

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. 1 OF 272

COPY NO.

LTV VOUGHT AERONAUTICS DIVISION
LING-TEMCO-VOUGHT, INC. P.O. BOX 5907 DALLAS, TEXAS 75222

**A LOW SPEED WIND TUNNEL FORCE TEST
OF THE SANDIA SAUTERNE MODEL WITH DROGUE CHUTE**

SUBMITTED UNDER

REPORT NO. LSWT 167	DATED 18 December 1964
MODEL Sauterne I	CONTRACT NO. P.O. 4803/004
DATE ISSUED	SUPERSEDING

1. Test Date: 6/25/97
 Authority: W.C. Layne
 Name: W.C. Layne
 2. Review Date: 6/30/97
 Authority: W.C. Layne
 Name: W.C. Layne

**LTV LOW SPEED WIND TUNNEL
TEST 167**

TEST DATES: 31 August - 3 September 1964

J.W. Holbrook
PREPARED

J. W. Holbrook
Test Engineer

J.M. Cooksey
REVIEWED

J. M. Cooksey, Supvr.
Low Speed Wind Tunnel
(Acting)

J.M. Cooksey
APPROVED

J. M. Cooksey, Chief
Gas Dynamics Labs.

UNCLASSIFIED

REVISIONS

DATE	REV BY	PAGES AFFECTED	REMARKS
SANDIA SYSTEMATIC DECLASSIFICATION REVIEW DOWNGRADING OR DECLASSIFICATION STAMP CLASSIFICATION CHANGED TO: <u>4</u> <i>Emilia Salas</i> 7/15/97 PERSON CHANGING MARKING & DATE <i>Carmela Dallas</i> 7/22/97 PERSON VERIFYING MARKING & DATE AUTHORITY: <u>W.C. Layne</u> RECORD ID: <u>975N2287</u> DATED: <u>6/30/97</u>			

TABLE OF CONTENTS

PAGE NO. 2

<u>SECTION NO.</u>		<u>PAGE NO.</u>
I	INTRODUCTION	3
II	TEST FACILITY, MODEL AND INSTRUMENTATION . . .	4
III	TEST PROCEDURES.	5
IV	DATA REDUCTION	6
V	NOMENCLATURE AND SYMBOLS	8
VI	MODEL DIMENSIONAL DATA	12
VII	REFERENCES	13

FIGURES AND TABLES

TABLE NO.

I	Run Index.	22
II	Plotted Data Index	28

FIGURE NO.

1	Sauterne Model Installation in LTV Low Speed Wind Tunnel	14
2	Basic Sauterne Model Configurations	15
3	10° (20° incidence) Wing Configuration	16
4	Aerial View of The Ling-Temco-Vought Low Speed Wind Tunnel Facility	17
5	Model Upright - Image Out	18
6	Model Upright - Image In	19
7	Model Upright Installation in Test Section	20
8	Model Inverted with Drogue Chute	21

APPENDIX A

IBM Tabulated Data

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO 3

I. INTRODUCTION

The Sandia Corporation Sauterne Shape was tested in the 7 x 10 foot test section of the Ling-Temco-Vought Low Speed Wind Tunnel during the period of 31 August - 3 September 1964. This report is a presentation of the plotted coefficient data, the tabulated coefficient data, and general test procedures for the test. A Run Index is presented in Table I for easy reference to configurations tested. Model installation photographs can be found in Figures 5 through 8.

GENERAL INFORMATION

Test Number	LSWT 167
Test Dates	31 August - 3 September 1964
Occupancy	39 hrs. 27 min.
Purchase Order Number	4803/004
Sandia Project Representatives	R. E. Tate P. R. Wilkes, Jr.
LTV Wind Tunnel Engineer	J. W. Holbrook

The purpose of this test was to study the effect of certain drogue chute configurations on the stability and drag of the Sauterne configuration.

UNCLASSIFIED

II. TEST FACILITY, MODEL AND INSTRUMENTATION

PAGE NO. 4

Test Facility

The test of the Sandia Corporation Sauterne Shape was tested in the 7 x 10 foot test section of the Ling-Temco-Vought Low Speed Wind Tunnel. The tunnel is a closed circuit single return facility having a 7 x 10 foot test section operated at speeds up to 240 mph. An aerial view of the tunnel is presented in Figure 4.

The pyramid-type balance system resolves and measures the aerodynamic forces acting on the model into six-components of lift, drag, pitching moment, side force, rolling moment, and yawing moment along and about a system of wind axes having its resolving center at the test section centerline and the support centerline intersection point. The force and moment data are recorded on an automatic IBM typewriter and card punch machine in units of pounds and foot-pounds.

The test section dynamic pressure is monitored by the use of a calibrated static pressure piezometer ring arrangement (Reference 1) that is permanently installed in the tunnel circuit.

Model

The model for this test was the Sandia Sauterne Shape. The model was of all metal construction with provisions for mounting to the LTV two-support system. The only variable model configurations during this test were the drogue chutes.

The model was a body of revolution having a length of 36.250 inches, a maximum diameter of 4.120 inches, fins on the aft end, and a wing fixed at 20° incidence. Model dimensional data are presented on page 12.

The drogue chutes were 4.50 inches and 6.00 inches in diameter with various shroud line lengths as defined in "Model Dimensional Data" on page 12.

Instrumentation

The model force and moment data were measured with the tunnel pyramid-type external balance.

The drogue chute motion was recorded with a sixteen millimeter movie camera, using Tri-X-negative film. Camera frame rate was set at 4000 frames per minute.

III. TEST PROCEDURES

PAGE NO 5

A total of 129 data runs was made during the test. A typical run consisted of 10 to 12 data points with either pitch angle or yaw angle being the variable and test section dynamic pressure held constant. The test variables included the following:

- (1) Drogue chute configuration changes.
- (2) Test section dynamic pressures of 33.9, 76.2, and 135.5 pounds per square foot.
- (3) Angle of attack (α) range of -4° to $+20^\circ$.
- (4) Angle of yaw (ψ) range of -4° to $+4^\circ$.

The model was supported in the test section on the tandem two support system as shown in Figure 7. The forward support fairing remains aligned with the wind during yaw runs. The rear support fairing does not remain aligned, but turns with the turntable.

As shown in Figure 8, the model was tested in the inverted position.

The first portion of the test (Runs 1-37) was devoted to obtaining support tare and interference corrections. The support tare and interference program was conducted using an image system in accordance with Reference 2. This involved making model upright runs both with and without the support image system thus isolating the effects of the supports. Photographs of the image system installation are presented in Figure 6. The flow alignment and support tare and interference corrections established are presented in Section IV, "Data Reduction."

During each run, six-component force and moment data (lift, drag, pitching moment, side force, rolling moment, and yawing moment) were recorded and plotted in raw data form (units of pounds and foot-pounds) at the control console.

The aerodynamic coefficient data are presented in plotted form on pages 29 through 55. The IBM tabulations of the data are presented in Appendix A of this report.

IV. DATA REDUCTION

PAGE NO. 6

General

Six-component data were recorded in pounds and foot-pounds during each run. These force and moment data were reduced to coefficient form as defined in Section V, "Nomenclature and Symbols." The moment data were transferred from the balance resolving center to a specified C.G.

Moment Transfer Equations

(From Trunnion to Center of Gravity)

$$C_m = C_{m_{TR}} + C_L \frac{R}{\bar{c}} \cos(\theta - \alpha) \cos \psi - C_D \frac{R}{\bar{c}} (\theta - \alpha)$$

$$C_n = C_{n_{TR}} + C_Y \frac{R}{b} \cos(\theta - \alpha) \cos \psi + C_D \frac{R}{b} \cos(\theta - \alpha) \sin \psi$$

$$C_l = C_{l_{TR}} - C_Y \frac{R}{b} \sin(\theta - \alpha) - C_L \frac{R}{b} \cos(\theta - \alpha) \sin \psi$$

(Wind to Body Axes)

$$C_N = C_L \cos \alpha + C_D \cos \psi \sin \alpha - C_Y \sin \psi \sin \alpha$$

$$C_A = C_D \cos \psi - C_Y \sin \psi \cos \alpha - C_L \sin \alpha$$

$$C_{m_B} = C_m \cos \psi - \frac{b}{\bar{c}} C_l \sin \psi$$

$$C_{Y_B} = C_Y \cos \psi + C_D \sin \psi$$

$$C_{l_B} = C_l \cos \psi \cos \alpha + \frac{\bar{c}}{b} C_m \sin \psi \cos \alpha - C_n \sin \alpha$$

$$C_{n_B} = C_n \cos \alpha + C_l \cos \psi \sin \alpha + \frac{\bar{c}}{b} C_m \sin \psi \sin \alpha$$

Data Reduction Factors

S = 0.0925233 square feet

b = 3.0210 feet

$\bar{c}$ = 3.0210 feet

R = 0.6979 feet

θ = 0.0 degrees

q = 33.9, 76.2, and 135.2 psf

Data Reduction Axes: Wind and Body

UNCLASSIFIED

IV. DATA REDUCTION (Continued)

PAGE NO. 7

Data Corrections

All force and moment data have been corrected for support tare and interference, static weight tares, flow alignment, and solid and wake blockage corrections. No tunnel wall corrections were applied to the data.

a) Support Tare and Interference Corrections

Support tare and interference corrections applied to the data were those derived from runs 1-36 of this test. These tare and interference data are presented in tabular form on page A-2 of Appendix A.

b) Static Weight Tare Corrections

Only pitching moment and rolling moment components require a static weight tare correction. A static weight tare correction was evaluated for each model configuration which made a significant change in the horizontal distance between the trunnion and the physical center of gravity of the model mass.

c) Flow Alignment Correction

$$\alpha_{\text{align}} = 0.450 \text{ degrees}$$

d) Solid and Wake Blockage Corrections

The solid and wake blockage corrections were combined into one expression and applied to the piezometer ring differential setting, thus resulting in a test section dynamic pressure (q) of a predetermined value.

$$q_{\text{set}} = q \left(\frac{1}{5.202 \times q_u/q_{\text{piez}}} \right) \left(1 + \frac{M^2}{4} \right) \left(\frac{1}{1 + 2 \epsilon b} \right)$$

where:

q_{set} = Piezometer ring differential pressure in inches of water.

q = Desired test section dynamic pressure, pounds per square foot.

q_u/q_{piez} = Piezometer ring calibration factor determined from a dynamic pressure survey of the clear test section. This factor was determined to be 1.20.

$1 + \frac{M^2}{4}$ = Compressibility correction term where M = Mach Number.

$(1 + 2\epsilon b)$ = Solid and wake blockage correction.

$\epsilon_b = 1/4 \frac{\text{Maximum model frontal area}}{\text{Test section cross-sectional area}}$

UNCLASSIFIED

V. NOMENCLATURE AND SYMBOLS

PAGE NO. 8

<u>Symbol</u>	<u>Description</u>
α_c	$\alpha_g + \alpha_{align}$, corrected angle of attack, degrees
α_g	Geometric angle of attack measured with respect to model centerline, degrees
α_{align}	Angle of attack correction due to flow alignment effects.
b	Model body length, feet
$\bar{c}$	Model body length, feet
C_D	Wind axes drag coefficient, D/qS
C_A	Body axes drag coefficient
C.G.	Center of gravity
C_l	Wind axes rolling moment coefficient, l/qSb
C_{l_B}	Body axes rolling moment coefficient
C_L	Wind axes lift, L/qS
C_N	Body axes lift coefficient, normal force coefficient
C_m	Wind axes pitching moment coefficient, $m/qS\bar{c}$
C_{m_B}	Body axes pitching moment coefficient
C_n	Wind axes yawing moment coefficient, N/qSb
C_{n_B}	Body axes yawing moment coefficient
C_Y	Wind axes side force coefficient, Y/qS
C_{Y_B}	Body axes side force coefficient
D	Drag, pounds
F.S.	Model fuselage station
l	Rolling moment, foot-pounds
L	Lift, pounds
m	Pitching moment, foot-pounds
n	Yawing moment, foot-pounds
N	Model normal force, lbs.
q	Test section dynamic pressure corrected for solid and wake blockage, psf

UNCLASSIFIED

V. NOMENCLATURE AND SYMBOLS (Continued)

PAGE NO. 9

<u>Symbol</u>	<u>Description</u>
q_{set}	Piezometer ring pressure used to monitor q inches of water.
R	Distance from trunnion to moment transfer point
S	Model body cross-sectional area, square feet
Y	Side force, pounds
ψ	Model angle of yaw, degrees
θ	Acute angle formed by a horizontal line and a line connecting the trunnion point to the moment transfer point.

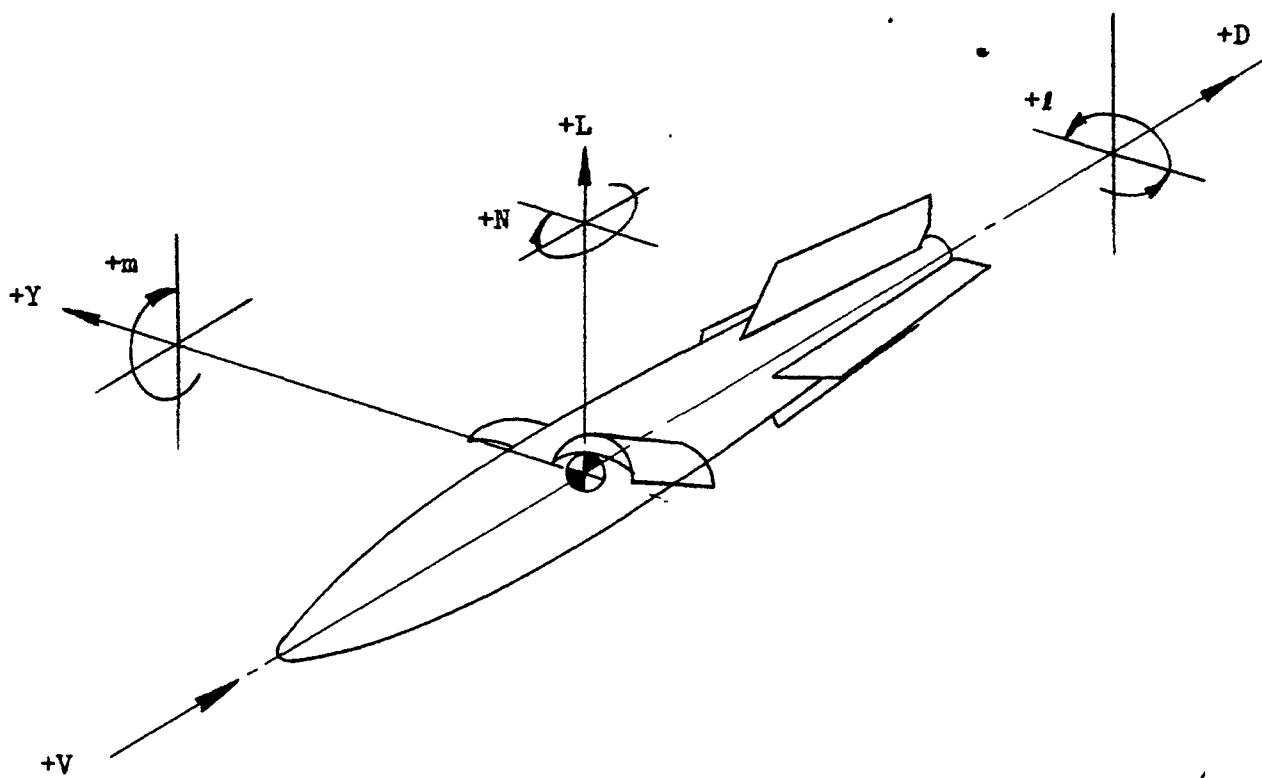
Below is the nomenclature for the IBM tabulated data presented in Appendix A of this report.

<u>Symbol</u>	<u>Description</u>
PT	Data point number
ALPHA	α_c
PSI	ψ
CL	C_L
CD	C_D
CPM	C_m
CY	C_Y
CRM	C_l
CYM	C_n
CN	Body axes lift coefficient
CA	Body axes drag coefficient

UNCLASSIFIED

V. NOMENCLATURE AND SYMBOLS (Continued)

PAGE NO. 10

Model Sign ConventionForce Diagram - Wind Axes

Model Shown in Upright Position

UNCLASSIFIED

V. NOMENCLATURE AND SYMBOLS (Continued)

PAGE NO 11

Model Configuration Symbols

<u>Symbol</u>	<u>Description</u>
B ₁	Basic Sauterne model configuration, reference Figure 2.
F ₁	Basic Sauterne slab fin. Reference Figure 1.
W ₁	Wing fixed at 20 degree incidence angle, Reference Figure 3.
C _{A10}	4.5 inch diameter vented drogue chute with ten inch long shroud lines.
C _{A13}	4.5 inch diameter vented drogue chute with thirteen inch long shroud lines.
C _{A16}	4.5 inch diameter vented drogue chute with sixteen inch long shroud lines.
C _{A38}	4.5 inch diameter vented drogue chute with thirty-eight inch long shroud lines.
C _{B16}	4.5 inch diameter unvented drogue chute with sixteen inch long shroud lines.
C _{B38}	4.5 inch diameter unverted drogue chute with thirty-eight inch long shroud lines.
C _{C16}	6.0 inch diameter unvented drogue chute with sixteen inch shroud lines.

CLASSIFIED

VI. MODEL DIMENSIONAL DATA

PAGE NO 12

1. Length: 36.250 inches
2. Diameter of body (max): 4.120 inches
3. Cross sectional area of body (max): 13.332 in.²
4. Cross sectional area of base: 4.343 in.²
5. Fin area (single fin): 11.763 in.²
6. Planform area of wing (total): 56.278 in.²
(20° incidence only)
7. Crushable vanes not used in this test.
(filler plates in place)
8. Chute dimensions
 - a. Chute diameter 4.5 inches A
Shroud line length
10 inches
13 inches
16 inches
38 inches
 - b. Chute diameter 4.5 inches B
Shroud line length
16 inches
38 inches
 - c. Chute diameter 6.0 inches C
16 inches

UNCLASSIFIED

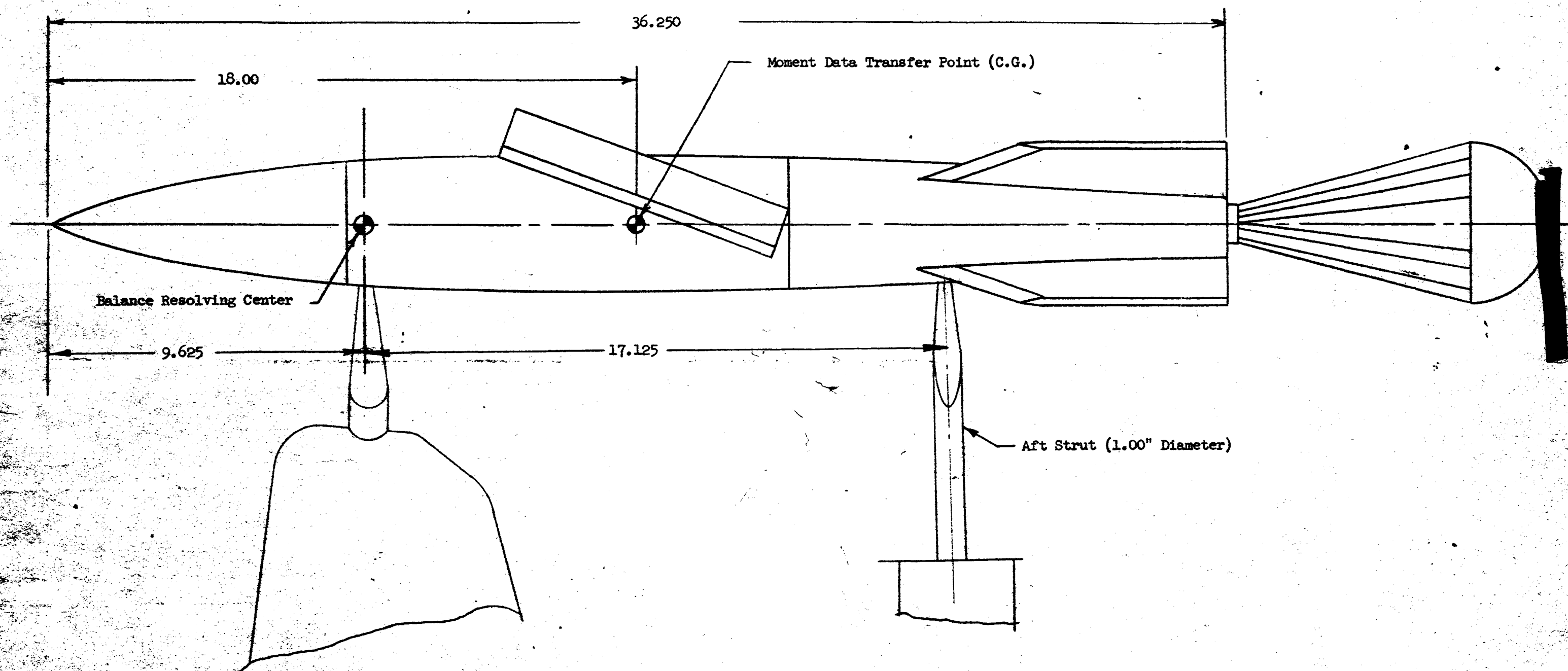
VII. REFERENCES

PAGE NO 13

1. "LTV Low Speed Wind Tunnel Handbook," Publication No. AER-EOR-12995, dated January, 1964.
2. "Wind Tunnel Testing," by Alan Pope, second edition.
3. "A Wind Tunnel Force Test of the Sandia Sauterne Shape in the LTV Vought Aeronautics Division Low Speed Tunnel," pretest information Report No. 230, dated September 2, 1964 by Sandia Corporation.

UNCLASSIFIED

UNCLASSIFIED



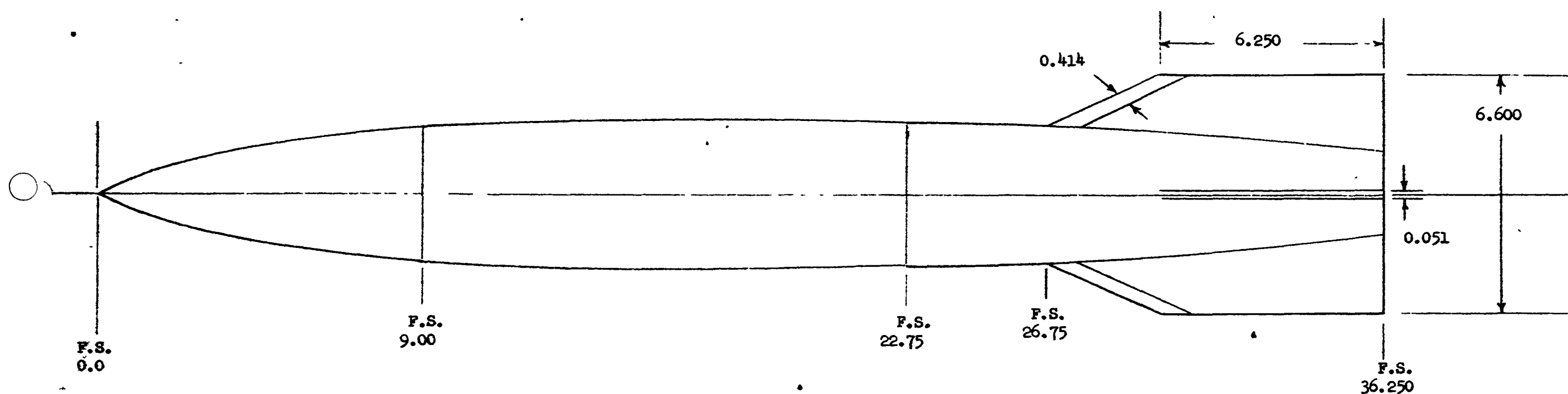
SAUTERNE MODEL INSTALLATION IN LTV LOW SPEED WIND TUNNEL

UNCLASSIFIED

UNCLASSIFIED

TABLE OF ORDINATES

X	Y	X	Y
0.0	0.0	19.9375	2.0535
1.8125	0.6630	21.7500	2.0406
3.6250	1.1340	23.5625	2.0126
5.4375	1.4648	25.3750	1.9685
7.2500	1.7113	27.1875	1.9031
9.0625	1.8988	29.0000	1.8142
10.8750	2.0020	30.8125	1.6962
12.6875	2.0380	32.6250	1.5493
14.5000	2.0535	34.4375	1.3819
16.3125	2.0602	36.2500	1.1758
18.1250	2.0600		

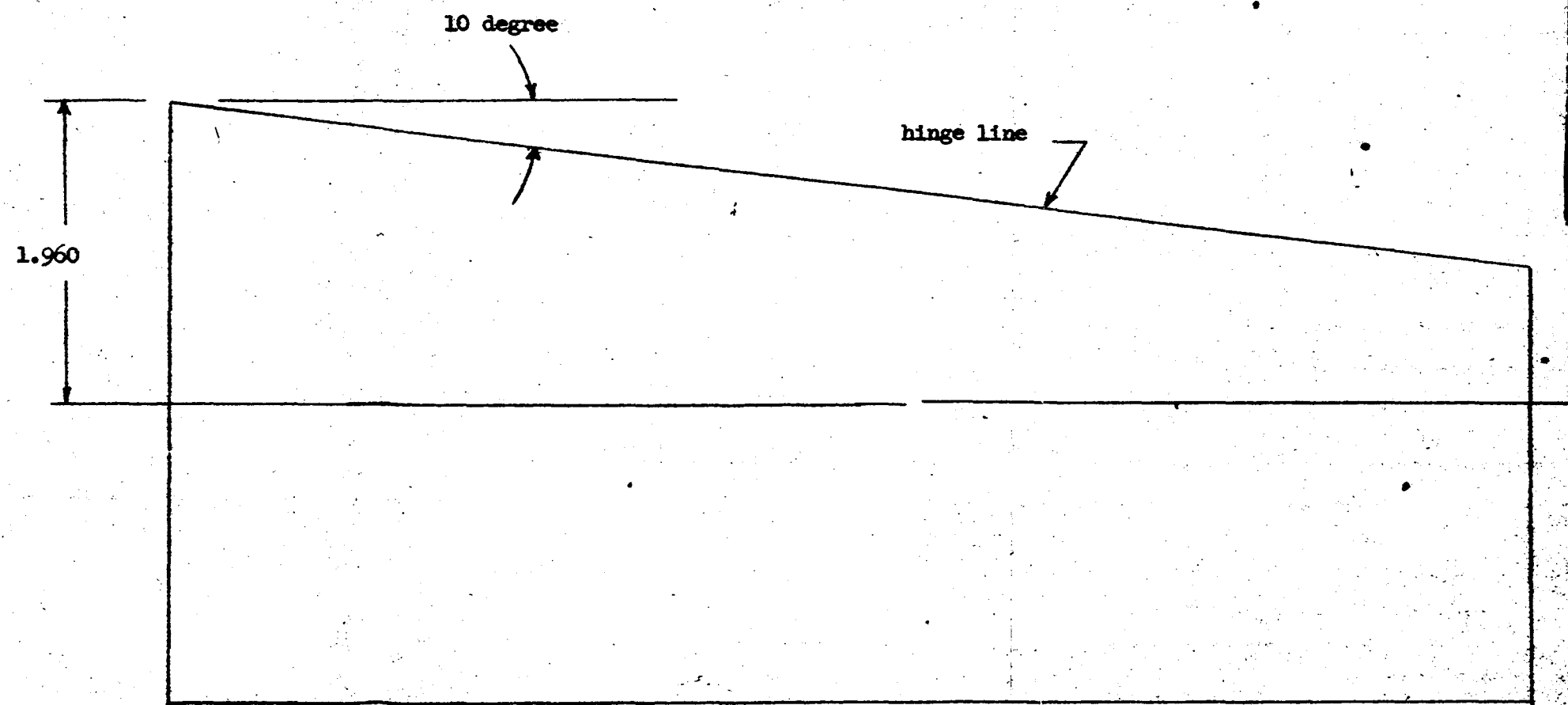
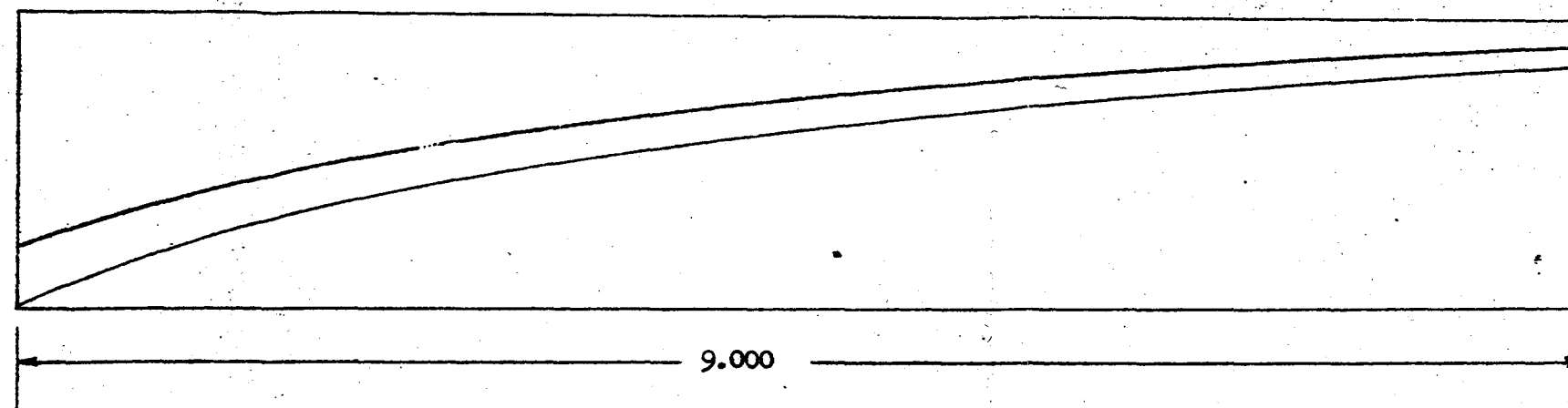
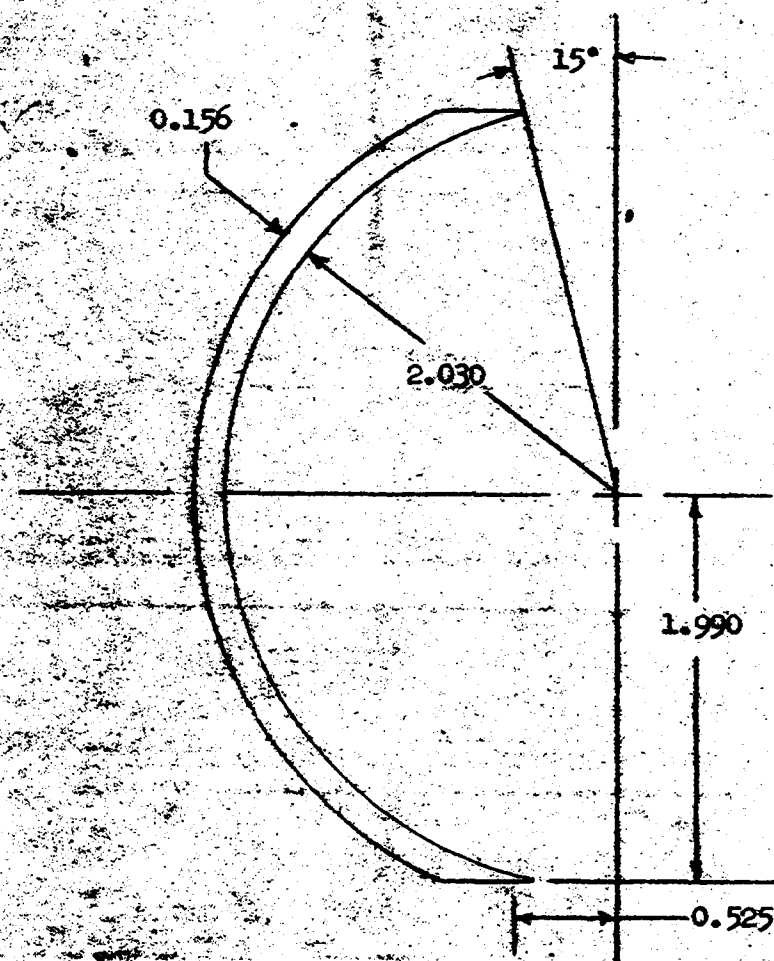


BASIC SAUTERNE MODEL CONFIGURATION

UNCLASSIFIED

UNCLASSIFIED

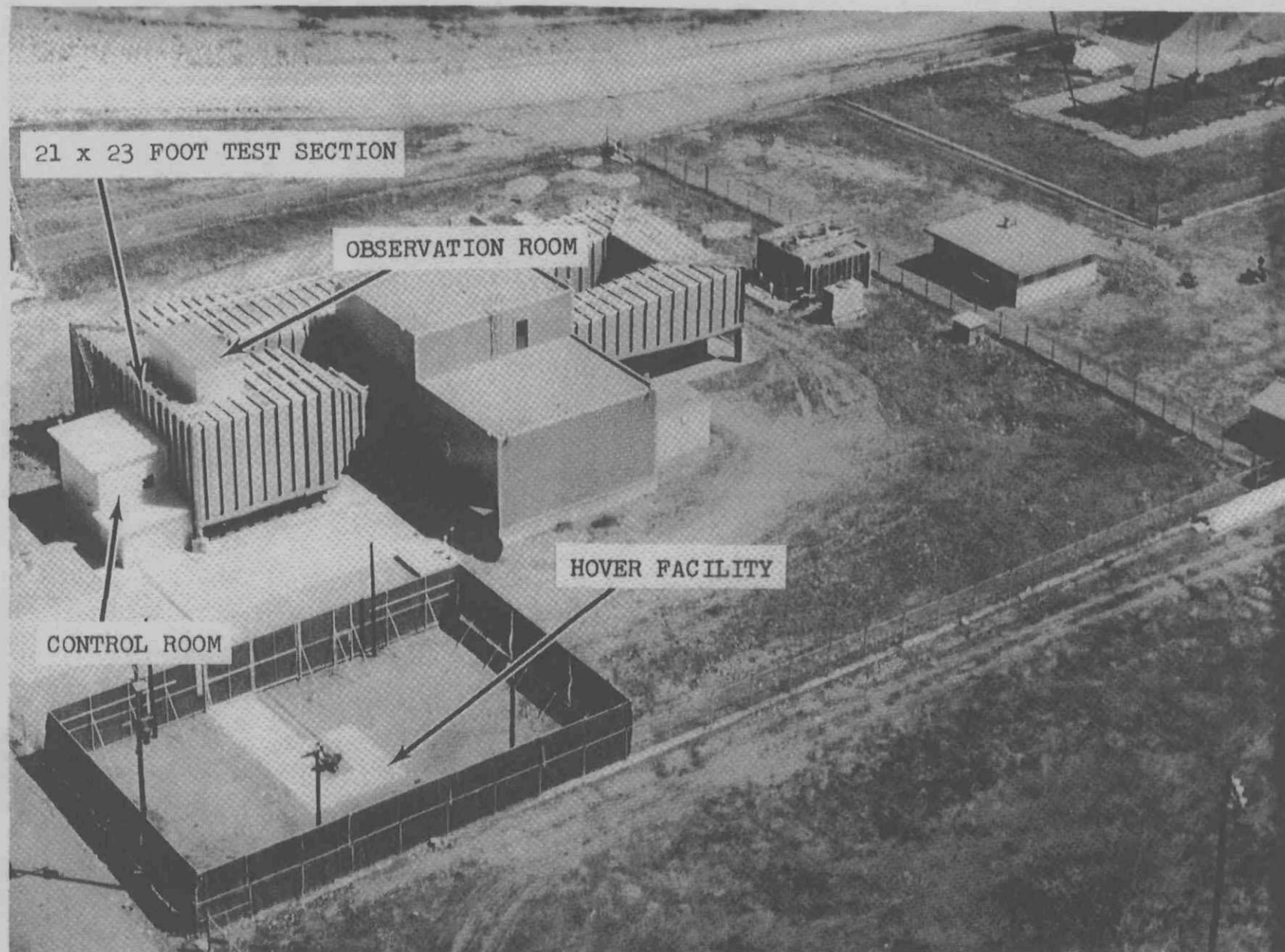
Report No. 1387 R7
Figure No. 3
Page No. 16



