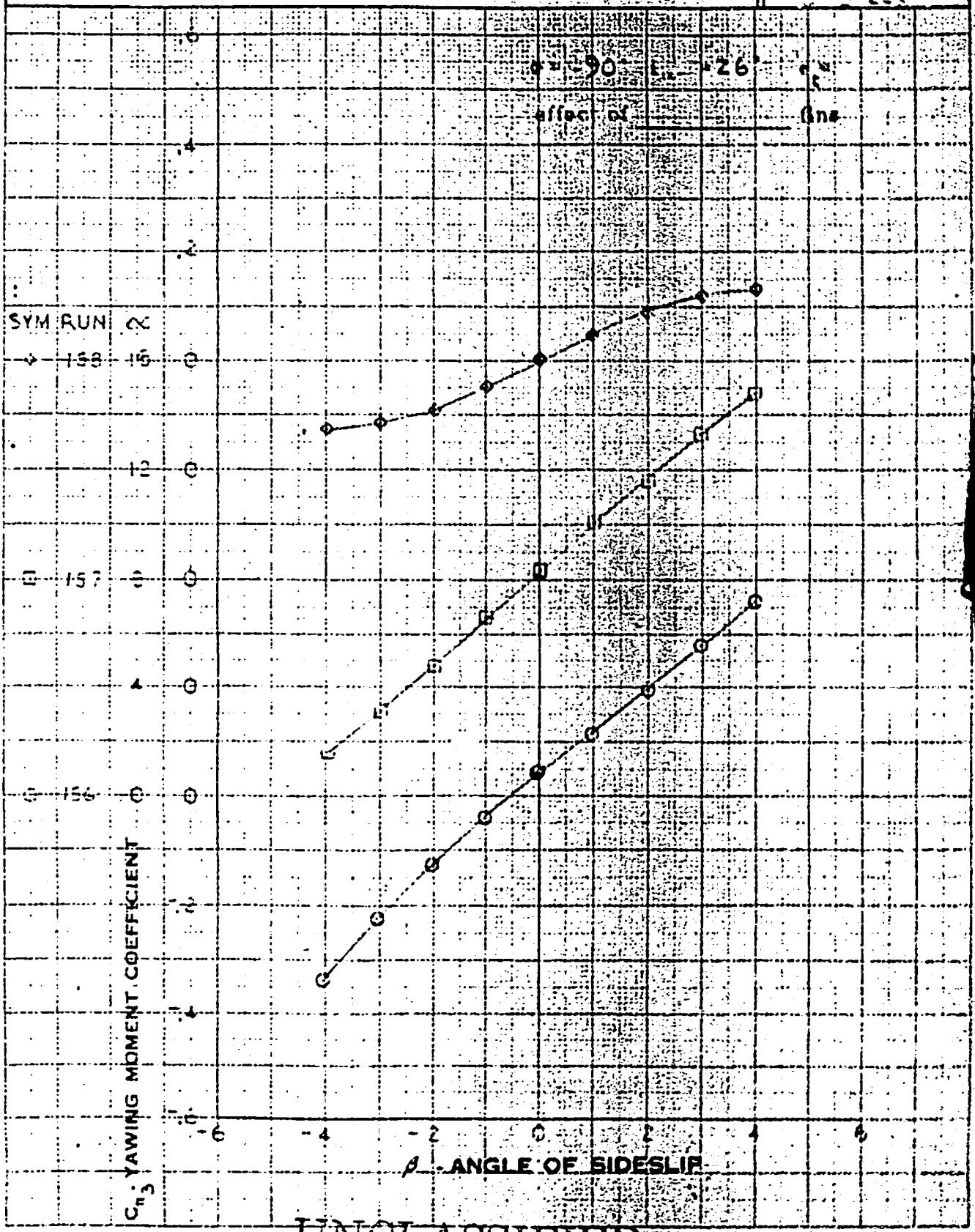
Lateral Aerodynamic Characteristics
Variation of Yawing Moment Coefficient with Angle of Sideslip

DATE Oct. 1964

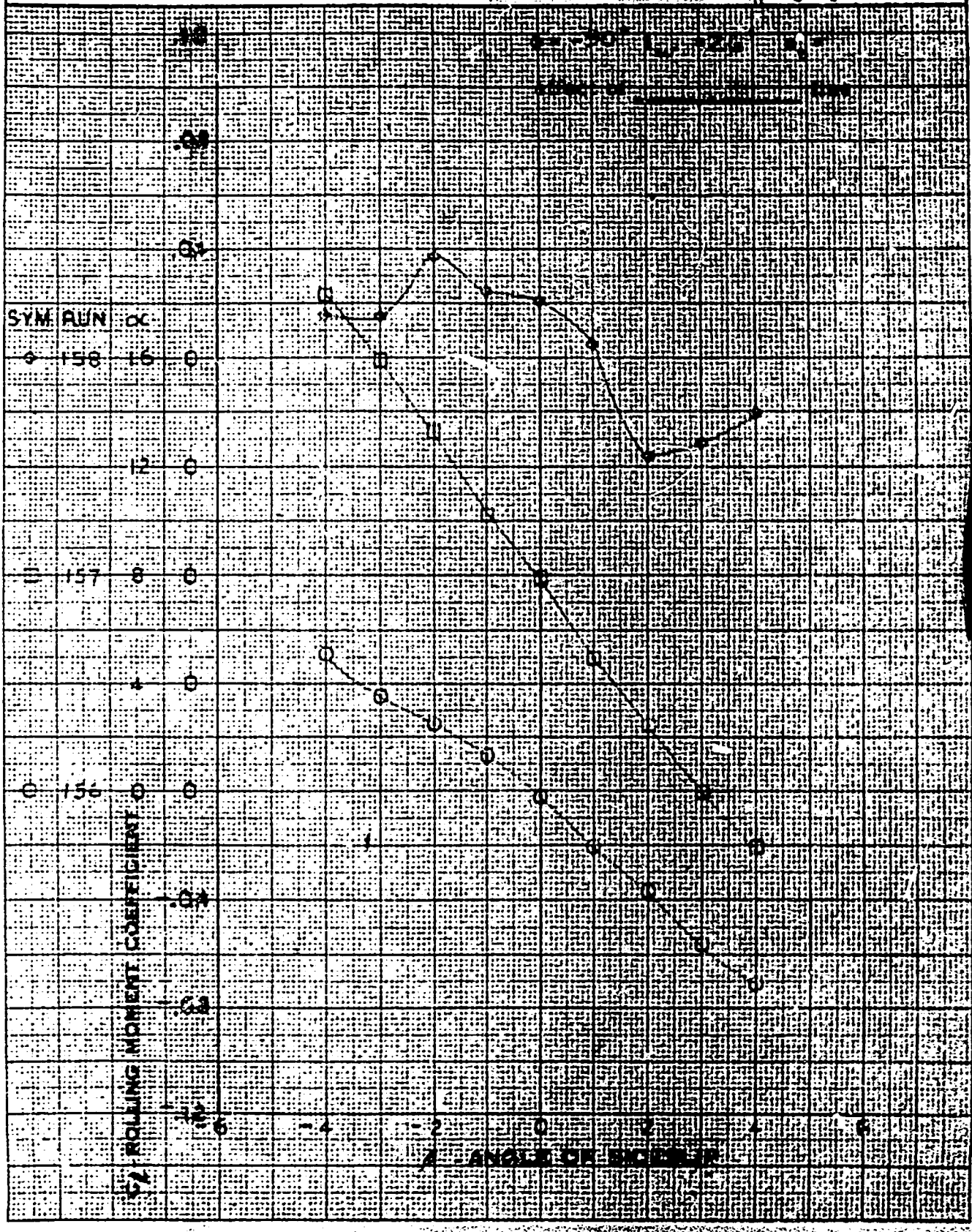
MACH. NO. .950

CONFIG. B W2 F20Y

CORNELL AERONAUTICAL LABORATORY, INC. 8' TRANSONIC WIND TUNNEL



Sandia	MODEL Sauterne II	SCALE	FIGURE 626
Lateral Aerodynamic Characteristics Variation of Rolling Moment Coefficient with Angle of Sideslip			DATE Oct. 1964
			MACH. NO. .950
			CONFIG.
CORNELL AERONAUTICAL LABORATORY, INC.	8' TRANSONIC WIND TUNNEL		$B_3W_3F_2C_Y$