10° (20° INCIDENCE) WING CONFIGURATION

UNCLASSIFIED

UNCLASSIFIED



Report No. LSM 167
Page No. 17
Figure No. 4

UNCLASSIFIED

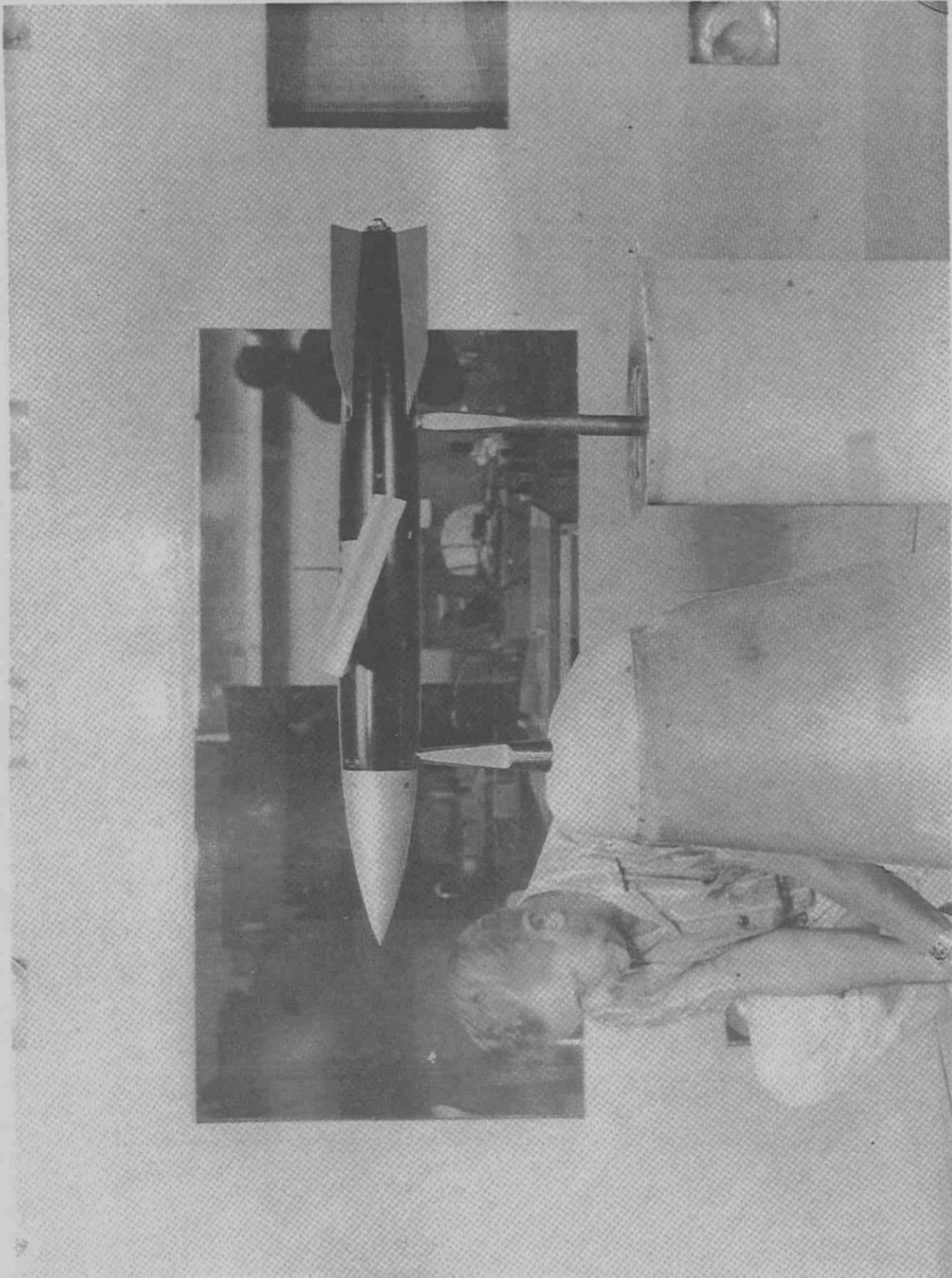
AERIAL VIEW OF THE LING-TEMCO-VOUGHT LOW SPEED WIND TUNNEL FACILITY

UNCLASSIFIED

Report No. ISWT 167

Page No. 18

Figure No. 5

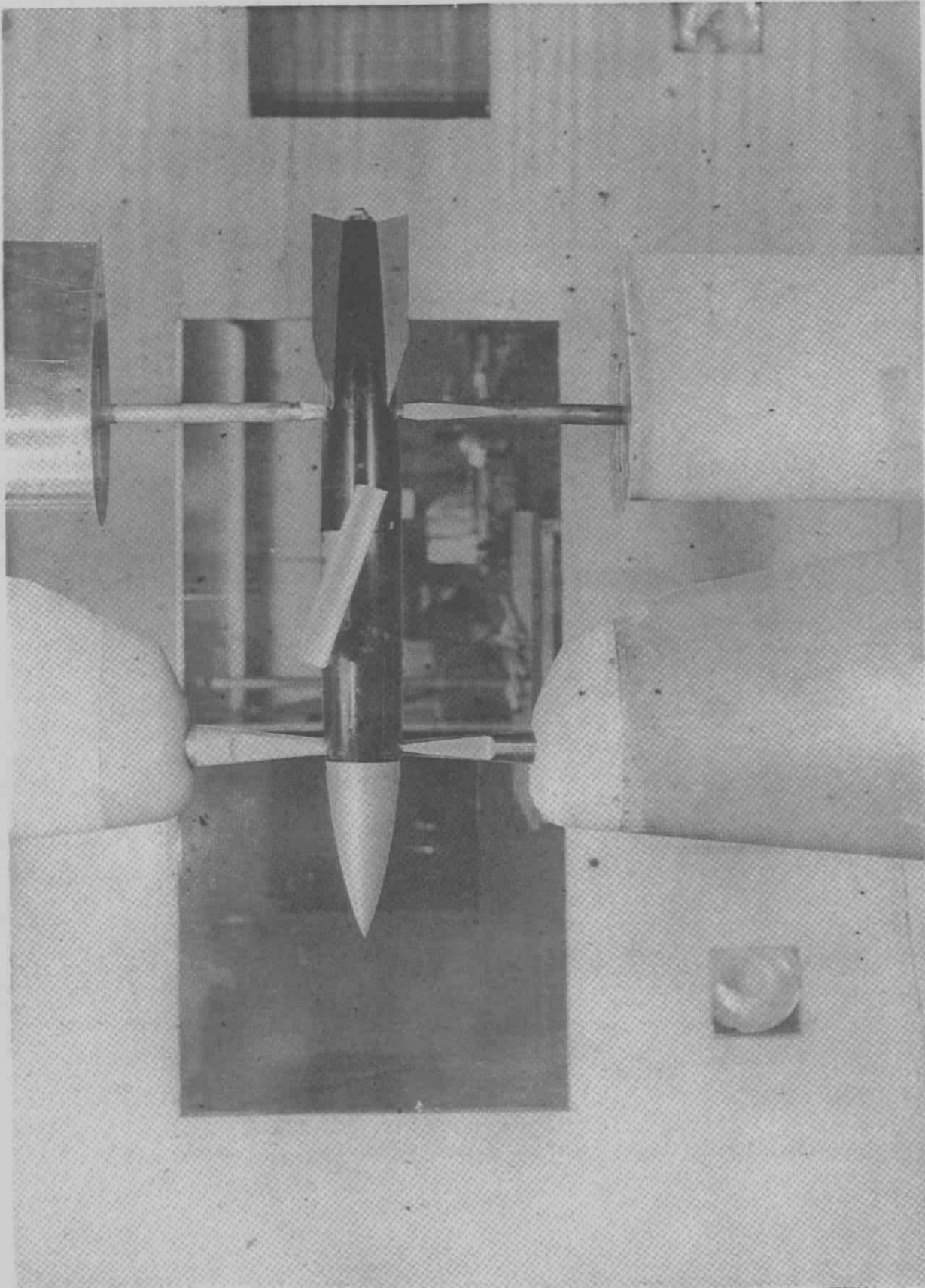


MODEL UPRIGHT - IMAGE OUT

UNCLASSIFIED

UNCLASSIFIED

Report No. LSWT 167
Page No. 19
Figure No. 6

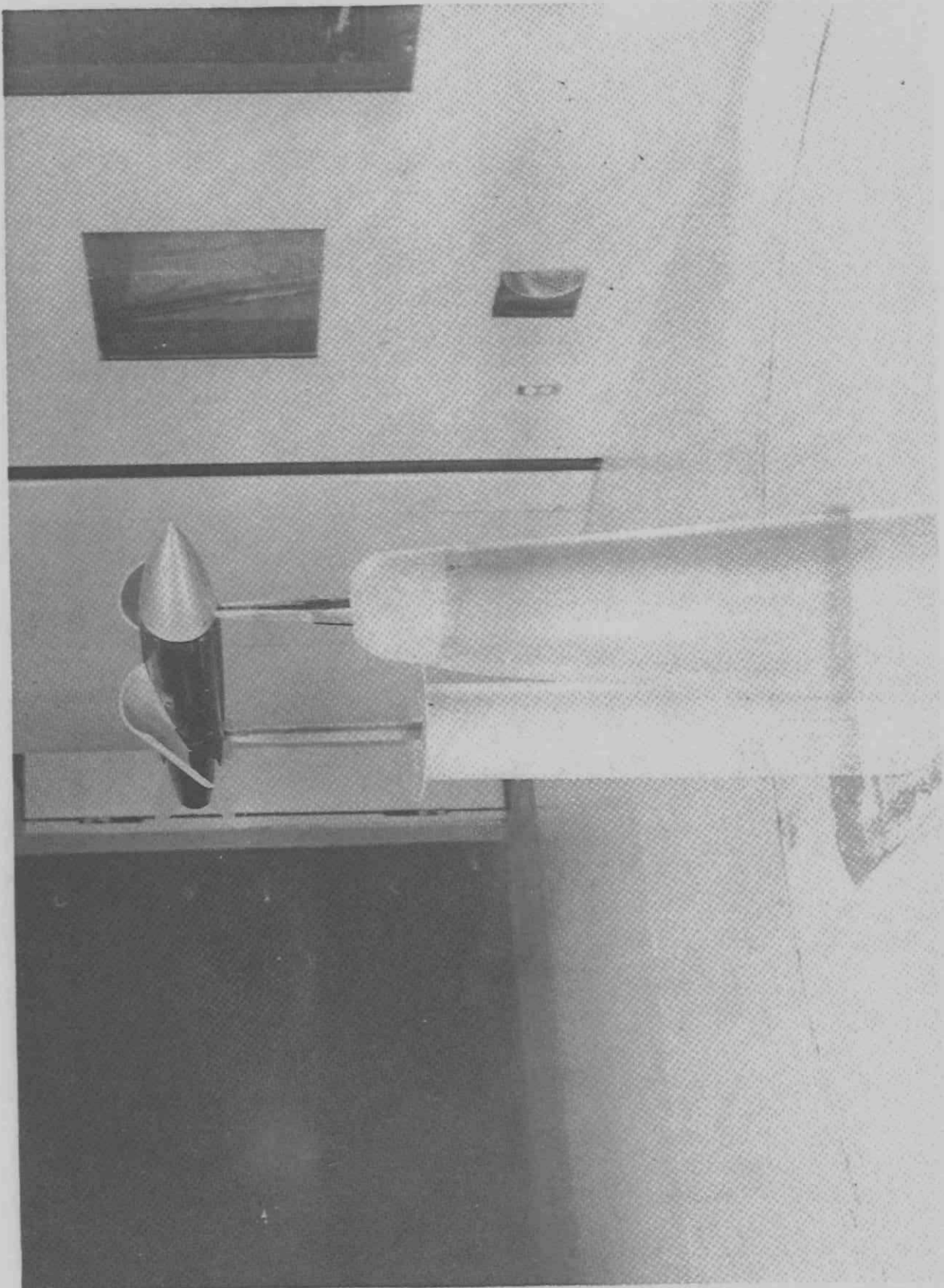


MODEL UPRIGHT - IMAGE IN

UNCLASSIFIED

UNCLASSIFIED

Report No. LSWT 167
Page No. 20
Figure No. 7

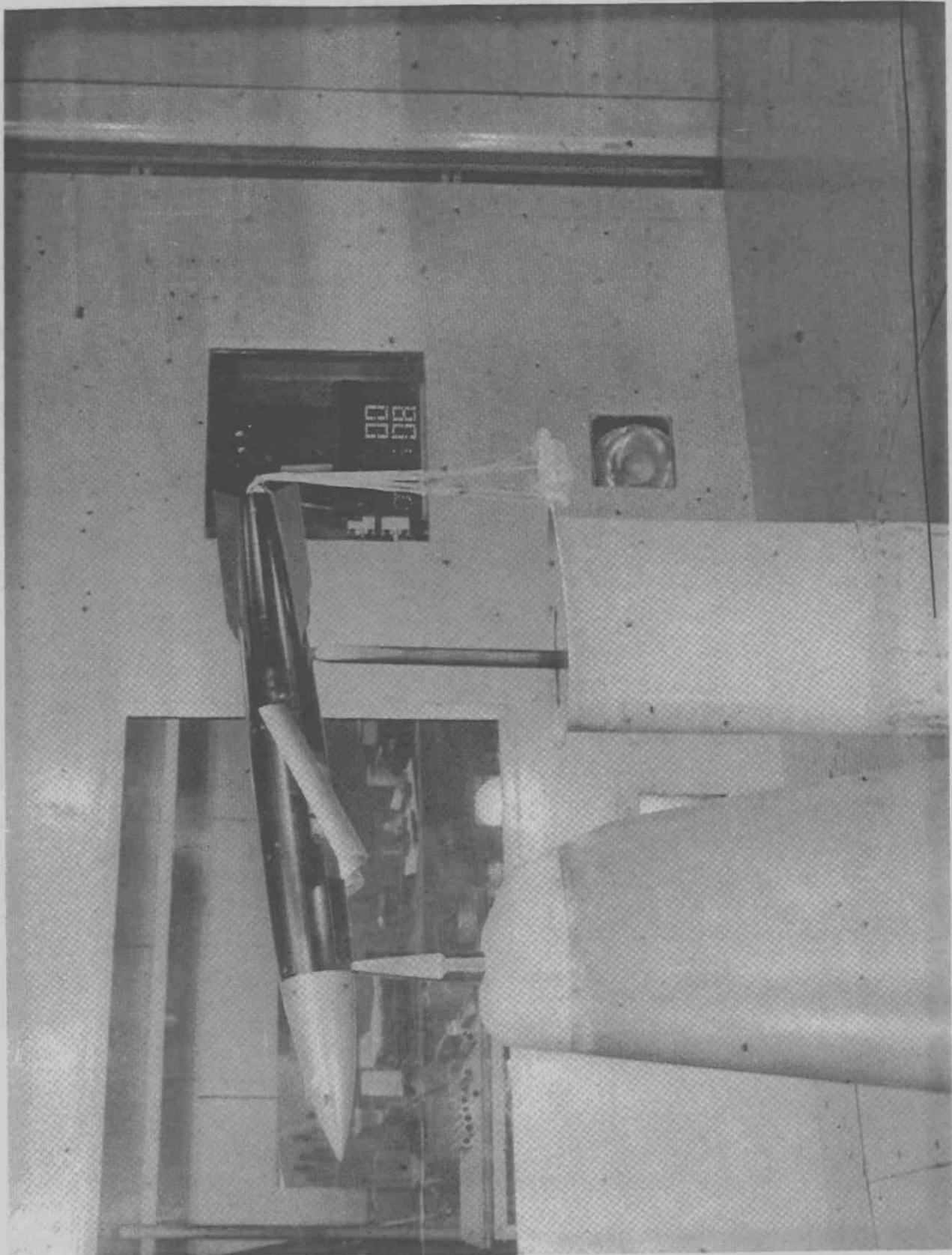


MODEL UPRIGHT INSTALLATION IN TEST SECTION

UNCLASSIFIED

UNCLASSIFIED

Report No. LSWT 167
Page No. 21
Figure No. 8



MODEL INVERTED WITH DROGUE CHUTE

UNCLASSIFIED

RUN NO.	CONFIGURATION	TEST q (P S.F.)	q Set In. H ₂ O	α RANGE (Console)	ψ RANGE (Console)	Baro. Press. In. Hg	TEMP °F	Model Up/Inv	Image In/Out	Pic.	Use Static Tare	REMARKS	Eng.	DATE
1*	B ₁ F ₁ W ₁	33.9	5.45	A	0	29.53	105	Up	Out		1		CLS	1964 8-31
2		76.2	12.36	↓	↓	↓	108				↓			
3		135.5	22.19	↓	↓	29.51	117				↓			
4*		33.9	5.45	0°	B		109				4			
5		76.2	12.36	↓			108				↓			
6		135.5	22.19	↓		↓	107				↓			
7*		33.9	5.45	+4°		29.48	106				7			
8		76.2	12.36	↓		↓	↓				↓			
9		135.5	22.19	↓		29.49	116				↓			
10*		33.9	5.45	+8°			106				10			
11		76.2	12.36	↓			108				↓		JWH	
12		135.5	22.19	↓			115				↓			
13*		33.9	5.45	+12°			106				13			
14		76.2	12.36	↓			106				↓			
15		135.5	22.19	↓			110				↓			
16*		33.9	5.45	+16°			106				16			
17		76.2	12.36	↓			106				↓			
18		135.5	22.19	↓	↓	↓	108		↓		↓			
19		33.9	5.45	A	0°	29.60	88		In		1		CLS	9-1
20		76.2	12.36	↓		29.61	97				↓			
21		135.5	22.19	↓	↓		100				↓			
22		33.9	5.45	+16°	B		106				16			
23		76.2	12.36	↓	↓						↓			
24		135.5	22.19	↓	↓	↓	114	↓	↓		↓			

RUN NO.	CONFIGURATION	TEST q (P S F)	q Set In. H ₂ O	α RANGE (Console)	ψ RANGE (Console)	Baro. Press. In Inches Hg	TEMP °F	Model Up/Inv.	Image In/Out	Pic.	Use Static Tare	REMARKS	Eng.	DATE 1964
25	B ₁ F ₁ W ₁	33.9	5.45	12°	B	29.60	106	Up	In		13		CLS	9-1
26		76.2	12.36			29.58	↓							
27		135.5	22.19	↓		29.57	114				↓			
28		33.9	5.45	8°		29.54	100				10			
29		76.2	12.36			29.55	106							
30		135.5	22.19	↓			114				↓			
31		33.9	5.45	4°		↓	104				7			
32		76.2	12.36			29.53	106							
33		135.5	22.19	↓		↓	116				↓			
34		33.9	5.45	0°		29.52	104				4			
35		76.2	12.36			29.51	111							
36		135.5	22.19	↓	↓		↓	↓			↓			
37*		76.2	12.36	C	0°		106	Inv.			37	Alignment Run	JWH	
38	C _{B16}	↓	↓	0°		↓	↓		↓		None	No Data Taken This Run		
39*	C _{A16}	33.9	5.45	C	↓	29.48	94		Out	Movie	39			
40*				0°	D	↓	96				40			
41*				-8°		29.50	88			↓	41			
42*		↓	↓	-16°	↓		90				42			
43		76.2	12.36	C	0°		96			Movie	39	Without Shut Down		
44				0°	D		97				40			
45				-8°			98				41			
46		↓	↓	-16°	↓		↓			↓	42			
47		135.5	22.19	C	0°		104				39	Runs 47 thru 50 made Without Shut Down		
48		↓	↓	0	D	↓	112	↓	↓		40			

C: $\alpha = 0, 4, 2, 1, 0, -1, -2, -4, -6, -8, -12, -16, -20, 0$
D: $\psi = 0, 4, 3, 2, 1, 0, -1, -2, -3, -4, 0$

RUN NO.	CONFIGURATION	TEST q (P S F)	q Set In. H ₂ O	α RANGE (Console)	ψ RANGE (Console)	Baro. Press. In Inches H _g	TEMP °F	Model Up/ Inv.	Image In/ Out	Pic.	Use Static Tare	REMARKS	Eng.	DATE 1964
49	B ₁ F ₁ W ₁ C _{A16}	135.5	22.19	-8°	D	29.50	114	Inv.	Out	Movie	41		JWH	9-1
50	↓	↓	↓	-16°	↓	↓	↓				42			
51	C _{C16}	33.9	5.45	C	0°	29.54	94				39	Without Shut Down		
52				0°	D		93				40			
53				-8°			92				41			
54		↓	↓	-16°	↓		90				42			
55		76.2	12.36	C	0°		92				39	Without Shut Down		
56				0°	D		94				40			
57				-8°			95				41			
58		↓	↓	-16°	↓	↓	96				42			
59		135.5	22.19	C	0°	29.57	101			Movie	39	Without Shut Down	CLS	9-2
60				0°	D	29.58	115				40			
61				-8°			109			Movie	41			
62		↓	↓	-16°	↓	↓	↓				42			
63	C _{A13}	33.9	5.45	C	0°	29.57	100			Movie	39	Without Shut Down		
64				0°	D		↓				40			
65				-8°		↓	98				41			
66		↓	↓	-16°	↓	29.58	97				42			
67		76.2	12.36	C	0°		101			Movie	39	Without Shut Down		
68				0°	D		105				40			
69				-8°			108			Movie	41			
70		↓	↓	-16°	↓		↓				42			
71		135.5	22.19	C	0°		118			Movie	39	Runs 72 and 73 made Without Shut Down		
72	↓	↓	↓	0	D	↓	↓	↓	↓	↓	40			

TEST 167 RUN INDEX

SAUTERNE I MODEL

UNCLASSIFIED
 RUN INDEX 167
 TEST NO. 167
 REPORT NO. LSWT 167
 PAGE NO. 25
 TABLE NO. 1

RUN NO.	CONFIGURATION	TEST q (P.S.F.)	q Set In. H ₂ O	α RANGE (Console)	ψ RANGE (Console)	Baro. Press. In. Hg	TEMP °F	Model Up/Inv.	Image In/Out	Pic.	Use Static Tare	REMARKS	Eng.	DATE
73	B ₁ F ₁ W ₁ CA ₁₃	135.5	22.19	-8°	D	29.58	122	Inv.	Out	Movie	41		CLS	1964 9-2
74	↓	↓	↓	-16°	↓	29.57	121				42			
75	CB ₃₈	33.9	5.45	C	0	29.56	109				39			
76		↓	↓	0°	D	29.57	108				40			
77		↓	↓	-8°	↓	↓	98			↓	41	Without Shut Down		
78		↓	↓	-16°	↓	29.55	99				42			
79		76.2	12.36	C	0°	29.53	101			Movie	39	Without Shut Down		
80		↓	↓	0°	D	↓	104			↓	40			
81		↓	↓	-8°	↓	↓				↓	41			
82		↓	↓	-16°	↓	↓	106				42			
83	↓	135.5	22.19	C	0°	29.51	112			Movie	39	Lost Parachute CB ₃₈		
84	CA ₃₈	33.9	5.45	↓	↓	29.48	101			Movie	39	Installed CA ₃₈		
85		↓	↓	0°	D	29.49					40			
86		↓	↓	-8°	↓	29.47				Movie	41			
87		↓	↓	-16°	↓	↓					42			
88		76.2	12.36	C	0°	29.48	103			Movie	39			
89		↓	↓	0°	D	↓	105			↓	40			
90		↓	↓	-8°	↓	↓	106				41			
91		↓	↓	-16°	↓	↓				Movie	42			
92		135.5	22.19	C	0°	↓	114			0, -6 Movie	39	Without Shut Down	JWH	
93		↓	↓	0°	D	↓	116			Movie	40			
94		↓	↓	-8°	D	↓	118			Movie	41	Without Shut Down		
95		↓	↓	-16°	D	↓	119			↓	42			
96	↓	33.9	5.45	C	0°	29.46	100	↓	↓		39			

C: α = 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 0
 D: ψ = 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 0

UNCLASSIFIED

RUN NO.	CONFIGURATION	TEST q (P S F)	q Set In. H ₂ O	α RANGE (Console)	ψ RANGE (Console)	Baro. Press. In Inches Hg	TEMP °F	Model Up/ Inv.	Image In/ Out	Pic.	Use Static Tare	REMARKS	Eng.	DATE 1964
97	B ₁ W ₁ F ₁	33.9	5.45	0°	D	29.46	88	Inv.	Out		40		JWH	9-2
98*				-4°			98				98			
99				-8°			97				41			
100*				-12°			96				100			
101				-16°			95				42			
102		76.2	12.36	C	0°	29.47	96				39	Without Shut Down		
103				-4°	D		98				98			
104				-8°			99				41			
105				-12°			100				100			
106				-16°							42			
107				0°							40			
108		135.5	22.19	C	0°	29.46	106				39	Without Shut Down		
109				0°	D		113				40			
110				-4°	D		115				98			
111				-8°		29.50	104				41	Without Shut Down 2.5 Lb. W.O.Z. Shift on Lift		
112				-12°			108				100			
113				-16°			110				42			
114				-8°			102				41			
115				-12°			110				100	Without Shut Down	Repeat of 112	
116				-16°			112				42		Repeat of 113	
117	CA ₁₀	33.9	5.45	C	0°	29.52	94			Movie	39	Without Shut Down		
118				0	D		92				40			
119				-8°			90				41			
120				-16°							42			

C: α = 0, -1, -2, -4, -6, -8, -12, -16, -20, 0
D: ψ = 0, 4, 3, 2, 1, 0, -1, -2, -3, -4, 0

UNCLASSIFIED

TEST 167 RUN INDEX

RUN INDEX
TEST NO. 167

REPORT NO. LSWT 167
PAGE NO. 27
TABLE NO. I

SAUTERNE I MODEL

[illegible]

C: $\alpha = 0, 4, 2, 1, 0, -1, -2, -4, -6, -8, -12, -16, -20, 0$
D: $\psi = 0, 4, 3, 2, 1, 0, -1, -2, -3, -4, 0$

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167

Table No. II

PAGE NO. 28

PLOTTED DATA INDEX

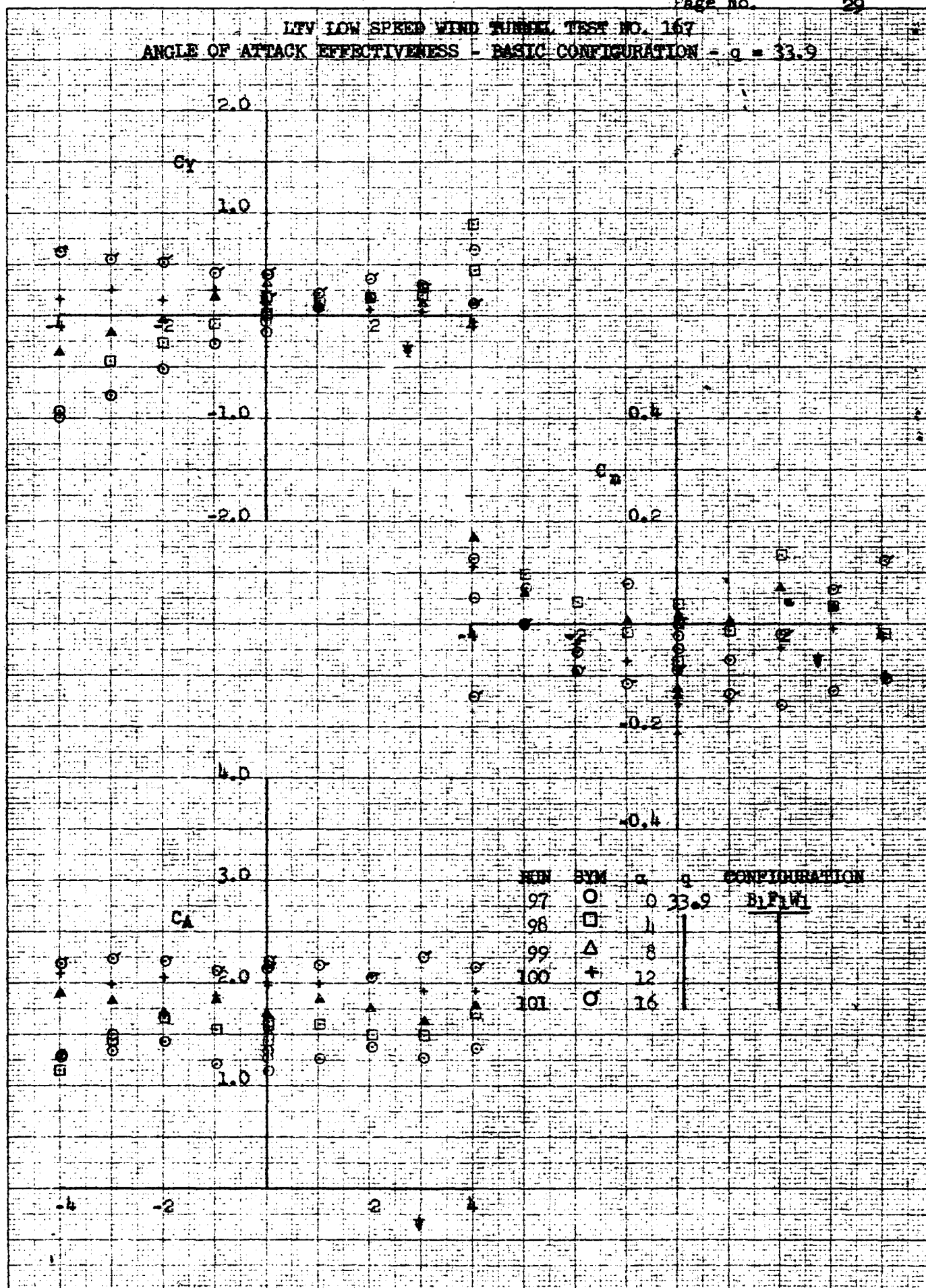
(All Data Plots Are Referred to Body Axis)

Type Plot 1 C_Y vs ψ C_D vs ψ C_A vs ψ Type Plot 2 C_N vs α C_m vs α C_A vs α

<u>TITLE</u>	<u>PLOT TYPE</u>	<u>RUN NO.</u>	<u>FIGURE NO.</u>
Angle of Attack Effectiveness	1	97-101	9
	1	103-107, 129	10
	1	109, 110, 114-116	11
	1	40-42	12
	1	44-46	13
	1	48-50	14
	1	52-54	15
	1	56-58	16
	1	60-62	17
	1	64-66	18
	1	68-70	19
	1	72-74	20
	1	76-78	21
	1	80-82	22
	1	85-87	23
	1	89-91	24
	1	93-95	25
	1	118-120	26
q Effectiveness	1	122-124	27
	1	125-128	28
	2	96, 102, 108	29
	2	39, 43, 47	30
	2	51, 55, 59	31
	2	63, 67, 71	32
	2	73, 77, 81	33
	2	84, 88, 92	34
	2	117, 121, 126	35