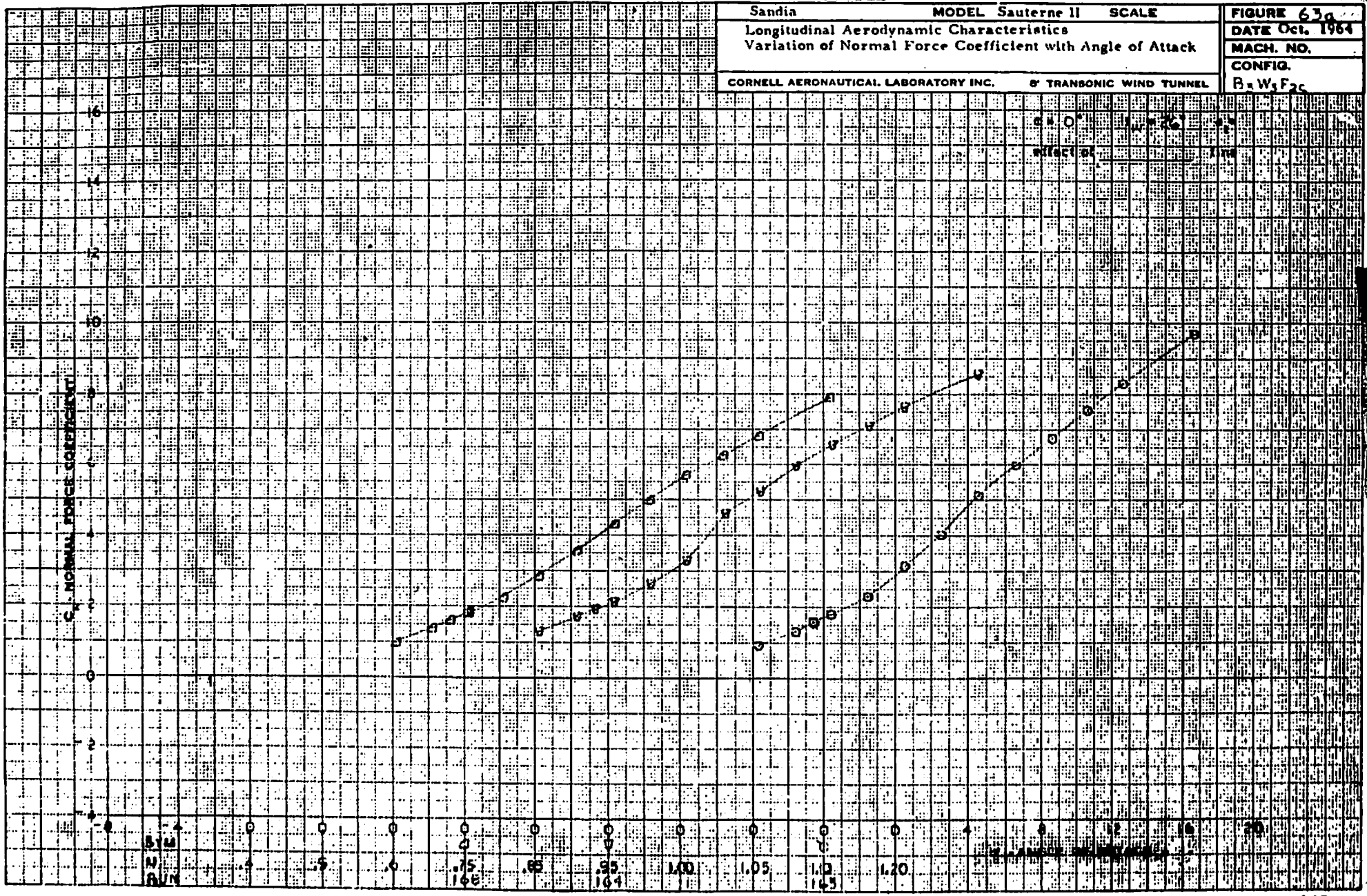


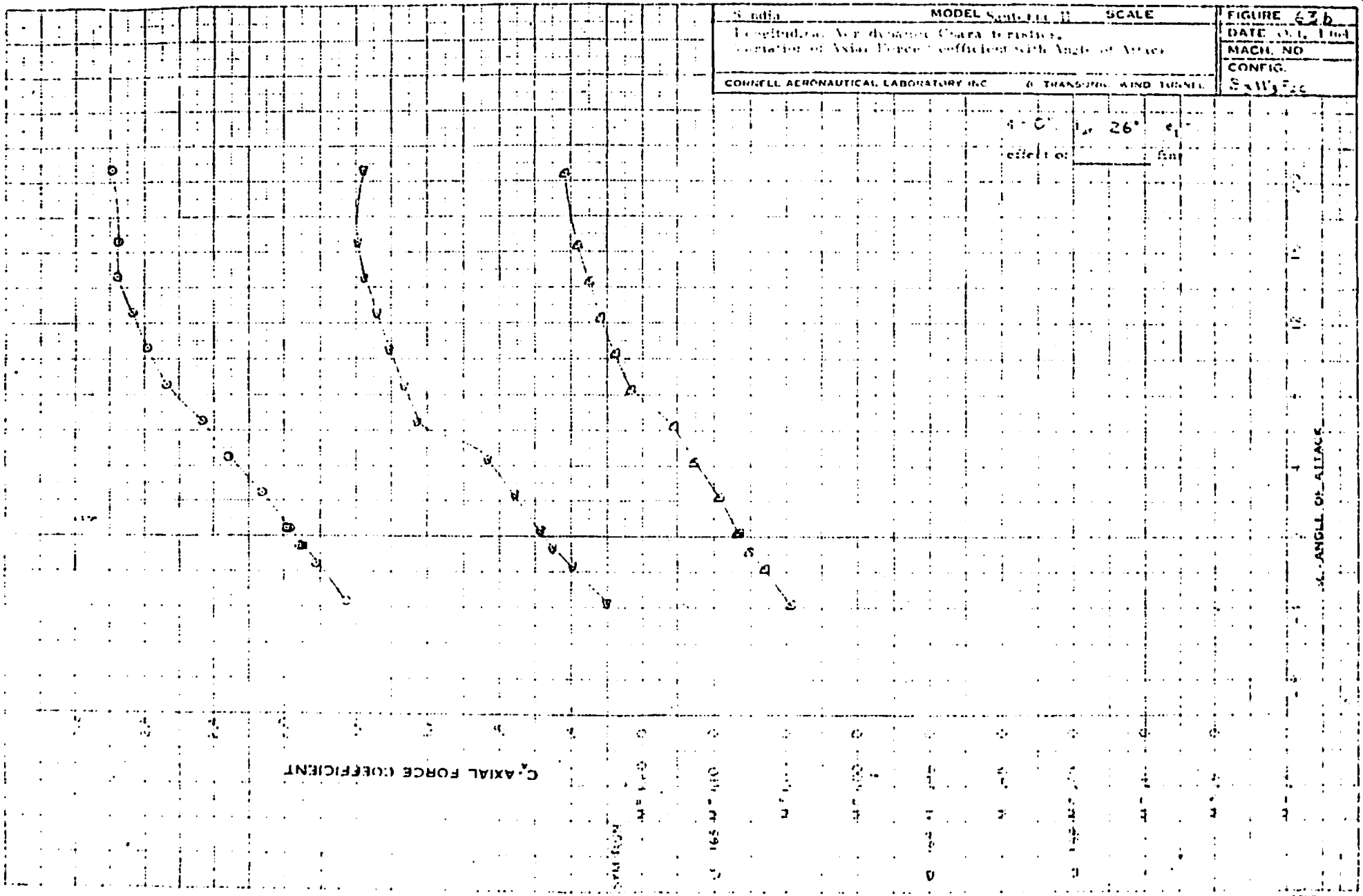
Sandia MODEL Sauterne II SCALE

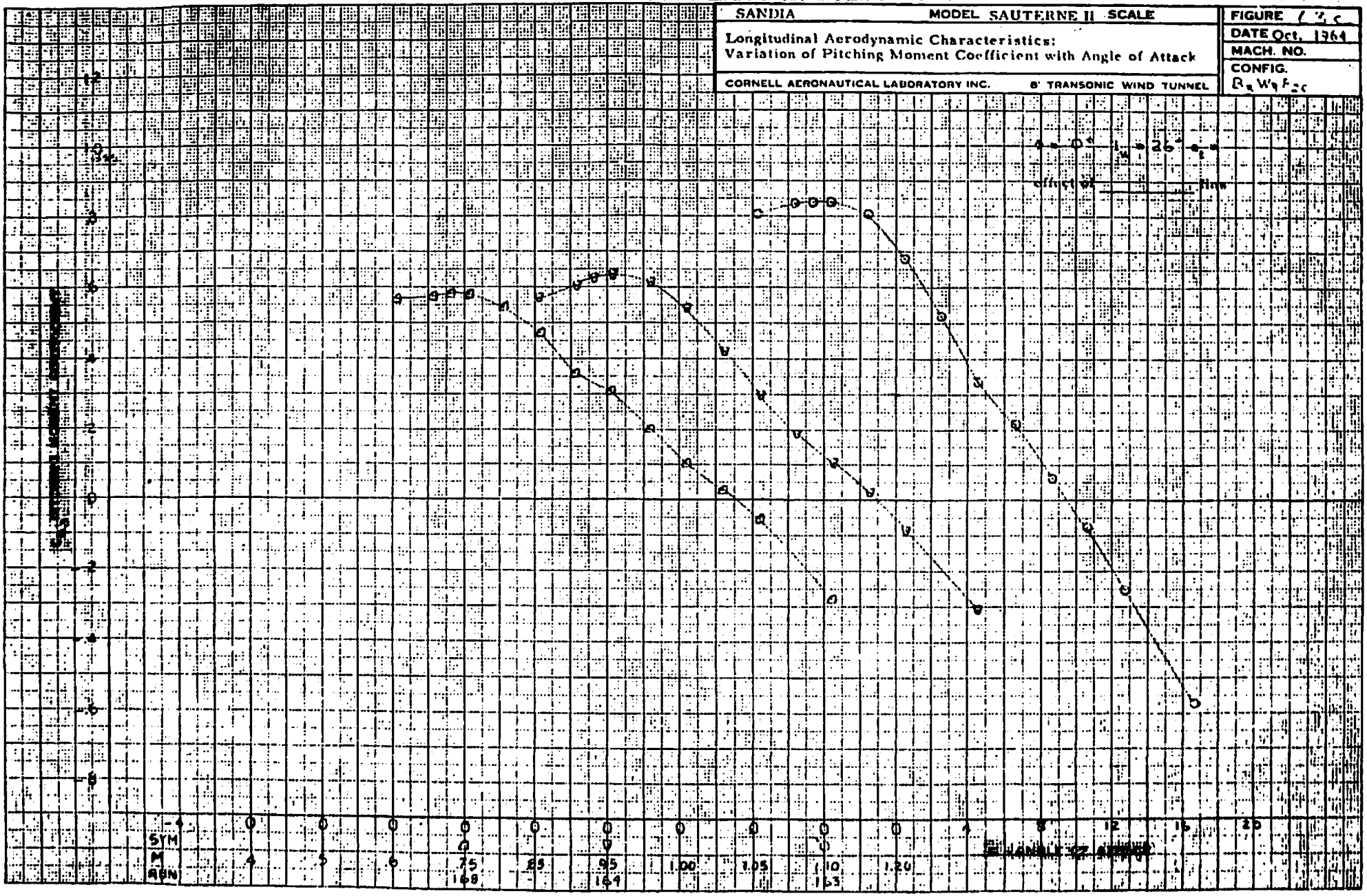
Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