UNCLASSIFIED

LTV LOW SPEED WIND TUNNEL TEST NO. 167
 ANGLE OF ATTACK EFFECTIVENESS - BASIC CONFIGURATION - $q = 33.9$



UNCLASSIFIED

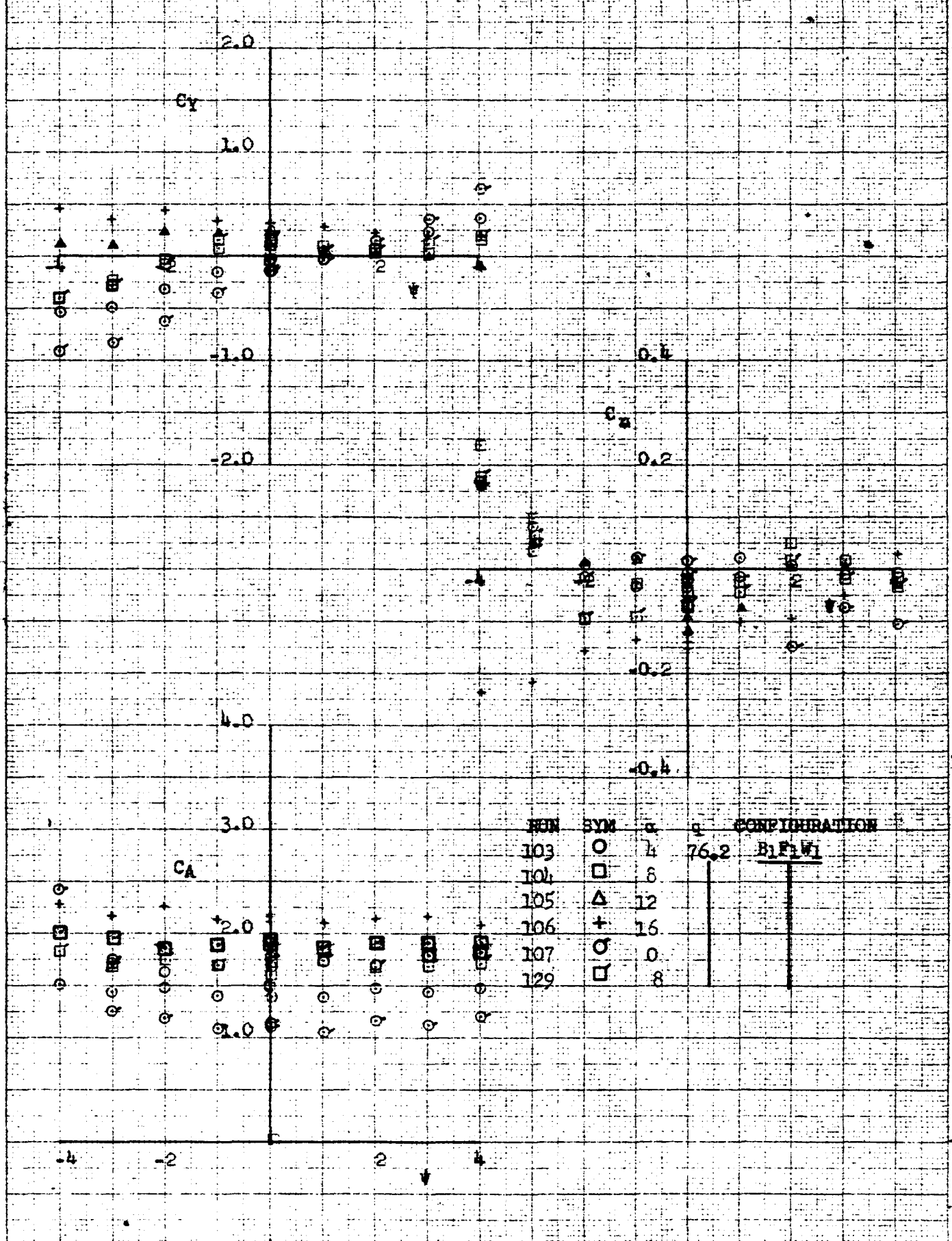
Report No. LSWT 167

Figure No. 10

Page No. 30

LTV LOW SPEED WIND TUNNEL TEST NO. 167

ANGLE OF ATTACK EFFECTIVENESS - BASIC CONFIGURATION - $q = 76.2$



UNCLASSIFIED

UNCLASSIFIED

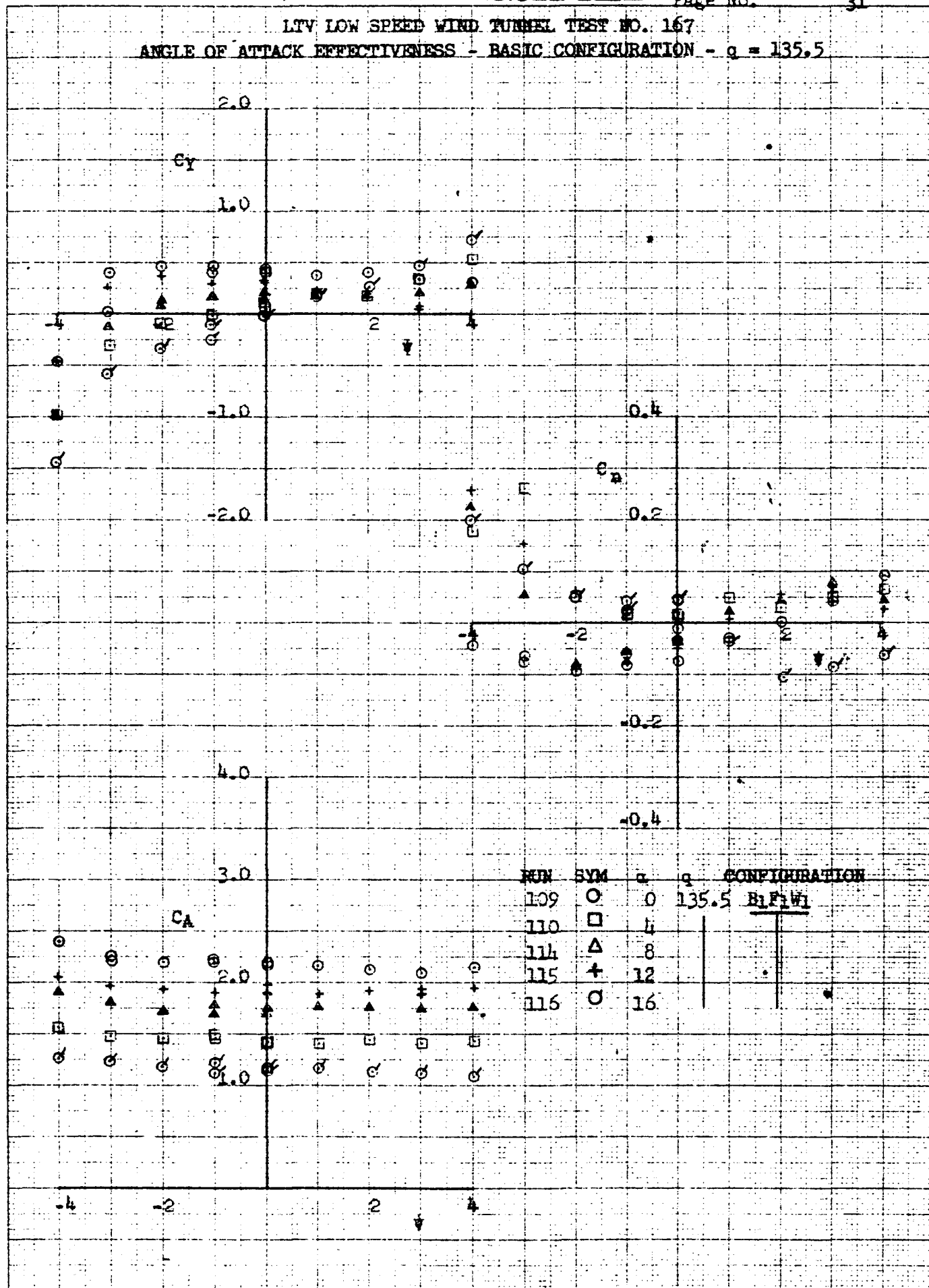
Report No. LSWT 167

Figure No. 11

Page No. 31

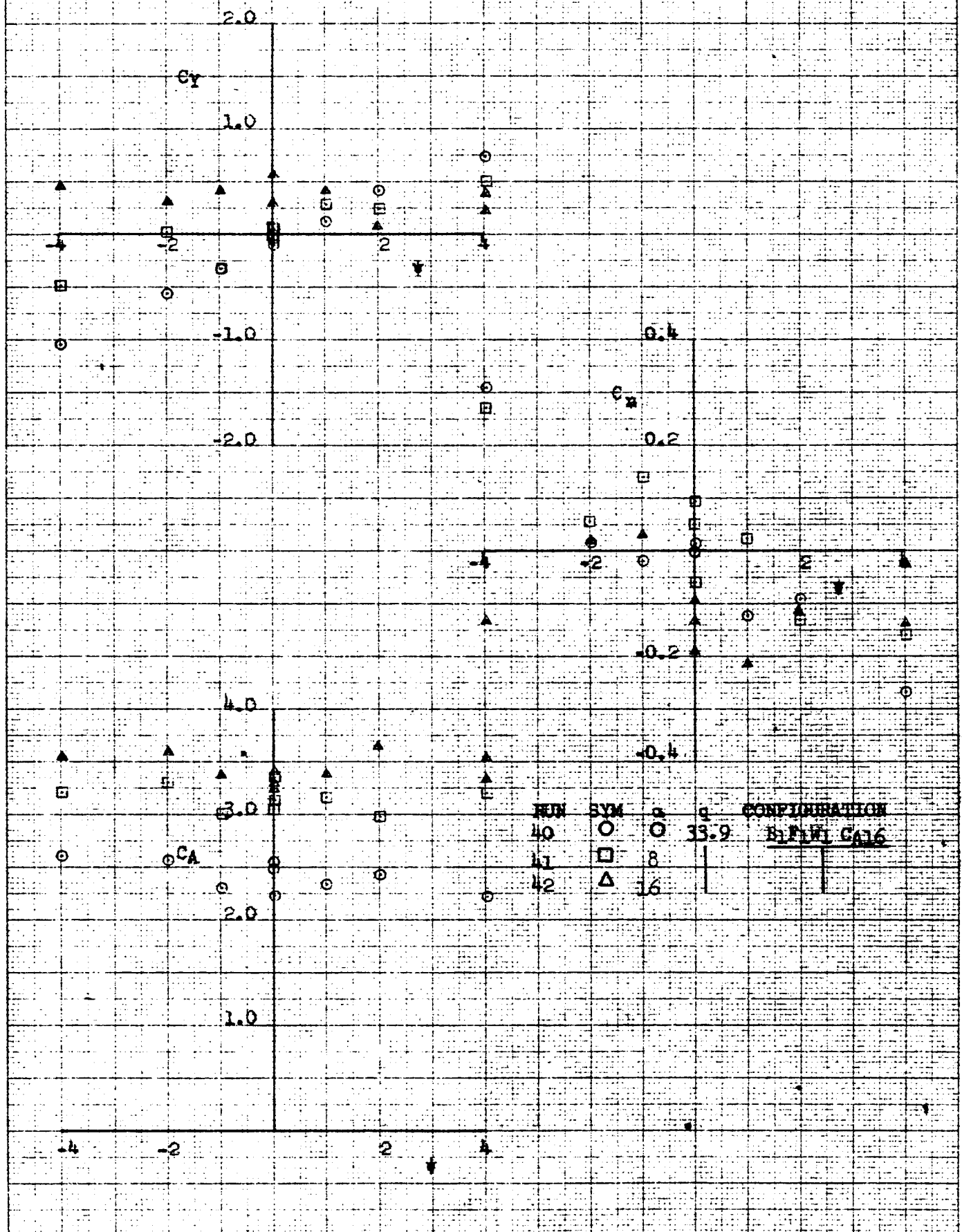
LTV LOW SPEED WIND TUNNEL TEST NO. 167

ANGLE OF ATTACK EFFECTIVENESS - BASIC CONFIGURATION - $q = 135.5$



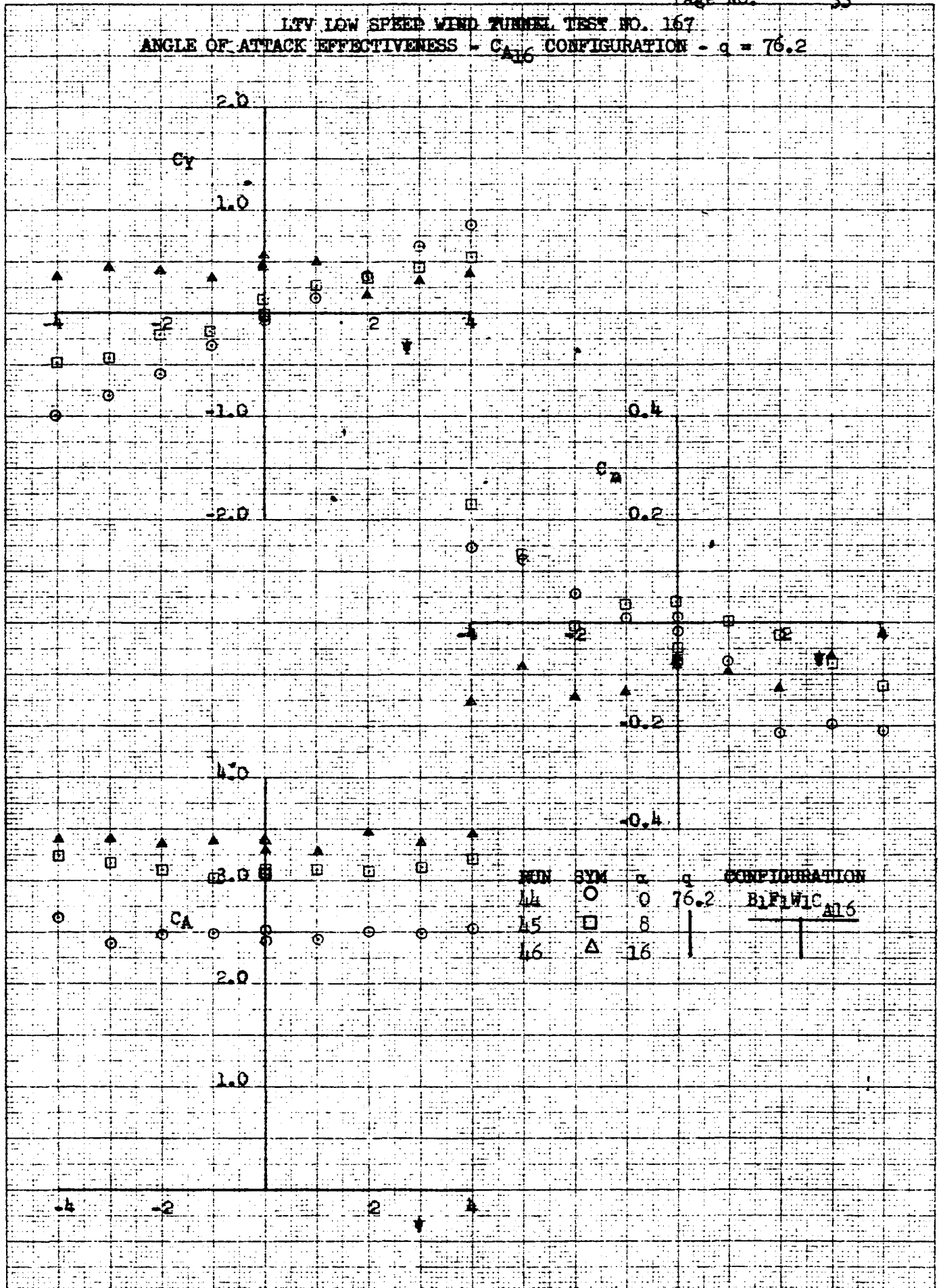
UNCLASSIFIED

LTV LOW SPEED WIND TUNNEL TEST NO. 167
 ANGLE OF ATTACK EFFECTIVENESS - C_{A16} CONFIGURATION - $q = 33.9$



10 X 10 TO THE CENTIMETER 40 1213

LTV LOW SPEED WIND TUNNEL TEST NO. 167
 ANGLE OF ATTACK EFFECTIVENESS - C_{A16} CONFIGURATION - $q = 76.2$



10 X 10 TO THE CENTIMETER
 40 1213

UNCLASSIFIED

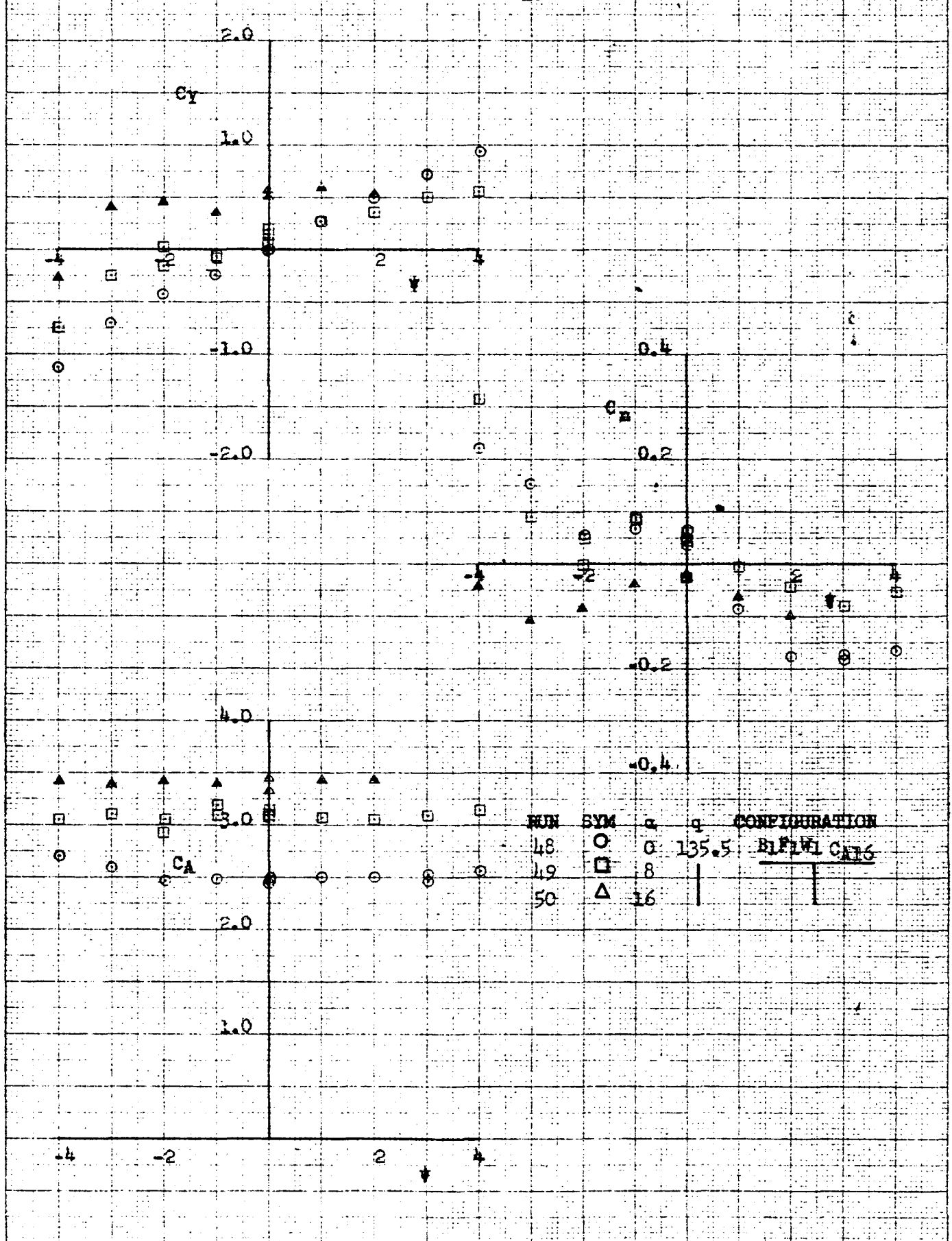
Report No. LSWT 167

Figure No. 14

Page No. 34

LTV LOW SPEED WIND TUNNEL TEST NO. 167

ANGLE OF ATTACK EFFECTIVENESS - C_{A16} CONFIGURATION - $q = 135.5$



UNCLASSIFIED

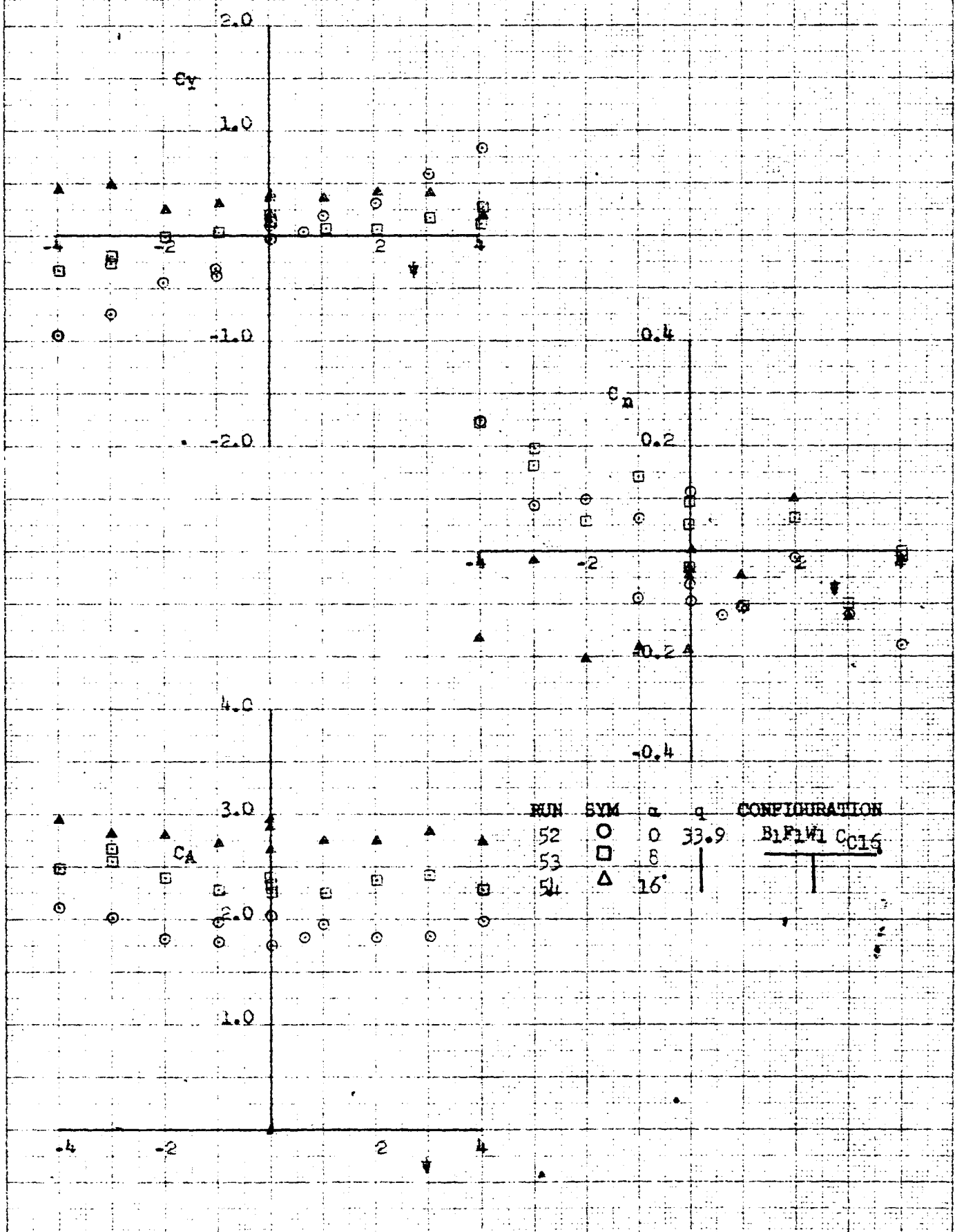
UNCLASSIFIED

Report No. LSWT 167

Figure No. 15

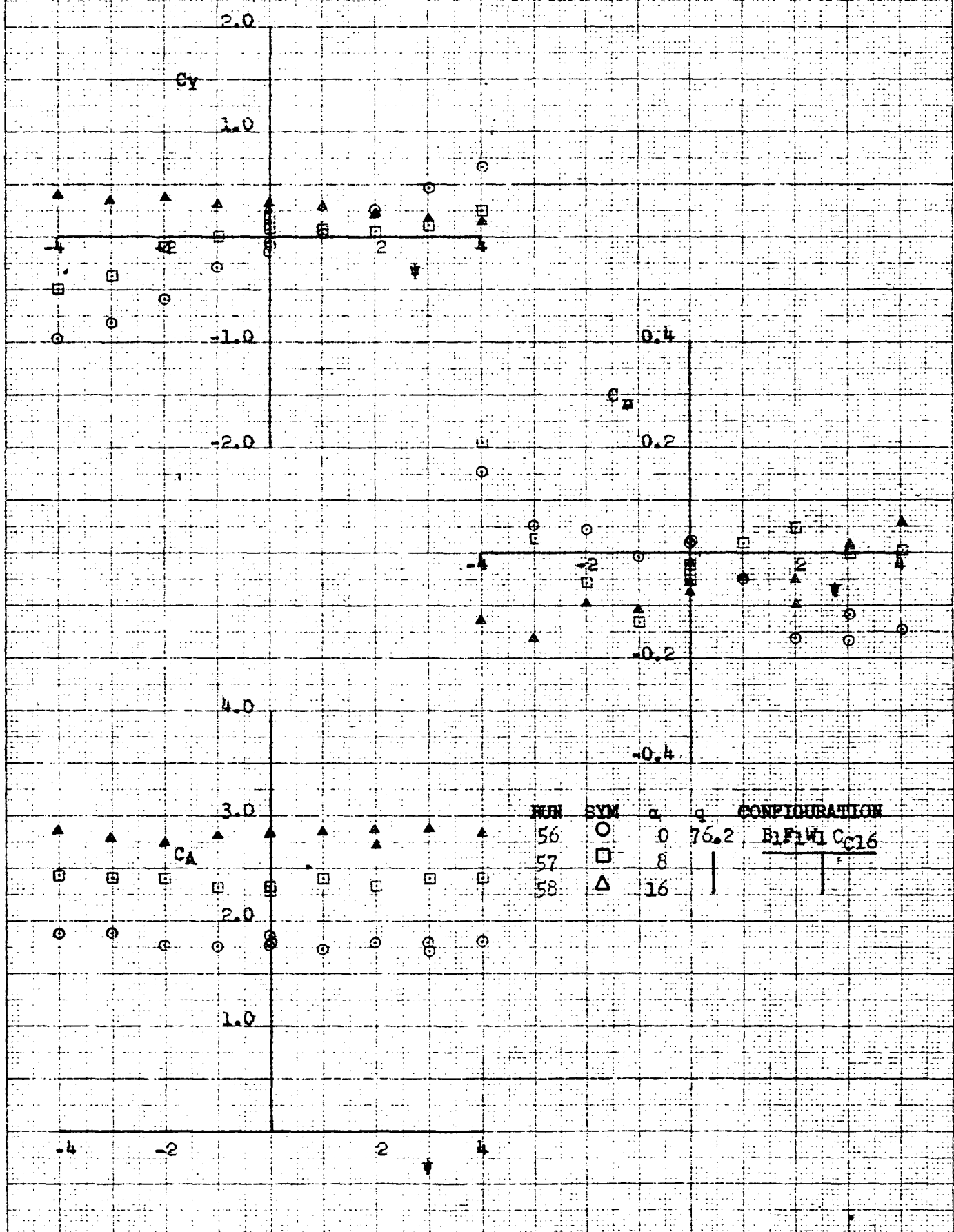
Page No. 35

LTV LOW SPEED WIND TUNNEL TEST NO. 167
ANGLE OF ATTACK EFFECTIVENESS - C_{C16} CONFIGURATION - $q = 33.9$



UNCLASSIFIED

LTV LOW SPEED WIND TUNNEL TEST NO. 167
ANGLE OF ATTACK EFFECTIVENESS - C_{C16} CONFIGURATION - $q = 76.2$



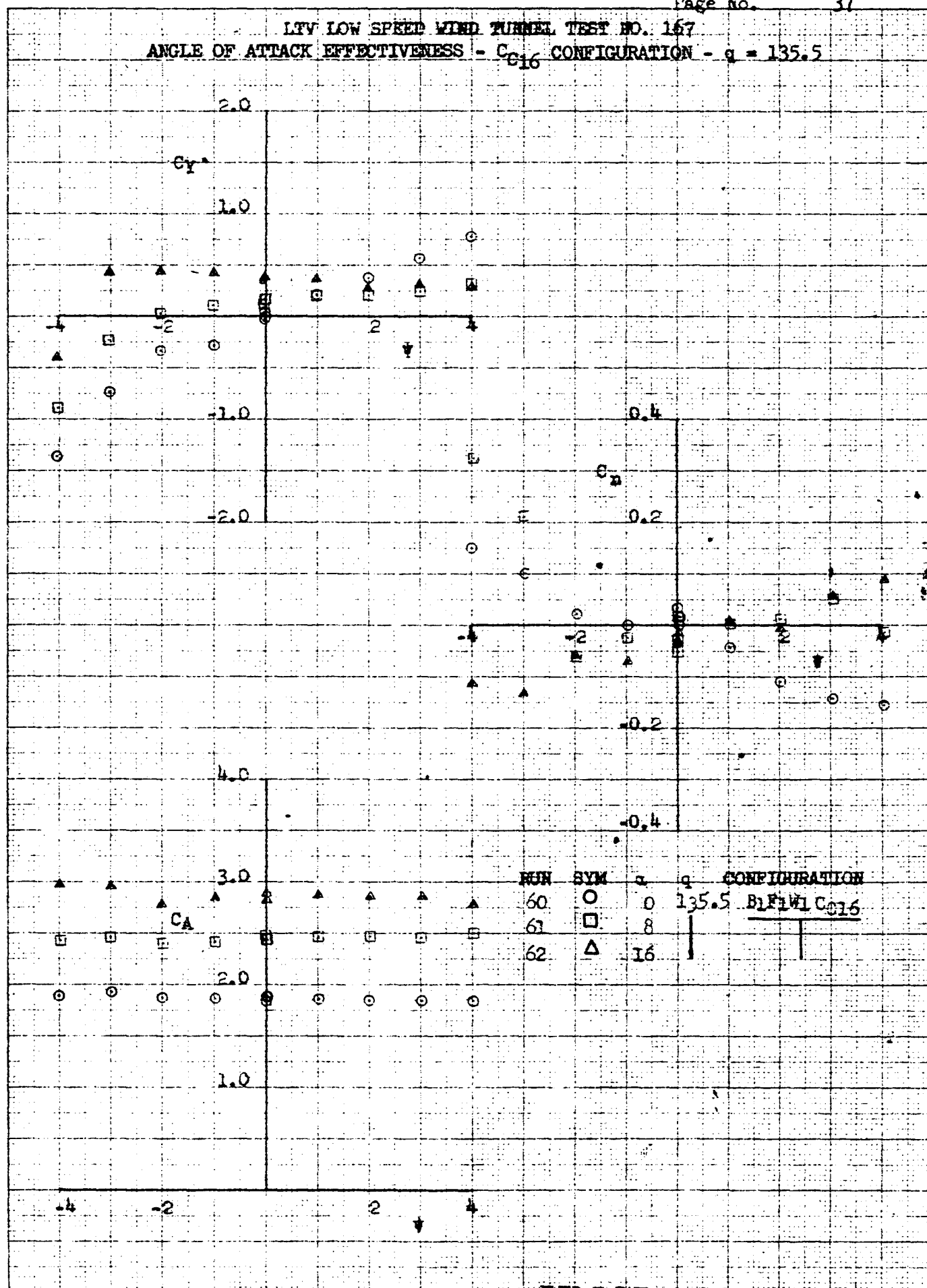
UNCLASSIFIED

Report No. LSWT 167

Figure No. 17

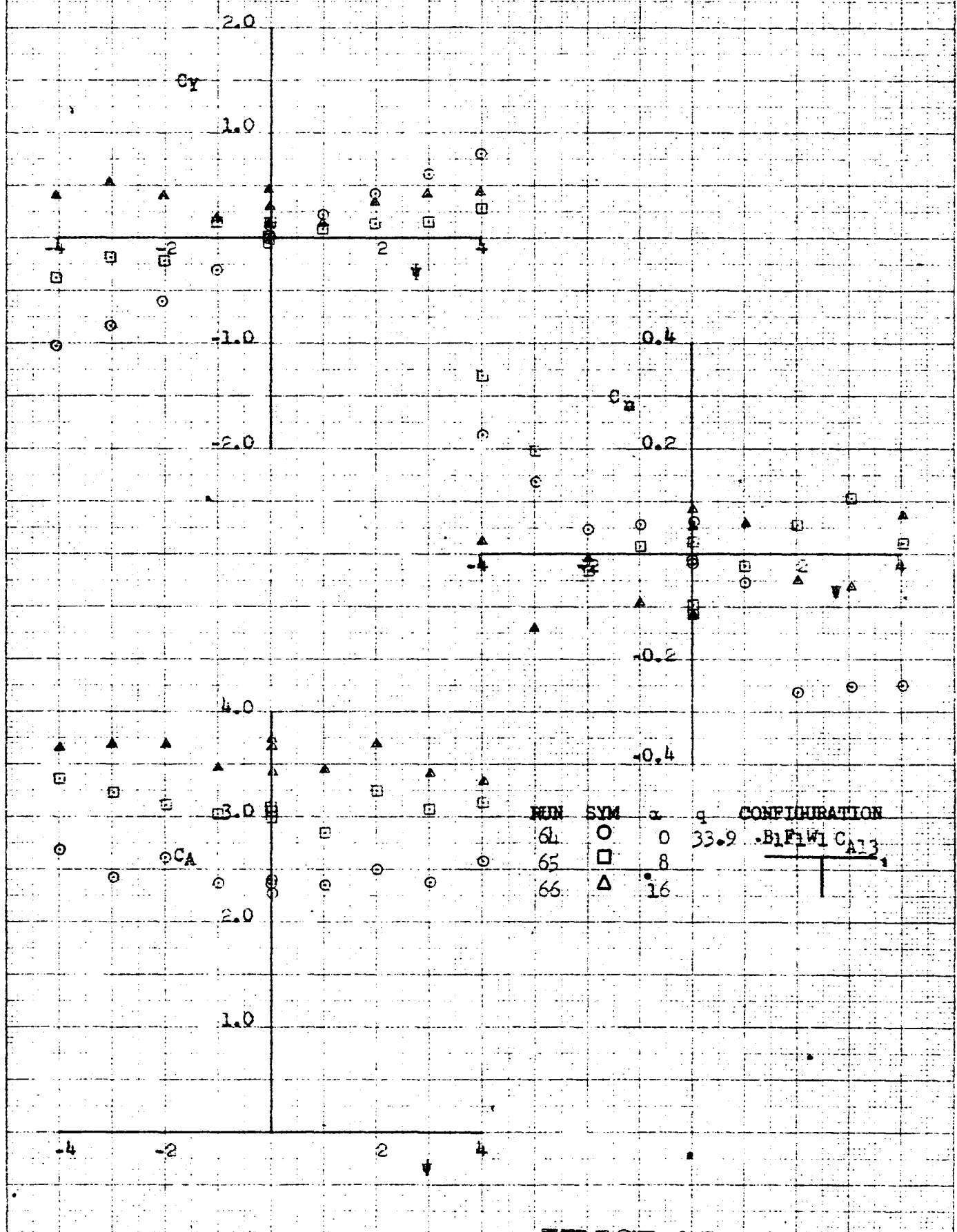
Page No. 37

LTV LOW SPEED WIND TUNNEL TEST NO. 167
 ANGLE OF ATTACK EFFECTIVENESS - C_{16} CONFIGURATION - $q = 135.5$

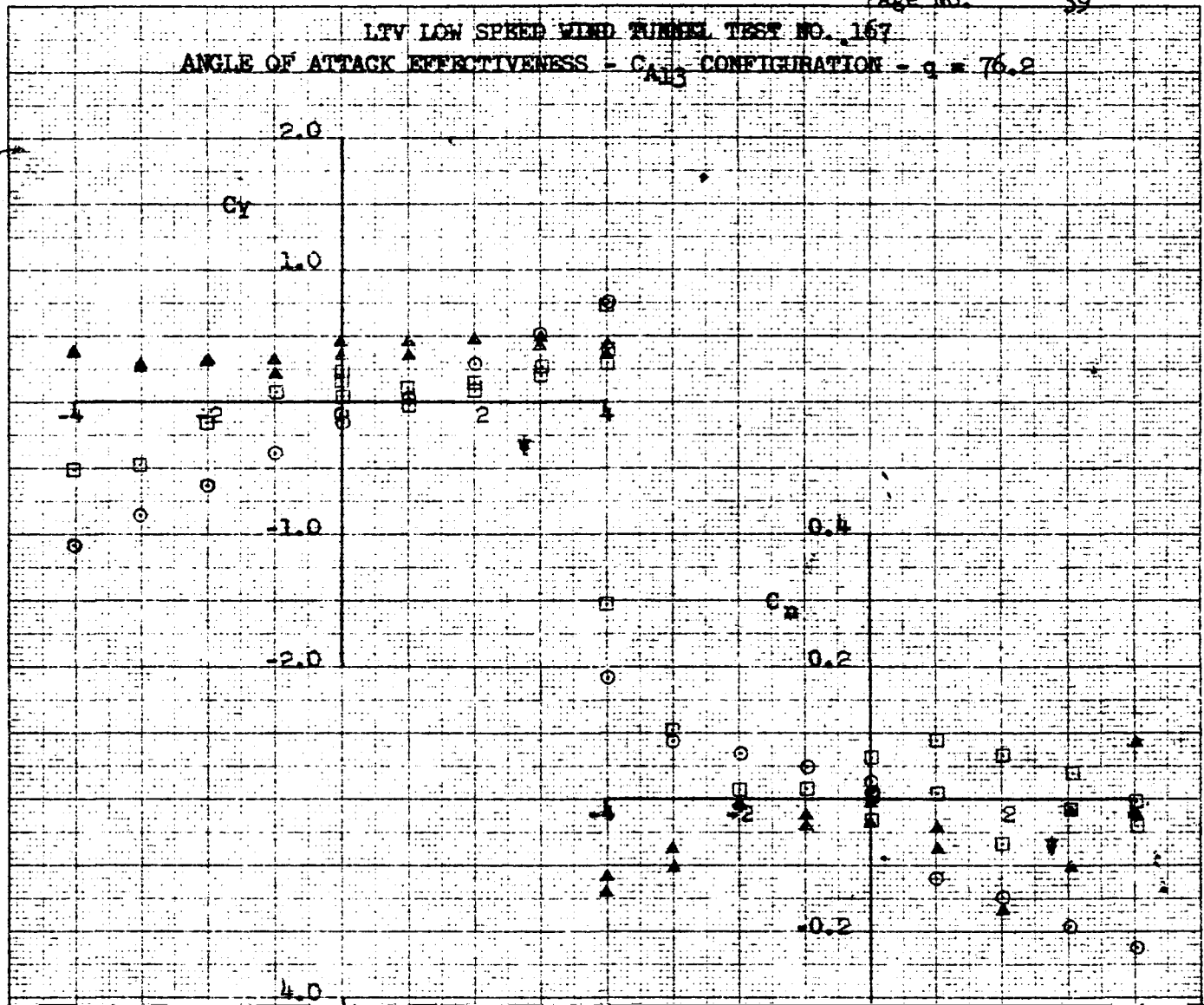


UNCLASSIFIED

LTV LOW SPEED WIND TUNNEL TEST NO. 167
ANGLE OF ATTACK EFFECTIVENESS - C_{A13} CONFIGURATION - $q = 33.9$

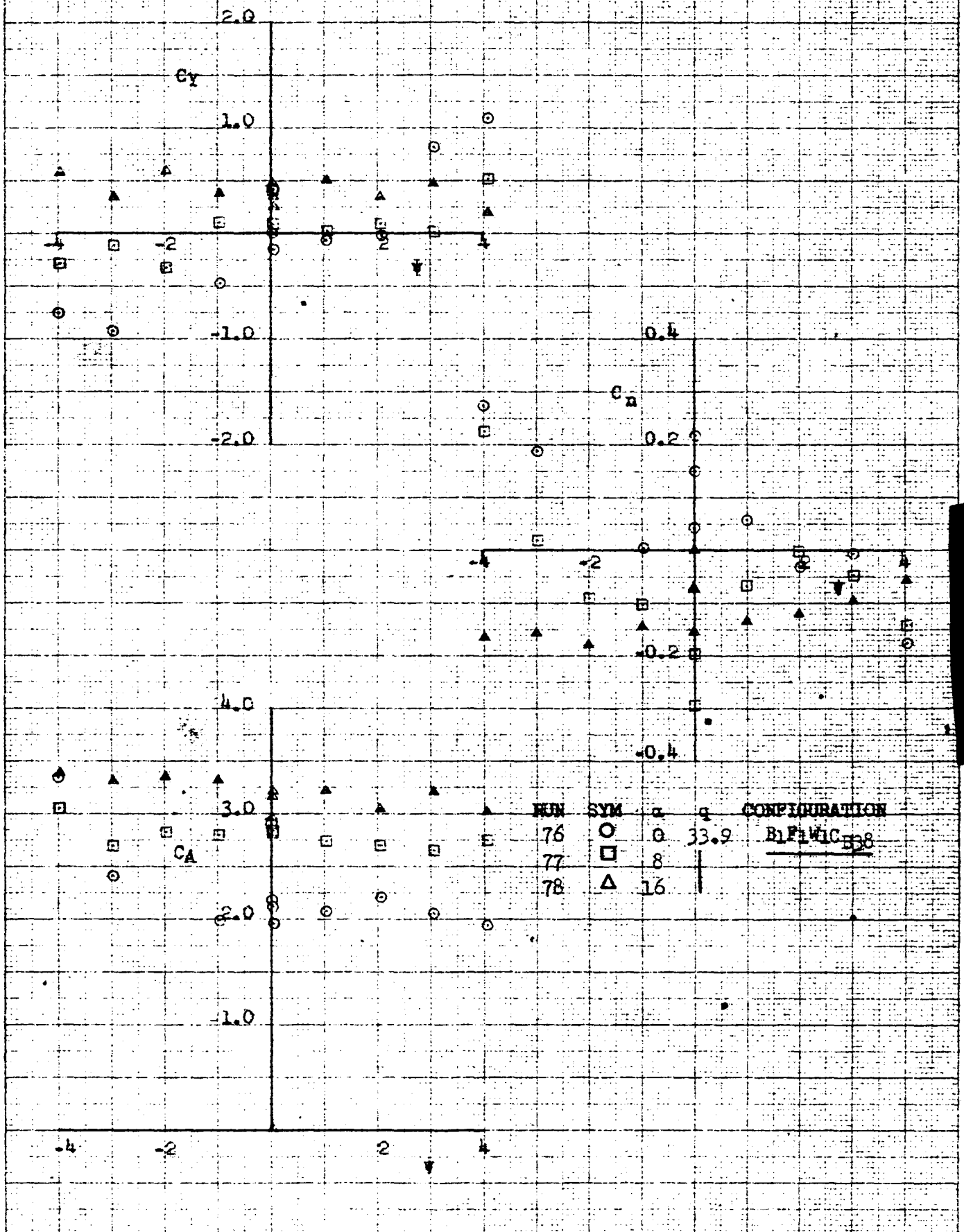


LTV LOW SPEED WIND TUNNEL TEST NO. 167

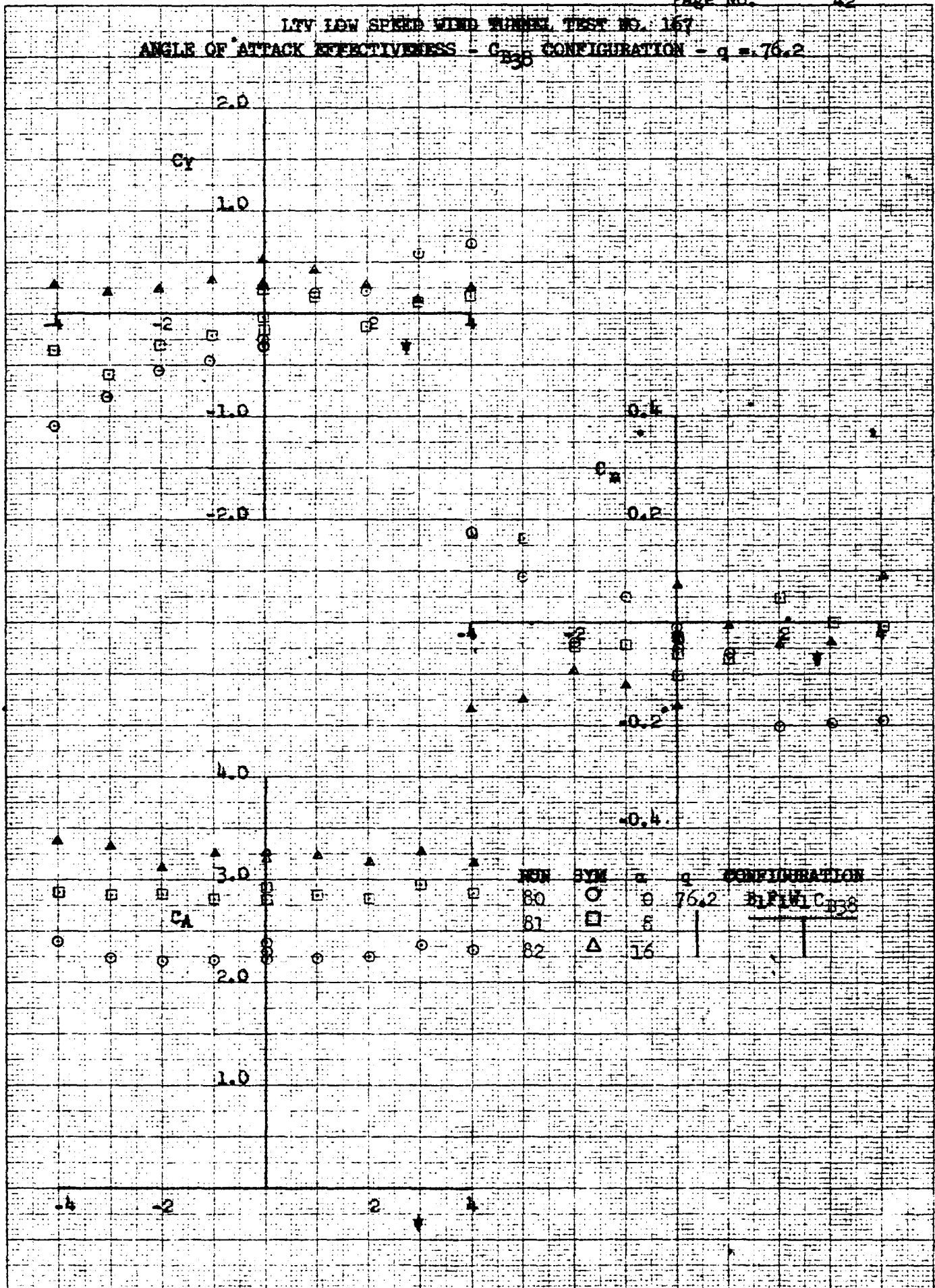
ANGLE OF ATTACK EFFECTIVENESS - C_{A13} CONFIGURATION - $q = 76.2$ 

10 X 10 TO THE CENTIMETER 40 1213

LTV LOW SPEED WIND TUNNEL TEST NO. 167
 ANGLE OF ATTACK EFFECTIVENESS - C_{B38} CONFIGURATION - $q = 33.9$



LTV LOW SPEED WIND TUNNEL TEST NO. 167
ANGLE OF ATTACK EFFECTIVENESS - C_{D30} CONFIGURATION - $q = 76.2$



UNCLASSIFIED

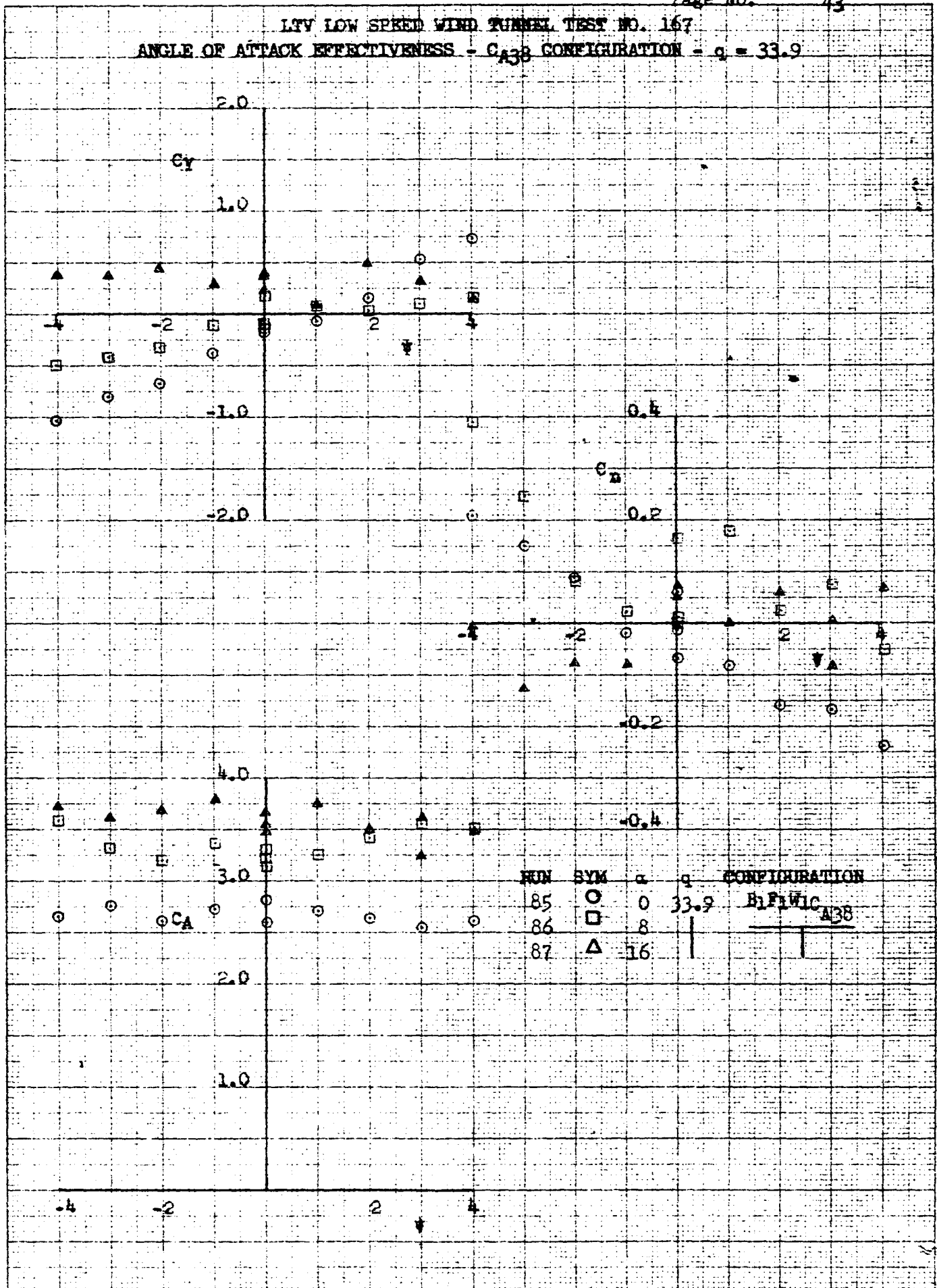
Report No. LSMT 167

Figure No. 23

Page No. 43

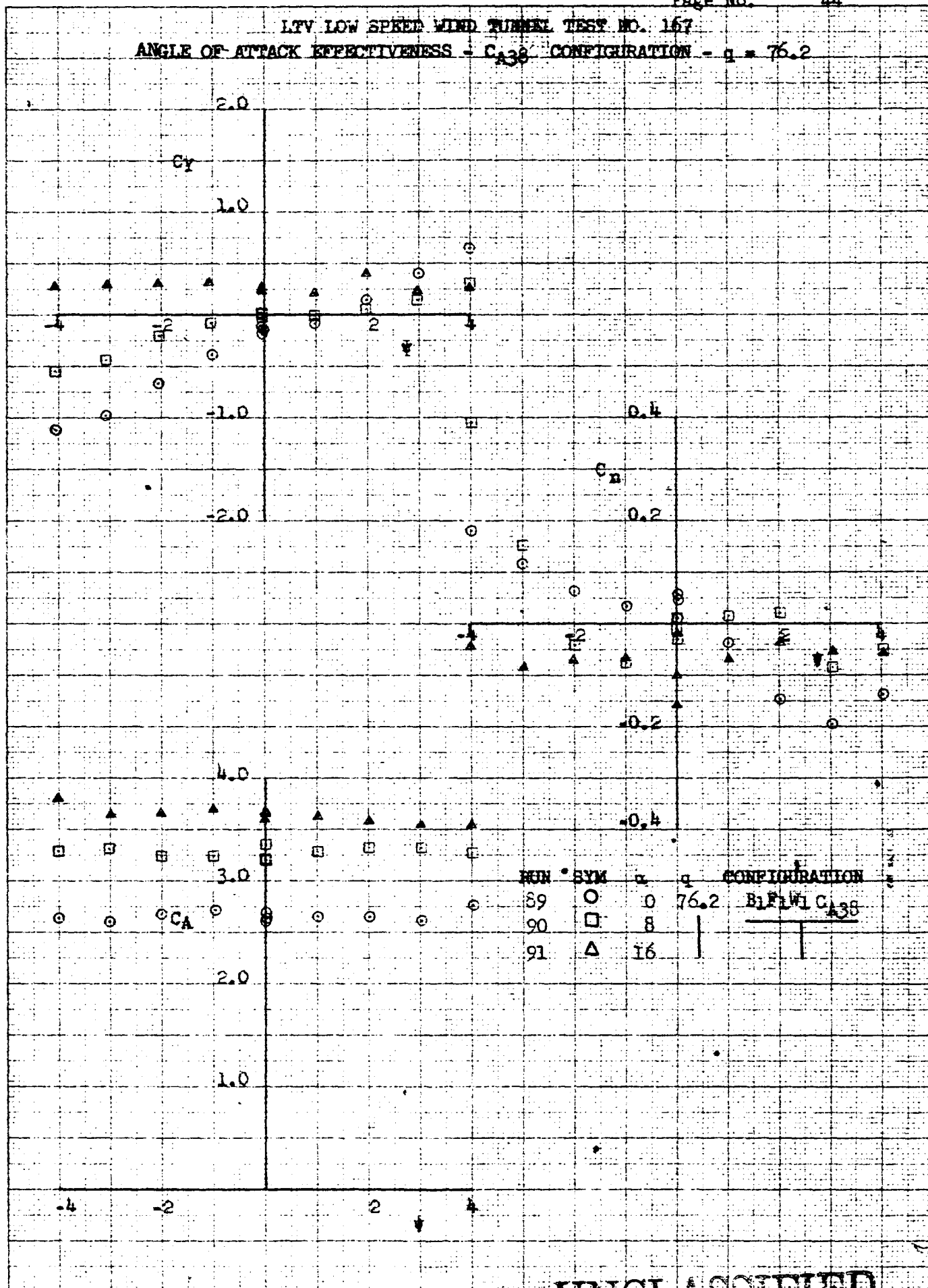
LTV LOW SPEED WIND TUNNEL TEST NO. 167

ANGLE OF ATTACK EFFECTIVENESS - C_{A38} CONFIGURATION - $q = 33.9$



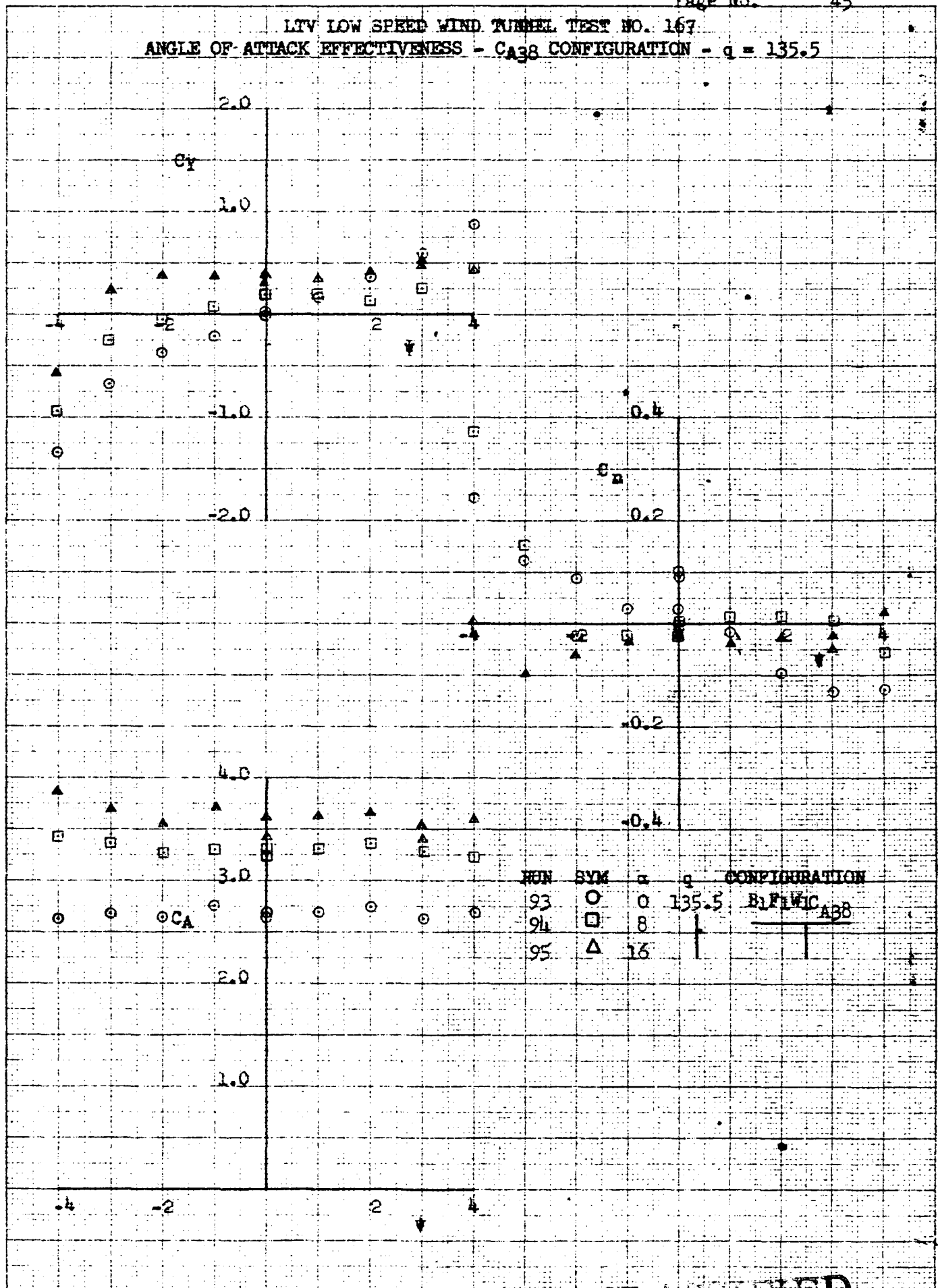
UNCLASSIFIED

LTV LOW SPEED WIND TUNNEL TEST NO. 167
 ANGLE OF ATTACK EFFECTIVENESS - CA38 CONFIGURATION - $q = 76.2$



LTV LOW SPEED WIND TUNNEL TEST NO. 167

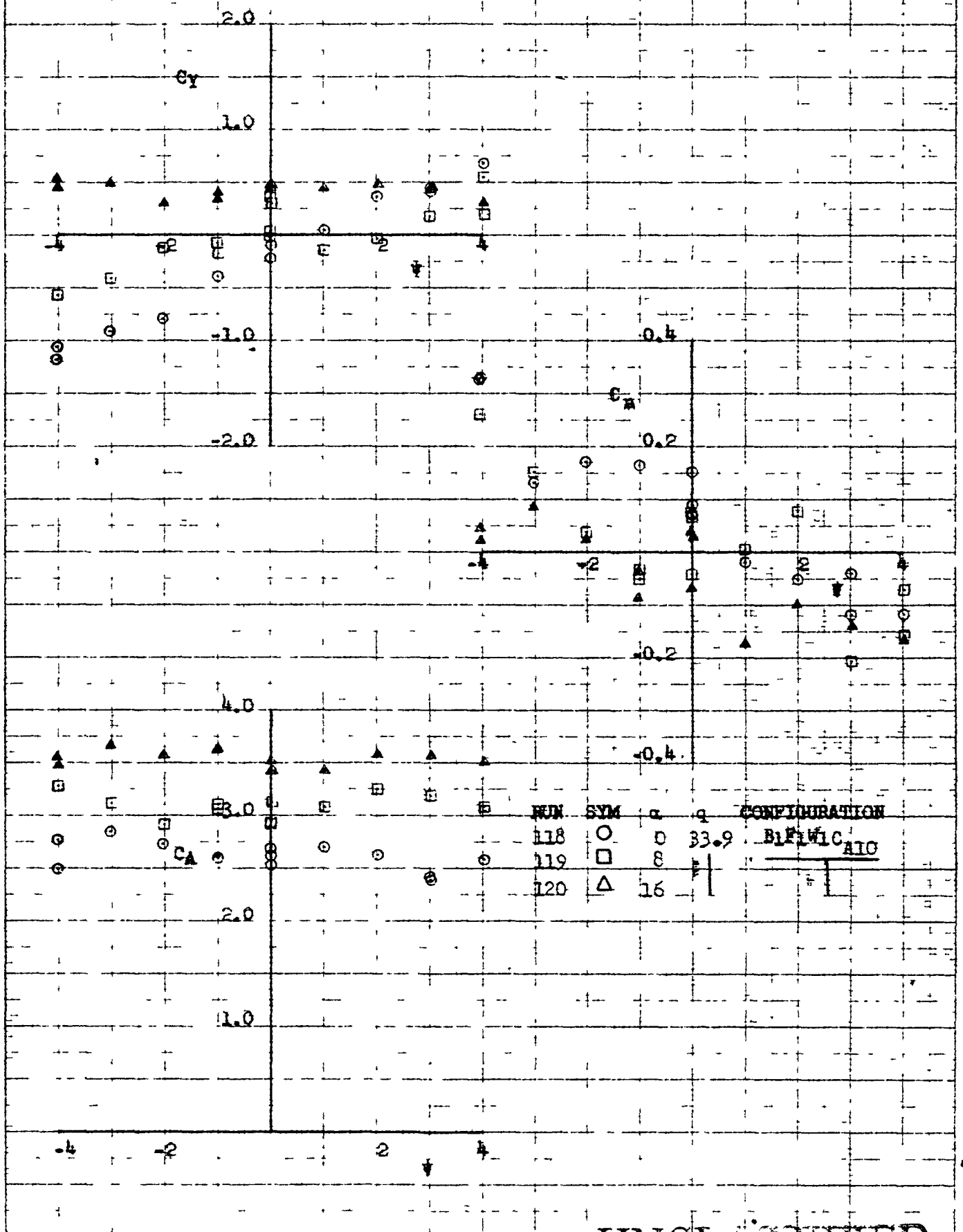
ANGLE OF ATTACK EFFECTIVENESS - CA38 CONFIGURATION - $q = 135.5$



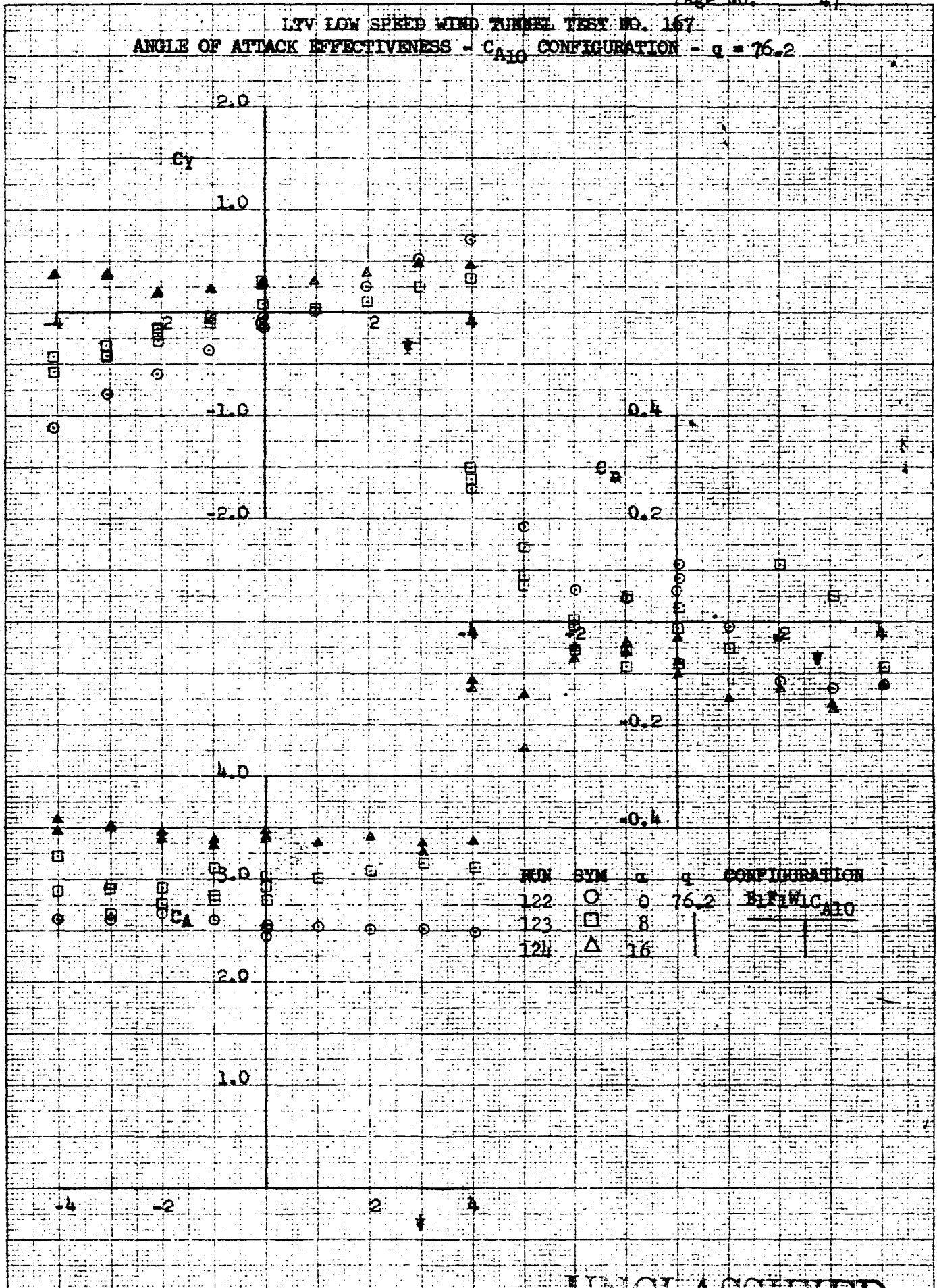
4012136
UNIVERSITY OF CALIFORNIA
LIBRARY
LOS ANGELES

~~CONFIDENTIAL~~

LTV LOW SPEED WIND TUNNEL TEST NO. 167
 ANGLE OF ATTACK EFFECTIVENESS - C_{A10} CONFIGURATION - $q = 33.9$



LTV LOW SPEED WIND TUNNEL TEST NO. 167
 ANGLE OF ATTACK EFFECTIVENESS - C_{A10} CONFIGURATION - $q = 76.2$

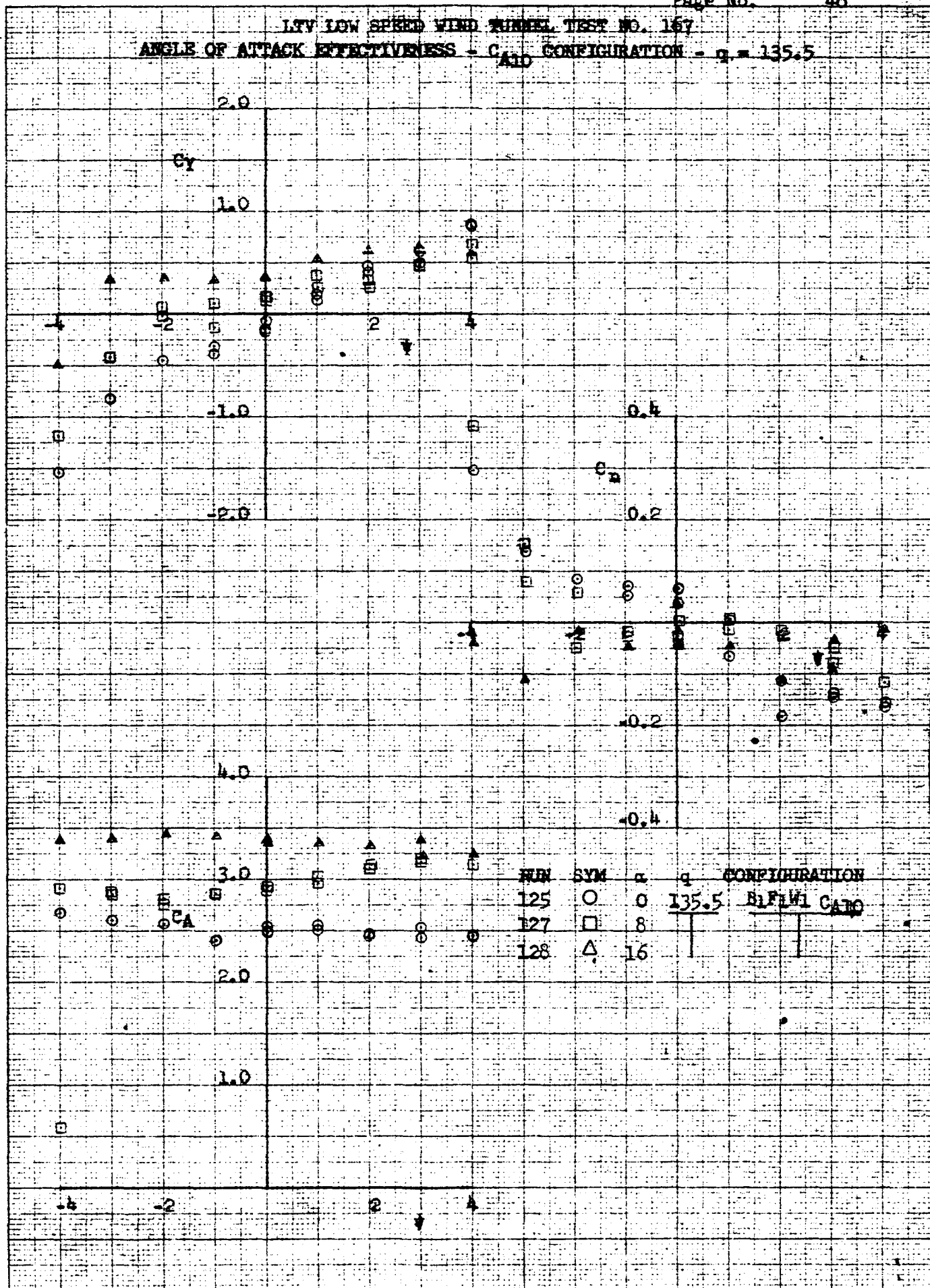


K&E 10 X 10 TO THE CENTIMETER 48 1213

UNCLASSIFIED

Report No. LSWT 167
Figure No. 28
Page No. 48

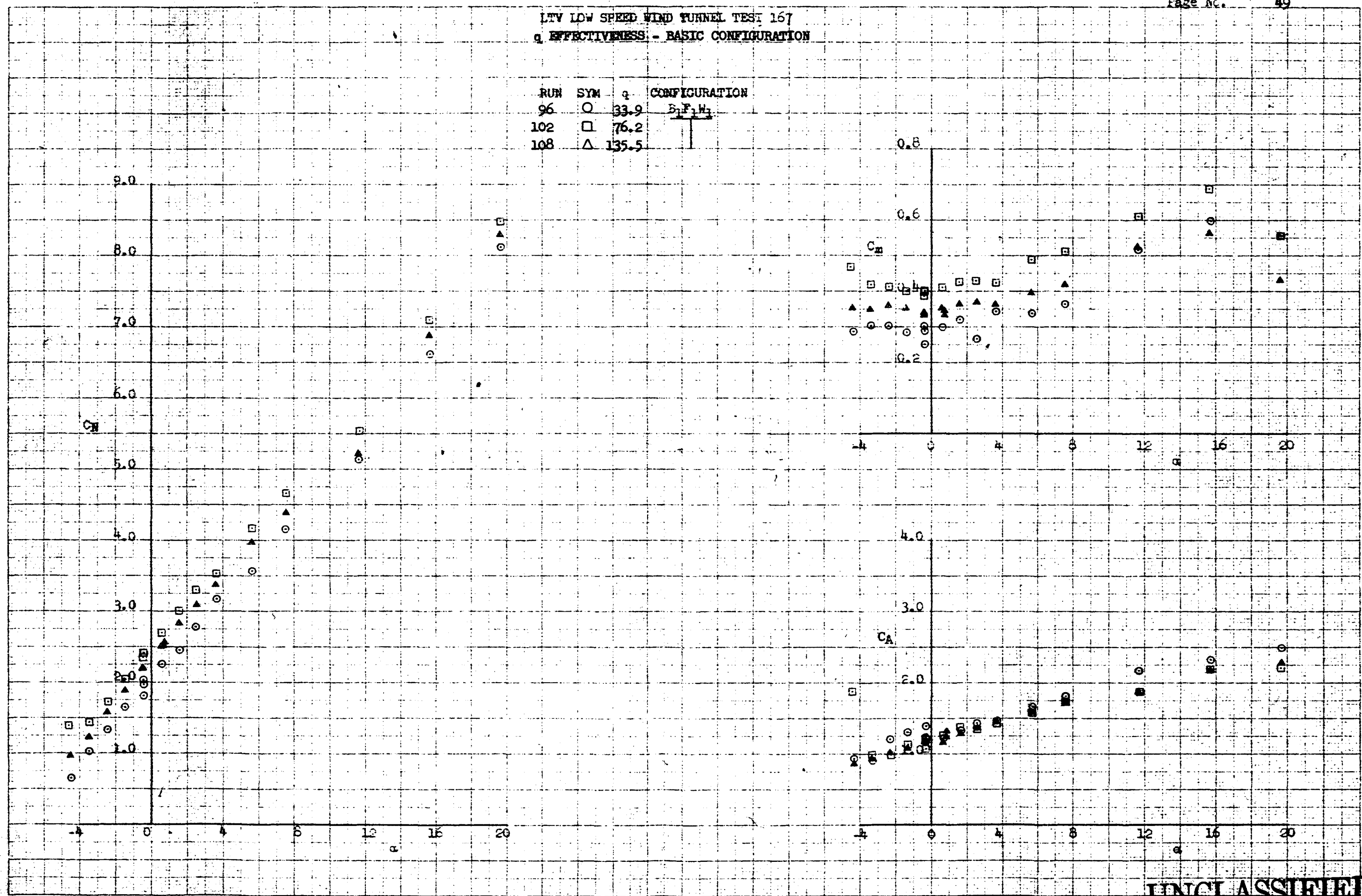
LTV LOW SPEED WIND TUNNEL TEST NO. 167
ANGLE OF ATTACK EFFECTIVENESS - C_{A10} CONFIGURATION - $\alpha = 135.5$



UNCLASSIFIED

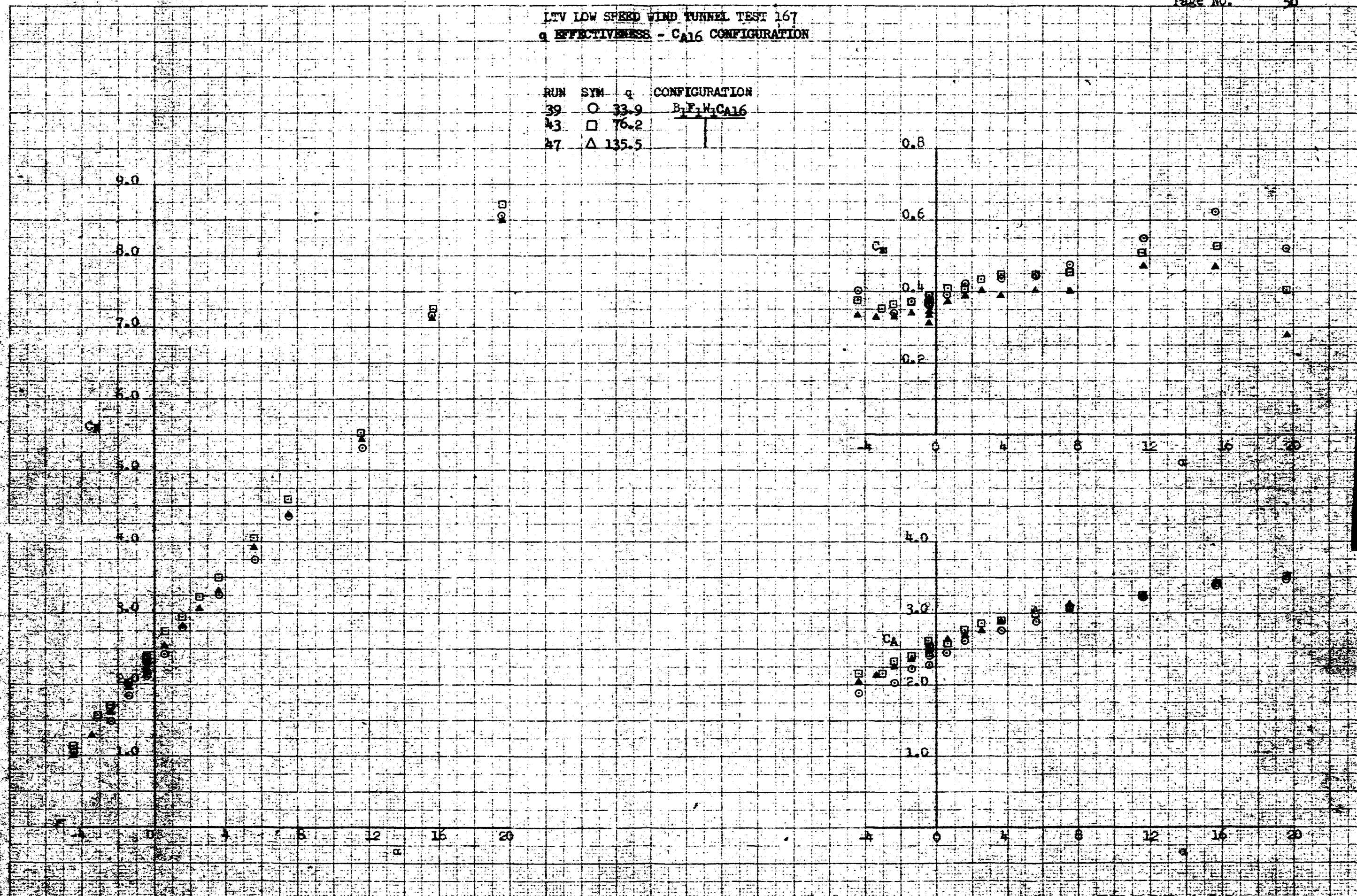
LTV LOW SPEED WIND TUNNEL TEST 167
q EFFECTIVENESS - BASIC CONFIGURATION

RUN	SYM	q	CONFIGURATION
96	○	33.9	B ₁ F ₁ W ₁
102	□	76.2	
108	△	135.5	



LTV LOW SPEED WIND TUNNEL TEST 167
q EFFECTIVENESS - CA16 CONFIGURATION

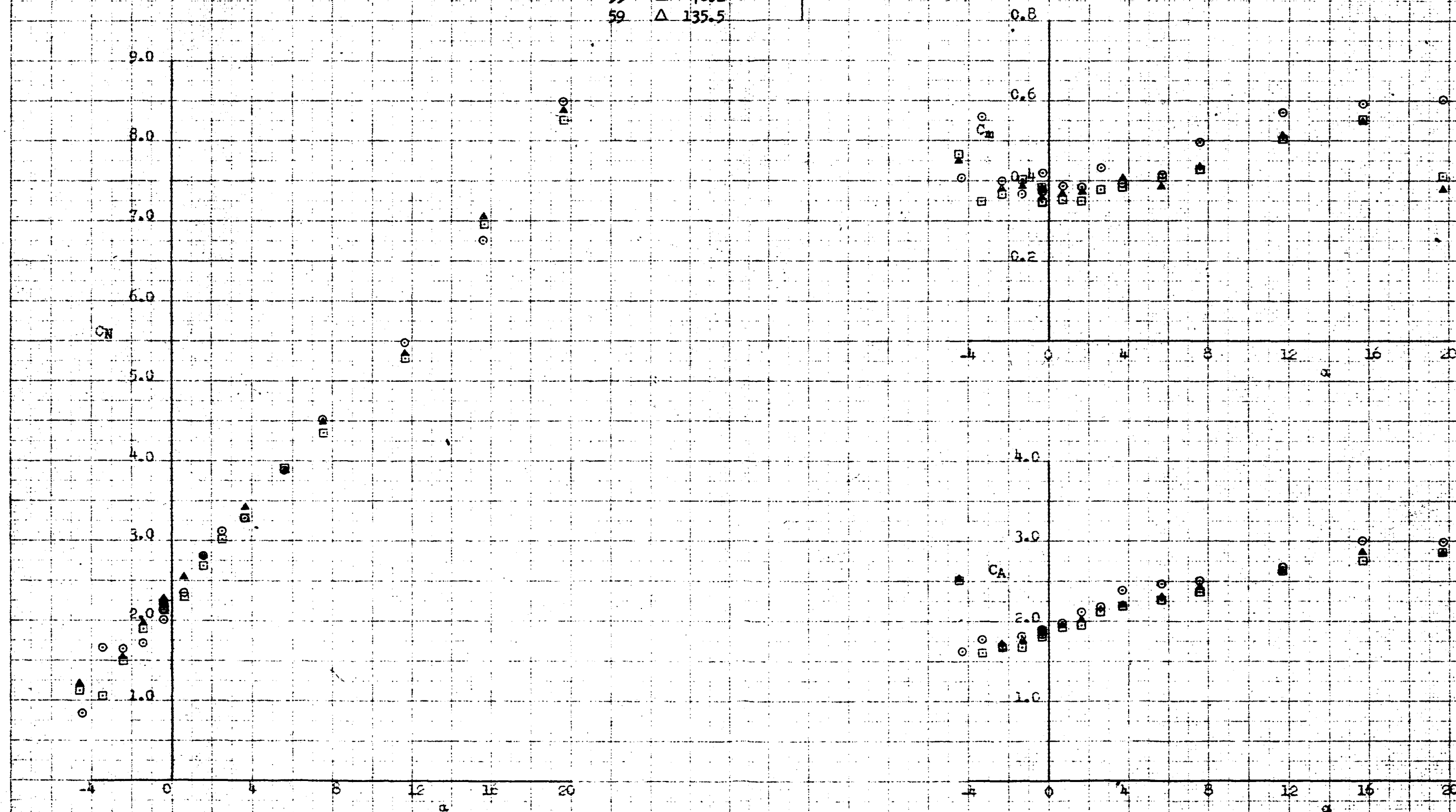
RUN	SYM	q	CONFIGURATION
39	O	33.9	B ₁ F ₁ W ₁ CA16
43	□	76.2	
47	Δ	135.5	



UNCLASSIFIED

Report No. LSWT 167
Figure No. 31
Page No. 51LTV, LOW SPEED WIND TUNNEL TEST 167
q EFFECTIVENESS - Cc16 CONFIGURATION

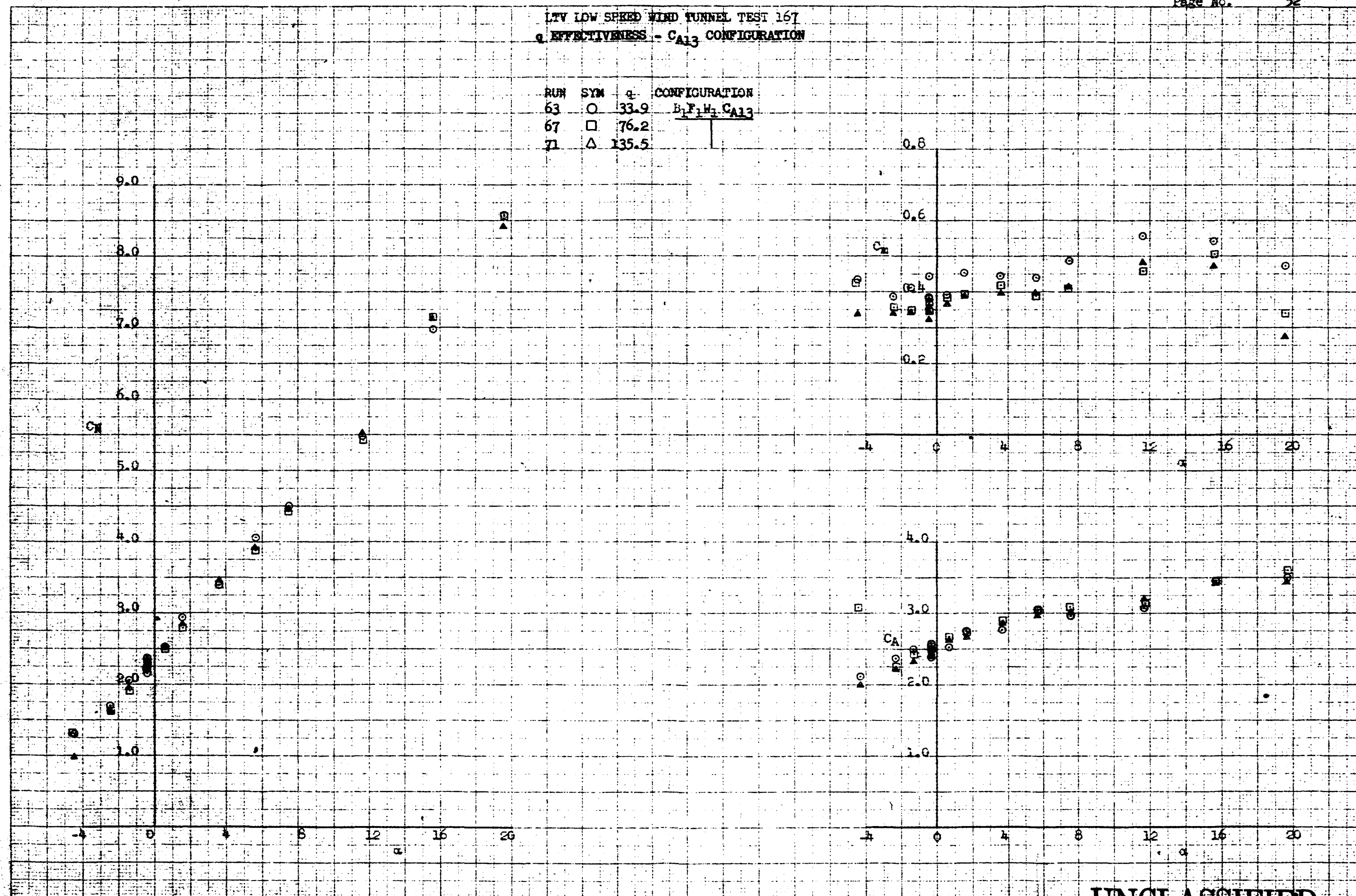
RUN	SYM	q	CONFIGURATION
51	○	33.9	B ₁ F ₁ H ₁ Cc16
55	□	76.2	
59	△	135.5	



UNCLASSIFIED

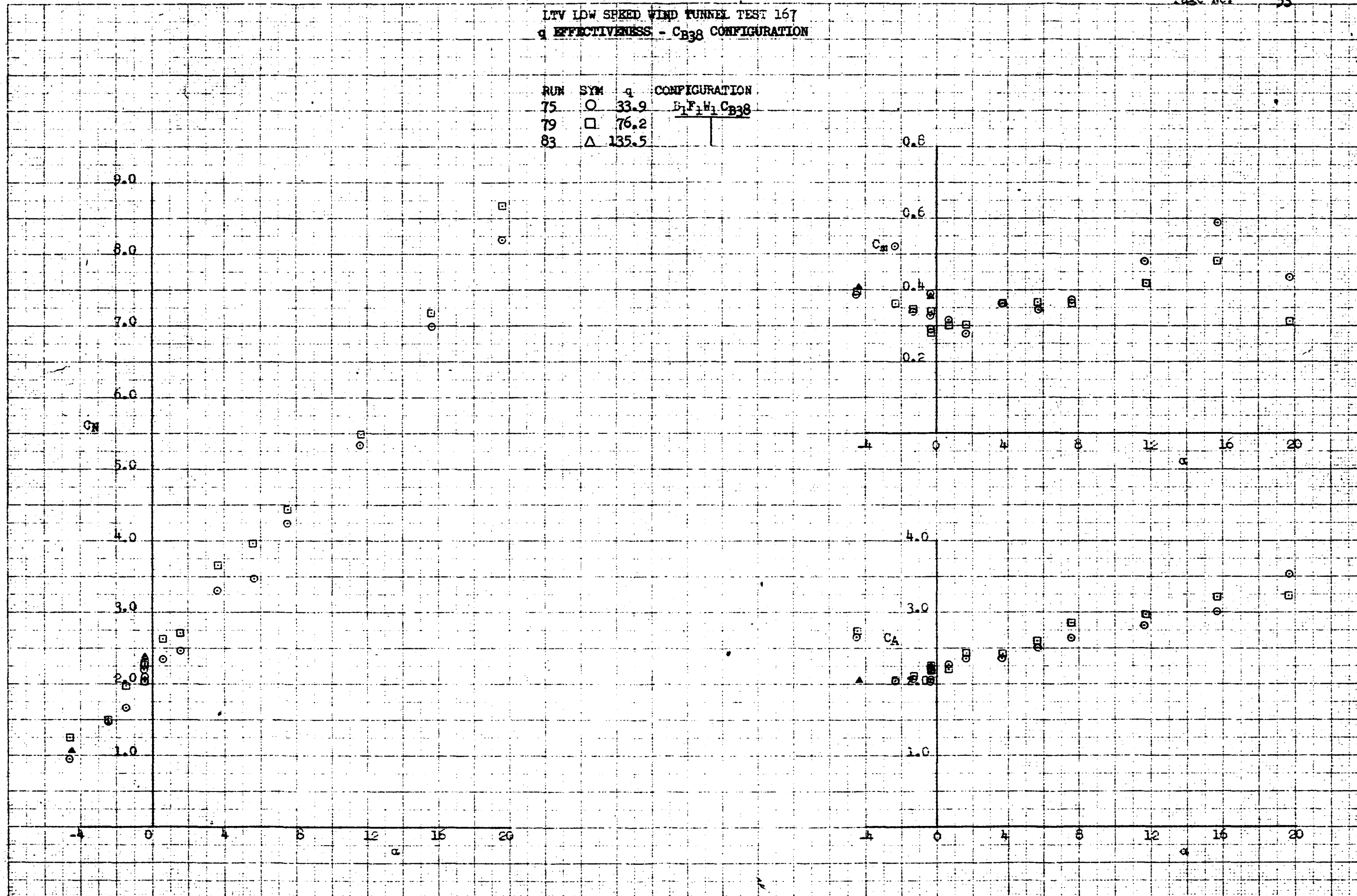
LTV LOW SPEED WIND TUNNEL TEST 167
q EFFECTIVENESS - CA13 CONFIGURATION

RUN	SYM	q	CONFIGURATION
63	○	33.9	B ₁ F ₁ W ₁ CA13
67	□	76.2	
71	△	135.5	



LTV LOW SPEED WIND TUNNEL TEST 167
q EFFECTIVENESS - CB38 CONFIGURATION

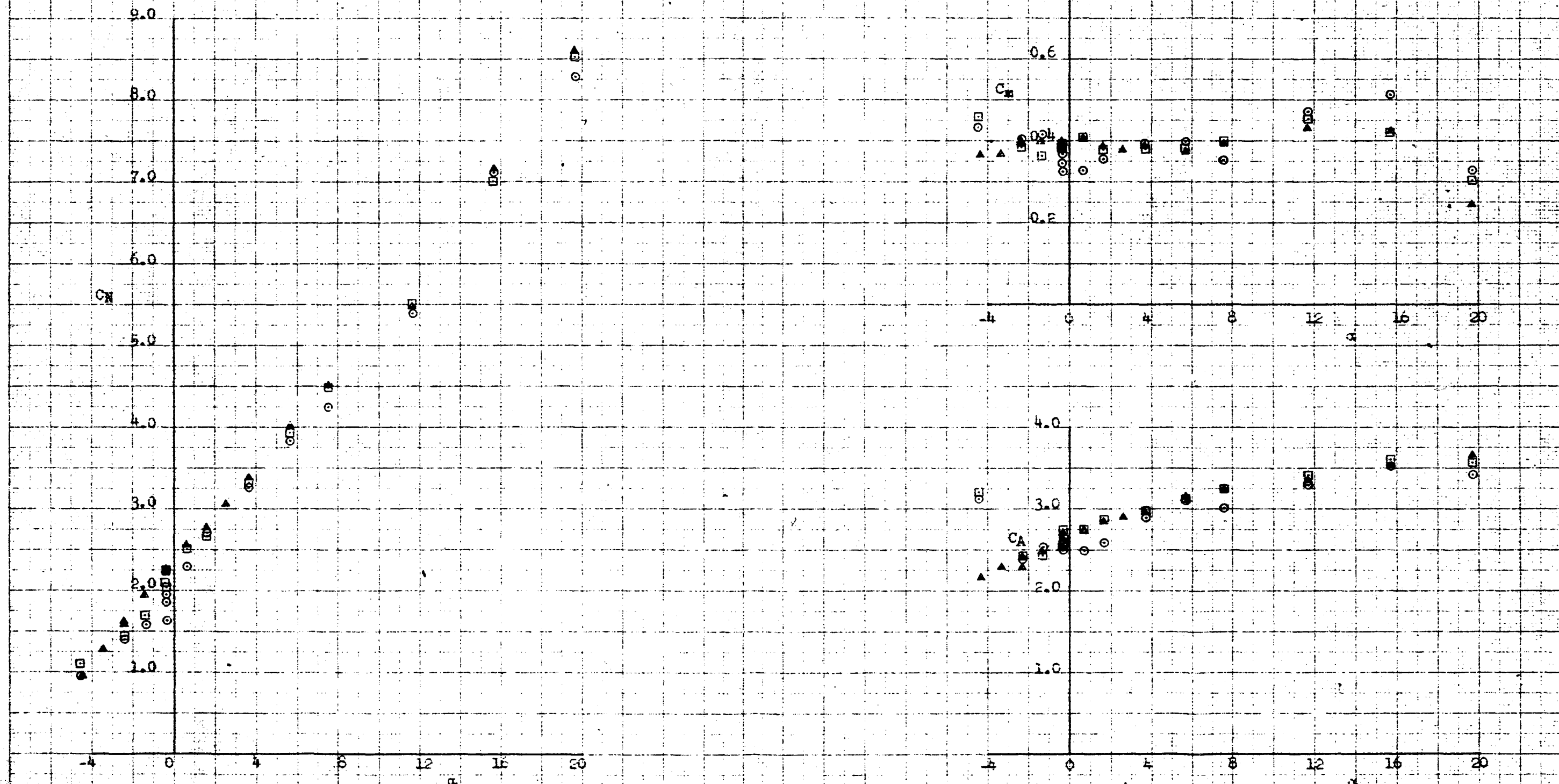
RUN	SYM	q	CONFIGURATION
75	○	33.9	B ₁ F ₁ W ₁ CB38
79	□	76.2	
83	△	135.5	



UNCLASSIFIED

Report No. LSWT 167
Figure No. 34
Page No. 54LTV LOW SPEED WIND TUNNEL TEST 167
q EFFECTIVENESS - CA38 CONFIGURATION

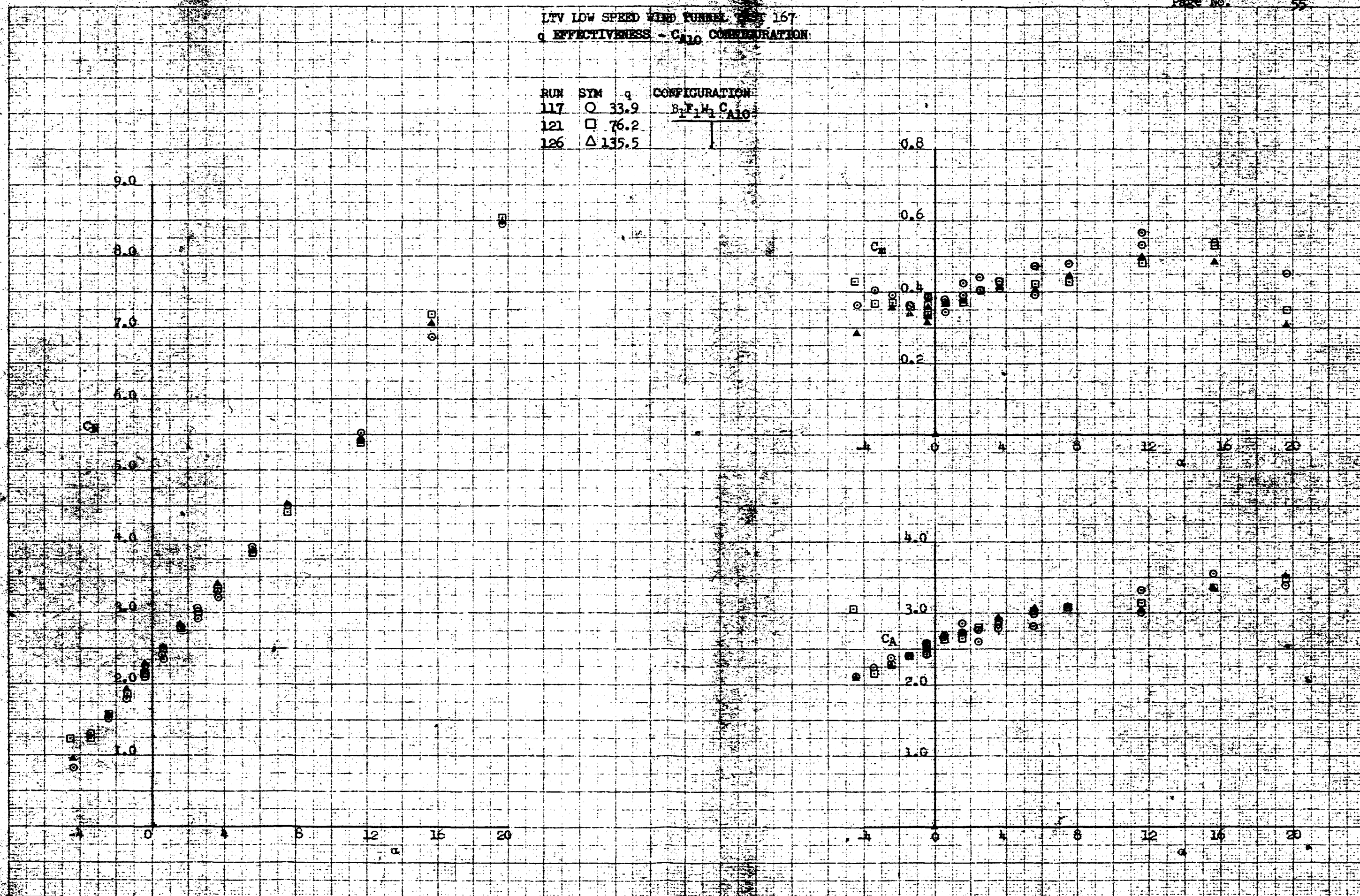
RUN	SYM	q	CONFIGURATION
84	○	33.9	B ₁ F ₁ H ₁ CA38
88	□	76.2	
92	△	135.5	



UNCLASSIFIED

LTV LOW SPEED WIND TUNNEL TEST 167
q EFFECTIVENESS - C_{A10} CONFIGURATION

RUN	SYM	q	CONFIGURATION
117	○	33.9	$B_1 F_1 W_1 C_{A10}$
121	□	76.2	
126	△	135.5	



UNCLASSIFIED

REPORT NO LSWT 167

PAGE NO A-1

APPENDIX A

Listed in this Appendix are the final data results from Test 167.
An Index to the tabulated data is presented below.

Tare and Interference Data Referenced to
the Model Trunnion - Model Upright

Page A-2

Wind Axes Coefficient Data Referenced to
the C.G.

Page A-40

Body Axes Coefficient Data Referenced
to the C.G.

Page A-129

Refer to Section V, Pages 8-9 for Nomenclature used on tabulated
data pages.

UNCLASSIFIED

UNCLASSIFIED

Listed on pages A-3 through A-39 are the Tare and Interference coefficient data referenced to the model trunnion - model upright.