FIGURE 63a
DATE Oct. 1964
MACH. NO.
CONFIG. B₈W₃F₃₅




Sandia
MODEL Santa Fe II
SCALE
FIGURE 43b
DATE
MACH. NO
CONFIG.
CORNELL AERONAUTICAL LABORATORY INC.
TRANSONIC WIND TUNNEL
δ = 0°
26°
effect of
δn
C_A, AXIAL FORCE COEFFICIENT
α, ANGLE OF ATTACK

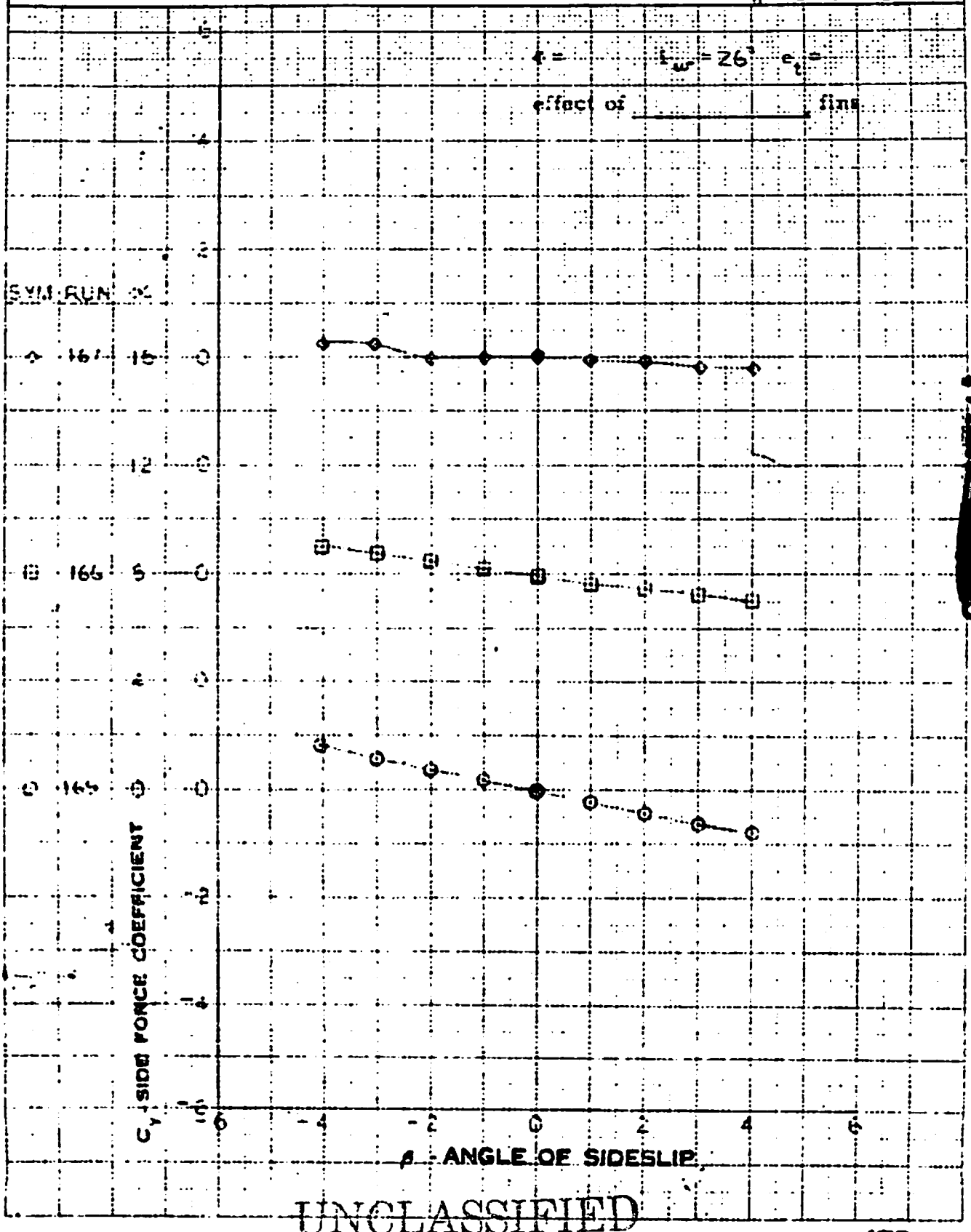

SANDIA
MODEL SAUTERNE II SCALE
Longitudinal Aerodynamic Characteristics:
Variation of Pitching Moment Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC.
8' TRANSONIC WIND TUNNEL
FIGURE
DATE Oct. 1964
MACH. NO.
CONFIG.
SYM
M
RUN
0.75
168
0.85
0.95
164
1.00
1.05
1.10
163
1.20

Sandia | MODEL Sanicrete #1 | SCALE

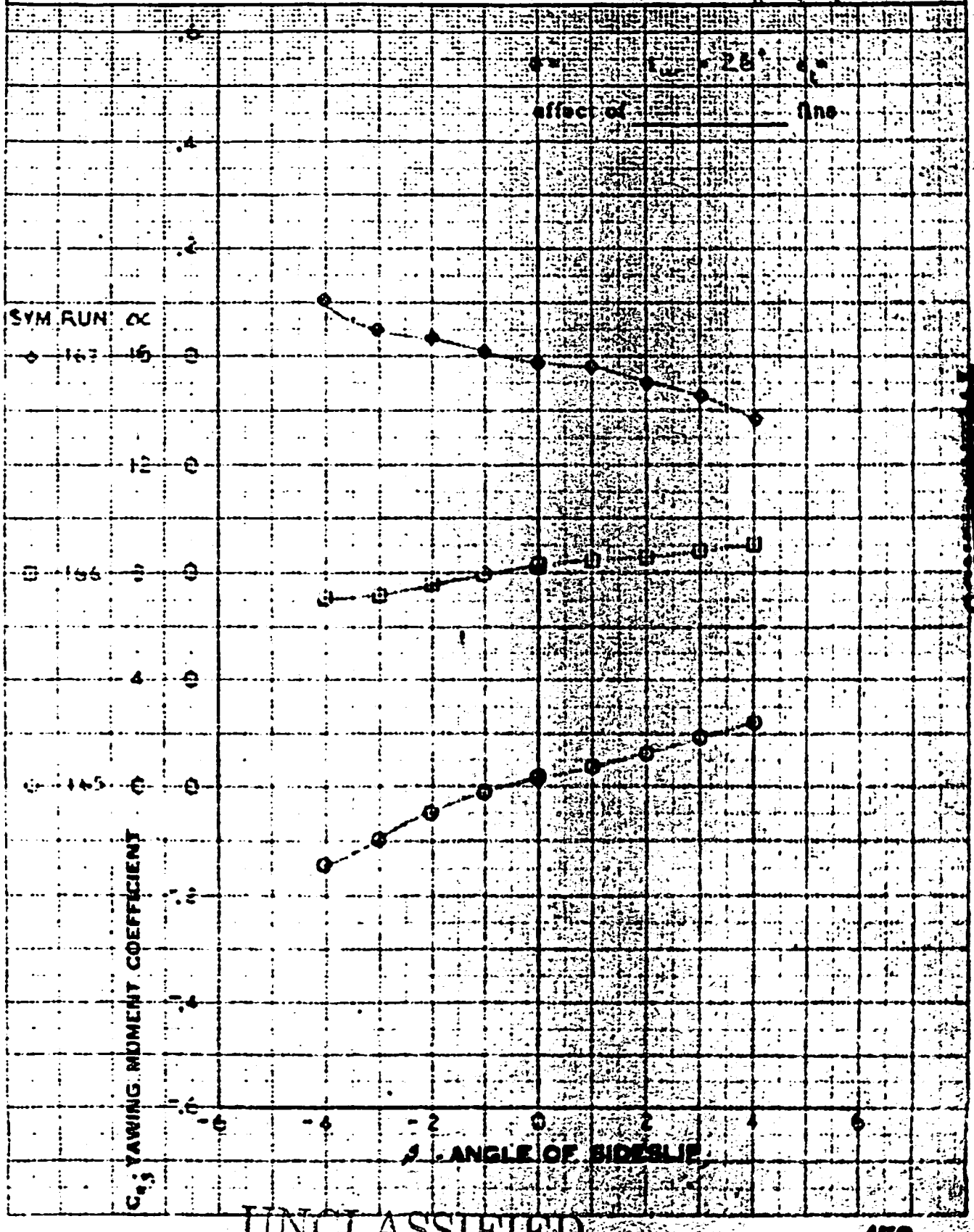
FIGURE 64a
DATE Oct. 1964
MACH. NO. .950
CONFIG. $B_2W_3F_{2C}$