UNCLASSIFIED

UNCLASSIFIED

WIND TUNNEL TEST 107
A-3

LOW SPEED WIND TUNNEL TEST 107

DYNAMIC PRESSURE 0.354 PSF
TUNNEL VELOCITY 15.5 KNOTS
BAROMETRIC PRESSURE 29.58 IN. HG
TUNNEL TEMPERATURE 100 DEG F
RENOULD 10.7 FT 0.4534 X 1.001,000

TEMPERATURE
INAC TEST CELL 1
MODEL 110-1
05/17/54-1
WIND TUNNEL

PT	ALPHA	CL	CD	CM	CM	CM	CM
01	00.01	0.0	02.007-	02.2144	-00.0000	00.0037	00.0000
02	-03.33	0.0	01.307	11.8639	-00.0044	00.0013	-00.0011
03	-01.0	0.0	01.6240	02.0069	-00.0171	00.0013	-00.0011
04	-01.01	0.0	01.9754	02.1108	-00.0240	00.0011	-00.0011
05	00.01	0.0	02.0091	01.9525	-00.0270	00.0000	-00.0000
06	01.00	0.0	02.1209	02.3100	-00.0297	00.0000	-00.0011
07	02.01	0.0	02.7082	02.1737	-00.0000	00.0000	-00.0000
08	04.00	0.0	03.2409	02.4803	-00.0000	00.0000	-00.0000
09	06.07	0.0	03.7057	02.7074	-00.0000	00.0011	-00.0011
10	08.00	0.0	03.7915	02.7005	-00.0077	00.0174	-00.0000
11	10.90	0.0	04.2057	03.0933	-00.0410	00.0174	-00.0000
12	12.00	0.0	04.0150	03.0402	-00.0762	00.0037	-00.0000
13	16.01	0.0	05.0025	04.0003	-01.1000	00.0000	-00.0000
14	20.01	0.0	07.0414	05.0150	-01.5040	00.0274	-00.0000
15	00.00	0.0	02.0010	02.1507	-00.0270	00.0000	-00.0000

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-4

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 157.9 KNOTS
BAROMETRIC PRESSURE 29.53 IN. HG
TUNNEL TEMPERATURE 106 DEG F
REYNOLDS NO./FT 1.4287 X 1,000,000

T+I RUN 002
IMAGE CUT 61 F1 W1
MODEL UPRIGHT
09/01/64-1
TRUNNION DATA

PI	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	00.02	0.0	02.2467	02.0128	-00.2710	00.1134	-00.0000	-00.1267
02	-03.98	0.0	01.0702	01.8852	-00.0130	00.0709	00.0328	-00.0057
03	-01.99	0.0	01.8214	01.9419	-00.1490	00.0709	00.0094	-00.0375
04	-01.01	0.0	01.9915	02.0411	-00.2194	00.0425	00.0094	-00.1126
05	00.01	0.0	02.2467	02.0553	-00.2757	00.0425	00.0141	-00.0704
06	00.99	0.0	02.5302	02.0978	-00.3461	00.0567	00.0094	-00.0938
07	02.03	0.0	02.7063	02.3246	-00.4071	00.0709	00.0282	-00.0751
08	04.00	0.0	03.2247	02.6081	-00.5009	00.0567	00.0047	-00.0657
09	06.00	0.0	03.6210	02.8208	-00.5901	00.1134	-00.0094	-00.1220
10	08.00	0.0	04.0752	03.0475	-00.6745	00.0567	00.0188	-00.0798
11	11.99	0.0	04.7131	03.5437	-00.7684	00.0850	00.0047	-00.0938
12	16.00	0.0	05.8754	04.5501	-01.1297	00.0425	-00.0047	-00.0610
13	20.01	0.0	06.7400	05.3155	-01.5848	00.1276	-00.0188	-00.1173
14	-01.99	0.0	01.0695	01.8852	-00.1490	00.0992	-00.0000	-00.0704
14	-01.99	0.0	01.5663	02.0553	-00.1443	00.0425	00.0188	-00.0563
15	-00.00	0.0	02.1333	02.0411	-00.2710	00.0567	00.0094	-00.0485

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-5

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 212.3 KNOTS
BAROMETRIC PRESSURE 29.51 IN. HG
TUNNEL TEMPERATURE 117 DEG F
RENOIDS NO./FT 1.8666 X 1,000,000

T+I RUN 003
IMAGE CUT B1 F1 W1
MODEL UPRIGHT
09/01/64-1
TFUNNION DATA

PT	ALPHA	PSI	CL	CL	CPM	CY	CRM	CYM
01	-00.00	0.0	02.2798	02.0805	-00.2791	00.2073	-00.0119	-00.0844
02	-04.00	0.0	01.0761	01.8095	-00.0152	00.1196	-00.0052	-00.0739
03	-01.98	0.0	01.7377	01.8972	-00.1524	00.0797	-00.0092	-00.0739
04	-00.99	0.0	02.0725	01.9290	-00.2184	00.2870	00.0013	-00.0580
05	00.01	0.0	02.2320	02.0646	-00.2791	00.0399	00.0013	-00.0633
06	01.01	0.0	02.5508	02.1762	-00.3424	00.0717	00.0040	-00.0686
07	02.00	0.0	02.8378	02.2798	-00.4057	00.0558	-00.0119	-00.0528
08	04.01	0.0	03.3161	02.5030	-00.5060	00.0638	00.0145	-00.0897
09	05.99	0.0	03.6987	02.7820	-00.6010	00.0319	00.0040	-00.0501
10	08.00	0.0	03.9856	03.1008	-00.6775	00.0558	00.0040	-00.0580
11	11.98	0.0	04.6393	03.6190	-00.7725	00.0159	-00.0040	-00.0528
12	16.00	0.0	05.8669	04.5038	-01.1287	00.0000	-00.0040	-00.0976
13	19.99	0.0	06.9111	05.3408	-01.5878	00.1435	-00.0145	-00.0712
14	00.02	0.0	02.2638	02.1044	-00.2738	00.0478	00.0066	-00.0501

REPORT NO. LSHT 167
PAGE NO. A-6

LVT LGW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 105.4 KNOTS
BAROMETRIC PRESSURE 29.51 IN. HG
TUNNEL TEMPERATURE 109 DEG F
REYNOLDS NO./FT 0.9505 X 1,000,000T+I RUN 004
IMAGE OUT 01 F1 W1
MODEL UPRIGHT
09/01/64-1
TRUNNION DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CPM	CYM
01	00.03	0.0	02.1666	02.2144	-00.2654	00.2071	00.0018	-00.1055
02	00.03	-4.0	02.1666	02.3100	-00.2693	-00.5576	-00.0669	00.2215
03	00.03	-2.0	02.1666	01.9914	-00.2906	-00.1434	00.0352	00.1687
03	00.03	-1.0	02.1985	02.1188	-00.2584	-00.0797	-00.0158	00.0422
05	00.03	-0.0	02.2622	01.8958	-00.2953	00.1752	-00.0580	-00.0422
06	00.03	1.0	02.1985	02.1507	-00.2521	00.2390	00.0500	-00.0422
07	00.03	2.0	02.1985	02.2462	-00.2373	00.3983	00.1002	-00.2742
	00.03	4.0	02.1985	02.3737	-00.4008	00.7169	-00.0158	-00.3375
07	00.03	-0.0	02.1666	02.2781	-00.2848	00.1434	00.0580	-00.1582

REPORT NO. LSWT 167
PAGE NO. A-7

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 158.0 KNOTS
BAROMETRIC PRESSURE 29.51 IN. HG
TUNNEL TEMPERATURE 108 DEG F
REYNOLDS NO./FT 1.4282 X 1,000,000T+I RUN 005
IMAGE CUT B1 F1 W1
MODEL UPRIGHT
09/01/64-1
TRUNNION DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	00.02	0.0	02.2396	02.2963	-00.2659	00.1276	00.0336	-00.1126
02	00.02	-4.0	02.3388	02.2396	-00.2911	-00.5103	-00.0485	00.2018
03	00.02	-2.0	02.2621	02.1404	-00.2724	-00.2551	00.0297	00.0704
04	00.02	-1.0	02.3530	02.1262	-00.2586	-00.0507	-00.0297	00.0047
05	00.02	-0.0	02.2821	02.1829	-00.2756	00.0992	-00.0137	-00.0798
06	00.02	1.0	02.3388	02.1971	-00.2551	00.2268	00.0272	-00.2018
07	00.02	2.0	02.2538	02.3388	-00.2584	00.3827	00.0535	-00.2862
08	00.02	4.0	02.2254	02.4097	-00.2628	00.6602	00.1103	-00.4364
09	00.02	0.0	02.3672	02.1971	-00.2659	00.1134	-00.0039	-00.1079

REPORT NO. LSWT 167
PAGE NO. A-8

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 210.4 KNOTS
BAROMETRIC PRESSURE 29.51 IN. HG
TUNNEL TEMPERATURE 107 DEG F
REYNOLDS NO./FT 1.9088 X 1,000,000

T+I RUN 006
IMAGE CUT B1 F1 W1
MODEL UPRIGHT
09/01/64-1
TRUNNION DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	00.02	0.0	02.3515	02.0526	-00.2683	00.2511	-00.0075	-00.0805
02	00.02	-4.0	02.3196	02.2120	-00.2771	-00.5540	-00.0145	00.2467
03	00.02	-2.0	02.2957	02.0606	-00.2823	-00.1156	-00.0224	00.1095
03	00.02	-1.0	02.3196	02.1084	-00.2771	00.0279	-00.0256	00.0330
05	00.02	-0.0	02.3675	02.0287	-00.2863	00.2192	-00.0224	-00.0646
06	00.02	1.0	02.3037	02.0606	-00.2807	00.3707	-00.0058	-00.1570
06	00.02	2.0	02.3436	02.1483	-00.2771	00.5062	00.0065	-00.2309
07	00.02	4.0	02.2798	02.4552	-00.3391	00.9765	-00.0752	-00.4261
07	00.02	-0.0	02.3037	02.0367	-00.2968	00.2431	-00.0172	-00.0989

REPORT NO. LSWT 167
PAGE NO. A-9

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 105.2 KNOTS
BAROMETRIC PRESSURE 29.48 IN. HG
TUNNEL TEMPERATURE 106 DEG F
REYNOLDS NO./FT 0.9564 X 1,000,000

T+I RUN 007
IMAGE OUT 61 F1 W1
MODEL UPRIGHT
09/01/64-1
TRUNNION DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	03.81	-0.0	03.2977	02.6604	-00.5379	00.0637	-00.0264	-00.0158
02	03.81	-4.0	03.4251	02.7242	-00.5408	-00.0956	00.0201	00.1107
03	03.81	-2.0	03.2977	02.4056	-00.4881	00.0000	00.0615	00.0158
04	03.81	-1.0	03.1702	02.5330	-00.4935	00.0956	00.0404	-00.0580
05	03.81	-0.0	03.3295	02.7242	-00.5311	00.0637	00.1037	-00.0369
06	03.81	1.0	03.2977	02.4693	-00.5254	00.2230	00.0299	-00.1213
07	03.81	2.0	03.4868	02.7242	-00.5419	00.2549	00.0299	-00.0580
08	03.81	4.0	03.3933	02.7879	-00.5414	00.4461	00.1248	-00.3217
09	03.81	-0.0	03.2021	02.5649	-00.4889	00.1592	00.0193	00.0158

REPORT NO. LSWT 167
PAGE NO. A-10

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 157.8 KNOTS
BAROMETRIC PRESSURE 29.48 IN. HG
TUNNEL TEMPERATURE 106 DEG F
RENOLOS NO./FT 1.4339 X 1,000,000T+I RUN 006
IMAGE OUT 81 F1 W1
MODEL UPRIGHT
09/01/64-1
TRUNNION DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	03.81	-0.0	03.3310	02.3955	-00.5131	00.0709	00.0063	-00.0469
02	03.81	-4.0	03.4161	02.4806	-00.5409	-00.2693	00.0066	00.1173
03	03.81	-2.0	03.4019	02.5231	-00.5081	-00.0992	00.0297	00.0563
04	03.81	-1.0	03.3736	02.4380	-00.5013	00.0283	00.0344	-00.0188
05	03.81	-0.0	03.2743	02.4097	-00.4943	00.0992	00.0344	-00.0891
06	03.81	1.0	03.3169	02.4806	-00.5060	00.1134	00.0156	-00.1173
07	03.81	2.0	03.2885	02.5089	-00.5131	00.2551	00.0297	-00.1830
	03.81	4.0	03.3452	02.7074	-00.5272	00.3969	00.0624	-00.2815
	03.81	0.0	03.3452	02.3813	-00.4988	00.0709	00.0391	-00.0610

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-11

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 212.2 KNOTS
BAROMETRIC PRESSURE 29.49 IN. HG
TUNNEL TEMPERATURE 116 DEG F
RENCLOS NO./FT 1.6701 X 1,000,000T+I RUN 009
IMAGE OUT BI FI MI
MODEL UPRIGHT
09/01/64-1
TRUNNION DATA

PT	ALPHA	PSI	CL	CD	CPH	CY	CRM	CYM
01	03.80	0.0	03.2882	02.5468	-00.5140	00.2073	00.0101	-00.0699
02	03.80	-4.0	03.3918	02.6664	-00.5406	-00.2949	00.0024	00.1253
03	03.80	-2.0	03.2722	02.5548	-00.5194	00.0319	-00.0189	-00.0066
04	03.80	-1.0	03.1925	02.5149	-00.5128	-00.0957	00.0048	-00.0172
05	03.80	0.0	03.2563	02.5389	-00.5114	00.1594	00.0233	-00.0805
06	03.80	1.0	03.2642	02.5229	-00.5155	00.1943	-00.0004	-00.1201
07	03.80	2.0	03.2642	02.5628	-00.5327	00.3109	00.0075	-00.1227
08	03.80	4.0	03.4555	02.7939	-00.5617	00.7015	-00.0243	-00.3338
09	03.80	-2.0	03.2005	02.4990	-00.5008	-00.0558	00.0207	00.0303
10	03.80	2.0	03.3280	02.6265	-00.5379	00.3268	00.0101	-00.1412
11	03.80	-0.0	03.2802	02.4990	-00.5106	00.1913	-00.0092	-00.0673

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-12

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 105.2 KNOTS
BAROMETRIC PRESSURE 29.49 IN. HG
TUNNEL TEMPERATURE 106 DEG F
RENCLOS NO./FT 0.9566 X 1,000,000T+I RUN 010
IMAGE OUT B1 F1 W1
MODEL UPRIGHT
09/01/64-1
TRUNNION DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	08.00	-0.0	03.9668	03.1384	-00.6803	00.2071	-00.0105	-00.0633
02	08.00	-4.0	04.0624	03.3295	-00.7273	00.0478	-00.0473	00.0633
03	08.00	-2.0	04.1261	03.1065	-00.6866	00.1752	-00.0580	-00.0844
04	08.00	-1.0	03.9668	03.1384	-00.6750	00.1115	-00.0686	00.0527
05	08.00	-0.0	03.9668	03.2658	-00.6803	00.1434	-00.0211	-00.0527
06	08.00	1.0	04.1579	03.2977	-00.6851	00.1115	00.0053	00.0949
07	08.00	2.0	03.9349	03.3933	-00.6961	00.0478	00.0580	-00.0211
	08.00	4.0	04.3810	03.5526	-00.7488	00.0159	00.0475	-00.0527
8.	08.00	-0.0	03.9349	03.0428	-00.6908	00.0159	00.0211	-00.0633

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-13

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 158.0 KNOTS
BAROMETRIC PRESSURE 29.49 IN. HG
TUNNEL TEMPERATURE 108 DEG F
REYNOLDS NO./FT 1.4277 X 1,000,000

T+I RUN 011
IMAGE OUT B1 F1 W1
MODEL UPRIGHT
09/01/64-1
TRUNNION DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.99	-0.0	04.0469	03.0405	-00.6686	00.1205	00.0047	-00.0610
02	07.99	-4.0	04.0894	03.1255	-00.7318	00.0638	-00.0492	00.0094
03	07.99	-2.0	04.0469	03.0830	-00.6710	00.1347	-00.0587	-00.0610
04	07.99	-1.0	04.0894	03.1255	-00.6801	00.1347	-00.0535	-00.0469
05	07.99	-0.0	04.0610	03.1255	-00.6780	00.1063	-00.0141	-00.0282
06	07.99	1.0	04.0327	03.0688	-00.6706	00.0780	00.0211	-00.0235
07	07.99	2.0	04.0894	03.1822	-00.6896	00.0496	00.0308	-00.0375
08	07.99	4.0	04.1603	03.3807	-00.7273	00.0354	00.0727	-00.1455
09	07.99	-0.0	04.0043	03.1113	-00.6780	00.1063	-00.0235	-00.0375

UNCLASSIFIED

UNCLASSIFIEDREPORT NO. LSMT 167
PAGE NO. A-14

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 212.0 KNOTS
BAROMETRIC PRESSURE 29.49 IN. HG
TUNNEL TEMPERATURE 115 DEG F
RENOIDS NO./FT 1.8743 X 1,000,000T+I RUN J12
IMAGE OUT 81 F1 W1
MODEL UPRIGHT
09/01/64-1
TRUNION DATA

PT	ALPHA	PSI	CL	CU	CPM	CY	CRM	CYM
01	07.99	-0.0	04.0454	03.0570	-00.6742	00.0917	-00.0026	-00.0449
02	07.99	-4.0	04.1172	03.1686	-00.7255	00.0518	-00.0567	-00.0211
03	07.99	-2.0	04.0614	03.1048	-00.6610	00.0757	-00.0303	-00.0686
04	07.99	-1.0	04.0375	03.0809	-00.6808	00.0678	-00.0198	-00.0580
05	07.99	-0.0	03.9657	03.1925	-00.6715	00.0438	-00.0079	-00.0396
06	07.99	1.0	04.0375	03.1128	-00.6913	-00.0279	00.0172	-00.0396
07	07.99	2.0	04.1092	03.1447	-00.7072	00.1475	-00.0040	-00.0475
08	07.99	4.0	04.0693	03.2882	-00.7705	00.5221	-00.0752	-00.3114
09	07.99	4.0	04.1809	03.3360	-00.7599	00.4265	-00.0805	-00.3272
10	07.99	3.0	04.1809	03.1845	-00.7334	00.3308	-00.0358	-00.1610
11	07.99	-3.0	04.0933	03.1128	-00.7046	00.0598	-00.0383	-00.0185
12	07.99	-2.0	04.0933	03.1686	-00.6942	00.0996	-00.0409	-00.0317
13	07.99	-1.0	04.0454	03.1447	-00.6860	00.0917	-00.0198	-00.0607

UNCLASSIFIED

REPORT NO. LSMT 167
PAGE NO. A-15

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 105.2 KNOTS
BAROMETRIC PRESSURE 29.49 IN. HG
TUNNEL TEMPERATURE 106 DEG F
REYNOLDS NO./FT 0.9566 X 1,000,000

T+I RUN 013
IMAGE OUT B1 F1 W1
MODEL UPRIGHT
09/01/64-1
TRUNNION DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	12.01	0.0	04.6837	03.6482	-00.7805	00.0478	-00.0422	00.0053
02	12.01	-4.0	05.0341	03.5207	-00.8596	00.3345	-00.1266	00.0158
03	12.01	-3.0	04.7155	03.6800	-00.8279	00.3027	-00.0426	-00.1107
04	12.01	-2.0	04.7792	03.8075	-00.7752	00.3027	-00.0527	00.0053
05	12.01	-1.0	04.7792	03.4888	-00.7963	00.1752	-00.0211	00.0053
06	12.01	0.0	04.9067	03.6163	-00.7910	00.0159	-00.0211	00.0284
07	12.01	1.0	04.9704	03.5207	-00.8174	00.0159	-00.0211	00.0580
08	12.01	2.0	04.7474	03.5844	-00.8178	-00.2071	-00.0103	00.0686
09	12.01	3.0	05.1616	03.7756	-00.8700	-00.1434	00.0426	00.0158
10	12.01	4.0	05.2572	03.5844	-00.9121	-00.1752	00.0842	-00.0053
11	12.01	0.0	04.7155	03.4251	-00.7910	00.0478	-00.0000	00.0053

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-16

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 157.7 KNOTS
BARGMETRIC PRESSURE 29.49 IN. HG
TUNNEL TEMPERATURE 106 DEG F
RENGLDS NO./FT 1.4342 X 1,000,000T+I RUN 014
IMAGE CUT 81 F1 W1
MODEL UPRIGHT
09/01/64-1
TRUNNION DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	12.01	-0.0	04.5926	03.6074	-00.7695	00.0213	-00.0047	-00.0727
02	12.01	-4.0	04.7202	03.6783	-00.8141	00.2339	-00.0890	-00.0774
03	12.01	-3.0	04.8619	03.6925	-00.7906	00.2622	-00.0565	-00.0962
04	12.01	-2.0	04.8194	03.5791	-00.7625	00.2481	-00.0563	-00.0587
05	12.01	-1.0	04.7060	03.5366	-00.7613	00.2055	-00.0609	-00.0821
06	12.01	0.0	04.6336	03.5366	-00.7763	00.0921	-00.0281	-00.0211
07	12.01	1.0	04.6635	03.5791	-00.7811	-00.0354	00.0187	-00.0540
08	12.01	2.0	04.6493	03.6783	-00.8001	-00.1205	00.0141	00.0211
09	12.01	3.0	04.8477	03.7208	-00.8422	-00.1347	00.0657	00.0023
10	12.01	4.0	04.9611	03.8768	-00.8704	-00.1914	00.0891	-00.0023
11	12.01	0.0	04.8194	03.4941	-00.7763	00.0921	-00.0033	-00.0258

UNCLASSIFIED

PRELIMINARY DATA

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-17

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 211.1 KNOTS
BAROMETRIC PRESSURE 29.49 IN. HG
TUNNEL TEMPERATURE 110 DEG F
REYNOLDS NO./FT 1.8953 X 1,000,000T+I RUN 015
IMAGE CUT 81 FI W1
MODEL UPRIGHT
09/01/64-L
TRUNNION DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	12.00	0.0	04.7110	03.6628	-00.7717	00.0757	-00.0079	-00.0673
02	12.00	-4.0	04.8625	03.6787	-00.8193	00.2910	-00.0818	-00.1069
03	12.00	-3.0	04.6791	03.5990	-00.7955	00.2272	-00.0450	-00.1201
04	12.00	-2.0	04.7589	03.5831	-00.7692	00.2272	-00.0422	-00.1069
05	12.00	-1.0	04.6154	03.6947	-00.7692	00.1714	-00.0263	-00.0937
06	12.00	-0.0	04.6871	03.5831	-00.7678	00.0757	-00.0053	-00.0383
07	12.00	1.0	04.6632	03.6947	-00.7743	-00.0279	00.0052	-00.0119
08	12.00	2.0	04.6871	03.6309	-00.7928	-00.0837	00.0291	-00.0092
09	12.00	3.0	04.7349	03.7585	-00.8377	-00.0199	-00.0236	-00.1042
10	12.00	4.0	04.9980	03.9259	-00.8905	00.2511	-00.0555	-00.2388
11	12.00	-1.0	04.6632	03.5751	-00.7665	00.1714	-00.0237	-00.0726
12	12.00	-0.0	04.5436	03.5751	-00.7693	00.0598	-00.0079	-00.0330

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSMT 167
PAGE NO. A-18

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 105.2 KNOTS
BAROMETRIC PRESSURE 29.49 IN. HG
TUNNEL TEMPERATURE 106 DEG F
RENCLOS NO./FT 0.9566 X 1,000,000

T+I RUN 016
IMAGE OUT 81 F1 W1
MODEL UPRIGHT
09/01/64-1
TRUNNION DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CPM	CYM
01	16.04	-0.0	06.0059	04.6518	-01.1285	00.1115	-00.0053	-00.1002
02	16.02	-4.0	06.2608	04.4925	-01.2340	00.3664	-00.1951	-00.2057
03	16.02	-3.0	06.2289	04.2376	-01.1496	00.3664	-00.1424	-00.1107
04	16.02	-2.0	06.2289	04.2376	-01.1603	00.3027	-00.1415	-00.0686
05	16.02	-1.0	06.2289	04.4925	-01.1281	-00.0478	-00.0892	-00.1002
06	16.02	-0.0	06.1334	04.3969	-01.1285	00.0797	-00.0264	-00.1002
07	16.02	1.0	06.2289	04.5243	-01.1289	-00.1434	00.0154	00.0475
	16.02	2.0	06.2289	04.3013	-01.1703	-00.0797	00.0372	-00.0686
	16.02	3.0	06.2289	04.7474	-01.2340	-00.1752	00.0896	-00.0369
10	16.02	4.0	06.3883	04.7155	-01.2970	-00.1115	00.0894	00.0053
11	16.02	-0.0	06.2608	04.5881	-01.1074	00.0159	00.0053	-00.1213
12	16.02	1.0	06.1971	04.6518	-01.1160	00.0159	00.0369	-00.0791

UNCLASSIFIED

UNCLASSIFIEDREPORT NO. LSMT 167
PAGE NO. A-19

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 157.7 KNOTS
BARGMETRIC PRESSURE 29.49 IN. HG
TUNNEL TEMPERATURE 106 DEG F
RENOIDS NO./FT 1.4342 X 1,000,000T+I RUN 017
IMAGE OUT B1 F1 W1
MODEL UPRIGHT
09/01/64-1
TRUNNIGN DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	16.02	-0.0	06.0171	04.5501	-01.1261	00.0213	-00.0070	-00.0915
02	16.01	-4.0	06.1164	04.4083	-01.2346	00.2481	-00.1564	-00.1666
03	16.01	-3.0	06.0736	04.5359	-01.1404	00.2906	-00.1154	-00.1853
04	16.01	-2.0	05.9179	04.5217	-01.1215	00.3331	-00.1052	-00.1478
05	16.01	-1.0	06.0455	04.5075	-01.1115	00.2055	-00.0768	-00.0866
06	16.01	-0.0	06.0030	04.4792	-01.1261	00.0780	-00.0023	-00.0493
07	16.01	1.0	05.9746	04.4792	-01.1308	-00.0354	00.0211	-00.0727
08	16.01	2.0	06.0597	04.5501	-01.1777	-00.1205	00.0447	-00.0399
09	16.01	3.0	06.1731	04.6635	-01.2245	-00.1347	00.0962	-00.0070
10	16.01	4.0	06.3006	04.5926	-01.2902	-00.1347	00.0961	-00.0727
11	16.01	-0.0	06.0597	04.4792	-01.1308	00.0780	-00.0023	-00.0680

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSMT 167
PAGE NO. A-20

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 210.3 KNOTS
BAROMETRIC PRESSURE 29.49 IN. HG
TUNNEL TEMPERATURE 106 DEG F
REYNOLDS NO./FT 1.9125 X 1,000,000T+I RUN 018
IMAGE OUT B1 F1 W1
MODEL UPRIGHT
09/01/64-1
TRUNNIGN DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYP
01	16.00	-0.0	05.9665	04.4958	-01.1346	00.0436	-00.0119	-00.0910
02	16.00	-4.0	06.1259	04.4878	-01.2352	00.2830	-00.1407	-00.1702
03	16.00	-3.0	06.0303	04.5038	-01.1664	00.2750	-00.1019	-00.1570
04	16.00	-2.0	05.9585	04.4878	-01.1267	00.2352	-00.0658	-00.1438
05	16.00	-1.0	05.9745	04.6074	-01.1264	00.2033	-00.0748	-00.1121
06	16.00	-1.0	05.9745	04.5596	-01.1264	00.1873	-00.0590	-00.1385
07	16.00	0.0	05.9745	04.5755	-01.1331	00.0518	-00.0209	-00.0778
	16.00	1.0	06.0303	04.4958	-01.1400	-00.0279	00.0381	-00.0172
	16.00	2.0	06.0303	04.5357	-01.1873	-00.0598	00.0489	-00.0224
10	16.00	3.0	06.0940	04.6313	-01.2296	-00.0837	00.0646	-00.0673
11	16.00	4.0	06.2136	04.6632	-01.3033	00.0757	00.0407	-00.1412
12	16.00	-1.0	05.9426	04.5596	-01.1267	00.1714	-00.0726	-00.1121
13	16.00	2.0	06.0303	04.5197	-01.1873	-00.1236	00.0621	-00.0224
14	16.00	2.0	06.0382	04.5277	-01.1873	-00.1315	00.0621	-00.0066
15	16.00	1.0	05.8230	04.5197	-01.1399	-00.0637	00.0383	-00.0409
16	16.00	-0.0	05.8868	04.4799	-01.1346	00.0438	-00.0119	-00.0673

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-21

LVT LOW SPEED WIND TUNNEL TEST 157

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 003.3 KNOTS
BAROMETRIC PRESSURE 60.00 IN. HG
TUNNEL TEMPERATURE 088 DEG F
ENCLOS NO./FT 1.2921 X 1,000,000

T+I RUN 019
IMAGE IN 81 FI W1
MODEL UPRIGHT
09/01/64-1
TRUNNIGN DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	-00.00	-0.0	02.6445	03.1224	-00.2689	00.1274	-00.0105	-00.1846
02	-03.98	-0.0	01.3063	02.8357	-00.0158	00.0319	-00.0000	-00.0896
03	-02.00	-0.0	02.0073	03.0269	-00.1635	00.0637	-00.0000	-00.1529
04	-01.01	-0.0	02.1666	02.9313	-00.1846	00.0319	-00.0000	-00.1213
05	00.02	-0.0	02.6445	03.1224	-00.2373	00.1274	-00.0000	-00.1846
06	01.00	-0.0	02.8038	03.2817	-00.3006	-00.0319	-00.0000	-00.1318
07	02.02	-0.0	02.9950	03.4092	-00.3428	00.0319	-00.0000	-00.0896
08	04.00	-0.0	03.3455	03.6004	-00.4799	00.0319	-00.0000	-00.0791
09	06.01	-0.0	03.9827	03.8871	-00.5537	00.0000	00.0105	-00.1213
10	07.99	-0.0	04.0783	04.2695	-00.6275	00.0637	-00.0000	-00.1318
11	12.01	-0.0	04.6518	04.7792	-00.7541	-00.0956	-00.0000	-00.0686
12	15.98	-0.0	06.0856	05.6714	-01.0810	-00.1593	-00.0316	-00.1529
13	20.02	0.0	06.9140	06.5316	-01.6931	00.0000	00.0211	00.0264
14	20.02	-0.0	06.8184	06.6272	-01.6295	00.1274	-00.0000	-00.0158
15	00.03	-0.0	02.6127	03.0587	-00.2689	00.1274	-00.0105	-00.1213

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-22

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 005.0 KNOTS
BAROMETRIC PRESSURE 61.00 IN. HG
TUNNEL TEMPERATURE 097 DEG F
REYNOLDS NO./FT 5.9524 X 1,000,000

T+I RUN 020
IMAGE IN B1 F1 W1
MODEL UPRIGHT
09/01/64-1
TRUNNION DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	-00.00	-0.0	02.5940	03.0830	-00.2393	00.0213	00.0047	-00.0282
02	-04.00	-0.0	01.4883	02.6719	-00.0094	-00.0071	00.0141	-00.0047
03	-02.02	-0.0	01.9986	02.8845	-00.1267	00.0780	-00.0000	-00.0094
04	-00.98	-0.0	02.2821	02.9696	-00.1830	-00.0354	00.0094	-00.0000
05	00.01	-0.0	02.6081	03.0405	-00.2487	-00.0071	00.0047	-00.0000
06	01.00	0.0	02.8349	03.1822	-00.3097	00.0071	00.0047	00.0375
07	02.00	-0.0	03.1468	03.3240	-00.3613	00.0638	-00.0000	-00.0469
08	03.99	-0.0	03.4303	03.4941	-00.4504	00.0921	-00.0047	-00.0469
09	06.00	0.0	03.9831	03.8342	-00.5443	00.0071	-00.0188	00.0000
10	07.99	-0.0	04.2949	04.0894	-00.6147	00.1347	-00.0047	-00.0094
11	12.01	0.0	04.7465	04.6564	-00.7179	-00.0071	00.0047	00.0094
12	16.00	0.0	05.9250	05.5777	-01.0745	-00.0780	-00.0000	00.0141
13	20.00	0.0	06.7897	06.5416	-01.5343	00.0213	00.0047	00.0375
14	20.00	0.0	06.8180	06.5274	-01.5624	-00.0354	00.0282	00.0235
15	-00.00	0.0	02.5798	03.0540	-00.2440	00.0496	00.0047	00.0000

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-23

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 028.8 KNOTS
BAROMETRIC PRESSURE 61.00 IN. HG
TUNNEL TEMPERATURE 000 DEG F
RENCLOS NO./FT 0.9567 X 1,000,000

T+I RUN 021
IMAGE IN 81 F1 W1
MODEL UPRIGHT
09/01/64-1
TRUNNION DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	00.01	-0.0	02.5588	03.0849	-00.2269	00.1794	-00.0026	-00.0449
02	-04.01	-0.0	01.5145	02.7581	00.0026	00.1315	-00.0185	-00.0290
03	-01.98	-0.0	01.9928	02.8776	-00.1240	00.1395	-00.0211	-00.0449
04	-01.00	-0.0	02.2878	02.9813	-00.1900	00.0996	-00.0290	-00.0396
05	00.01	-0.0	02.5110	03.0849	-00.2454	00.1156	-00.0264	-00.0369
06	01.02	-0.0	02.7740	03.1965	-00.2455	00.1315	-00.0132	-00.0237
07	02.01	-0.0	02.9653	03.3240	-00.3641	00.0996	-00.0290	-00.0422
08	00.01	-0.0	02.5588	03.0769	-00.2559	00.0917	-00.0264	-00.0106
09	02.00	-0.0	03.0530	03.3240	-00.3641	00.1156	-00.0369	-00.0132
10	04.01	-0.0	03.4595	03.5233	-00.4591	00.0757	-00.0290	-00.0211
11	06.04	-0.0	03.8740	03.8661	-00.5468	00.1076	-00.0343	-00.0422
12	19.88	-0.0	06.9270	06.4727	-01.5357	-00.2192	-00.0000	-00.0158
13	15.98	-0.0	06.1857	05.6437	-01.0871	-00.0996	-00.0211	-00.0158
14	12.00	-0.0	04.9980	04.7589	-00.7203	-00.0438	-00.0290	-00.0132
15	08.01	0.0	04.4320	04.1132	-00.6412	-00.0518	-00.0290	00.0026

UNCLASSIFIED

REPORT NO. LSMT 167
PAGE NO. A-24

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 014.6 KNOTS
BAROMETRIC PRESSURE 61.00 IN. HG
TUNNEL TEMPERATURE 600 DEG F
RENDLDS NO./FT 0.4405 X 1,000,000

T+I RUN 022
IMAGE IN B1 F1 W1
MODEL UPRIGHT
09/01/64-1
TRUNNION DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	16.02	0.0	06.2927	05.7351	-01.0969	-00.1115	00.0158	00.0633
02	16.02	-4.0	06.4838	05.9263	-01.1390	00.4301	-00.1846	-00.1055
03	16.02	-3.0	06.3883	05.7351	-01.0973	00.2390	-00.1223	-00.0211
04	16.02	-2.0	06.2927	05.7988	-01.0865	00.1434	-00.1521	00.0211
05	16.02	-1.0	06.2608	05.8307	-01.0536	-00.0478	-00.1410	00.1371
06	16.02	0.0	06.3564	05.6714	-01.0909	-00.1752	-00.0202	-00.0316
07	16.02	1.0	06.3564	05.6714	-01.0968	-00.3345	00.0683	00.1477
08	16.02	2.0	06.2289	05.8307	-01.1601	-00.2390	00.0369	00.0105
09	16.02	3.0	06.4520	05.9900	-01.2023	-00.3345	00.1318	00.0211
10	16.02	4.0	06.6431	06.2130	-01.2762	-00.2390	00.1951	-00.0000
11	16.01	-0.0	06.1652	05.6714	-01.0810	-00.1434	-00.0422	00.0738

UNCLASSIFIED

REPORT NO. LSAT 167
PAGE NO. A-24

LVT LOW SPEED MINI TUNNEL TEST 17

DYNAMIC PRESSURE 033.3 PSF
TUNNEL VELOCITY 014.0 KNOTS
BAROMETRIC PRESSURE 01.00 IN. HG
TUNNEL TEMPERATURE 600.00 F
REYNOLDS NO./FT 0.4405 x 1,000,000

TAPE RUN 022
IMAGE IN FILE M1
MODEL UP-101
04/01/64-1
-ATF JANIS-104403

PT	ALPHA	PSI	CL	CC	CPX	CY	CLX	CPY
01	16.02	0.0	05.2327	05.7351	-01.0909	-00.1115	00.0113	00.0033
02	16.02	-4.0	05.4835	05.9263	-01.1390	00.4501	-00.1946	-00.1055
03	16.02	-3.0	06.3865	05.7351	-01.0973	00.2790	-00.1273	-00.0211
04	16.02	-2.0	06.2727	05.7986	-01.0465	00.1434	-00.1901	00.0211
05	16.02	-1.0	06.2606	05.8307	-01.0556	-00.0475	-00.1410	00.1371
06	16.02	0.0	06.3564	05.6714	-01.0909	-00.1752	-00.0202	-00.0312
07	16.02	1.0	06.3564	05.6714	-01.0556	-00.3345	00.0600	00.1477
08	16.02	2.0	06.2289	05.8507	-01.1001	-00.2390	00.0367	00.0105
09	16.02	3.0	06.4520	05.9900	-01.2020	-00.3345	00.1316	00.0211
10	16.02	4.0	06.5431	06.2130	-01.2702	-00.2591	00.1951	-00.0000
11	16.01	-0.0	06.1652	05.6714	-01.0610	-00.1434	-00.0422	00.0758

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. 1517 177
PAGE NO. A-25

LVT LOW SPEED WIND TUNNEL TEST 17

DYNAMIC PRESSURE 070.2 PSF
TUNNEL VELOCITY 622.2 FPM
BAROMETRIC PRESSURE 31.01 IN. HG
TUNNEL TEMPERATURE 60.0 DEG F
HEADLOSS 10.7 FT LOSS COEFF X 1,000,000

T-1 - ON 100
IMAGE 11 11 11
MODEL 1000000
09/01/64-1
1111 1111 1111

PT	ALPHA	PSI	CL	CF	CM	CY	CI	LYN
01	16.01	-0.0	05.1731	05.5690	-01.1004	-00.1430	-00.0096	00.0000
02	16.00	-4.0	06.1731	05.5625	-01.1824	-00.1740	-00.1572	-00.0751
03	16.00	-3.0	06.2240	05.5110	-01.1714	-00.4040	-00.0015	-00.0000
04	16.00	-2.0	06.0597	05.7049	-01.0750	-00.2330	-00.1250	-00.0450
05	16.00	-1.0	06.1447	05.5902	-01.0846	-00.0354	-00.0000	-00.0000
06	16.00	-0.0	06.1089	05.5990	-01.1070	-00.1630	-00.0211	-00.0747
07	16.00	1.0	06.1104	05.5990	-01.1200	-00.2704	-00.0442	-00.0700
	16.00	2.0	06.2581	05.7407	-01.1634	-00.2900	-00.0442	-00.0000
	16.00	3.0	06.2865	05.8341	-01.2244	-00.3040	-00.1525	-00.0270
10	16.00	4.0	06.4700	05.9534	-01.2900	-00.3040	-00.1700	-00.0200
11	16.00	0.0	06.1447	05.5840	-01.0800	-00.1430	-00.0137	-00.0000

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSNT 167
PAGE NO. A-26

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 330.7 KNOTS
BAROMETRIC PRESSURE 31.00 IN. HG
TUNNEL TEMPERATURE 400 DEG F
RENCLOS NO./FT 0.7938 X 1,000,000

T+1 RUN 024
IMAGE IN 51 FL #1
MODEL UPRIGHT
09/01/64-1
TRUNNION DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	15.99	0.0	06.0143	05.8277	-01.1041	-00.1395	-00.0077	-00.0185
02	15.98	-4.0	06.0013	05.9466	-01.1677	00.4583	-00.1676	-00.0950
03	15.99	-3.0	06.1738	05.8748	-01.1426	00.4025	-00.1282	-00.1042
04	15.99	-2.0	06.0791	05.7792	-01.1070	00.2272	-00.1115	-00.0528
05	15.99	-1.0	06.0622	05.7393	-01.0868	00.0757	-00.0801	-00.0343
06	15.99	-0.0	06.0143	05.6596	-01.0937	-00.0996	-00.0211	00.0185
07	15.99	1.0	06.1738	05.6676	-01.1293	-00.3069	00.0356	00.0309
8	15.99	2.0	06.1498	05.7234	-01.1742	-00.3306	00.0488	00.0185
9	15.99	3.0	06.3252	05.8031	-01.2507	-00.1953	-00.0040	-00.0818
10	15.98	4.0	06.3730	06.0263	-01.3008	-00.0757	-00.0330	-00.1847
11	15.99	-3.0	06.1738	05.8190	-01.1346	00.2939	-00.1089	-00.0644
12	15.99	0.0	06.0303	05.6437	-01.1014	-00.1554	-00.0103	-00.0000

UNCLASSIFIED

REPORT NO. LSNT 107
 TEST NO. A-27

LWT LOW SPEED WIND TUNNEL TEST 107

DYNAMIC PRESSURE 0.33.9 PSF
 TUNNEL VELOCITY 014.7 KNOTS
 BAROMETRIC PRESSURE 30.00 IN. HG
 TUNNEL TEMPERATURE 200 DEG F
 REYNOLDS NO./FT 0.4400 X 1,000,000

TEST RUN 025
 IMAGE P. 51-1-1
 MODEL SP-1001
 09/01/55-1
 *T-3-1-1-1-1-1-1

CI	ALPHA	PSI	CL	CL	CM	CM	CM	CM
01	12.00	0.0	05.2572	04.8410	-00.7326	-00.0515	-00.0012	-00.0046
02	11.99	-4.0	05.4185	05.0341	-00.0505	00.4147	-00.1115	-00.1898
03	11.99	-3.0	05.1203	04.8111	-00.7041	00.2543	-00.1692	-00.2426
04	11.99	-2.0	05.0121	04.7153	-00.7222	00.1055	-00.1057	-00.1477
05	11.99	-1.0	05.1572	04.7157	-00.7027	00.1055	-00.0947	-00.1552
06	11.99	-0.0	05.2072	04.7474	-00.7172	-00.1017	-00.0422	-00.0211
7	11.99	1.0	05.1515	04.7712	-00.7115	-00.1093	-00.0527	-00.0644
8	11.99	2.0	05.0027	04.8437	-00.7045	-00.1274	-00.0174	00.0211
9	11.99	3.0	05.2090	04.9000	-00.6079	-00.0011	-00.0577	00.0100
10	11.99	4.0	05.0073	05.1914	-00.8000	-00.1093	00.0012	-00.1286
11	11.99	-0.0	05.1250	04.8510	-00.7000	00.0015	-00.0310	-00.0700

UNCLASSIFIED

PRELIMINARY DATA

REPORT NO. LST 107
PAGE NO. A-29

LVI FLX SPEED WIND TUNNEL TEST

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 330.7 KNOTS
EACHMETRIC PRESSURE 97.00 IN. HG
TUNNEL TEMPERATURE 400 DEGR F
RECORDS NO./PI 0.7958 X 1,000,000
ATTENTION DATA