Lateral Aerodynamic Characteristics
Variation of Side Force Coefficient with Angle of Sideslip

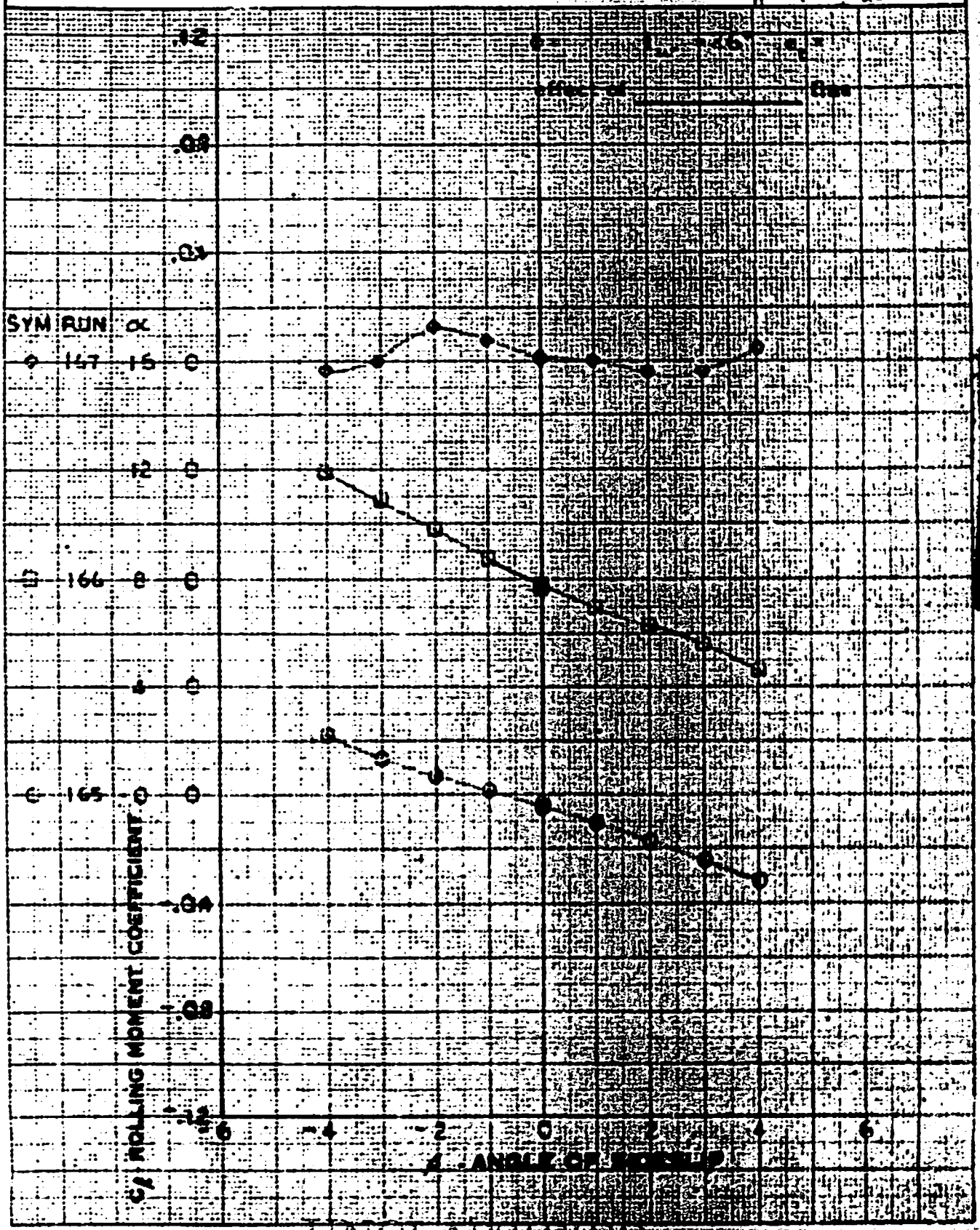
CORNELL AERONAUTICAL LABORATORY, INC. 8' TRANSONIC WIND TUNNEL

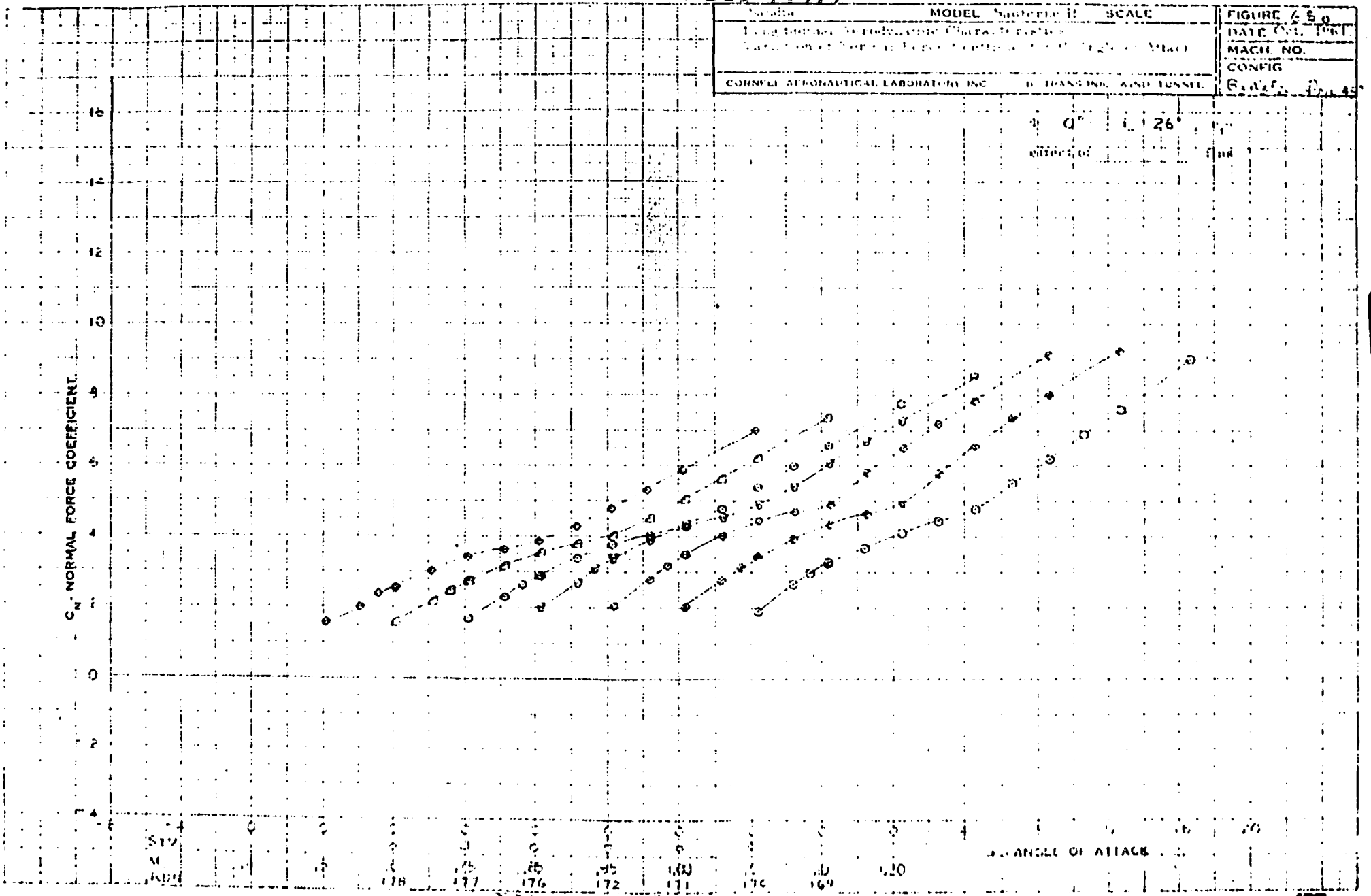


Sandia	MODEL Sailterne II	SCALE	FIGURE 6.9 b
Lateral Aerodynamic Characteristics Variation of Yawing Moment Coefficient with Angle of Sideslip			DATE Oct. 1964
			MACH. NO. .950
			CONFIG.
CORNELL AERONAUTICAL LABORATORY, INC.	8' TRANSONIC WIND TUNNEL		B, W, Fac



Sandia	MODEL Sauterne II SCALE	FIGURE 6-[illegible]
Lateral Aerodynamic Characteristics Variation of Rolling Moment Coefficient with Angle of Sideslip		DATE Oct. 1964
		MACH. NO. .950
		CONFIG. B+W+[illegible]
CORNELL AERONAUTICAL LABORATORY, INC.	8' TRANSONIC WIND TUNNEL	




MODEL
SCALE
FIGURE
DATE
MACH NO.
CONFIG
CORNELL AERONAUTICAL LABORATORY INC.
δ° 26°
effect of
C_N NORMAL FORCE COEFFICIENT
ANGLE OF ATTACK

Sandia MODEL Sauterne II SCALE

Longitudinal Aerodynamic Characteristics.
Variation of Axial Force Coefficient with Angle of Attack

CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL

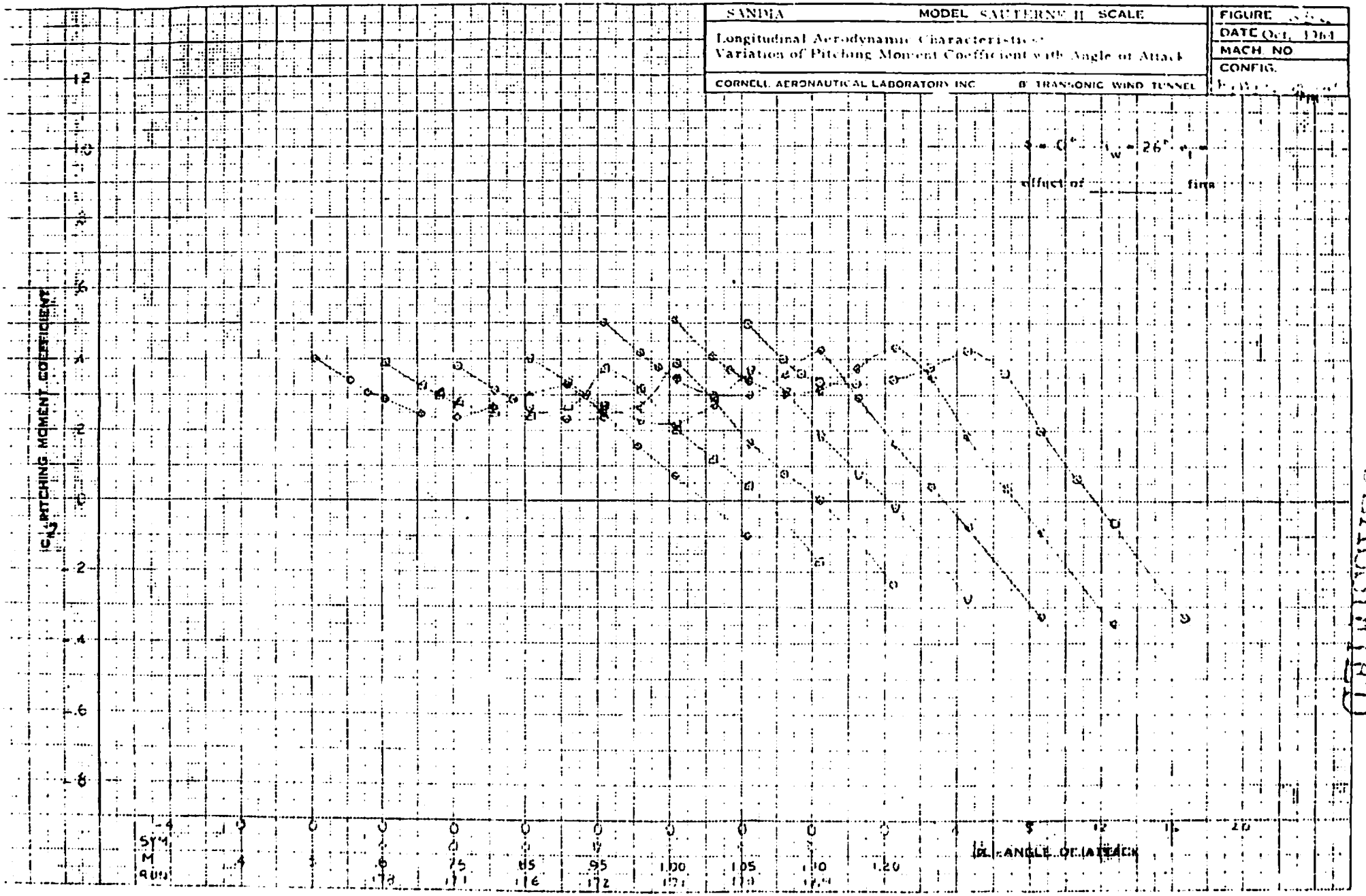
FIGURE
DATE Oct. 1964
MACH. NO.
CONFIG.

$\delta_f = \delta_e$ $i_w = 24°$ β

effect of δ_{trim}

C_A AXIAL FORCE COEFFICIENT

STN RUN M



UNCLASSIFIED

Sandia MODEL Santorne II SCALE

Lateral Aerodynamic Characteristics
Variation of Side Force Coefficient with Angle of Sideslip

CORNELL AERONAUTICAL LABORATORY, INC. 8' TRANSONIC WIND TUNNEL

FIGURE 66
DATE Oct. 1964
MACH. NO. .950
CONFIG.
F = M = [illegible]

Φ = i_w = 26° c_t =

effect of _____ fins

SYMBOL α

○ 18 16 0

□ 18 12 0

△ 17 4 0

▽ 17 4 0

C_Y - SIDE FORCE COEFFICIENT

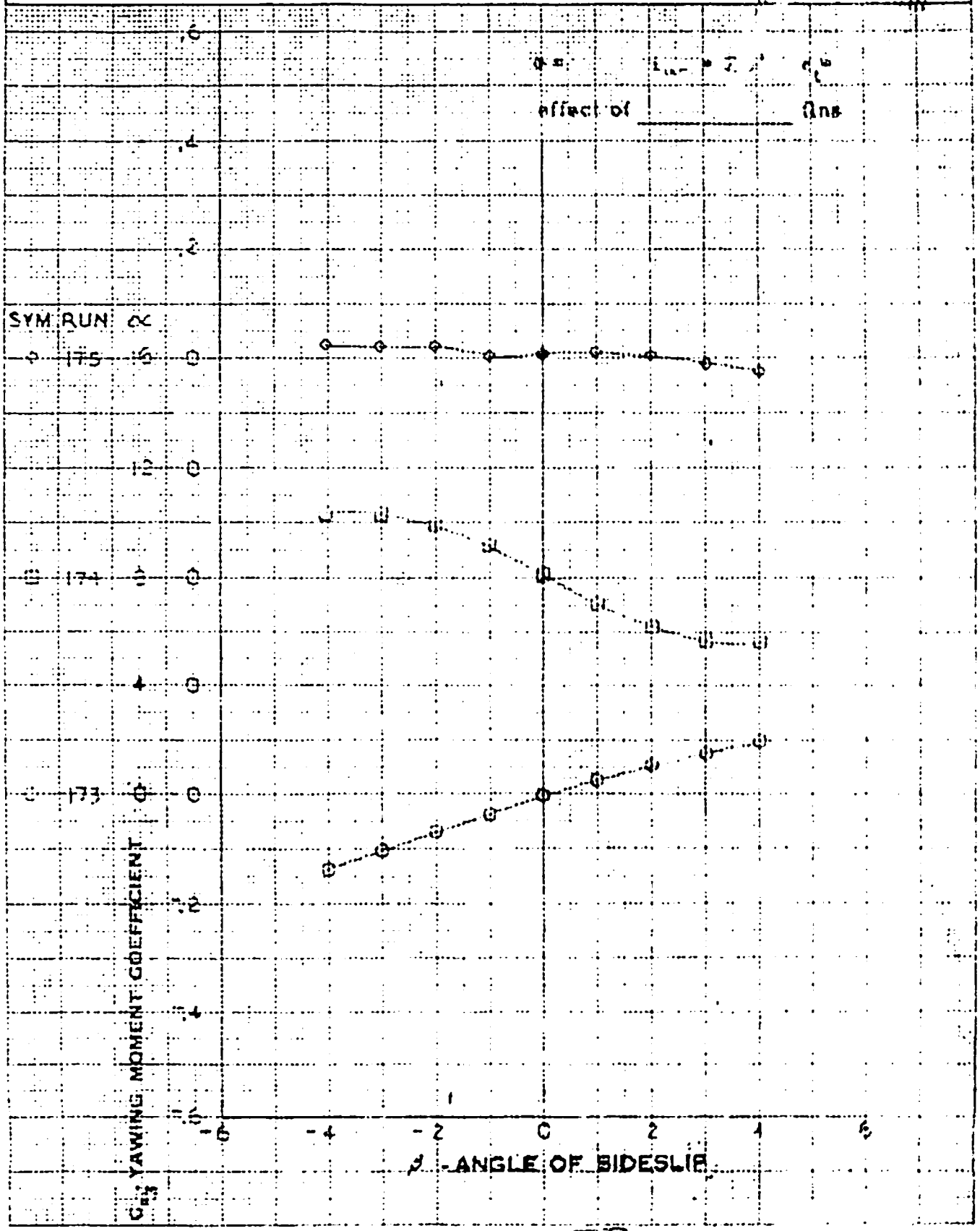
β - ANGLE OF SIDESLIP

Sandia | MODEL Sauterne II | SCALE

Lateral Aerodynamic Characteristics
Variation of Yawing Moment Coefficient with Angle of Sideslip