PI ALPHA PSI CL CB CBY CPM CYA

01	11.99	0.0	04.8705	04.7907	-00.7288	00.1084	-00.0237	00.0132
02	11.98	-4.0	05.0957	05.0450	-00.8403	00.556	-00.1081	-00.0782
03	11.98	-3.0	04.9741	04.9028	-00.7955	00.5807	-00.0712	-00.0703
04	11.98	-2.0	04.9103	04.8445	-00.7559	00.7031	-00.0634	-00.0703
05	11.98	-1.0	04.8500	04.7888	-00.7205	00.1116	-00.0501	-00.0475
06	11.98	0.0	04.7110	04.7429	-00.7221	-00.0797	-00.0343	-00.0211
07	11.98	1.0	04.7031	04.6632	-00.7400	-00.1237	-00.0026	00.0100
08	11.98	2.0	04.6625	04.7589	-00.8114	-00.1754	-00.0105	00.0054
09	11.98	3.0	04.5025	04.8147	-00.9450	-00.2312	-00.0552	-00.1005
10	11.98	4.0	05.1176	05.0936	-00.9301	00.0543	-00.0872	-00.1401
11	11.98	5.0	04.7525	04.6871	-00.7838	-00.0957	-00.1105	00.0057
12	11.98	6.0	04.7270	04.7349	-00.7559	-00.1993	-00.0100	00.0182
13	11.98	-0.0	04.7407	04.8051	-00.7503	-00.1515	-00.0079	00.0079

UNCLASSIFIED

REPORT NO. LSAT 167
PAGE NO. A-30

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 035.9 PSF
TUNNEL VELOCITY 614.4 KNOTS
BAROMETRIC PRESSURE 54.00 IN. HG
TUNNEL TEMPERATURE 300 DEG F
RENCLOS NO./FT 0.4785 X 1,000,000

I+I FOR 028
IMAGE IN 61 F1 #1
MODEL COPYRIGHT
00/01/64-1
METROJNICK DATA

PT	ALPHA	PSI	CL	CD	CPM	CY	CMX	CYM
01	07.99	-0.0	04.4925	04.3013	-00.0644	-00.0637	-00.0385	-00.1160
02	07.99	-4.0	04.6510	04.3013	-00.7509	00.2230	-00.0947	-00.1160
03	07.99	-3.0	04.4925	04.2374	-00.6803	00.0950	-00.0758	00.0316
04	07.99	-2.0	04.5502	04.1420	-00.6235	00.1274	-00.1075	00.0000
05	07.99	-1.0	04.7155	04.1739	-00.6301	00.0950	-00.1071	-00.0527
06	07.99	-0.0	04.5562	04.2057	-00.6430	00.0315	-00.1002	-00.0105
07	07.99	1.0	04.4606	04.0783	-00.6542	00.0315	00.0105	-00.1065
	07.99	2.0	04.6199	04.1739	-00.6550	-00.0319	00.0211	-00.1687
08	07.99	3.0	04.6837	04.2013	-00.7014	00.1593	00.0422	-00.0949
10	07.99	4.0	04.6037	04.4925	-00.7547	00.0950	00.0323	-00.1598
11	07.99	0.0	04.4925	04.2370	-00.6554	-00.0315	00.0162	-00.0422

REPORT NO. LSAT 167
PAGE NO. A-31

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 075.2 PSF
TUNNEL VELOCITY 142.2 KNOTS
BAROMETRIC PRESSURE 29.00 IN. HG
TUNNEL TEMPERATURE 60.0 DEG F
REYNOLDS NO./FT 0.6503 X 1,000,000

T+1 004 029
IN/SP IN PL 11 W1
MODEL UPRIGHT
09/11/84-1
TUNNEL DATA

PT	ALPHA	PSI	CL	CU	CPM	CY	CPH	CYN
01	07.95	0.0	04.3510	04.0965	-00.6332	-00.0283	-00.0207	-00.0704
02	07.98	-4.0	04.4068	04.2807	-00.7127	00.2643	-00.0408	-00.0475
03	07.98	-3.0	04.4003	04.2240	-00.6656	00.2410	-00.0810	-00.0657
04	07.98	-2.0	04.4225	04.1715	-00.6311	00.0692	-00.0375	-00.0751
05	07.98	-1.0	04.3550	04.0585	-00.5262	00.1559	-00.0657	-00.0375
06	07.98	-0.0	04.2507	04.0390	-00.6381	00.0425	-00.0305	-00.0387
07	07.98	1.0	04.4225	04.0681	-00.6450	00.0245	00.0188	-00.0687
08	07.98	2.0	04.3191	04.0505	-00.6490	-00.0567	00.0189	-00.0891
09	07.98	3.0	04.2524	04.2140	-00.6421	00.0425	00.0110	-00.1220
10	07.98	4.0	04.4034	04.3374	-00.7391	00.0709	00.0705	-00.1542
11	07.98	-0.0	04.0510	04.0965	-00.6420	00.0567	-00.0211	-00.0375

REPORT NO. LSRT 167

PAGE NO. A-32

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 155.5 PSF
 TUNNEL VELOCITY 130.7 KNOTS
 BAROMETRIC PRESSURE 51.00 IN. HG
 TUNNEL TEMPERATURE 400 DEG F
 REYNOLDS NO./FT 0.7956 X 1,000,000

T+I RUN 73.
 IMAGE IN 01 F1 F1
 MODEL ORIFICE
 04/01/54-1
 1-TRONIC 1-1455

PT	ALPHA	PSI	CL	CD	CPM	CV	CPM	CV
01	07.98	-0.0	04.3045	04.1052	-00.6540	00.0000	-00.0440	-00.0155
02	07.98	-4.0	04.3445	04.2646	-00.7110	00.1411	-00.0324	-00.0422
03	07.98	-3.0	04.4241	04.2088	-00.6821	00.1155	-00.0180	-00.0143
04	07.98	-2.0	04.2885	04.1929	-00.6533	00.0797	-00.0343	-00.0554
05	07.98	-1.0	04.3782	04.1550	-00.6424	00.0139	-00.0409	-00.0290
06	07.98	-0.0	04.2646	04.0733	-00.6458	-00.0239	-00.0168	-00.0211
07	07.98	1.0	04.3523	04.0654	-00.6818	00.1357	-00.0287	-00.0166
08	07.98	2.0	04.2721	04.0843	-00.5869	-00.1674	00.1053	-00.0668
09	07.98	3.0	04.2646	04.1610	-00.7057	-00.1474	00.0709	-00.0144
10	07.98	4.0	04.3922	04.3782	-00.7726	00.1115	-00.0784	-00.0744
11	07.98	1.0	04.2587	04.1052	-00.6533	-00.0757	00.0070	-00.0185
12	07.98	0.0	04.2646	04.1212	-00.6457	-00.0478	-00.0117	-00.0157

REF ID: A57 167
PAGE 1 A-33

LVT LOW SPEED WIND TUNNEL TEST 157

YNAMIC PRESSURE 0.009 PSF
TUNNEL VELOCITY 114.7 KNOTS
DYNAMIC PRESSURE 55.00 IN. HG
TUNNEL TEMPERATURE 430 DEG F
PEACHES NO./FT 0.4525 X 1,000,000

TIME 01:03:1
INCHES 11.51
SEE PROJECT
C-701/44-1
TEST DATA

PT	ALPHA	PSI	CL	CD	CM	CY	C	CY
01	03.80	0.0	03.5500	03.5641	-0.4675	0.1274	0.0277	-0.1201
02	03.80	-4.0	03.5322	03.7517	-0.4302	-0.1247	-0.0000	0.0040
03	03.81	-3.0	03.5554	03.7147	-0.4457	-0.1912	-0.0000	0.2115
04	03.81	-2.0	03.5685	03.6041	-0.4776	0.0000	-0.0000	0.0000
05	03.81	-1.0	03.5904	03.5004	-0.4850	0.0037	-0.0000	0.0000
06	03.81	-0.0	03.5540	0.0097	-0.4573	0.0007	0.0141	-0.0000
07	03.81	1.0	0.0040	03.5091	-0.4341	0.0000	0.0000	-0.0000
08	03.91	2.0	03.5322	03.7270	-0.4300	0.0000	0.0000	-0.0000
09	03.91	3.0	03.5327	03.6500	-0.4380	0.0000	0.0000	-0.0000
10	03.91	4.0	03.5500	04.119	-0.4471	0.0000	0.0000	-0.0000
11	03.91	0.0	03.5648	03.7170	-0.4777	0.0114	0.0000	-0.0000

UNCLASSIFIED

REFLECTOR LOCAT 187
PAGE NO. A-34

LWT LOW SPEED WIND TUNNEL TEST 187

DYNAMIC PRESSURE 976.2 PSF
TUNNEL VELOCITY 157.6 KNOTS
BAROMETRIC PRESSURE 29.53 IN. HG
TUNNEL TEMPERATURE 106 DEG F
WIND TUNNEL 1.4352 X 1,000,000

1+1 R/L 030
IMAGE IN 01+1 W1
JUL 01/01-1
09/01/01-1
EXTENSION DATA**

PI	ALPHA	PSI	CL	CD	CMX	CY	CLM	CYM
02	03.81	-4.0	03.6429	04.7421	-00.6127	-00.0263	-00.0026	00.1545
03	03.81	-3.0	03.6287	03.6854	-00.4646	-00.0425	-00.0360	00.1079
04	03.81	-2.0	03.6145	03.6145	-00.4565	00.0425	-00.0078	00.0469
05	03.81	-1.0	03.5578	03.5578	-00.4542	00.1270	00.0015	00.0375
06	03.81	0.0	03.4161	03.5578	-00.4645	00.0002	-00.0429	00.0047
07	03.81	1.0	03.4870	03.5153	-00.4720	00.1701	00.0010	-00.0083
08	03.81	2.0	03.4728	03.5437	-00.4645	00.1984	00.0063	-00.1455
	03.81	3.0	03.4870	03.6571	-00.5157	00.2977	00.0365	-00.1783
10	03.81	4.0	03.5720	03.6272	-00.5413	00.3544	00.0762	-00.3097
11	03.81	-0.0	03.4161	03.5662	-00.4645	00.1134	-00.0205	-00.0422

UNCLASSIFIED

LOW SPEED WIND TUNNEL TEST 1-7

DYNAMIC PRESSURE 139.5 PSF
TUNNEL VELOCITY 212.0 KNOTS
BAROMETRIC PRESSURE 29.55 IN. HG
TUNNEL TEMPERATURE 116.06 F
REYNOLDS NO./FT 1.6714 X 10,000,000
1-1 804 033
1-466 IN AL FL MI
MODEL ORIFICE
09/01/64-1
ASTRONAUTICAL LAB

PT	ALPHA	PSI	CL	CD	CPR	CY	CPR	CY
01	00.00	-0.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
02	00.00	-4.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
03	00.00	-3.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
04	00.00	-2.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
05	00.00	-1.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
06	00.00	-0.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
07	00.00	1.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
08	00.00	2.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
09	00.00	3.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
10	00.00	4.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
11	00.00	00.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000

01	00.00	-0.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
02	00.00	-4.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
03	00.00	-3.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
04	00.00	-2.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
05	00.00	-1.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
06	00.00	-0.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
07	00.00	1.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
08	00.00	2.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
09	00.00	3.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
10	00.00	4.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000
11	00.00	00.00	00.0000	00.0000	00.0000	00.0000	00.0000	00.0000

TEST NO. 1517
A-36

TEST OF SPILLAGE IN TUNNEL TEST 1517

HYDRAULIC PRESSURE 100.0 PSI
TUNNEL VELOCITY 105.0 IN/SEC
BAROMETRIC PRESSURE 24.5 IN. HG
TUNNEL TEMPERATURE 104 DEG F
RECORDS NO./FT 0.9 14 X 14 0.001

TEST NO. 1517
A-36
TUNNEL VELOCITY 105.0 IN/SEC
BAROMETRIC PRESSURE 24.5 IN. HG
TUNNEL TEMPERATURE 104 DEG F
RECORDS NO./FT 0.9 14 X 14 0.001

FT	ALPHA	PSI	CL	CD	CM	CV	CS	CM
01	-00.00	0.0	02.075	03.234	-00.2191	0.1752	0.1	0.1
02	-00.00	-4.0	02.075	03.234	-00.2191	0.1752	0.1	0.1
03	-00.00	-8.0	02.075	03.234	-00.2191	0.1752	0.1	0.1
04	-00.00	-12.0	02.075	03.234	-00.2191	0.1752	0.1	0.1
05	-00.00	-16.0	02.075	03.234	-00.2191	0.1752	0.1	0.1
06	-00.00	-20.0	02.075	03.234	-00.2191	0.1752	0.1	0.1
07	-00.00	-24.0	02.075	03.234	-00.2191	0.1752	0.1	0.1
08	-00.00	-28.0	02.075	03.234	-00.2191	0.1752	0.1	0.1
09	-00.00	-32.0	02.075	03.234	-00.2191	0.1752	0.1	0.1
10	-00.00	-36.0	02.075	03.234	-00.2191	0.1752	0.1	0.1
11	-00.00	-40.0	02.075	03.234	-00.2191	0.1752	0.1	0.1

REPORT NO. LGNT 107
PAGE NO. A-37

LVT LOW SPEED WIND TUNNEL TEST 1-7

DYNAMIC PRESSURE 070.7 PSF
TUNNEL VELOCITY 158.4 KNOTS
BAROMETRIC PRESSURE 29.91 IN. HG
TUNNEL TEMPERATURE 111 DEG F
REYNOLDS NO./FT 1.4186 X 10⁶ / 100

TEST NO. 026
IMAGE 1 OF 1
DATE OF TEST
09/01/64-1
DATE OF FILE 09/01/64

PT	ALPHA	PSI	CL	CM	CPM	CY	CM	CV
01	-00.00	0.0	02.5940	03.1255	-00.2571	00.1914	00.0102	-00.0040
02	-00.00	-4.0	02.6053	03.1361	-00.2674	-00.3515	-00.0211	00.0050
03	-00.00	-3.0	02.7557	03.2531	-00.2557	-00.3515	-00.0394	00.2299
04	-00.00	-2.0	02.7541	03.1534	-00.2459	-00.2157	00.0016	00.1173
05	-00.00	-1.0	02.7524	03.0972	-00.2299	00.3446	-00.0473	00.0763
06	-00.00	-0.0	02.5775	03.0657	-00.2287	00.1700	00.0003	-00.0000
07	-00.00	1.0	02.8491	03.0405	-00.2552	00.4040	00.0129	-00.1075
	-00.00	2.0	02.7541	03.0350	-00.2584	00.4007	00.0054	-00.1924
09	-00.00	3.0	02.7215	03.3551	-00.2513	00.4223	00.0032	-00.3191
10	-00.00	4.0	02.7752	03.4510	-00.2079	00.5701	00.1107	-00.3754
11	-00.00	-2.0	02.7215	03.1255	-00.2440	-00.1444	00.0004	00.1000
12	-00.00	0.0	02.5080	03.0810	-00.2518	00.1770	00.0100	-00.0375

UNCLASSIFIED

PT	ALPHA	PSI	CL	CD	CPM	CV	GRA	LYM
01	-00.00	0.0	02.6624	03.0570	-00.2603	00.1544	-00.1544	-00.0344
02	-00.01	-4.0	02.7341	03.3121	-00.2559	-00.4044	-00.0212	00.2455
03	-00.01	-3.0	02.6943	03.2463	-00.2521	-00.3627	-00.0123	00.2322
04	-00.01	-2.0	02.7182	03.1926	-00.2428	-00.2750	00.0092	00.1873
05	-00.01	-1.0	02.6783	03.1367	-00.2299	-00.1551	00.0246	00.0950
06	-00.01	0.0	02.6624	03.0570	-00.2472	00.1076	-00.0286	-00.0290
07	-00.01	1.0	02.6665	03.0729	-00.2510	00.2192	-00.0164	-00.1108
08	-00.01	2.0	02.6585	03.0889	-00.2561	00.2989	-00.0064	-00.1900
09	-00.01	3.0	02.6665	03.2563	-00.2731	00.5440	-00.0119	-00.3246
10	-00.01	4.0	02.7421	03.4630	-00.3004	00.8888	-00.0011	-00.4502
11	-00.01	-0.0	02.6146	03.0729	-00.2573	00.0040	-00.0303	-00.0158

DYNAMIC PRESSURE 195.5 PSF
TUNNEL VELOCITY 211.2 KNOTS
BAROMETRIC PRESSURE 29.01 IN. HG
TUNNEL TEMPERATURE 111 DEG F
REHOLDS NO./FT 1.0917 X 1,000,000
T+1 FOR 030
IMAGE TO BE AT 11 MI
WHEEL ORIENT
05/01/94-I

LET FOR SPEED WIND TUNNEL TEST 167

REPORT NO. LSWT 167
PAGE NO. A-38

UNCLASSIFIED

PRELIMINARY DATA

THE 7th

[illegible]

SYNCHRIC PRESSURE 676.2 PS
TUNNEL VELOCITY 157.7 KNOTS
ELECTRIC POWER 29.51 MW
TUNNEL TEMPERATURE 100 DEG F
MEASURES NO./FT 1.4347 X 1,000,000
DATE 12/11/74
TIME 1714

197 427 634 641 734 735 197

U.S. AIR FORCE
A-39

REF ID: A55 257A

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-40

Listed on pages A-41 through A-128 are the Wind Axes Coefficient
Data referenced to the C.G.

UNCLASSIFIED

REPORT NO. LSNT 167

PAGE NO. A-41

LVT LO- SPEED WITH TUNNEL TEST 167

DYNAMIC PRESSURE 833.3 PSF
 TUNNEL VELOCITY 104.1 KNOTS
 BAROMETRIC PRESSURE 29.48 IN. HG
 TUNNEL TEMPERATURE 094 DEG F
 REYNOLDS NO./FT 0.9829 X 1,000,000

NOV 030
 SI 11 41 0410
 PRI 0 000
 09/04/4-1
 44110 AX007

PT	ALPHA	PSI	CL	CD	CFM	CY	CFM	CY
01	-00.47	0.0	02.1909	02.4094	00.3908	-00.0797	-00.0157	00.0003
02	-04.44	0.0	01.1854	01.7900	00.4024	-00.2708	-00.0478	00.0071
03	-02.44	0.0	01.5609	01.9561	00.5594	-00.1797	00.0272	-00.0112
04	-01.47	0.0	01.5915	02.1671	00.5733	-00.1434	-00.0150	00.0000
05	-00.47	0.0	02.1272	02.2501	00.3656	-00.0747	00.0264	00.0320
06	00.51	0.0	02.3950	02.4057	00.5915	-00.1752	00.0576	00.0200
07	01.52	0.0	02.7281	02.8011	00.4235	00.0478	-00.0050	-00.0154
08	03.57	0.0	03.0748	02.9525	00.4375	00.0470	00.0378	00.0699
09	05.56	0.0	03.4476	03.2244	00.4429	-00.0000	-00.0351	-00.0737
10	07.46	0.0	03.7151	03.5243	00.4755	00.0071	00.0055	00.0153
11	11.56	0.0	04.5613	04.2208	00.5503	-00.0375	-00.0175	-00.0150
12	15.55	0.0	06.0134	05.1786	00.6229	00.2854	00.0125	00.0592
13	19.47	-0.0	08.9226	05.1271	00.5215	00.5122	00.0151	00.0074
14	-00.46	0.0	02.1591	02.3775	00.5625	-00.1115	-00.0041	00.0246

REPORT NO. LSMT 187

PAGE NO. A-42

LVI LOW SPEED WIND TUNNEL TEST 187

DYNAMIC PRESSURE 033.9 PSF
 TUNNEL VELOCITY 104.3 KNOTS
 BAROMETRIC PRESSURE 29.48 IN. HG
 TUNNEL TEMPERATURE 69.8 DEG F
 REYNOLDS NO./FT 0.9784 X 1,000,000

PHN 042
 11 F1 41 0416
 PHN 0 068
 09/03/64-1
 44, INC 48544

PT	ALPHA	PSI	CL	CD	CPM	CY	CPM	CY
01	-00.46	0.0	02.0954	02.4730	00.3579	-00.0159	00.0158	-00.0158
02	-00.46	-4.0	01.7341	02.5719	00.4430	-00.8834	-00.8834	00.0158
03	-00.46	-2.0	01.8942	02.5122	00.2833	-00.4401	00.0161	00.0147
04	-00.45	-1.0	02.1475	02.2530	00.4087	-00.3008	00.0140	-00.0016
05	-00.45	-0.0	02.2228	02.5362	00.3616	-00.0484	00.0146	-00.0041
06	-00.45	1.0	02.0113	02.5354	00.4754	00.0750	-00.0147	-00.0123
07	-00.45	2.0	02.1564	02.4252	00.4060	00.0215	00.0152	-00.0944
08	-00.45	4.0	01.9586	02.2521	00.4395	00.5657	-00.0011	-00.2723
09	-00.45	0.0	02.1595	02.2164	00.3586	-00.1110	-00.0425	00.0157

~~UNCLASSIFIED~~

REPORT NO. LSWT 167
PAGE NO. A-43

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 103.5 KNOTS
BAROMETRIC PRESSURE 29.50 IN. HG
TUNNEL TEMPERATURE 088 DEG F
REYNOLDS NO./FT 0.9970 X 1,000,000RUN 041
B1 F1 W1 CA16
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.46	0.0	04.0266	03.9274	00.4214	-00.0564	-00.0918	-00.0516
02	07.46	-4.0	04.1008	03.8270	00.4335	-00.2426	-00.1089	00.2906
03	07.46	-2.0	04.1008	03.8866	00.4510	00.1491	-00.0450	00.0624
04	07.46	-1.0	04.1107	03.5888	00.4358	-00.2711	-00.0994	00.1543
05	07.46	0.0	03.7399	03.6721	00.3791	00.0394	-00.0305	00.0964
06	07.46	1.0	04.0907	03.7434	00.4302	00.2069	-00.1022	00.0337
07	07.46	2.0	04.1159	03.5623	00.4267	00.1192	-00.1450	-00.1202
08	07.46	4.0	03.9580	03.7972	00.5288	00.2371	-00.0970	-00.1560
09	07.46	0.0	04.1859	03.6402	00.4275	00.0713	-00.0822	00.0616

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-44

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 103.7 KNOTS
BAROMETRIC PRESSURE 29.50 IN. HG
TUNNEL TEMPERATURE 090 DEG F
RENOIDS NO./FT 0.9924 X 1,000,000RUN 042
B1 F1 W1 CA16
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	15.57	-0.0	05.9499	05.0987	00.4249	00.2838	-00.1722	-00.1543
02	15.54	-4.0	05.9778	05.3186	00.3390	00.8088	-00.1213	-00.1012
03	15.52	-2.0	05.7779	05.3398	00.4579	00.4854	-00.0516	00.0366
04	15.50	-1.0	06.1082	05.2080	00.5282	00.4952	-00.0270	00.0402
05	15.47	-0.0	05.8849	05.0035	00.4817	00.2819	00.0019	-00.1019
06	15.47	1.0	05.8804	05.1635	00.4788	00.3227	-00.1057	-00.2008
08	15.47	4.0	05.7655	05.0848	00.4592	00.0424	-00.0899	-00.0122
07	15.47	2.0	05.9217	05.4312	00.4778	-00.1146	-00.0952	-00.0984
09	15.47	4.0	05.9567	05.3397	00.4857	-00.1487	-00.0730	-00.1350
10	15.47	0.0	05.6937	05.1314	00.4371	00.5689	-00.1078	-00.1113

LWT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 070.2 PSF
 TUNNEL VELOCITY 154.3 KNOTS
 BAROMETRIC PRESSURE 29.50 IN. HG
 TUNNEL TEMPERATURE 69.0 DEG F
 KNUDSEN NO./FT 1.4674 X 1,000,000

RUN 044
 31 F1 H1 C416
 P-1 1 JFC
 09/05/64-1
 WIND TEST

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CY*
01	-00.51	0.0	02.5613	02.5871	00.3678	-00.1000	-00.0451	00.045
02	-04.45	0.0	01.2917	02.0546	00.3713	-00.1769	-00.0415	00.0192
03	-02.47	0.0	01.7982	02.2429	00.3604	-00.1544	-00.0292	00.0771
04	-01.48	0.0	02.0799	02.3440	00.3716	-00.1202	-00.0486	00.0336
05	-00.45	0.0	02.3904	02.5150	00.3869	-00.1202	-00.04-1	00.0436
06	-00.11	0.0	01.6769	02.3605	00.3555	-00.1000	-00.0586	00.0351
07	00.55	0.0	02.7100	02.5951	00.4102	-00.0770	-00.0355	00.0061
08	01.50	0.0	02.8708	02.8411	00.4073	-00.0495	-00.0403	00.0123
09	02.40	0.0	03.0900	02.9899	00.4355	-00.0070	-00.0200	00.0005
10	03.57	0.0	03.0100	03.1091	00.4407	-00.0770	-00.0270	-00.0154
11	05.55	0.0	03.7434	03.3650	00.4472	-00.0370	-00.0455	00.0015
12	07.44	0.0	04.1015	03.5330	00.4530	-00.0540	-00.0135	00.0110
13	11.48	0.0	04.7090	04.2071	00.5091	-00.0055	-00.0028	00.0730
14	15.02	0.0	06.0022	05.2475	00.5270	00.0519	-00.0229	-00.0142
15	19.53	0.0	07.0522	06.2296	00.4041	00.5013	-00.0721	-00.0385
16	-00.45	0.0	02.4157	02.4672	00.3700	-00.0035	-00.0305	00.0757

~~UNCLASSIFIED~~AFFO-T NO. 15-7 167
PAGE NO. A-46

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 070.2 PSF
 TUNNEL VELOCITY 156.4 KNOTS
 BAROMETRIC PRESSURE 29.50 IN. HG
 TUNNEL TEMPERATURE 697 DEG F
 PERGLDS NO./FT 1.4041 X 1,000,000

UN 044
 B1 P1 = 1 CALS
 PHI = 0.05
 09/03/64-1
 PAYING AXES-8

PT	ALPHA	PSI	CL	CO	CPX	CY	CSX	CYX
01	-00.44	0.0	02.4827	02.5013	00.4012	-00.0440	-00.0588	-00.0193
02	-00.43	-4.0	02.1834	02.5928	00.4550	-00.0417	-00.0497	00.1447
03	-00.43	-2.0	02.4127	02.4794	00.4346	-00.0001	-00.0375	00.0041
04	-00.43	-1.0	02.4985	02.4007	00.4125	-00.0275	-00.0665	00.0072
05	-00.43	-3.0	02.3907	02.4071	00.4704	-00.0048	-00.0728	00.1205
06	-00.43	1.0	02.4521	02.4216	00.3923	00.1050	-00.0498	-00.0794
07	-00.43	2.0	02.5333	02.5000	00.3700	00.2741	-00.0054	-00.2199
08	-00.43	3.0	02.2114	02.5112	00.3621	00.5154	-00.0414	-00.2005
09	-00.43	4.0	02.1824	02.5702	00.4334	00.0775	-00.0101	-00.2133
10	-00.43	5.0	02.5265	02.4019	00.3034	-00.1777	-00.0041	00.0111

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-47

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 156.6 KNOTS
BAROMETRIC PRESSURE 29.50 IN. HG
TUNNEL TEMPERATURE 098 DEG F
RENOIDS NO./FT 1.4607 X 1,000,000

RUN 045
B1 F1 W1 CA16
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.51	0.0	04.0348	03.6751	00.4012	-00.0261	-00.0668	-00.0413
02	07.51	-4.0	04.2257	03.8579	00.4444	-00.2191	-00.0813	00.2448
03	07.52	-3.0	04.1407	03.7699	00.4440	-00.2471	-00.0344	00.1411
04	07.52	-2.0	04.1833	03.6913	00.4521	-00.0886	-00.0273	-00.0031
05	07.52	-1.0	04.1080	03.5978	00.4477	-00.1212	-00.0184	00.0381
06	07.52	-0.0	04.0349	03.6321	00.4279	-00.0116	-00.0027	-00.0760
07	07.52	1.0	04.0067	03.6716	00.4150	00.2053	-00.0530	00.0058
08	07.52	2.0	04.0424	03.6676	00.4172	00.2093	-00.0656	-00.0217
09	07.52	3.0	03.8996	03.6961	00.4204	00.2431	-00.0882	-00.0742
10	07.52	4.0	04.0095	03.8038	00.4984	00.2768	-00.0527	-00.1255
11	07.52	-0.0	04.0489	03.6458	00.4127	00.1296	-00.0285	00.0449

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-48

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 156.6 KNOTS
BAROMETRIC PRESSURE 29.50 IN. HG
TUNNEL TEMPERATURE 098 DEG F
RENOLDS NO./FT 1.4607 X 1,000,000RUN 046
B1 F1 W1 CA16
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	15.55	-0.0	06.1594	05.2476	00.4959	00.4658	-00.0339	-00.0705
02	15.55	-4.0	06.2476	05.2445	00.3521	00.7123	-00.1219	-00.1222
03	15.54	-3.0	06.2255	05.2388	00.4133	00.7132	-00.0921	-00.0584
04	15.54	-2.0	06.1472	05.1812	00.4435	00.5874	-00.0566	-00.1311
05	15.54	-1.0	05.9466	05.1703	00.4348	00.4274	-00.0337	-00.1295
06	15.54	-0.0	06.0175	05.1069	00.4488	00.5650	-00.0213	-00.0665
07	15.54	1.0	06.0548	05.1068	00.4956	00.4049	-00.0510	-00.0892
08	15.54	2.0	06.0042	05.2859	00.4470	-00.0108	-00.0870	-00.1165
09	15.54	3.0	05.9784	05.1837	00.4352	00.0459	-00.0780	-00.0543
10	15.54	4.0	05.9581	05.2672	00.4259	00.0174	-00.0829	-00.0088
11	15.54	0.0	06.0883	05.2203	00.4787	00.4376	-00.0227	-00.0806

UNCLASSIFIED

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 165.2 PSF
 TUNNEL VELOCITY 209.5 KM/HR
 BAROMETRIC PRESSURE 29.50 IN. HG
 TUNNEL TEMPERATURE 104 DEG F
 REYNOLDS NO./FT 1.5215 X 1,000,000

RUN 047
 11 FL #1 CA16
 PHI 0.226
 04/05/64-1
 ***110 AXES**

PT	ALPHA	PSI	CL	CG	CPX	CY	CPY	CYM
01	-00.47	0.0	02.2520	02.4520	00.3150	00.0202	00.0070	00.0502
02	-04.44	0.0	01.1430	01.7512	00.3343	-00.0511	00.0009	00.0551
03	-03.45	0.0	01.4020	02.0505	00.3401	-00.0595	00.0017	00.0701
04	-02.45	0.0	01.6942	02.1734	00.3314	-00.0448	00.0056	00.0530
05	-01.47	0.0	02.0050	02.2571	00.3415	-00.0515	00.0055	00.0441
06	-00.45	0.0	02.2848	02.4677	00.3402	-00.0050	00.0105	00.0470
07	00.50	0.0	02.5139	02.6515	00.3720	00.0751	00.0080	00.0450
08	01.54	0.0	02.7425	02.7637	00.3877	00.0440	00.0055	00.0637
09	02.48	0.0	02.9386	02.8703	00.4017	00.0014	-00.0045	00.0224
10	03.55	0.0	03.1210	03.0835	00.3890	00.0997	00.0055	00.0170
11	05.55	0.0	03.6556	03.5935	00.4035	-00.0002	00.0104	-00.0040
12	07.46	0.0	03.9351	03.6521	00.3997	00.0033	00.0052	00.0267
13	11.50	0.0	04.0728	04.2000	00.4723	00.1350	00.0377	00.0249
14	15.58	0.0	05.9505	05.2228	00.4050	00.5034	00.0175	-00.0250
15	19.55	0.0	06.3289	06.1717	00.2776	00.5619	-00.0074	-00.1041
16	-00.40	0.0	02.3245	02.4758	00.3342	00.0043	00.0024	00.0378

REPORT NO. LSMT 167

PAGE NO. A-50

LIFT LUG SPEED WIND TUNNEL TEST 1.7

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 211.4 KNOTS
 BAROMETRIC PRESSURE 29.50 IN. Hg
 TUNNEL TEMPERATURE 112 DEG F
 REYNOLDS NO./FT 1.0072 X 1,000,000

PIR 042
 SI FI 41 0216
 PHI 0 DEC
 00/03/64-1
 WIND AXES

FT	ALPHA	PSI	CL	CC	CPX	CY	CRX	CYN
01	-00.45	0.0	02.2846	02.4418	00.3285	-00.0177	00.0073	00.0654
02	-00.45	-4.0	02.1075	02.7084	00.4597	-00.0117	-00.0852	00.2201
03	-00.45	-3.0	02.1450	02.6139	00.4175	-00.0775	00.0071	00.1520
04	-00.45	-2.0	02.1869	02.4813	00.3782	-00.0510	00.0050	00.0715
05	-00.45	-1.0	02.2644	02.4271	00.3553	-00.0217	-00.0089	00.0348
06	-00.45	0.0	02.2646	02.4717	00.3347	-00.0037	-00.0054	01.0348
07	-00.45	1.0	02.3283	02.4831	00.3357	00.2222	-00.0043	-00.0908
08	-00.45	2.0	02.2896	02.4995	00.3417	00.4015	0.0049	-00.1806
09	-00.45	3.0	02.1583	02.4756	00.3514	00.5864	-00.0048	-00.1750
10	-00.45	4.0	02.0381	02.6013	00.3520	00.7054	00.0002	-00.1693
11	-00.45	-0.0	02.3082	02.4235	00.3450	-00.0124	-00.0077	00.0477
12	-00.45	3.0	02.2401	02.5454	00.3425	00.5444	-00.0054	-00.1073

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-51

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 211.8 KNOTS
 BAROMETRIC PRESSURE 29.50 IN. HG
 TUNNEL TEMPERATURE 114 DEG F
 RENOLDS NO./FT 1.8788 X 1,000,000

RUN 049
 B1 F1 W1 CA16
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.50	-0.0	04.0539	03.6393	00.4210	00.0633	-00.0230	00.0475
02	07.50	-4.0	04.1679	03.6747	00.4451	-00.5082	-00.1376	00.3393
03	07.50	-3.0	04.1360	03.6824	00.4252	-00.0560	-00.0115	00.0920
04	07.50	-2.0	04.0643	03.4877	00.4190	00.1419	00.0063	-00.0043
05	07.50	-1.0	04.0183	03.7472	00.4249	-00.0244	00.0125	00.0847
06	07.50	-0.0	04.0219	03.6471	00.4112	00.1906	-00.0084	-00.0292
07	07.50	1.0	04.0144	03.6311	00.4007	00.1990	-00.0250	-00.0070
08	07.50	2.0	04.0156	03.6173	00.4144	00.2229	-00.0170	-00.0479
09	07.50	3.0	03.9443	03.6573	00.4157	00.3054	-00.0164	-00.0849
10	07.50	4.0	03.9858	03.7251	00.4790	00.3003	-00.0194	-00.0602
11	07.50	-2.0	04.0883	03.6236	00.4497	-00.0404	-00.0046	00.0496
12	07.50	-1.0	03.9625	03.6435	00.4011	-00.0085	00.0181	00.0809
13	07.50	-0.0	04.0061	03.6951	00.4012	00.1271	-00.0105	00.0595

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-52

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 211.8 KNOTS
BAROMETRIC PRESSURE 29.50 IN. HG
TUNNEL TEMPERATURE 114 DEG F
RENOIDS NO./FT 1.8788 X 1,000,000RUN 050
81 F1 W1 CA16
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	15.59	-0.0	05.9108	05.2262	00.4273	00.5632	00.0115	-00.0347
02	15.59	-4.0	06.1854	05.2867	00.4086	00.0850	-00.3568	00.0591
03	15.59	-3.0	06.1161	05.2057	00.3982	00.6724	-00.0715	-00.0906
04	15.59	-2.0	05.9618	05.1961	00.3955	00.6227	-00.0322	-00.0789
05	15.59	-1.0	05.9503	05.1846	00.4376	00.4416	-00.0105	-00.0390
06	15.59	-0.0	05.9746	05.1225	00.4351	00.4994	-00.0030	-00.0225
07	15.59	1.0	05.9535	05.2348	00.4474	00.4935	-00.0267	-00.0639
08	15.59	2.0	05.9224	05.2312	00.4275	00.3440	-00.0487	-00.0978

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSRI 187
PAGE NO. A-53

LVT LOW SPEED WIND TUNNEL TEST 1.7

DYNAMIC PRESSURE 003.9 PSF
TUNNEL VELOCITY 104.3 KNOTS
BAROMETRIC PRESSURE 29.94 IN. HG
TUNNEL TEMPERATURE 59.4 DEG F
REYNOLDS NO./FT 0.9239 X 1,000,000

COJA 001
SI FI W1 0016
REF 0 006
09/23/64-1
ANNEX A-XFSAF

PT	ALPHA	PSI	CL	CD	CPM	CY	CL	CYM
01	-00.45	0.0	01.2072	01.8510	00.4210	00.0719	-00.0171	-0.0050
02	-04.44	0.0	00.9458	01.5508	00.4090	-00.1431	-00.0355	00.0367
03	-03.47	0.0	01.7554	01.5860	00.5618	-00.1112	-00.0249	00.0338
04	-02.45	0.0	01.7044	01.6217	00.4624	00.1755	-00.0387	00.0890
05	-01.46	0.0	01.7485	01.7030	00.5689	-00.0157	-00.0569	00.0354
06	-00.45	0.0	02.0160	01.8200	00.5777	00.3348	-00.0481	-00.0519
07	00.56	0.0	02.3107	02.0036	00.5984	-00.0794	-00.0181	-00.0635
08	01.51	0.0	02.7440	02.1876	00.3872	-00.1432	-00.0801	-00.0574
09	02.47	0.0	03.0120	02.5079	00.4341	00.1435	-00.0250	00.0084
10	03.58	0.0	03.1226	02.5665	00.3958	-00.0477	00.0382	-00.0948
11	05.53	0.0	03.0227	02.8266	00.4151	00.0277	-00.0364	-00.0045
12	07.45	0.0	04.1557	03.0672	00.4975	00.1347	-00.0456	-00.0184
13	11.56	0.0	04.2528	01.7271	00.5730	00.1534	-00.0627	-00.0986
14	15.54	0.0	05.7105	04.7167	00.5954	00.1877	-00.0409	-00.1380
15	19.55	0.0	07.0030	05.8645	00.6047	00.4511	-00.0654	-00.0504
16	-00.40	0.0	02.1431	1.8840	00.3752	-00.0475	-00.0254	00.0180

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSNT 167
PAGE NO. A-54

LVI LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 035.9 PSF
TUNNEL VELOCITY 103.9 KNOTS
BAROMETRIC PRESSURE 29.54 IN. HG
TUNNEL TEMPERATURE 093 DEG F
KENNELS NO./FT 0.9862 X 1,000,000RUN 052
#1 #1 #1 CC15
PHI 0 DEG
04/03/64-1
WIND TUNNEL

PT	ALPHA	PSI	CL	CU	CPM	CY	CPM	CYM
01	-00.48	0.0	02.0694	01.7407	00.3049	-00.0157	-00.1153	-00.0959
02	-00.48	-4.0	01.9341	02.1621	00.4763	-00.7878	-00.0514	00.2472
03	-00.48	-3.0	02.1061	02.0424	00.4114	-00.6232	-00.0314	00.0874
04	-00.48	-2.0	02.1168	01.8172	00.4263	-00.3631	-00.0454	00.0973
05	-00.47	-1.0	02.2428	01.9752	00.3498	-00.3327	-00.0357	00.0519
06	-00.47	-0.0	01.9359	02.0289	00.3644	00.1112	-00.0740	00.1124
07	-00.47	1.0	02.1710	01.9511	00.3736	00.1706	-00.0512	-00.1116
08	-00.47	2.0	01.9971	01.8239	00.3702	00.2518	00.0046	-00.0138
09	-00.47	3.0	02.0191	01.6458	00.4141	00.5025	-00.0200	-00.1205
10	-00.47	4.0	01.9048	02.0271	00.3407	00.7111	-00.0109	-00.1784
11	-00.48	-1.0	01.9580	01.7841	00.4075	-00.2690	-00.0972	-00.0913
12	-00.48	0.0	02.0390	01.8164	00.3854	00.0330	-00.0434	-00.1230
13	-00.47	-0.0	02.1890	02.0269	00.4177	-00.0162	-00.0520	-00.0647

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-55

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
 TUNNEL VELOCITY 103.8 KNOTS
 BAROMETRIC PRESSURE 29.54 IN. HG
 TUNNEL TEMPERATURE 092 DEG F
 RENOLDS NO./FT 0.9885 X 1,000,000

RUN 053
 B1 F1 W1 CC16
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.50	-0.0	04.1224	02.8910	00.3803	00.1509	-00.0480	-00.0261
02	07.50	-4.0	04.2284	03.0781	00.4405	-00.1008	-00.0875	00.2625
03	07.50	-3.0	04.0691	03.2448	00.4156	-00.0800	-00.0420	00.1721
04	07.50	-2.0	04.1009	02.9468	00.4131	00.1028	-00.0528	00.0676
05	07.50	-1.0	04.0471	02.8395	00.4094	00.0951	-00.0201	00.1459
06	07.50	0.0	03.8677	02.7957	00.4245	00.1511	00.0309	00.0903
07	07.50	1.0	03.9951	02.8040	00.4451	00.0306	-00.1030	-00.0932
08	07.50	2.0	03.9248	02.9090	00.3742	-00.0244	-00.0793	00.0736
09	07.51	3.0	03.9732	02.9728	00.4141	00.0341	-00.0303	-00.1010
10	07.51	4.0	03.9590	02.8255	00.4477	00.0926	-00.0122	-00.0047
11	07.50	-3.0	04.0053	03.1179	00.3659	-00.0145	-00.1361	00.2179
12	07.51	4.0	03.9590	02.8255	00.4688	-00.0667	-00.0276	-00.0094
13	07.51	-0.0	04.0269	02.9545	00.3918	00.2144	-00.0669	00.0620

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-56

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
 TUNNEL VELOCITY 103.6 KNOTS
 BAROMETRIC PRESSURE 29.54 IN. HG
 TUNNEL TEMPERATURE 090 DEG F
 RENOLDS NO./FT 0.9931 X 1,000,000