CORNELL AERONAUTICAL LABORATORY, INC. 8' TRANSONIC WIND TUNNEL

FIGURE
DATE Oct. 1964
MACH. NO.
CONFIG

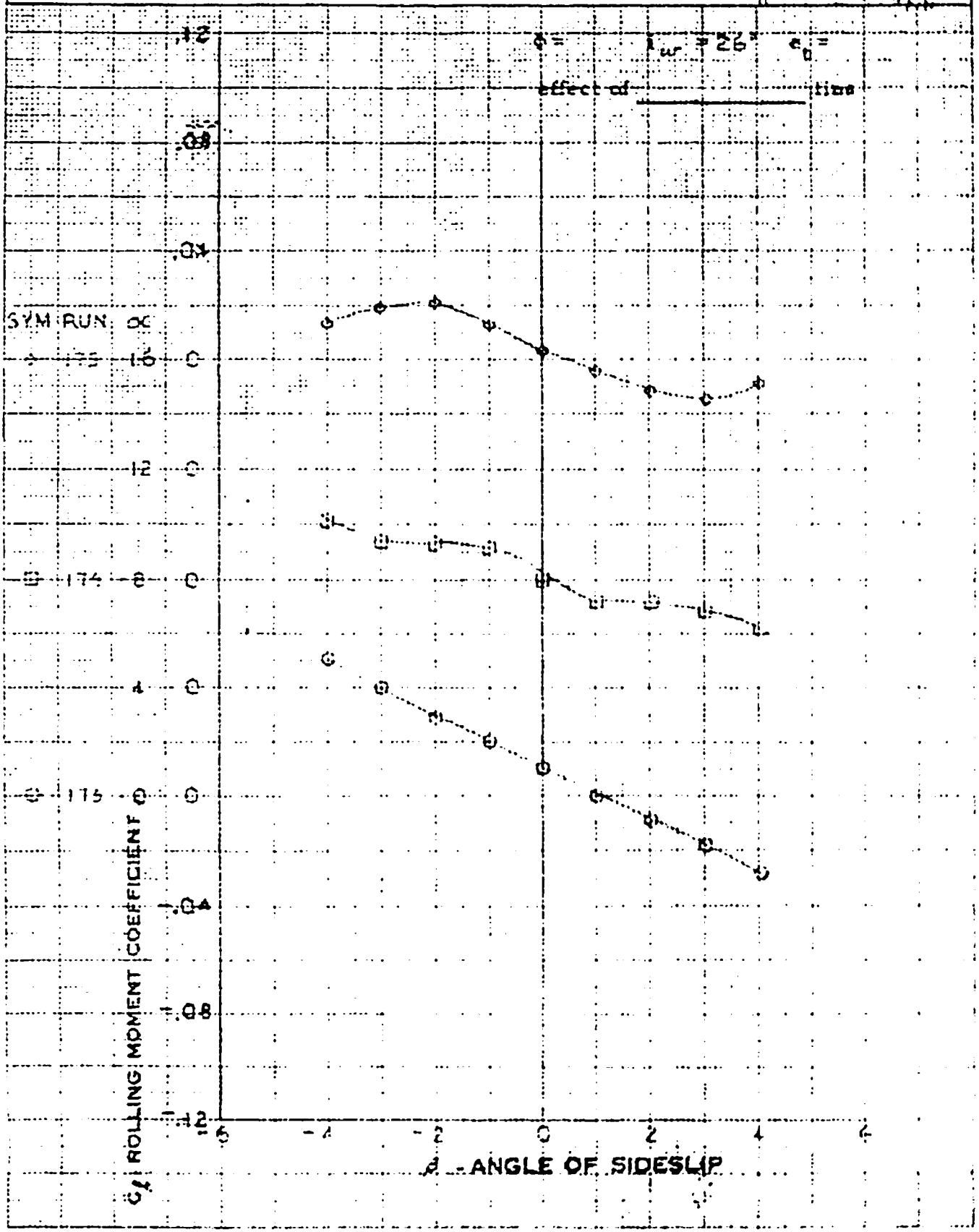


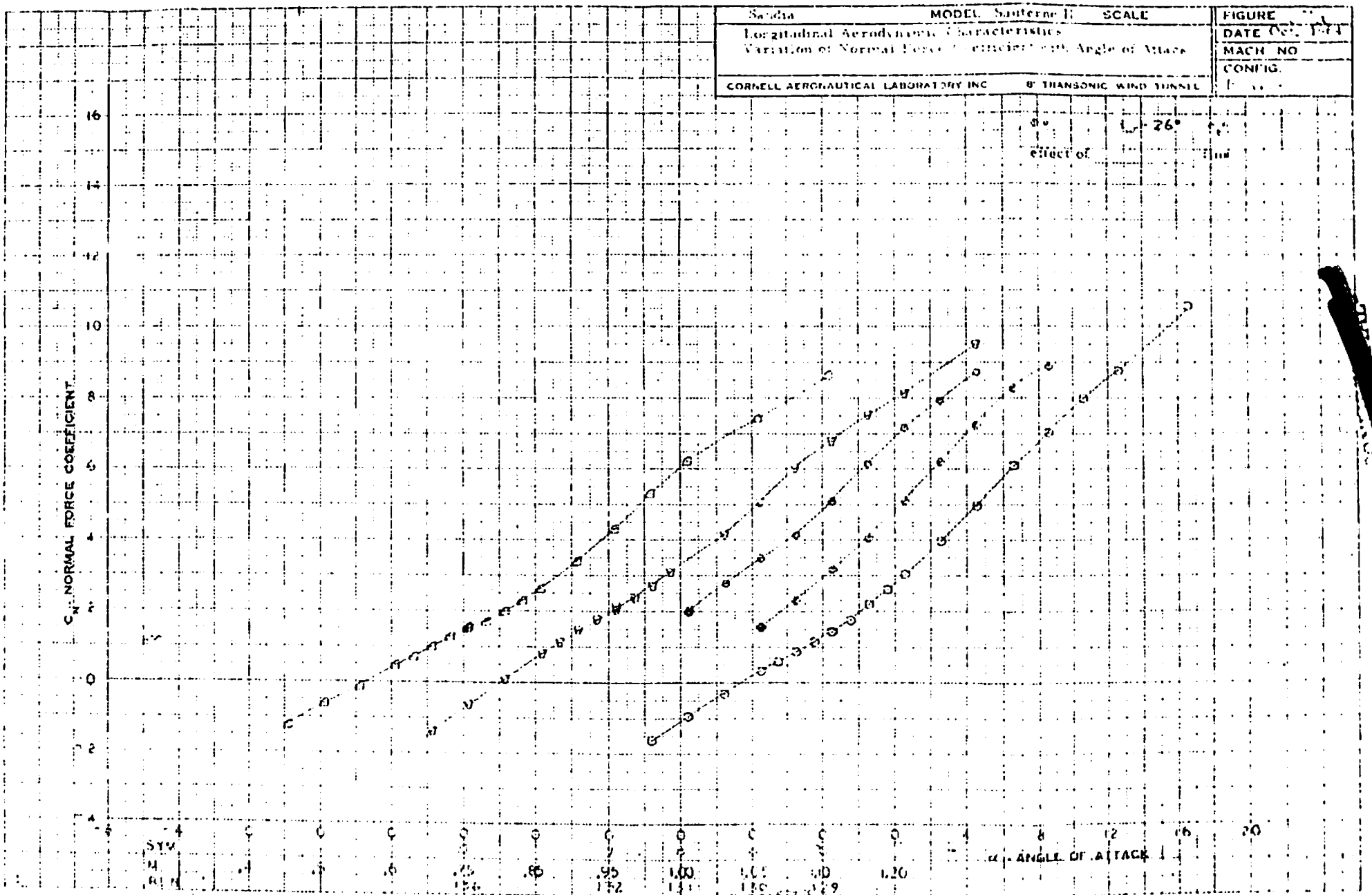
Sandia | MODEL Sauterne II | SCALE | FIGURE