RUN 054
 B1 F1 W1 CC16
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	15.57	-0.0	06.1251	04.6995	00.5754	00.4110	-00.0160	-00.0423
02	15.56	-4.0	05.9298	04.6645	00.3560	00.7774	-00.1606	-00.1204
03	15.56	-3.0	06.1875	04.6163	00.5006	00.7434	-00.0822	00.0117
04	15.56	-2.0	05.8261	04.5270	00.4347	00.4229	-00.0920	-00.1835
05	15.56	-1.0	05.9975	04.4924	00.5399	00.4012	-00.0710	-00.1681
06	15.56	-0.0	06.1250	04.4765	00.5509	00.2197	-00.0068	-00.0320
07	15.56	1.0	06.0244	04.5413	00.5211	00.2935	-00.0716	-00.0317
08	15.56	2.0	05.9378	04.5216	00.5057	00.2716	-00.0573	00.1155
09	15.56	3.0	06.0891	04.6531	00.5586	00.1761	-00.0688	-00.1213
10	15.56	4.0	06.1327	04.5557	00.5878	-00.1106	-00.0595	-00.0125
11	15.56	-0.0	05.9657	04.7314	00.5207	00.3790	-00.0707	-00.1759

UNCLASSIFIED

REPORT NO. LSWT 187

PAGE NO. A-57

LWT LOW SPEED WIND TUNNEL TEST 187

DYNAMIC PRESSURE 070.2 PSI
 TUNNEL VELOCITY 159.6 KNOTS
 BAROMETRIC PRESSURE 29.54 IN. HG
 TUNNEL TEMPERATURE 69.2 DEG F
 REAR LIDS NO./FT 1.4320 X 1,007,000

RUN 055
 01 F1 W1 C01
 PHI 0 CEL
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPX	CY	CPW	CYW
01	-00.46	-0.0	02.1300	01.8205	00.3479	-00.1049	-00.0206	00.0559
02	-04.58	-0.0	01.3041	02.4057	00.4094	-00.2126	-00.0171	00.1040
03	-03.45	-0.0	01.1411	01.5317	00.3518	-00.2416	-00.0224	-00.0101
04	-02.45	-0.0	01.5505	01.6043	00.3695	-00.1140	-00.0011	01.0010
06	-00.47	-0.0	02.2262	01.6031	00.0501	-00.1252	-00.0019	-00.0201
07	00.50	-0.0	02.2044	01.9404	00.3550	-00.0855	-00.0397	-00.0294
08	01.51	-0.0	02.5227	01.0103	00.3521	-00.0854	00.0113	-00.0003
09	02.40	-0.0	02.9193	02.2781	00.3000	-00.0062	-00.0203	-00.0292
10	03.57	-0.0	03.1331	02.3857	00.3056	00.0145	-00.0152	00.0252
11	05.55	-0.0	03.6053	02.6200	00.4105	00.0258	-00.0386	-00.1197
12	07.40	-0.0	03.9407	02.9092	00.4302	00.1277	00.0004	-00.0527
13	11.06	-0.0	04.0405	03.1035	00.4506	00.1505	-00.0040	-00.0533
14	15.58	-0.0	05.5013	04.5185	00.5534	00.2570	-00.0105	-00.0511
15	19.55	-0.0	06.0326	05.4057	00.4123	00.3809	-00.0305	-00.1267
16	-01.40	-3.0	01.5311	01.6205	00.4050	-00.1140	-00.0002	-00.0545
17	-00.47	-0.0	02.1417	01.7923	00.3009	-00.1554	00.0122	-00.0070

UNCLASSIFIED

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 155.5 KNOTS
 BAROMETRIC PRESSURE 29.54 IN. HG
 TUNNEL TEMPERATURE 094 DEG F
 NOZLES NO./FT 1.4752 X 1,000,000

POA 056
 91 H1 51 0016
 PHI 0 DEG
 09/03/64-1
 ** IN AXES **

PT	ALPHA	PSI	CL	CD	CFM	CY	CLM	CVM
01	-00.48	-0.0	02.1985	01.3420	00.3974	-00.0675	-00.2513	00.0150
02	-00.48	-4.0	02.2255	01.9209	00.4704	-00.8434	-00.4471	00.1514
03	-00.48	-3.0	02.2410	01.9034	00.4550	-00.7210	-00.0253	00.0475
04	-00.48	-2.0	02.3124	01.7634	00.4592	-00.5201	-00.0412	00.0406
05	-00.48	-1.0	02.3262	01.7370	00.4597	-00.2571	-00.0276	-00.0132
06	-00.48	0.0	02.2270	01.7717	00.4419	-00.0848	-00.0422	00.0138
07	-00.48	1.0	02.3523	01.7060	00.4125	-00.0011	-00.0057	-00.0556
08	-00.48	2.0	02.2104	01.7770	00.3895	00.1962	-00.0367	-00.1692
09	-00.48	3.0	02.0978	01.7174	00.3695	00.3842	-00.0264	-00.1244
10	-00.48	4.0	01.8841	01.5286	00.4189	00.5434	-00.0126	-00.1533
11	-00.48	3.0	02.0551	01.7954	00.4159	00.3700	-00.0794	-00.1736
12	-00.48	-0.0	02.3455	01.7428	00.4258	-00.1423	-00.0404	00.0142

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-59

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 156.1 KNOTS
BAROMETRIC PRESSURE 29.54 IN. HG
TUNNEL TEMPERATURE 095 DEG F
REYNOLDS NO./FT 1.4718 X 1,000,000

RUN 057
B1 F1 W1 CC16
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.45	-0.0	04.0836	02.8667	00.4177	00.1080	-00.0503	-00.0489
02	07.44	-4.0	04.2609	03.0364	00.4341	-00.2929	-00.0794	00.2230
03	07.44	-3.0	04.2042	02.9909	00.3803	-00.2228	-00.0620	00.0359
04	07.44	-2.0	04.1049	02.9546	00.3807	00.0174	-00.0394	-00.0563
05	07.44	-1.0	04.0722	02.8617	00.4049	00.0562	-00.0760	-00.1291
06	07.44	-0.0	04.0268	02.8243	00.4080	00.0796	-00.0230	-00.0272
07	07.44	1.0	03.9990	02.9349	00.3974	00.0139	-00.0469	00.0204
08	07.44	2.0	04.0491	02.8740	00.4293	-00.0524	-00.0476	00.0484
09	07.44	3.0	04.1040	02.9450	00.4601	-00.0462	-00.0589	-00.0033
10	07.44	4.0	04.1707	02.9816	00.4882	00.0449	-00.0355	00.0017
11	07.44	-0.0	04.0976	02.8810	00.4259	00.1788	-00.0482	-00.0420

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-60

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 156.2 KNOTS
BAROMETRIC PRESSURE 29.54 IN. HG
TUNNEL TEMPERATURE 096 DEG F
REYNOLDS NO./FT 1.4684 X 1,000,000RUN 058
B1 F1 W1 CC16
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	15.57	-0.0	06.0533	04.6166	00.5484	00.2678	-00.0250	-00.0584
02	15.57	-4.0	06.1977	04.6555	00.3959	00.7266	-00.0581	-00.1149
03	15.57	-3.0	06.2036	04.5921	00.4642	00.5859	-00.0832	-00.1414
04	15.57	-2.0	06.0836	04.5220	00.4897	00.5315	-00.0770	-00.0780
05	15.58	-1.0	06.0247	04.5951	00.4942	00.3997	-00.0322	-00.1063
06	15.58	-0.0	05.9543	04.6023	00.5256	00.3247	-00.0027	-00.0833
07	15.58	1.0	05.9066	04.6035	00.5419	00.2072	-00.0640	-00.0373
08	15.58	2.0	06.0530	04.5122	00.5353	00.0614	-00.0541	-00.0966
09	15.58	3.0	05.9855	04.6518	00.5006	-00.0662	-00.0923	00.0316
10	15.58	4.0	06.0787	04.6359	00.5150	-00.1796	-00.0996	00.0736
11	15.58	2.0	05.8694	04.6122	00.5237	00.0471	-00.0760	-00.0434
12	15.58	-0.0	05.8834	04.5750	00.5203	00.3249	-00.0010	-00.0263

REPORT NO. LSWT 167

PAGE NO. A-61

LWT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 205.1 KNOTS
 BAROMETRIC PRESSURE 29.87 IN. HG
 TUNNEL TEMPERATURE 101 DEG F
 REYNOLDS NO./FT 1.9569 X 1,000,000

CON 059
 SI FI FI 0015
 PHI 0 DEG
 09/03/64-1
 SINL AXIS

PT	ALPHA	PSI	CL	CD	CPX	CY	CPX	CY
01	-00.45	0.0	02.2169	01.8577	00.3620	-00.0837	-00.0117	00.0045
02	-04.58	0.0	01.3996	02.4272	00.4520	-00.1554	-00.0129	00.0005
03	-02.45	0.0	01.8020	01.6515	00.3625	-00.0757	00.0047	00.0050
04	-01.43	0.0	02.0054	01.7105	00.3904	-00.0837	-00.0114	00.0072
05	-00.46	0.0	02.2805	01.8419	00.3793	-00.0516	-00.0355	00.0134
06	00.57	0.0	02.5179	01.9696	00.3701	-00.0518	-00.0120	00.0056
07	01.54	0.0	02.7464	02.0699	00.2752	-00.0040	-00.0013	00.0343
08	03.59	0.0	03.2687	02.4095	00.4096	00.0361	00.0150	00.0105
09	05.55	0.0	03.6039	02.6057	00.5471	00.1304	00.0102	00.0100
10	07.48	-0.1	04.1030	02.9059	00.4360	00.1232	00.0182	-00.0334
11	11.56	0.0	04.7105	03.6548	00.5152	00.1898	00.0492	-00.0131
12	15.58	-0.0	06.0340	04.0610	00.5513	00.3514	-00.0059	-00.0009
13	19.55	-0.0	05.9447	05.5059	00.3795	00.4701	00.0139	-00.0510
14	-00.45	0.0	02.2060	01.8300	00.3644	-00.0757	-00.0302	00.0263

UNCLASSIFIED

REPORT NO. LSAT 167

PAGE NO. A-62

LVI LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 211.7 KNOTS
 BAROMETRIC PRESSURE 29.52 IN. HG
 TUNNEL TEMPERATURE 115 DEG F
 REYNOLDS NO./FT 1.8771 X 1,000,000

RUN 010
 01 F1 W1 C018
 PHI J DFC
 09/23/64-1
 WIND AXED

PT	ALPHA	PSI	CL	CD	CPX	CY	CPX	CY
01	-00.45	0.0	02.3165	01.8577	00.3782	-00.0359	-00.0395	00.0144
02	-00.45	-4.0	02.0749	01.9009	00.4128	-01.2311	-00.2058	00.1475
03	-00.45	-3.0	02.2240	01.8454	00.4250	-00.6432	-00.5739	00.0986
04	-00.45	-2.0	02.1948	01.8635	00.4141	-00.2712	-00.0254	00.0193
05	-00.45	-1.0	02.2680	01.8536	00.4098	-00.2572	-00.0354	-00.0031
06	-00.45	0.0	02.3165	01.8657	00.3903	-00.0040	-00.0105	-00.0019
07	-00.45	1.0	02.2905	01.8450	00.3425	00.1747	00.0077	-00.0465
08	-00.45	2.0	02.2059	01.8078	00.3835	00.3058	-00.0544	-00.1130
09	-00.45	3.0	02.1004	01.8439	00.3603	00.4569	-00.0048	-00.1461
10	-00.45	4.0	02.1190	01.8054	00.3737	01.8437	-00.0075	-00.1592
11	-00.45	-0.0	02.2680	01.8176	00.3753	00.3435	-00.0302	00.0175

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-63

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 210.6 KNOTS
 BAROMETRIC PRESSURE 29.58 IN. HG
 TUNNEL TEMPERATURE 109 DEG F
 RENOLDS NO./FT 1.9025 X 1,000,000

RUN 061
 B1 F1 W1 CC16
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.37	-0.0	04.0207	03.0105	00.3920	00.1104	00.1604	-00.0059
02	07.37	-4.0	04.1913	03.0461	00.4158	-00.6917	-00.2195	00.3592
03	07.37	-3.0	04.1514	03.0291	00.4118	-00.0765	-00.1018	00.2311
04	07.37	-2.0	04.0876	02.9388	00.3896	00.1276	-00.0155	-00.0611
05	07.37	-1.0	04.1130	02.9590	00.4019	00.1507	-00.0306	-00.0238
06	07.37	-0.0	04.0844	02.9786	00.3925	00.1662	-00.0094	-00.0538
07	07.37	1.0	04.0772	03.0100	00.4021	00.1432	00.0233	-00.0020
08	07.37	2.0	04.0389	03.0119	00.3992	00.0959	00.0661	00.0023
09	07.37	3.0	04.0461	03.0040	00.4141	00.0761	00.1084	00.0339
10	07.37	4.0	04.0068	03.0475	00.4341	00.1040	-00.0373	-00.0155
11	07.37	-0.0	04.1085	02.9867	00.4061	00.1664	00.0208	-00.0350

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-64

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 210.6 KNOTS
BAROMETRIC PRESSURE 29.58 IN. HG
TUNNEL TEMPERATURE 109 DEG F
REYNOLDS NO./FT 1.9025 X 1,000,000RUN 062
B1 F1 W1 CC16
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	15.57	-0.0	05.9424	04.5852	00.4947	00.3397	-00.0357	-00.0233
02	15.56	-4.0	06.1934	04.8284	00.4330	-00.0670	-00.4795	00.0220
03	15.56	-3.0	06.1324	04.7561	00.4595	00.6801	-00.1213	-00.0990
04	15.56	-2.0	06.0894	04.5624	00.4725	00.5902	-00.0412	-00.0467
05	15.56	-1.0	05.9422	04.5992	00.4849	00.4969	-00.0127	-00.0714
06	15.56	-0.0	05.9343	04.5768	00.5040	00.3792	-00.0105	-00.0147
07	15.56	1.0	05.9054	04.6252	00.5027	00.2776	-00.0241	00.0100
08	15.56	2.0	05.9383	04.6214	00.4839	00.1043	-00.0559	00.0026
09	15.56	3.0	06.0101	04.6415	00.4822	00.0566	-00.0235	00.0577
10	15.56	4.0	05.9819	04.5521	00.4605	-00.0391	-00.0221	00.0877
11	15.56	-0.0	05.9184	04.6486	00.5023	00.3713	-00.0031	-00.0376

UNCLASSIFIED

REPORT NO. LSMT 167
PAGE NO. A-65

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 104.5 KNOTS
BAROMETRIC PRESSURE 29.57 IN. HG
TUNNEL TEMPERATURE 100 DEG F
REYNOLDS NO./FT 0.9710 X 1,000,000

RUN 063
C1 F1 W1 C413
PHI 0 DFL
04/03/64-1
WIND AXES

PI	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	-00.44	-0.0	02.3823	02.5523	00.4453	00.0953	00.0368	-00.0653
02	-04.44	-0.0	01.4405	01.9988	00.4583	00.0953	00.0353	-00.0146
03	-02.47	-0.0	01.7835	02.2909	00.3878	00.0953	00.0360	-00.0347
04	-01.46	-0.0	02.1147	02.4375	00.4127	00.1271	00.0046	00.0154
05	-00.46	-0.0	02.1590	02.5613	00.3834	-00.0322	00.0054	-00.0523
06	00.54	-0.0	02.4914	02.5450	00.3929	00.0934	00.0162	00.0209
07	01.51	-0.0	02.5553	02.8244	00.4537	00.0954	00.0062	-00.1189
08	03.54	-0.0	03.2019	02.9686	00.4456	00.2230	00.0501	00.0151
09	05.58	-0.0	03.7348	03.4312	00.4490	00.0121	-00.0152	-00.0301
10	07.45	-0.0	04.0742	03.5127	00.4677	00.1506	00.0311	-00.0893
11	11.55	-0.0	04.7526	04.1089	00.5566	00.2604	-00.0411	-00.1255
12	15.56	-0.0	05.7905	05.1939	00.6422	00.5862	00.0102	-00.1875
13	19.55	-0.0	06.5234	06.1741	00.4136	00.5295	-00.0168	-00.2005
14	-00.45	-0.0	02.2229	02.4568	00.3674	-00.0939	-00.0366	-00.0556

REPORT NO. LSWT 167
PAGE NO. A-66

LWT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.4 PSF
TUNNEL VELOCITY 104.5 KNOTS
BAROMETRIC PRESSURE 29.57 IN. HG
TUNNEL TEMPERATURE 100 DEG F
REYNOLDS NO./FT 0.9710 X 1,000,000

RUN 104
DL FL WL CAL
PHI 0.0
04/03/64-1
***** AX 55*

PT	ALPHA	PSI	CL	CU	CPM	CY	CFX	CYM
01	-00.45	-0.0	02.2069	02.3293	00.3145	-00.0102	-00.0475	-00.0125
02	-00.45	-4.0	02.1731	02.7197	00.4515	-00.0315	-00.0850	00.2135
03	-00.45	-3.0	02.1544	02.4416	00.4593	-00.7164	-00.0152	00.1144
04	-00.45	-2.0	02.1039	02.5479	00.4162	-00.5224	-00.0430	00.0457
05	-00.45	-1.0	02.3541	02.3411	00.4298	-00.2693	00.0048	00.0135
06	-00.45	-0.0	02.1751	02.2338	00.3479	00.1112	00.0052	00.0107
07	-00.45	1.0	02.3145	02.3175	00.4084	00.1700	00.0160	-00.0174
08	-00.45	2.0	02.2940	02.4770	00.4127	00.3255	-00.0138	-00.2560
09	-00.45	3.0	02.1300	02.3715	00.3704	00.4706	-00.0512	-00.1307
10	-00.44	4.0	01.9750	02.1871	00.4103	00.6151	00.0403	-00.2551
11	-00.44	-0.0	02.1454	02.3611	00.3482	00.0155	-00.0575	-00.0151

REPORT NO. LSWT 167

PAGE NO. A-67

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
 TUNNEL VELOCITY 104.3 KNOTS
 BAROMETRIC PRESSURE 29.57 IN. HG
 TUNNEL TEMPERATURE 098 DEG F
 RENOIDS NO./FT 0.9755 X 1,000,000

RUN 065
 B1 F1 W1 CA13
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.46	-0.0	03.8672	03.6082	00.3800	00.0073	-00.1209	00.0361
02	07.46	-4.0	04.2282	03.9544	00.4506	-00.1151	-00.0398	00.3493
03	07.46	-3.0	04.1964	03.8030	00.4456	00.0023	-00.0324	00.2023
04	07.46	-2.0	04.0690	03.6642	00.4219	-00.1039	-00.0642	-00.0273
05	07.46	-1.0	04.0149	03.5565	00.4072	00.2064	-00.0637	00.0206
06	07.46	-0.0	03.9309	03.5763	00.4042	00.1348	-00.0538	-00.1140
07	07.46	1.0	03.8676	03.3610	00.3729	00.0157	-00.0543	-00.0222
08	07.46	2.0	03.7654	03.7533	00.3571	-00.0080	-00.0719	00.0627
09	07.46	3.0	03.8770	03.5942	00.3945	-00.0448	-00.0786	00.1102
10	07.46	4.0	03.6712	03.6379	00.3899	00.0141	-00.0674	00.0225
11	07.46	-0.0	03.9309	03.5126	00.4128	-00.0564	-00.1334	-00.0840

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-68

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 104.2 KNOTS
BAROMETRIC PRESSURE 29.58 IN. HG
TUNNEL TEMPERATURE 097 DEG F
RENOIDS NO./FT 0.9779 X 1,000,000

RUN 066
B1 F1 W1 CA13
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	15.54	-0.0	05.6468	05.4331	00.4351	00.4424	-00.0250	00.0917
02	15.53	-4.0	06.0889	05.4295	00.3487	00.7760	-00.0739	00.0487
03	15.53	-3.0	05.8683	05.4123	00.3566	00.8057	-00.0608	-00.1301
04	15.52	-2.0	05.7301	05.3876	00.4081	00.5810	-00.0514	00.0048
05	15.50	-1.0	05.8056	05.1921	00.4915	00.2722	-00.0156	-00.0937
06	15.53	-0.0	05.6785	05.1150	00.3860	00.2830	-00.0827	-00.1016
07	15.53	1.0	05.5781	05.1151	00.4094	00.0377	00.0515	00.0406
08	15.53	2.0	05.5554	05.3822	00.3944	00.1429	-00.0620	-00.0429
09	15.53	3.0	05.7386	05.1316	00.4203	00.1427	-00.0980	-00.0490
10	15.53	4.0	05.6545	05.0346	00.3897	00.0786	-00.0082	00.0687
11	15.53	-0.0	05.5829	05.3376	00.3938	00.1236	-00.0447	00.0630

REPORT NO. LSWT 167
PAGE NO. A-69

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 156.8 KNOTS
BAROMETRIC PRESSURE 29.98 IN. HG
TUNNEL TEMPERATURE 101 DEG F
REYNOLDS NO./FT 1.4527 X 1,000,000

RUN 067
BI FL 41 CALS
PIL C DEB
09/23/64-L
-A WIND AXES#8

PT	ALPHA	PSI	CL	CC	CPM	CV	CFM	CYM
01	-00.45	-0.0	02.7271	02.5009	00.3490	-00.1066	-00.0375	00.0440
02	-04.56	-0.0	01.5450	02.4825	00.4257	-00.2481	-00.0917	00.0382
03	-02.45	-0.0	01.7032	02.1715	00.3577	-00.1917	-00.0450	00.0137
04	-01.44	-0.0	01.9597	02.3715	00.3509	-00.1491	-00.0647	00.0666
05	-00.45	-0.0	02.3264	02.4726	00.3719	-00.1350	-00.0313	-00.0001
06	00.55	-0.0	02.4556	02.3919	00.3850	-00.1207	-00.0425	00.0497
07	01.52	-0.0	02.7080	02.7980	00.3954	-00.0781	-00.0142	00.0263
08	03.56	-0.0	03.2036	03.0946	00.4167	00.0213	-00.0320	00.0389
09	05.58	-0.0	03.5522	03.3915	00.3877	00.0474	-00.0438	-00.0469
10	07.40	-0.0	03.3819	03.6323	00.4102	00.1006	-00.0297	-00.0075
11	11.59	-0.0	04.8782	04.1722	00.4587	00.4499	-00.0778	-00.1220
12	15.55	-0.0	05.9609	05.2481	00.5061	00.2637	-00.0757	-00.0552
13	19.55	-0.0	06.8612	06.2575	00.3391	00.4023	-00.0342	-00.1278
14	-00.45	-0.0	02.3547	02.5293	00.3737	-00.0924	-00.0467	00.0567

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSNT 167

PAGE NO. A-70

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 157.4 KNOTS
 BAROMETRIC PRESSURE 29.58 IN. HG
 TUNNEL TEMPERATURE 105 DEG F
 REYNOLDS NO./FT 1.4396 X 1,000,000

RUN 068
 01 F1 W1 CA13
 PHI 0 DEG
 09/05/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPX	CY	CPX	CY
01	-00.45	-0.0	02.1928	02.4939	00.3354	-00.1066	-00.0517	00.0088
02	-00.45	-4.0	02.1544	02.7713	00.4087	-00.9071	-00.0412	00.1841
03	-00.45	-3.0	02.0147	02.5133	00.3813	-00.7424	-00.0306	00.0868
04	-00.45	-2.0	02.1002	02.5858	00.3856	-00.5490	-00.0032	00.0664
05	-00.45	-1.0	02.2011	02.5305	00.3608	-00.3489	-00.0445	00.0474
06	-00.45	0.0	02.1959	02.5224	00.3330	-00.1630	-00.0091	00.0105
07	-00.45	1.0	02.2557	02.5704	00.3510	-00.0065	-00.0395	-00.1239
08	-00.45	2.0	02.3095	02.5141	00.3409	00.1894	-00.0508	-00.1910
09	-00.45	3.0	02.2250	02.5751	00.3131	00.3709	-00.0415	-00.1961
10	-00.45	4.0	01.9834	02.7054	00.3841	00.5647	-00.0306	-00.2281
11	-00.45	-0.0	02.2413	02.5506	00.3210	-00.0924	-00.0209	00.0282

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-71

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 157.8 KNOTS
BAROMETRIC PRESSURE 29.58 IN. HG
TUNNEL TEMPERATURE 108 DEG F
RENOIDS NO./FT 1.4299 X 1,000,000

RUN 069
B1 F1 W1 CA13
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.46	0.0	04.0343	03.6821	00.4052	00.0306	00.0150	00.0605
02	07.46	-4.0	04.2397	03.6100	00.4302	-00.2736	-00.0466	00.3095
03	07.46	-3.0	04.1121	03.4937	00.4097	-00.3022	-00.0564	00.1166
04	07.46	-2.0	04.0129	03.4718	00.3917	-00.0466	-00.0190	00.0188
05	07.46	-1.0	04.0085	03.3930	00.4088	00.1342	-00.0131	00.0180
06	07.46	-0.0	04.1193	03.5543	00.4115	00.1579	-00.0115	-00.0326
07	07.46	1.0	03.9921	03.7498	00.3947	-00.1066	-00.0506	00.0147
08	07.46	2.0	04.0847	03.7315	00.4047	-00.0455	-00.0196	00.0661
09	07.46	3.0	04.0548	03.7458	00.4423	00.0034	-00.0522	-00.0155
10	07.46	4.0	03.9940	03.7258	00.4540	00.1364	00.0073	-00.0502
11	07.46	1.0	04.0772	03.6081	00.4240	00.0352	-00.0044	00.0888
12	07.46	2.0	04.0563	03.6748	00.4106	00.0112	-00.0411	-00.0668
13	07.46	3.0	03.9407	03.6606	00.4054	00.0732	-00.0538	00.0421
14	07.46	4.0	04.0370	03.7969	00.4702	00.0234	-00.0107	-00.0094
15	07.46	0.0	04.0060	03.6541	00.3982	00.2288	-00.0380	00.0079
16	07.46	-4.0	07.8286	01.2432	07.4696	06.1093	-06.0667	01.6153

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-72

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 157.8 KNOTS
 BAROMETRIC PRESSURE 29.58 IN. HG
 TUNNEL TEMPERATURE 108 DEG F
 RENOIDS NO./FT 1.4299 X 1,000,000

RUN 070
 B1 F1 W1 CA13
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	15.54	-0.0	05.8190	05.1419	00.4417	00.3452	00.0076	-00.0102
02	15.53	-4.0	06.1479	05.3646	00.3321	00.7463	-00.0578	-00.1266
03	15.53	-3.0	06.1116	05.3445	00.4034	00.5353	-00.0596	-00.0588
04	15.53	-2.0	05.9345	05.3160	00.4184	00.4949	-00.0054	00.0003
05	15.53	-1.0	05.9181	05.0783	00.4555	00.2925	-00.0023	-00.0252
06	15.53	-0.0	05.8189	05.1845	00.4301	00.4443	00.0043	-00.0397
07	15.53	1.0	05.7857	05.1283	00.4412	00.3689	-00.0487	-00.0715
08	15.53	2.0	05.8905	05.0662	00.4221	00.2935	-00.0700	-00.1649
09	15.53	3.0	05.8366	05.1343	00.4240	00.1515	-00.0626	-00.0101
10	15.53	4.0	05.8448	05.2335	00.4123	00.0661	-00.0470	00.0925
11	15.53	-4.0	06.1199	05.3654	00.3263	00.7324	-00.0922	-00.0919
12	15.53	-3.0	05.8570	05.2609	00.3514	00.5501	-00.0904	-00.0775
13	15.53	-2.0	05.8495	05.2316	00.4086	00.4809	-00.0072	-00.0065
14	15.53	-1.0	05.8755	05.2478	00.4376	00.4058	00.0001	-00.0431
15	15.53	1.0	05.7857	05.1567	00.4336	00.2555	-00.0370	-00.0403
16	15.53	2.0	05.7913	05.2363	00.4153	00.2935	-00.0880	-00.1589
17	15.53	3.0	05.7516	05.1202	00.3901	00.2224	-00.0666	-00.0977
18	15.53	4.0	05.7881	05.2619	00.3968	-00.0189	-00.0279	-00.0292

UNCLASSIFIED

REPORT NO. LSWF 167
PAGE NO. A-73

LWT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 155.5 PSF
TUNNEL VELOCITY 212.2 KNOTS
BAROMETRIC PRESSURE 29.58 IN. HG
TUNNEL TEMPERATURE 110 DEG F
REYNOLDS NO./FT 1.8647 X 1,000,000

NO. 071
SI 11 W1 C417
PHI 1 186
OP/13/14-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CM	CY	CM	CY
01	-00.45	-0.0	02.0188	02.3717	00.1254	-0.1039	-00.0024	00.0335
02	-04.44	-0.0	01.1150	01.9113	00.3592	-00.2315	-00.0100	00.0368
03	-02.45	-0.0	01.7057	02.1355	00.3597	-00.0242	-00.0120	00.0339
04	-01.40	-0.0	01.9570	02.2047	00.3443	-00.1039	-00.0151	00.0412
05	-00.45	-0.0	02.2765	02.4275	00.3464	00.0077	00.0027	00.0517
06	00.56	-0.0	02.4938	02.6431	00.3674	00.0257	00.0053	00.0445
07	01.52	-0.0	02.7621	02.7515	00.3893	00.0555	00.0086	00.0487
08	03.57	-0.0	03.2000	03.0670	00.3966	00.1117	-00.0111	-00.0107
09	05.53	-0.0	03.6095	03.3232	00.3974	00.0915	00.0182	00.0147
10	07.40	-0.0	04.0216	03.5038	00.4156	00.1607	-00.0080	-0.03457
11	11.50	-0.0	04.7725	04.2402	00.4623	00.3441	-00.0110	-00.0083
12	15.53	-0.0	05.3518	05.2068	00.4731	00.5142	-00.0234	-00.0162
12	15.52	-0.0	06.7547	08.0523	00.2743	00.5770	00.0105	-00.0213
14	-00.45	-0.0	02.3522	02.4074	00.3613	00.0157	00.0106	00.0797

REPORT NO. LSWT 167
PAGE NO. A-74

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 212.2 KNOTS
BAROMETRIC PRESSURE 29.53 IN. HG
TUNNEL TEMPERATURE 115 DEG F
REYNOLDS NO./FT 1.3647 X 1,000,000

RUN 072
SI FL BL CALS
CHI O DEG
89/05/64-1
PRVING EXES: *

PT	ALPHA	PSI	CL	CD	CPM	CY	CLY	CYF
01	-00.40	-0.0	02.2282	02.4597	00.3253	00.0150	-00.0000	0.0640
02	-00.40	-4.0	02.1077	02.7309	00.4400	-00.8437	-00.0000	0.2242
03	-00.40	-3.0	02.1675	02.5465	00.4139	-00.5704	00.0000	0.1410
04	-00.40	-2.0	02.1809	02.5211	00.3714	-00.3141	-00.0000	0.1286
05	-00.40	-1.0	02.2056	02.4390	00.3609	-00.1544	-00.0000	0.0650
06	-00.40	0.0	02.3087	02.4760	00.2439	00.3085	-00.0000	0.0506
07	-00.40	1.0	02.2000	02.4395	00.3208	00.1707	-00.0134	-00.0020
08	-00.40	2.0	02.2758	02.4795	00.3234	00.3173	-00.0043	-00.0971
09	-00.40	3.0	02.1524	02.5175	00.3230	00.5347	-00.0005	-00.1408
10	-00.40	4.0	02.0381	02.6372	00.3532	00.7116	00.0174	-00.1464
11	-00.40	5.0	02.2706	02.9075	00.3271	00.0877	00.0078	00.0667

UNCLASSIFIED

REPORT NO. LSNT 107

PAGE NO. A-75

LWT LOW SPEED WIND TUNNEL TEST 107

DYNAMIC PRESSURE 175.7 PSF
 TUNNEL VELOCITY 210.0 KNOTS
 BAROMETRIC PRESSURE 29.58 IN. HG
 TUNNEL TEMPERATURE 122 DEG F
 REYNOLDS NO./FT 1.3482 X 1,000,000

DATE 10/1/57
 -1 FLIGHT CALIB
 CH1 3183
 04/10/54-1
 F-105 AIRCRAFT

PT	ALPHA	BET	CL	CD	CMX	CMY	CMZ	MA
01	07.50	-0.0	04.0459	00.5034	00.4100	00.0792	-00.0070	00.3327
02	07.50	-4.0	04.1440	00.5707	00.4119	-00.0756	-0.01571	00.3040
03	07.50	-3.0	04.0802	00.5184	00.4114	-00.0711	-00.0040	00.2800
04	07.50	-2.0	04.0962	00.5150	00.4100	00.0020	-0.0000	00.3002
05	07.51	-1.0	04.0907	00.5360	00.4001	00.0033	-0.0000	00.3350
06	07.51	-0.0	04.0220	00.5314	00.4110	00.3300	-00.0170	00.0514
07	07.51	1.0	04.0020	00.5075	00.4100	00.2300	-00.0027	00.0000
08	07.51	2.0	04.0071	00.5030	00.4201	00.0170	-00.0040	00.0000
09	07.51	3.0	03.9917	00.6770	00.4210	00.0010	-0.00070	00.0000
10	07.51	4.0	03.9302	00.7040	00.4000	00.0000	00.0014	00.0000
11	07.51	-0.0	04.0450	00.5030	00.4000	00.2000	-00.0001	00.0001

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSAT 107
PAGE NO. A-76

LWT LOW SPEED WIND TUNNEL TEST 107

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 212.5 KNOTS
BAROMETRIC PRESSURE 29.97 IN. HG
TUNNEL TEMPERATURE 121 DEG F
KNUDSEN NO./FT 1.0520 X 1,000,000

RUN 074
01 F1 #1 CALF
PHI 0 DEG
09/11/64-1
AXIAL AXIS#1

PT	ALPHA	PSI	CL	CD	CPX	CY	CPX	CYX
01	15.48	-0.0	05.9812	05.2465	00.4481	00.0018	-00.0207	-00.0515
02	15.47	-4.0	05.2681	05.2154	00.4234	00.0001	-00.0557	00.0005
03	15.48	-3.0	06.1755	05.1470	00.4092	00.0012	-00.0878	-00.0755
04	15.48	-2.0	06.0760	05.1151	00.4040	00.0118	-00.0330	-00.1129
05	15.48	-1.0	06.0040	05.0959	00.4410	00.0190	00.0070	-00.0204
06	15.48	-0.0	06.0011	05.1573	00.4500	00.0293	-00.0238	-00.0740
07	15.48	1.0	05.9720	05.2150	00.4514	00.0351	-00.0321	-00.0500
	15.48	2.0	05.9137	05.3002	00.4511	00.0401	-00.0608	-00.0419
09	15.48	3.0	05.8455	05.2570	00.4216	00.1718	-00.0700	-00.0001
10	15.48	4.0	06.0174	05.2007	00.4495	00.0153	-00.0631	00.0178
11	15.48	5.0	05.9155	05.1917	00.4310	00.2954	-00.0077	-00.0348

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-77

LWT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 105.4 KNOTS
BAROMETRIC PRESSURE 29.56 IN. HG
TUNNEL TEMPERATURE 109 DEG F
RENOLOS NO./WT 0.9515 X 1,000,000RUN 075
B1 F1 A1 C038
PHI 0 DEJ
09/03/64-1
- **WIND AXES**

PT	ALPHA	PSI	CL	CU	CPX	CY	CPW	CY*
01	-00.46	0.0	02.1115	02.0112	00.3941	-00.2546	-00.0471	00.0176
02	-04.58	0.0	01.1470	02.5649	00.3909	-00.0637	-00.0041	00.1911
03	-02.44	0.0	01.5452	01.9721	00.5257	00.0459	-00.0063	00.0765
04	-01.47	0.0	01.7165	02.0236	00.5442	-00.1540	-00.0255	00.1131
05	-00.46	0.0	02.0476	02.2024	00.2946	00.0640	-00.0371	00.0069
06	00.55	0.0	02.3165	02.2904	00.3254	-00.1910	-00.0163	-00.0120
07	01.51	0.0	02.3935	02.4126	00.2813	00.0639	00.0267	00.0160
08	03.55	0.0	03.1544	02.5547	00.3656	00.1593	-00.0664	00.0364
09	05.56	0.0	03.2067	02.8205	00.3475	00.1394	-00.0128	00.0509
10	07.45	0.0	03.5672	03.1628	00.3770	-00.0466	-00.0594	-00.0321
11	11.50	0.0	04.6720	03.8229	00.4029	00.3919	-00.0296	-00.0076
12	15.58	0.0	05.5341	04.7800	00.5916	00.5000	-00.0071	-00.0340
13	19.55	0.0	06.5509	00.0767	00.4594	00.4341	-00.0030	00.0570
14	-00.46	0.0	02.2071	02.0431	00.3317	00.0321	-00.0476	00.0101

UNCLASSIFIED

REPORT NO. LSMT 167
 PBOL NO. A-78

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 0.33.4 PSF
 TUNNEL VELOCITY 105.2 KNOTS
 BAROMETRIC PRESSURE 29.57 IN. HG
 TUNNEL TEMPERATURE 108 LFC F
 REINCLUS NO./FT 0.9536 X 1,000,000

FORM 075
 61 F1 W1 0234
 PFI 3 066
 09/13/54-1
 ***WIND AXES**

PT	ALPHA	PSI	CL	CC	CPM	CY	CRM	CYM
01	-00.45	0.0	02.0478	01.9310	00.2642	00.4145	-00.0645	00.1911
02	-00.46	-4.0	02.3631	03.3499	00.5767	-00.5177	-00.0300	00.2746
03	-00.46	-3.0	02.1856	02.4248	00.3239	-00.7525	-00.0407	00.1900
04	-00.45	-1.0	01.9721	01.5753	00.4217	-00.4439	-00.0442	00.0052
05	-00.46	0.0	02.0470	02.0907	00.3792	-00.1595	00.0056	00.2192
06	-00.46	1.0	02.3147	02.0467	00.4774	-00.1032	-00.0618	00.1900
07	-00.46	2.0	01.9402	02.1742	00.3363	-00.1041	-00.0893	-00.3315
08	-00.46	3.0	02.0000	02.3688	00.2983	00.7096	-00.0100	-00.1000
09	-00.45	4.0	01.3889	01.9575	00.3794	00.9501	-00.0420	-00.1760
10	-00.45	0.0	02.0796	2.1543	00.4603	-00.0000	-00.0155	00.0451

REPORT NO. LSWT 167

PAGE NO. A-79

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
 TUNNEL VELOCITY 104.3 KNOTS
 BAROMETRIC PRESSURE 29.57 IN. HG
 TUNNEL TEMPERATURE 098 DEG F
 RENCLOS NO./FT 0.9755 X 1,000,000

RUN 077
 B1 F1 W1 C838
 PHI 0 DEG
 09/10/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.46	-0.0	04.2496	03.4013	00.4772	00.1191	-00.0492	-00.1068
02	07.46	-4.0	04.1326	03.6195	00.4344	-00.0363	-00.1126	00.2473
03	07.46	-3.0	04.3238	03.2771	00.3797	00.0493	-00.0609	00.0307
04	07.46	-2.0	04.4194	03.4250	00.4051	-00.2156	-00.0644	-00.0829
05	07.46	-1.0	04.1424	03.3496	00.4462	00.1588	-00.0649	-00.0946
06	07.46	-0.0	04.1221	03.3692	00.4365	00.0870	-00.1501	-00.1777
07	07.46	1.0	03.5809	03.2176	00.3082	-00.0321	-00.0229	-00.0653
08	07.46	2.0	04.2114	03.2596	00.4606	-00.0242	-00.1078	00.0133
09	07.46	3.0	04.1319	03.1960	00.4566	-00.1563	-00.0323	-00.0467
10	07.46	4.0	03.9580	03.3034	00.4296	00.2849	-00.0322	-00.1424
11	07.46	-0.0	03.9309	03.4329	00.4368	00.4056	-00.0984	-00.2840

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-80

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 104.4 KNOTS
BAROMETRIC PRESSURE 29.55 IN. HG
TUNNEL TEMPERATURE 099 DEG F
RENOIDS NO./FT 0.9729 X 1,000,000RUN 078
B1 F1 W1 CB38
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	15.55	-0.0	06.0452	04.7480	00.4763	00.4744	-00.0862	-00.0488
02	15.54	-4.0	05.9138	05.0948	00.3472	00.9359	-00.0772	-00.1436
03	15.54	-3.0	06.2672	05.1428	00.4032	00.6156	-00.1423	-00.1167
04	15.54	-2.0	06.0010	05.1158	00.4885	00.7725	-00.0265	-00.1733
05	15.54	-1.0	06.2044	05.1446	00.5727	00.4643	-00.0341	-00.1357
06	15.54	-0.0	06.1088	04.9711	00.5041	00.3468	-00.0309	-00.0666
07	15.54	1.0	06.1039	05.0353	00.5375	00.4204	-00.0534	-00.1279
08	15.54	2.0	06.1130	04.8563	00.4597	00.1753	-00.0539	-00.1139
09	15.54	3.0	06.1688	05.0517	00.5058	00.2071	-00.0992	-00.0779
10	15.54	4.0	06.3397	04.8907	00.5172	-00.1436	-00.0750	-00.0461
11	15.54	0.0	06.0450	05.0034	00.4714	00.2514	-00.0693	-00.1401

REPORT NO. LSMT 167
PAGE NO. A-81

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 156.9 KNOTS
BAROMETRIC PRESSURE 29.53 IN. HG
TUNNEL TEMPERATURE 101 DEG F
HEADLOS AQ./FT 1.4515 X 1,000,000

RAN 079
01 F1 W1 C028
FHI 0 JEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CO	CPX	CY	CRX	CYI
01	-00.44	0.0	02.0504	02.1844	00.3439	-00.2690	-00.0355	00.0666
02	-04.56	0.0	01.4529	02.0223	00.3990	-00.2835	-00.0207	00.0444
03	-02.44	0.0	01.5718	01.7074	00.3683	-00.2265	-00.0236	00.0204
04	-01.44	0.0	02.0237	02.0600	00.3510	-00.0736	-00.0677	00.0140
05	-00.44	0.0	02.2772	02.1611	00.2637	-00.0281	-00.0048	-00.0001
06	00.56	0.0	02.6027	02.2240	00.3025	-00.0425	-00.0401	00.0445
07	01.51	0.0	02.6442	02.5005	00.3060	-00.2207	-00.0460	00.0017
08	03.59	0.0	03.4947	02.6413	00.3673	-00.1274	-00.0371	-00.0517
09	05.52	0.0	03.0800	02.9670	00.3689	-00.0713	-00.0369	-00.0087
10	07.46	0.0	04.0543	03.4081	00.3665	00.0091	-00.0351	00.0185
11	11.00	0.0	04.7045	04.0108	00.4218	00.0744	-00.0601	-00.0905
12	15.54	0.0	06.0670	05.0215	00.4801	00.2533	-00.0432	00.0377
13	19.54	0.0	07.1091	05.9602	00.5151	00.4225	-00.0828	-00.1504
14	-00.46	0.0	02.7052	02.2521	00.2947	00.0144	-00.0447	00.0000