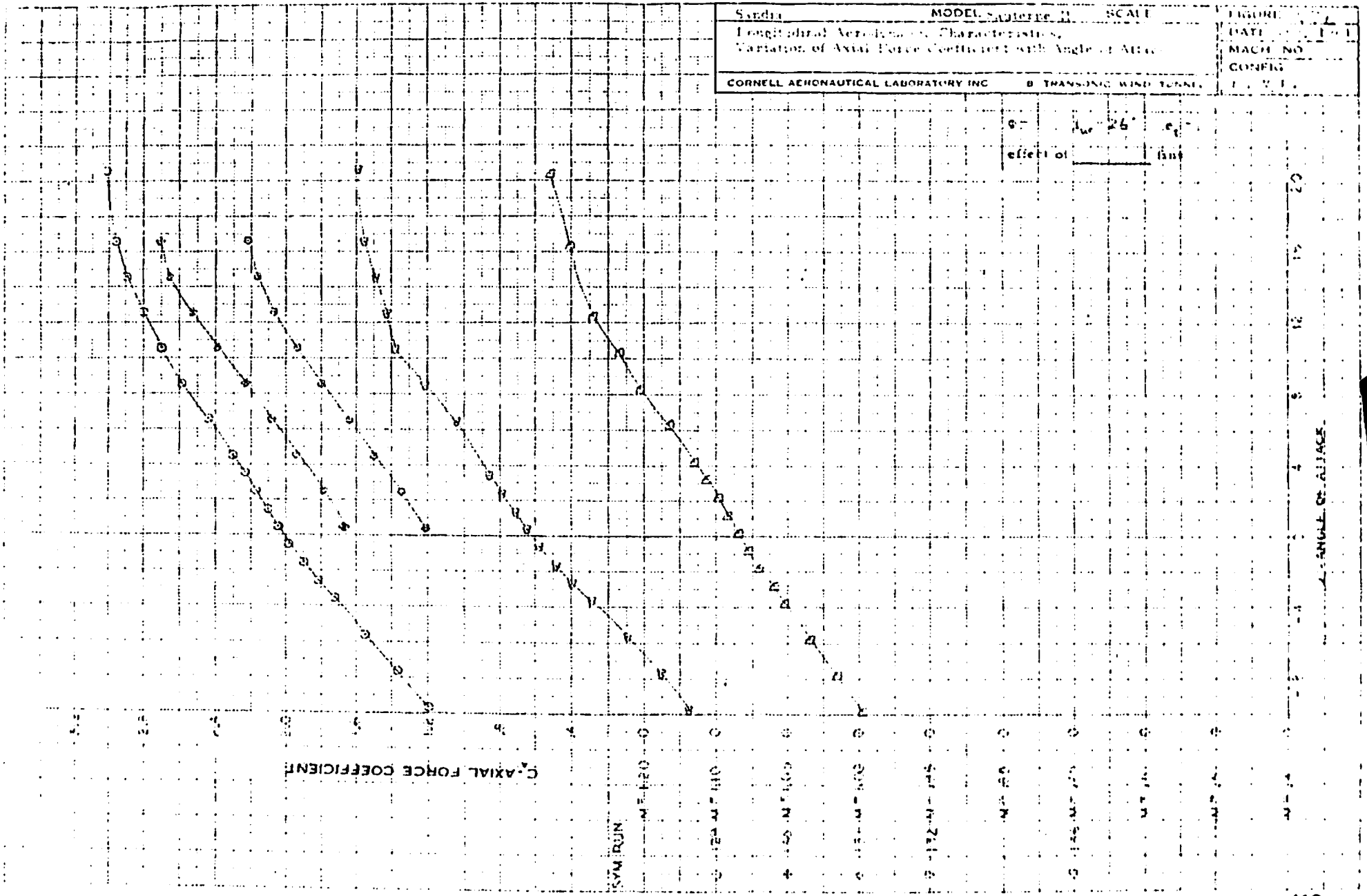
Lateral Aerodynamic Characteristics
Variation of Rolling Moment Coefficient with Angle of Sideslip

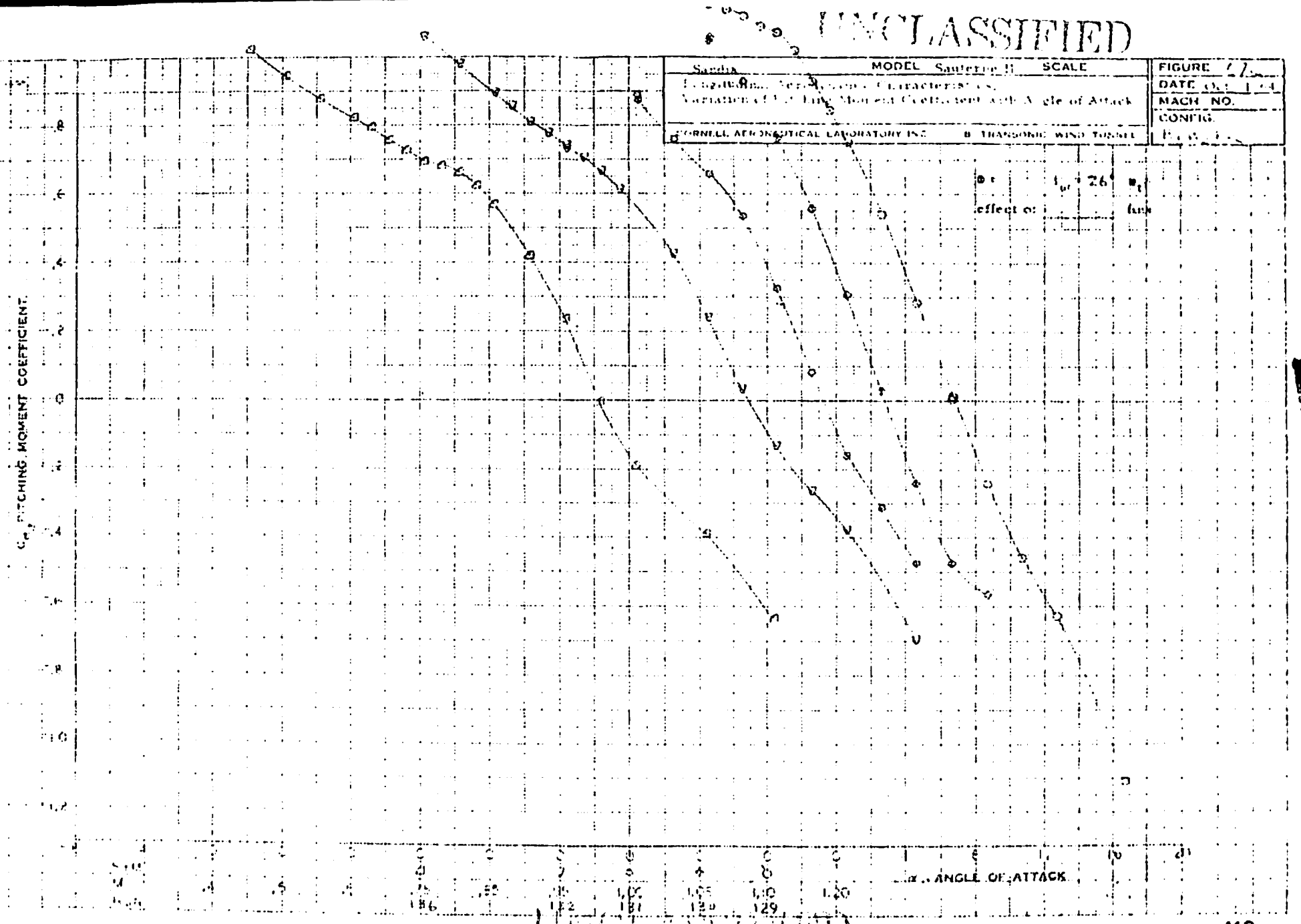
DATE Oct. 1961
MACH. NO. .95
CONFIG.

CORNELL AERONAUTICAL LABORATORY, INC | 8' TRANSONIC WIND TUNNEL

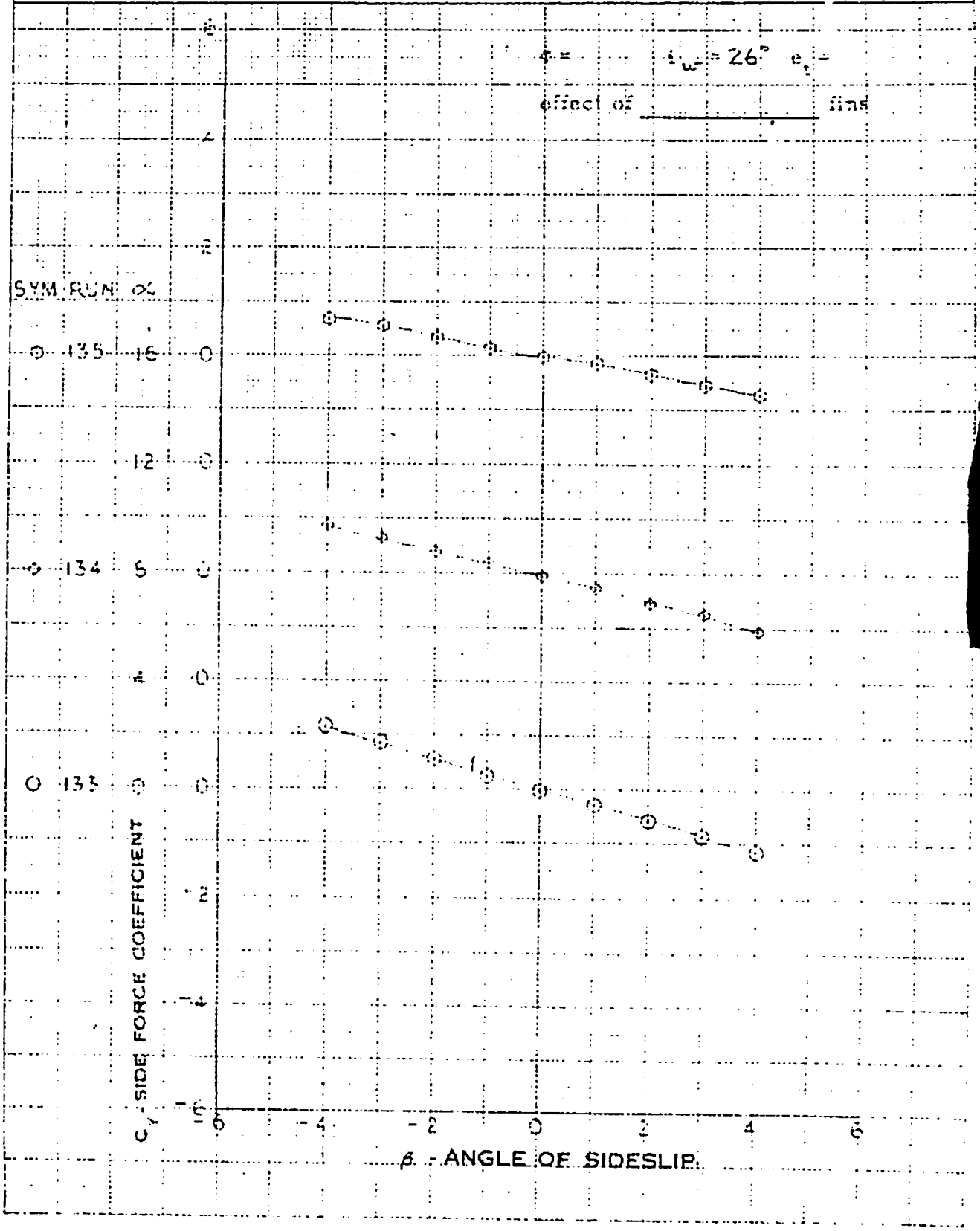



Sandia
MODEL Sauterne II
SCALE
FIGURE
DATE Oct. 1964
MACH NO
CONFIG.
Longitudinal Aerodynamic Characteristics
Variation of Normal Force Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC
8' TRANSONIC WIND TUNNEL
effect of
C_N NORMAL FORCE COEFFICIENT
α - ANGLE OF ATTACK
16
14
12
10
8
6
4
2
0
-2
-4
-6
-4
-2
0
2
4
6
8
12
16
20
.95
1.00
1.20

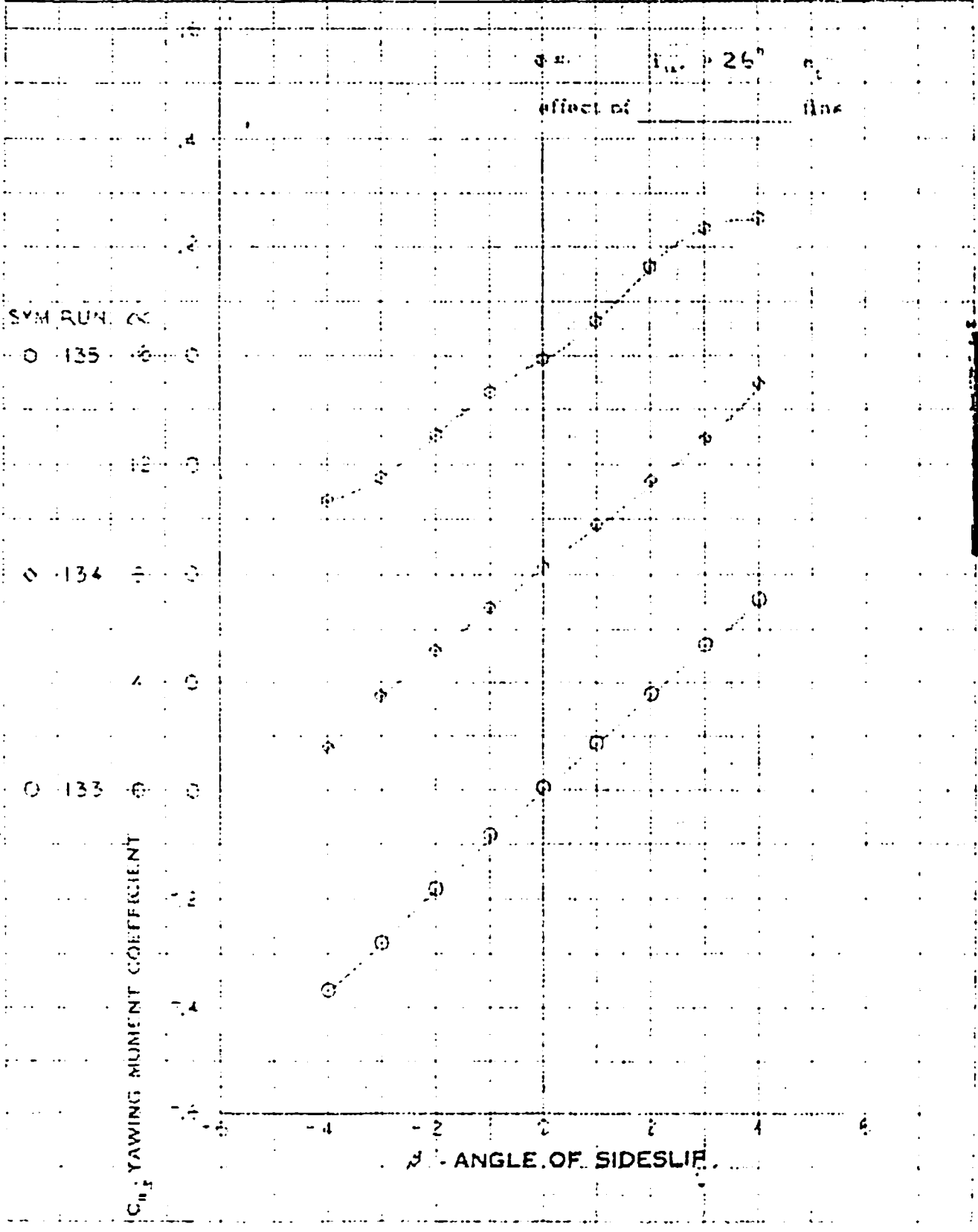

Sandia
MODEL Saturne II
SCALE
Longitudinal Aerodynamic Characteristics
Variation of Axial Force Coefficient with Angle of Attack
CORNELL AERONAUTICAL LABORATORY INC
8' TRANSONIC WIND TUNNEL
FIGURE
DATE
MACH NO.
CONFIG.
effect of
δint
C_A, AXIAL FORCE COEFFICIENT
ANGLE OF ATTACK
SYM RUN


MODEL Sapphire II SCALE
FIGURE
DATE
MACH NO.
CONFIG.
CORNELL AERONAUTICAL LABORATORY INC. 8' TRANSONIC WIND TUNNEL
effect of
C_m, PITCHING MOMENT COEFFICIENT
α, ANGLE OF ATTACK

Sandia	MODEL Santorini II	SCALE	FIGURE 62a
Lateral Aerodynamic Characteristics Variation of Side Force Coefficient with Angle of Sideslip			DATE Oct. 1961
			MACH. NO.
			CONFIG
CORNELL AERONAUTICAL LABORATORY, INC	8' TRANSONIC WIND TUNNEL		B, A, F, C



Sandia	MODEL Sanserne II	SCALE	FIGURE
Lateral Aerodynamic Characteristics Variation of Yawing Moment Coefficient with Angle of Sideslip			DATE Oct. 1964
			MACH NO
			CONFIG
CORNELL AERONAUTICAL LABORATORY, INC	8' TRANSONIC WIND TUNNEL		



Navion	MODEL Airplane II SCALE	FIGURE 4.2.c
Lateral Aerodynamic Characteristics Variation of Rolling Moment Coefficient with Angle of Sideslip		DATE Oct. 1954
		MACH. NO.
		CONFIG
CORNELL AERONAUTICAL LABORATORY, INC.	8' TRANSONIC WIND TUNNEL	