REPORT NO. LSRT 167

PAGE NO. A-82

LYT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 157.3 KNOTS
 BAROMETRIC PRESSURE 29.93 IN. HG
 TUNNEL TEMPERATURE 104 DEG F
 REYNOLDS NO./FT 1.4417 X 1,000,000

RUN 080
 HI FI WL C938
 PHI 0 DEG
 C9/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	-00.46	0.0	01.9012	02.2818	00.2226	-00.3116	-00.0489	-00.0499
02	-00.45	-4.0	01.7429	02.4591	00.3654	-00.9288	-00.0336	00.1772
03	-00.45	-3.0	02.3544	02.2577	00.3310	-00.6932	-00.0218	00.0690
04	-00.45	-2.0	02.3412	02.2031	00.2982	-00.4852	-00.0296	-00.0400
05	-00.45	-1.0	02.3284	02.2044	00.4226	-00.4272	-00.0062	00.0512
06	-00.45	-0.0	02.1137	02.2104	00.2858	-00.2554	-00.0393	-00.0091
07	-00.45	1.0	02.3806	02.2162	00.3268	00.1548	-00.0309	-00.0621
08	-00.45	2.0	02.2111	02.2447	00.3747	00.1393	-00.0209	-00.2049
09	-00.45	3.0	02.2252	02.5766	00.4567	00.4550	-00.0323	-00.1962
10	-00.45	4.0	02.0259	02.3511	00.4016	00.5151	-00.0171	-00.1912
11	-00.45	0.0	01.9014	02.3667	00.2694	-00.3257	-00.0395	-00.0344

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-83

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 157.3 KNOTS
BAROMETRIC PRESSURE 29.53 IN. HG
TUNNEL TEMPERATURE 104 DEG F
RENOIDS NO./FT 1.4417 X 1,000,000RUN 081
B1 F1 W1 C838
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.46	0.0	04.0343	03.3635	00.3115	-00.1610	-00.0614	-00.0556
02	07.43	-4.0	04.3955	03.4904	00.3118	-00.1214	-00.0744	00.1900
03	07.43	-3.0	04.0411	03.4306	00.3397	-00.4201	-00.0346	00.1742
04	07.43	-2.0	04.2679	03.4510	00.3037	-00.1943	-00.0514	-00.0418
05	07.43	-1.0	04.4051	03.4285	00.4017	-00.1566	-00.0173	-00.0419
06	07.43	-0.0	04.2039	03.3774	00.4018	-00.0337	-00.0384	-00.0975
07	07.43	1.0	03.9635	03.3881	00.3768	00.1134	-00.0553	-00.0657
08	07.43	2.0	04.1979	03.3843	00.3448	-00.2508	-00.0289	00.0517
09	07.43	3.0	04.0400	03.5120	00.4224	-00.0744	-00.0284	-00.0005
10	07.43	4.0	04.2767	03.4636	00.4728	-00.0683	-00.0099	-00.0093
11	07.43	-0.0	04.1615	03.4910	00.4189	00.2359	-00.0281	-00.0260

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-84

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 157.6 KNOTS
BAROMETRIC PRESSURE 29.53 IN. HG
TUNNEL TEMPERATURE 106 DEG F
RENOIDS NO./FT 1.4352 X 1,000,000RUN 082
B1 F1 W1 C838
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	15.56	0.0	06.1595	05.0996	00.4263	00.2961	00.0137	00.0730
02	15.56	-4.0	06.3040	05.2366	00.3428	00.6414	-00.0970	-00.1405
03	15.56	-3.0	06.1975	05.1614	00.3533	00.4732	-00.0981	-00.1231
04	15.56	-2.0	06.2747	04.9749	00.3819	00.4176	-00.0330	-00.0859
05	15.56	-1.0	06.2020	05.1065	00.3871	00.4137	-00.0148	-00.1209
06	15.56	-0.0	05.8618	05.0425	00.5134	00.5228	-00.0400	-00.1584
07	15.56	1.0	06.0553	05.0572	00.4339	00.3344	-00.0262	-00.0001
08	15.56	2.0	06.2450	05.0374	00.4738	00.1034	-00.0965	-00.0204
09	15.56	3.0	06.2056	05.1344	00.3865	-00.1375	-00.1106	-00.0143
10	15.56	4.0	06.2842	05.0470	00.3700	-00.0949	-00.0248	00.0965
11	15.56	-0.0	06.2871	05.0855	00.4163	00.2678	00.0307	-00.0319

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-85

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 211.4 KNOTS
 BAROMETRIC PRESSURE 29.51 IN. HG
 TUNNEL TEMPERATURE 112 DEG F
 REYNOLDS NO./FT 1.6875 X 1,000,000

RUN 063
 81 FT 41 C63r
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CO	CPM	CY	CP*	CYM
01	-00.44	0.0	02.4004	02.2265	00.3040	-00.1515	00.0314	00.0782
02	-04.45	0.0	01.2100	01.9595	00.4105	-00.2073	-00.0015	01.3667

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSMT 167

PAGE NO. A-86

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
 TUNNEL VELOCITY 104.8 KNOTS
 BAROMETRIC PRESSURE 29.48 IN. HG
 TUNNEL TEMPERATURE 101 DEG F
 REOCLOS NO./FT 0.9673 X 1,000,000

RUN 054
 BI FI MI CA38
 PHI 0 DEG
 00/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	-00.44	0.0	01.9083	02.6481	00.3705	-00.0478	-00.0157	00.0341
02	-04.58	0.0	01.1948	03.0428	00.4353	-00.2708	-00.0550	00.0378
03	-02.43	0.0	01.4973	02.3224	00.4059	-00.1434	-00.0039	-00.0206
04	-01.43	0.0	01.6372	02.5011	00.4181	-00.0797	-00.0154	00.0157
05	-00.44	0.0	01.8497	02.5843	00.3287	-00.2390	-00.0470	-00.0417
06	00.55	0.0	02.2660	02.5132	00.3309	00.0478	-00.0052	00.0662
07	01.51	0.0	02.6323	02.8653	00.3590	-00.0159	-00.0370	00.0299
08	03.56	0.0	03.0747	03.0960	00.3972	-00.0477	-00.0376	-00.0101
09	05.53	-0.0	03.5111	03.4635	00.3993	-00.1315	-00.0609	-00.1312
10	07.43	0.0	03.8191	03.9449	00.3561	00.0711	-00.0348	00.0036
11	11.56	-0.0	04.6253	04.3323	00.4750	00.1220	-00.0735	-00.1115
12	15.55	-0.0	05.9178	05.3220	00.5156	00.3152	-00.0490	-00.1156
13	19.55	-0.0	06.6687	06.0148	00.3322	00.3544	-00.0833	-00.1487
14	-00.46	0.0	01.8724	02.4890	00.3485	-00.0797	-00.0579	-00.0155

UNCLASSIFIED

REPORT NO. L-87 157

PAGE NO. A-87

TUNNEL A CUSTODIAN TUNNEL TEST 1-7

DYNAMIC PRESSURE 0.00 PSI
 TUNNEL VELOCITY 104.7 MI/HR
 BAROMETRIC PRESSURE 29.45 IN. HG
 TUNNEL TEMPERATURE 102.000 F
 RECDUS NO./FT 0.0075 X 1,000,000

01 01 01 01 01
 01 01 01 01 01
 01 01 01 01 01
 01 01 01 01 01
 01 01 01 01 01

PT	ALPHA	PSI	CL	CD	CPM	CY	CPH	CYH
01	-00.46	0.0	01.004	02.0076	00.4080	-00.1792	-00.0471	00.0000
02	-00.45	-4.0	01.0015	02.7193	00.4045	-00.3519	00.0111	00.0077
03	-00.45	-3.0	02.1081	02.7912	00.4841	-00.0001	00.0101	00.0001
04	-00.45	-2.0	01.7975	02.0294	00.4038	-00.3555	-00.0751	00.0087
05	-00.45	-1.0	01.9877	02.7234	00.3919	-00.3330	00.0192	-00.0008
06	-00.45	-0.0	02.2806	02.5842	00.4285	-00.1437	-00.0707	-00.0150
07	-00.45	1.0	02.1712	02.0998	00.4010	-00.1162	-00.0085	-00.0052
08	-00.45	2.0	02.0720	02.0303	00.4060	00.0707	00.0134	-00.0021
09	-00.45	3.0	02.0470	02.0828	00.4314	00.4067	-00.0529	-00.0175
10	-00.45	4.0	01.7774	02.0504	00.3851	00.0518	00.0120	-00.0242
11	-00.45	0.0	02.0015	02.0077	00.3370	-00.1112	-00.0020	-00.0000

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-88

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 104.8 KNOTS
BAROMETRIC PRESSURE 29.47 IN. HG
TUNNEL TEMPERATURE 101 DEG F
REYNOLDS NO./FT 0.9672 X 1,000,000RUN 086
B1 F1 W1 CA38
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.45	0.0	04.0424	03.7044	00.3180	00.1665	-00.1114	00.0259
02	07.46	-4.0	04.2123	04.2093	00.3808	-00.2107	-00.0376	00.4025
03	07.46	-3.0	03.9574	03.8980	00.3724	-00.2224	-00.0153	00.2522
04	07.46	-2.0	03.8937	03.7593	00.3209	-00.2005	-00.0837	00.0930
05	07.48	-1.0	04.0311	03.9389	00.3701	-00.0483	-00.0560	00.0296
06	07.42	-0.0	03.9782	03.8634	00.3703	-00.0885	-00.0868	00.0090
07	07.42	1.0	03.9469	03.8073	00.3829	00.0157	-00.0493	00.1854
08	07.42	2.0	03.9723	03.9766	00.3687	-00.1036	-00.0291	00.0274
09	07.41	3.0	03.7009	04.0723	00.3044	-00.1077	-00.0937	00.0861
10	07.41	4.0	03.8451	04.0521	00.3884	-00.1120	-00.0152	-00.0571
11	07.41	-0.0	03.8825	03.7679	00.3032	-00.0886	-00.0974	00.1777

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-89

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
 TUNNEL VELOCITY 104.8 KNOTS
 BAROMETRIC PRESSURE 29.47 IN. HG
 TUNNEL TEMPERATURE 101 DEG F
 RENOLDS NO./FT 0.9672 X 1,000,000

RUN 087
 BI FI WI CA38
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	15.55	-0.0	06.0452	05.4967	00.4963	00.3948	00.0512	00.0389
02	15.55	-4.0	06.1687	05.5566	00.3534	00.7613	-00.0366	00.0099
03	15.55	-3.0	06.2671	05.4765	00.4185	00.6635	00.0139	-00.1321
04	15.55	-2.0	06.1923	05.5458	00.4682	00.6295	00.0136	-00.0824
05	15.55	-1.0	05.7585	05.5438	00.3987	00.3851	00.0272	-00.0912
06	15.55	-0.0	05.9178	05.3374	00.4897	00.3629	00.0492	00.0634
07	15.56	1.0	05.9448	05.5609	00.4980	-00.0092	00.0207	-00.0107
08	15.56	2.0	06.0495	05.3502	00.4814	00.3193	-00.0388	00.0691
09	15.56	3.0	05.9139	05.0355	00.3904	00.0646	-00.0262	00.0060
10	15.56	4.0	06.1167	05.3204	00.4577	-00.2221	-00.0293	00.0695
11	15.57	-0.0	05.9181	05.2735	00.4545	00.2359	00.0414	-00.0177
12	15.57	3.0	06.0095	05.4497	00.4797	00.0329	00.0235	-00.1018

UNCLASSIFIED

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 070.2 PSF
 TUNNEL VELOCITY 157.3 KNOTS
 BAROMETRIC PRESSURE 29.48 IN. HG
 TUNNEL TEMPERATURE 103 DEG F
 REYNOLDS NO./FT 1.4437 X 1,000,000

104 078
 P1 F1 W1 CA3E
 PHI 0 DEG
 09/03/54-1
 ALL AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CPM	CYM
01	-00.45	0.0	02.1136	02.5250	00.3582	-00.1556	-00.0279	00.1566
02	-04.56	0.0	01.3466	03.1113	00.4617	-00.2655	-00.0417	00.0578
03	-02.44	0.0	01.5364	02.3830	00.5869	-00.1982	-00.0265	00.0244
04	-01.45	0.0	01.7472	02.5935	00.5873	-00.1555	-00.0226	00.0302
05	-00.46	0.0	02.0572	02.7355	00.5842	-00.1640	-00.0091	00.0007
06	00.56	0.0	02.4823	02.7844	00.4107	-00.1841	-00.0521	-00.0575
07	01.52	0.0	02.5806	02.9473	00.3809	-00.1558	-00.0433	-00.0122
08	03.57	0.0	03.1312	03.1871	00.3532	-00.0566	-00.0478	-00.0224
09	05.55	0.0	03.6087	03.4984	00.3141	-00.0024	-00.0189	-00.0125
10	07.44	0.0	04.0270	03.8102	00.4015	00.0373	-00.0225	-00.0852
11	11.55	0.0	04.7254	04.4637	00.4578	00.1309	-00.0244	-00.0492
12	15.54	0.0	05.7906	05.3692	00.4240	00.2533	-00.0552	-00.0114
13	19.54	0.0	06.8460	06.2388	00.3061	00.4235	-00.0241	-00.0498
14	-00.43	0.0	02.2702	02.5845	00.3964	-00.1131	-00.0250	00.0311

REPORT NO. LSRT 167
PAGE NO. A-91

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 157.6 KNOTS
BAROMETRIC PRESSURE 29.48 IN. HG
TUNNEL TEMPERATURE 105 DEG F
REYNOLDS NO./FT 1.4372 X 1,000,000

RUN 089
U1 F1 W1 C838
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CFM	CY	CXB	CYM
01	-00.43	0.0	02.2844	02.6148	00.3951	-00.1486	-00.0914	00.0440
02	-00.41	-4.0	02.2411	02.6931	00.4615	-00.9343	-00.0204	00.1776
03	-00.41	-3.0	02.1147	02.6331	00.4536	-00.8554	-00.0379	00.1140
04	-00.41	-2.0	02.2424	02.6775	00.4536	-00.5772	-00.0200	00.0622
05	-00.41	-1.0	02.1027	02.7082	00.4216	-00.3481	-00.0308	00.0318
06	-00.41	-0.0	02.1568	02.6708	00.4218	-00.1917	-00.0048	00.0072
07	-00.41	1.0	02.2822	02.6342	00.4162	-00.1366	-00.0816	-00.0425
08	-00.41	2.0	02.1401	02.6344	00.3606	00.0472	-00.0383	-00.1512
09	-00.41	3.0	02.2541	02.6104	00.3931	00.2630	-00.0020	-00.1593
10	-00.41	4.0	01.9984	02.7834	00.4234	00.4505	-00.0254	-00.1423
11	-00.41	-0.0	02.2843	02.5657	00.4373	-00.1208	-00.0346	00.0079

REPORT NO. LSWT 167

PAGE NO. A-92

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 157.8 KNOTS
BAROMETRIC PRESSURE 29.48 IN. HG
TUNNEL TEMPERATURE 106 DEG F
RENOLDS NO./FT 1.4339 X 1,000,000

RUN 090
B1 F1 W1 CA38
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.42	-0.0	04.1117	03.7743	00.3806	00.0017	-00.0209	00.0115
02	07.42	-4.0	04.2324	03.9011	00.3969	-00.2847	-00.0416	00.4025
03	07.42	-3.0	04.0198	03.8836	00.3833	-00.2443	00.0156	00.1523
04	07.43	-2.0	04.1332	03.8053	00.4031	-00.0739	-00.0231	-00.0429
05	07.44	-1.0	04.0438	03.7972	00.3889	-00.0217	-00.0315	-00.0756
06	07.44	-0.0	04.0552	03.7600	00.3769	-00.0265	-00.0405	-00.0278
07	07.44	1.0	04.0557	03.8421	00.3860	-00.0782	-00.0687	00.0216
08	07.45	2.0	04.0350	03.8804	00.3765	-00.0879	-00.0579	00.0248
09	07.45	3.0	04.0616	03.8805	00.3800	-00.0677	-00.0498	-00.0862
10	07.45	4.0	03.9441	03.8321	00.4292	00.0375	-00.0369	-00.0523
11	07.45	-0.0	04.0412	03.9158	00.3597	00.0161	-00.0674	-00.0041

REPORT NO. LS-4T 167
PAGE NO. A-93

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 070.2 PSF
TUNNEL VELOCITY 107.5 KNOTS
BAROMETRIC PRESSURE 29.43 IN. HG
TUNNEL TEMPERATURE 108 DEG F
RENCLOS NO./FT 1.4335 X 1.014,000

SEN 091
21 MI WL 074
074 1 061
07/11/64-1
43.115 XLS#

PT	ALPHA	PSI	CL	CD	CPM	CY	CX	CY*
01	15.55	-0.0	05.9485	05.4395	00.4277	00.2834	-00.0005	-00.1181
02	15.55	-4.0	06.1481	05.8194	00.2824	00.6124	-00.0629	-00.0287
03	15.55	-3.0	06.0701	05.7456	00.2740	00.5795	-00.0722	-00.0673
04	15.55	-2.0	05.9771	05.4426	00.3469	00.4353	-00.0704	-00.0355
05	15.55	-1.0	05.8750	05.3027	00.2520	0.4083	-00.0598	-00.0510
06	15.55	-0.0	05.9320	05.4678	00.3922	00.2370	-00.0712	-00.0039
07	15.55	1.0	07.9070	05.4116	00.4205	00.1145	-00.0511	-00.0640
	15.55	2.0	05.8190	05.3493	00.3771	00.2033	-00.0655	-00.0244
9	15.55	3.0	05.9211	05.3322	00.3757	-00.0455	-00.0057	-00.0353
10	15.55	4.0	06.0149	05.3536	00.3774	-00.1154	-00.1088	-00.0412
11	15.55	-0.0	05.9509	05.3569	00.4142	0.2462	-00.0267	-00.1003

REPORT NO. 15WT 167

PAGE NO. A-94

LVT LOA SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 211.9 KNOTS
 BAROMETRIC PRESSURE 29.45 IN. HG
 TUNNEL TEMPERATURE 114 DEG F
 PERCUSS NO./PI 1.0781 X 1,000,000

RUN 002
 G1 P1 X1 C438
 PHI 0 DEG
 09/03/84-1
 ***IND AXES**

PT	ALPHA	PSI	CL	CD	CPM	CY	CPM	CYM
01	-00.45	-0.0	02.2367	02.5151	00.3835	-00.1159	-00.0162	00.0040
02	-04.44	-0.0	01.1110	02.0826	00.3682	-00.1256	-00.0176	00.0045
03	-08.46	-0.0	01.4101	02.2133	00.3706	-00.1747	00.0024	00.0026
04	-02.45	-0.0	01.6776	02.2252	00.4023	-00.1239	-00.0277	00.0586
05	-01.48	-0.0	02.0307	02.4363	00.4008	-00.1233	-00.0045	00.0405
06	-00.46	-0.0	02.2844	02.6229	00.3947	-00.0441	-00.0154	00.0632
07	00.55	-0.0	02.5295	02.7827	00.4085	-00.0261	00.0081	01.0231
08	01.51	-0.0	02.6942	02.9269	00.3895	-00.0201	00.0107	00.0246
09	02.46	-0.0	02.9504	03.0394	00.3614	-00.0041	-00.0102	00.0384
10	03.55	-0.0	03.2006	03.1747	00.3914	00.0837	00.0017	00.0254
11	05.57	-0.0	03.6935	03.3342	00.3757	00.0957	00.1010	00.0116
12	07.48	-0.0	04.0575	03.8149	00.3964	00.1627	00.0051	00.0337
13	11.53	-0.0	04.7044	04.3957	00.4351	00.2370	00.0402	-00.0414
14	15.59	-0.0	05.9587	05.3457	00.4270	00.3440	-00.0046	-00.0517
15	19.55	-0.0	06.8927	06.3429	00.2462	00.5656	-00.0167	-00.0702
16	-02.44	-0.0	01.7178	02.3447	00.3946	-00.0920	-00.0043	00.0606
17	-00.47	-0.0	02.2683	02.6747	00.4015	-00.0123	-00.0289	00.0563

REPORT NO. LSHT 157

PAGE NO. A-95

LWT LOW SPEED WIND TUNNEL TEST 157

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 212.2 KNOTS
 BAROMETRIC PRESSURE 29.48 IN. HG
 TUNNEL TEMPERATURE 116 DEG F
 RECLOSE NO./FT 1.8696 X 1,000,000

RUN 099
 W1 F1 W1 CASE
 PHI 0 DEG
 19/03/64-1
 RAD AXLS

PT	ALPHA	PSI	CL	CD	CPN	CY	CHK	CYN
01	-00.47	-0.0	02.2565	02.6190	00.3915	00.0276	-00.0250	00.0275
02	-00.47	-4.0	02.0834	02.6986	00.4620	-01.1539	-00.1134	00.2415
03	-00.47	-5.0	02.0790	02.6980	00.4283	-00.9403	-00.0001	00.1214
04	-00.47	-2.0	02.1475	02.6327	00.4371	-00.2872	-00.0020	00.0869
05	-00.47	-1.0	02.1643	02.7341	00.4275	-00.1701	-00.0105	00.0282
06	-00.46	0.0	02.2287	02.6669	00.3935	-00.0120	00.0079	00.0912
07	-00.46	1.0	02.2327	02.6707	00.3980	00.1139	-00.0157	-00.0192
08	-00.46	2.0	02.2738	02.7346	00.3623	00.2660	00.0011	-00.0951
09	-00.46	3.0	02.1125	02.6370	00.3856	00.4010	00.0001	-00.1349
10	-00.46	4.0	02.0002	02.7169	00.3524	00.6917	00.0074	-00.1265
11	-00.46	-0.0	02.2844	02.6687	00.4157	-00.0202	-00.0091	00.1019

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 212.6 KNOTS
BAROMETRIC PRESSURE 29.48 IN. HG
TUNNEL TEMPERATURE 118 DEG F
REYNOLDS NO./FT 1.8615 X 1,000,000

RUN 094
B1 F1 W1 CA38
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.44	-0.0	04.0055	03.8589	00.3433	00.1905	00.0125	-00.0274
02	07.44	-4.0	04.0879	04.0459	00.3938	-00.6560	-00.2161	00.4082
03	07.44	-3.0	04.0640	03.9337	00.3747	-00.0465	-00.0163	00.1572
04	07.44	-2.0	04.0005	03.8195	00.3517	00.0798	-00.0246	-00.0231
05	07.44	-1.0	04.0496	03.8549	00.3541	00.1425	-00.0051	-00.0244
06	07.44	-0.0	04.0294	03.7951	00.3521	00.1905	00.0098	00.0016
07	07.44	1.0	04.0299	03.8661	00.3724	00.1275	00.0733	00.0050
08	07.44	2.0	03.9595	03.9085	00.3425	-00.0081	00.1269	-00.0041
09	07.44	3.0	03.9993	03.8448	00.3633	00.0512	00.0575	-00.0045
10	07.44	4.0	03.9287	03.7928	00.3893	00.1821	00.0314	-00.0657
11	07.44	-0.0	04.0613	03.7872	00.3697	00.1905	00.0072	-00.0063

UNCLASSIFIED

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 212.8 KNOTS
BAROMETRIC PRESSURE 29.48 IN. HG
TUNNEL TEMPERATURE 119 DEG F
RENOIDS NO./FT 1.8574 X 1,000,000

RUN 095
B1 F1 W1 CA38
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	15.53	-0.0	05.8861	05.3822	00.3870	00.3866	00.0057	-00.0156
02	15.53	-4.0	06.1211	05.7367	00.3248	-00.1644	-00.4072	00.1226
03	15.53	-3.0	06.0449	05.4912	00.3346	00.5201	-00.0879	-00.0751
04	15.53	-2.0	05.9858	05.3292	00.3594	00.5658	-00.0441	-00.0511
05	15.53	-1.0	05.9339	05.4857	00.3795	00.4566	-00.0240	-00.0294
06	15.53	-0.0	06.0056	05.2233	00.3947	00.3788	-00.0043	-00.0249
07	15.53	1.0	05.8733	05.3987	00.3978	00.2528	-00.0254	-00.0370
08	15.53	2.0	05.8425	05.4269	00.3853	00.2226	-00.0369	-00.0248
09	15.53	3.0	05.9228	05.1927	00.3748	00.2463	-00.0654	-00.0127
09	15.53	3.0	05.9228	05.3362	00.3784	00.1985	-00.0683	-00.0401
10	15.53	4.0	06.0377	05.4232	00.3811	00.0467	-00.0615	00.0327
11	15.53	-0.0	05.9658	05.4061	00.4009	00.3069	-00.0071	-00.0254

~~UNCLASSIFIED~~

REPORT NO. LS-T 167
PAGE NO. A-98

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.5 PSF
TUNNEL VELOCITY 104.7 KNOTS
BAROMETRIC PRESSURE 29.46 IN. HG
TUNNEL TEMPERATURE 100 DEG F
REYNOLDS NO./FT 0.9552 X 1,000,000

ROW 096
BL F1 #1
PHI C DFL
09/03/64-1
XING AXES

PT	ALPHA	F _{SI}	CL	CD	CPN	CV	CRM	CYM
01	-00.47	-0.0	02.0315	01.1507	00.3035	00.0794	-00.0001	-00.0102
02	-04.44	-0.0	00.7077	00.8216	00.2874	-00.1113	-00.0085	00.0538
03	-03.45	-0.0	01.0705	00.8374	00.3047	-00.0421	00.0007	-00.0154
04	-02.45	-0.0	01.3690	01.1435	00.3036	00.0156	-00.0212	00.0601
05	-01.47	-0.0	01.0685	01.2588	00.2850	00.0156	-00.0106	00.0108
06	-00.45	-0.0	01.9680	01.3735	00.2883	00.0156	-00.0210	00.0219
07	00.50	-0.0	02.2568	01.2385	00.2997	00.1113	00.0015	-00.0105
08	01.54	-0.0	02.4096	01.3905	00.3210	00.0470	-00.0205	00.0070
09	02.44	-0.0	02.7069	01.5430	00.2668	00.0477	00.0009	-00.0037
10	03.56	-0.0	03.0747	01.6621	00.3450	00.1435	-00.0080	00.0499
11	05.57	-0.0	03.3040	01.9975	00.3370	00.2509	00.0020	-00.0001
12	07.44	-0.0	03.3829	02.3339	00.3681	00.1078	00.0052	-00.0080
13	11.55	-0.0	04.3931	03.1500	00.3185	00.2459	-00.0109	-00.0050
14	15.58	-0.0	05.7587	04.0140	00.6000	00.1903	-00.0514	-00.0000
15	13.55	-0.0	06.8270	05.3585	00.5506	00.4180	-00.0202	-00.0000
16	-00.47	-0.0	01.0084	01.2144	00.2515	-00.0800	-00.0314	00.0347

UNCLASSIFIED

REPORT NO. LSAT 167

PAGE NO. A-99

LWT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 003.9 PSF
 TUNNEL VELOCITY 104.6 KNOTS
 BAROMETRIC PRESSURE 29.46 IN. HG
 TUNNEL TEMPERATURE 69.4 DEG F
 HENGLUS NO./FT 0.9714 X 1,000,000

RUN 397
 01 FL W1
 PHI 0 DEG
 00/00/64-1
 ***END TEST**

PT	ALPHA	PSI	CL	CD	CPM	CY	CFM	LYN
01	-00.47	-0.0	01.8502	01.2782	00.2733	-00.0162	-00.0421	-00.0225
02	-00.47	-4.0	01.6833	01.2860	00.3049	-00.0515	-00.0677	00.1304
03	-00.47	-3.0	01.5128	01.4849	00.3047	-00.07108	-00.0712	00.0721
04	-00.47	-2.0	01.3423	01.3877	00.3715	-00.4898	-00.0786	-00.0547
05	-00.47	-1.0	02.0035	01.1624	00.3299	-00.2093	-00.0603	00.0794
06	-00.47	-0.0	02.0155	01.0870	00.3421	-00.1755	-00.0410	-00.0487
07	-00.47	1.0	01.5319	01.2022	00.3113	00.0429	-00.0709	-00.0700
08	-00.47	2.0	01.3453	01.3300	00.3232	00.2957	-00.0584	-00.1755
09	-00.40	3.0	01.8124	01.2240	00.2580	00.2155	-00.1013	-00.1515
10	-00.40	4.0	01.6844	01.3429	00.2834	00.5202	-00.0401	-00.1013
11	-00.40	-0.0	01.5319	01.2145	00.3100	-00.0800	-00.0347	-00.0477
12	-00.40	-4.0	01.7905	01.3178	00.3257	-00.0152	-00.1052	00.0021
13	-00.40	-3.0	01.8667	01.3252	00.3520	-00.07192	-00.0550	00.0002

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-100

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 104.5 KNOTS
BAROMETRIC PRESSURE 29.46 IN. HG
TUNNEL TEMPERATURE 098 DEG F
REYNOLDS NO./FT 0.9736 X 1,000,000

RUN 098
B1 F1 W1
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	03.59	-0.0	03.1068	01.7416	00.3183	00.0002	-00.0346	-00.0680
02	03.57	-4.0	05.2680	01.2477	04.1962	02.8323	-03.2047	01.0005
03	03.57	-3.0	03.2071	01.6300	00.3753	-00.3830	00.0144	00.1002
04	03.57	-2.0	03.1434	01.8292	00.3570	-00.2232	00.0560	00.0437
05	03.57	-1.0	03.0160	01.6996	00.2965	-00.0637	00.0161	-00.0166
06	03.57	-0.0	03.0111	01.5824	00.3044	00.0001	00.0497	00.0375
07	03.57	1.0	02.9621	01.7397	00.3139	00.0956	00.0332	-00.0166
08	03.57	2.0	03.0309	01.6445	00.3197	00.0954	-00.0271	00.1386
09	03.57	3.0	03.0703	01.6445	00.3431	00.0952	00.0141	00.0336
10	03.57	4.0	02.8295	01.8697	00.3419	00.2862	00.0624	-00.0239
11	03.57	-0.0	03.0111	01.7736	00.3004	00.1595	00.0339	00.0007

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-101

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
 TUNNEL VELOCITY 104.4 KNOTS
 BAROMETRIC PRESSURE 29.46 IN. HG
 TUNNEL TEMPERATURE 097 DEG F
 RENOLDS NG./FT 0.9759 X 1,000,000

RUN 099
 B1 F1 W1
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.45	0.0	03.8831	02.1588	00.3242	00.2942	-00.0650	00.0283
02	07.45	-4.0	04.2122	02.4406	00.3749	-00.2110	-00.1374	00.1941
03	07.45	-3.0	03.9574	02.3209	00.3408	-00.0628	-00.0367	00.0702
04	07.45	-2.0	03.9892	02.2143	00.3651	00.0234	-00.1027	-00.0818
05	07.45	-1.0	03.9990	02.3302	00.3405	00.2066	-00.0323	00.0154
06	07.45	-0.0	03.8510	01.9991	00.3435	00.0389	-00.0986	-00.1150
07	07.45	1.0	03.9472	02.3256	00.3548	00.0157	-00.0757	00.0159
08	07.45	2.0	03.9087	02.2400	00.3817	00.0555	-00.1136	00.0868
09	07.45	3.0	03.9240	02.1125	00.3778	-00.0135	-00.1204	00.0471
10	07.45	4.0	03.8143	02.2519	00.3968	-00.0494	-00.0504	-00.0983
11	07.45	-0.0	03.8830	02.1904	00.3146	00.1347	-00.0327	-00.1351

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-102

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 104.3 KNOTS
BAROMETRIC PRESSURE 29.46 IN. HG
TUNNEL TEMPERATURE 096 DEG F
RENOIDS NO./FT 0.9781 X 1,000,000RUN 100
B1 F1 W1
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	11.56	-0.0	04.6094	02.9458	00.4687	00.2172	00.0296	-00.2212
02	11.56	-4.0	05.0086	03.0993	00.4679	00.3551	-00.0541	00.1338
03	11.56	-3.0	04.7785	02.9456	00.4572	00.3924	-00.0430	00.0133
04	11.56	-2.0	04.6948	03.0050	00.4214	00.2386	-00.0378	-00.0268
05	11.56	-1.0	04.6731	02.8326	00.4254	00.2762	-00.0232	-00.0655
06	11.56	-0.0	04.6094	02.9140	00.4250	00.0897	-00.0185	-00.1552
07	11.56	1.0	04.5922	02.9243	00.4662	-00.0195	-00.0311	-00.1472
08	11.56	2.0	04.7100	03.0299	00.4433	-00.0669	-00.0631	-00.0379
09	11.56	3.0	04.6831	02.8727	00.4686	-00.1266	-00.0841	00.0036
10	11.58	4.0	04.6007	02.8439	00.4764	-00.2805	-00.0036	-00.1130
11	11.58	-0.0	04.6096	02.9462	00.4232	00.1223	-00.0207	-00.0852

REPORT NO. LEAT 167
PAGE NO. A-103

LVT LOW SPEED FIELD TUNNEL TEST 167

DYNAMIC PRESSURE 035.9 PSF
TUNNEL VELOCITY 104.2 KNOTS
BAROMETRIC PRESSURE 29.40 IN. HG
TUNNEL TEMPERATURE 092 DEC F
RENCLOS NC./FT 0.9604 X 1,000,000

RUN 101
SI FI 51
PRE C 000
07/10/54-1
* * * I N D E X * * *

FT	ALPHA	PSI	CL	CO	CPM	CY	CRM	CYM
01	15.59	0.0	00.7441	03.8559	00.4471	00.3796	-00.0502	00.0140
02	15.59	-4.0	00.1209	03.8839	00.4547	00.3736	-00.1041	-00.1032
03	15.59	-3.0	00.1262	03.9312	00.4652	00.7440	-00.1103	00.0487
04	15.59	-2.0	00.3850	03.9063	00.5102	00.6430	-00.1140	-00.0550
05	15.59	-1.0	00.3339	03.8075	00.5305	00.4812	-00.0511	-00.0495
06	15.59	-0.0	00.3387	03.8240	00.4347	00.3775	00.0238	00.0040
07	15.59	1.0	00.5720	03.8650	00.5687	00.1348	-00.0333	-00.1537
08	15.59	2.0	00.5334	03.7728	00.5441	00.0173	-00.0579	-00.0103
09	15.59	3.0	00.0575	04.0000	00.5241	00.0495	-00.0615	00.0753
10	15.59	4.0	00.7415	03.8388	00.5434	-00.1738	-00.0525	00.1204
11	15.59	-0.0	05.3024	03.6235	00.5069	00.1566	-00.0470	-00.0775

REPORT NO. LS47 167

PAGE NO. A-104

LVI LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 576.2 PSF
 TUNNEL VELOCITY 150.4 KNOTS
 BAROMETRIC PRESSURE 29.47 IN. HG
 TUNNEL TEMPERATURE 69.5 DEG F
 REYNOLDS NO./FT 1.4667 X 1,000,000

RUN 102
 #1 F1 W1
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CFA	CY	CRF	CY*
01	-00.47	0.0	02.4114	01.1404	00.3968	-00.1273	-00.0441	-00.0104
02	-04.56	0.0	01.5167	01.7647	00.4693	-00.2551	-00.0453	00.1563
03	-03.45	0.0	01.4313	00.9014	00.4205	-00.1840	-00.0327	00.0132
04	-02.41	0.0	01.7494	00.9026	00.4128	-00.1040	-00.0589	00.0177
05	-01.46	0.0	02.0584	01.0751	00.4001	-00.1556	-00.0390	00.0254
06	-00.40	0.0	02.3407	01.0486	00.3877	-00.1415	-00.0350	00.0315
07	00.55	0.0	02.5800	01.2819	00.4159	-00.1132	-00.0355	00.0444
08	01.50	0.0	02.3630	01.4449	00.4271	-00.0272	-00.0401	00.0204
09	02.45	0.0	02.2305	01.4805	00.4304	-00.0706	-00.0407	00.0335
10	03.50	0.0	03.4507	01.0421	00.4243	-00.0506	-00.0381	00.0511
11	05.55	0.0	03.9910	01.5075	00.4897	-00.0023	-00.0507	00.0161
12	07.45	0.0	04.3557	02.5218	00.5178	00.0799	-00.0514	00.0235
13	11.56	0.0	05.1466	02.9487	00.8118	00.1551	-00.0604	00.0516
14	15.55	0.0	06.2585	04.5083	00.6080	00.3102	-00.0492	00.0473
15	19.54	0.0	07.2515	04.5185	00.5505	00.4015	-00.0411	00.0134
16	-00.45	0.0	02.4117	01.1760	00.4033	-00.1121	-00.0445	00.0125

REPORT NO. LSWT 167
PAGE NO. A-105

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 156.7 KNOTS
BAROMETRIC PRESSURE 29.47 IN. HG
TUNNEL TEMPERATURE 098 DEG F
RENOIDS NO./FT 1.4600 X 1,000,000RUN 103
B1 F1 W1
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	03.57	0.0	03.5442	01.6137	00.4304	-00.0282	-00.0255	-00.0187
02	03.57	-4.0	03.6623	01.7778	00.4593	-00.4123	00.1252	00.1590
03	03.57	-3.0	03.5489	01.6890	00.4417	-00.3976	00.0917	00.0792
04	03.57	-2.0	03.5347	01.7147	00.4324	-00.2553	00.0653	00.0073
05	03.59	-1.0	03.5774	01.6313	00.4426	-00.1276	00.0182	-00.0333
06	03.59	-0.0	03.5018	01.7265	00.4172	-00.0423	00.0130	-00.0230
07	03.59	1.0	03.5306	01.6147	00.4349	-00.0567	-00.0068	00.0227
08	03.59	2.0	03.5639	01.7002	00.4455	00.0140	-00.0106	00.0088
09	03.59	3.0	03.5079	01.6718	00.4465	00.1412	00.0278	-00.0154
10	03.59	4.0	03.3698	01.7131	00.4627	00.2401	00.0537	-00.0127
11	03.59	-0.0	03.5301	01.7124	00.4236	-00.0707	-00.0067	-00.0339

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-106

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 156.8 KNOTS
 BAROMETRIC PRESSURE 29.47 IN. HG
 TUNNEL TEMPERATURE 099 DEG F
 RENOLDS NO./FT 1.4567 X 1,000,000

RUN 104
 B1 F1 W1
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.46	-0.0	04.2752	02.2573	00.4552	00.1437	-00.0002	-00.0170
02	07.46	-4.0	04.4382	02.4410	00.4687	-00.2302	-00.0447	00.2524
03	07.46	-3.0	04.3815	02.3530	00.4652	-00.1455	-00.0416	00.1086
04	07.46	-2.0	04.3106	02.2173	00.4363	-00.0040	-00.0412	-00.0881
05	07.46	-1.0	04.3205	02.2805	00.4517	00.1061	-00.0106	-00.0260
06	07.46	-0.0	04.3177	02.2573	00.4649	00.1295	-00.0429	-00.0625
07	07.46	1.0	04.2189	02.2969	00.4546	-00.0073	-00.0508	-00.0200
08	07.46	2.0	04.2690	02.2785	00.4547	-00.0169	-00.0504	00.0560
09	07.46	3.0	04.1964	02.3496	00.4613	-00.0962	-00.0453	00.0203
10	07.46	4.0	04.2633	02.3863	00.5223	-00.0195	-00.0275	-00.0368
11	07.46	-0.0	04.3319	02.3566	00.4759	00.1012	-00.0296	-00.0643

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-107

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 156.9 KNOTS
 BAROMETRIC PRESSURE 29.47 IN. HG
 TUNNEL TEMPERATURE 100 DEG F
 RENOLDS NO./FT 1.4533 X 1,000,000

RUN 105
 B1 F1 W1
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	11.60	-0.0	04.9760	02.8893	00.5503	00.2375	-00.0083	-00.0903
02	11.60	-4.0	05.2836	03.1144	00.5295	00.3388	-00.0568	00.1856
03	11.60	-3.0	04.9965	02.9994	00.5029	00.2659	-00.0425	00.0628
04	11.60	-2.0	05.0226	02.9166	00.4913	00.3340	-00.0721	00.0322
05	11.60	-1.0	04.8768	02.9248	00.5107	00.2721	-00.0205	00.0259
06	11.60	-0.0	04.9193	02.9885	00.5374	00.2658	00.0071	-00.0323
07	11.60	1.0	04.7921	02.8857	00.5255	-00.0078	-00.0076	-00.0764
08	11.60	2.0	04.8390	02.9375	00.5140	-00.0952	-00.0392	00.0090
09	11.60	3.0	04.8828	02.9359	00.5317	-00.1685	-00.0531	00.0107
10	11.60	4.0	04.8467	02.9178	00.5515	-00.3127	-00.0178	-00.0372
11	11.60	-0.0	04.8059	02.9318	00.5138	00.2091	-00.0143	-00.1155

~~UNCLASSIFIED~~

REPORT NO. LSWT 167

PAGE NO. A-108

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 156.9 KNOTS
 BAROMETRIC PRESSURE 29.47 IN. HG
 TUNNEL TEMPERATURE 100 DEG F
 RENOLDS NO./FT 1.4533 X 1,000,000

RUN 106
 B1 F1 W1
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	15.54	-0.0	06.1309	03.8945	00.5747	00.3169	-00.0340	-00.1337
02	15.58	-4.0	06.3469	04.1035	00.4820	00.7484	-00.0946	-00.2069
03	15.59	-3.0	06.2111	03.9693	00.5052	00.5795	-00.0580	-00.1988
04	15.59	-2.0	06.0196	04.0110	00.5073	00.5812	-00.0248	-00.1501
05	15.59	-1.0	06.0744	03.9005	00.5397	00.4070	00.0037	-00.1372
06	15.59	-0.0	05.9615	03.9077	00.5429	00.3178	-00.0196	-00.1247
07	15.59	1.0	05.9843	03.8520	00.5575	00.2147	-00.0438	-00.0923
08	15.63	2.0	05.9757	03.9035	00.5390	00.0833	-00.0769	-00.0809
09	15.63	3.0	06.0351	03.9431	00.5502	-00.0158	-00.0968	-00.0337
10	15.63	4.0	06.0149	03.8421	00.5293	-00.0867	-00.0577	00.0371
11	15.63	-0.0	05.9194	03.9220	00.5348	00.3185	-00.0291	-00.1479

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-109

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 156.9 KNOTS
BAROMETRIC PRESSURE 29.47 IN. HG
TUNNEL TEMPERATURE 100 DEG F
REYNOLDS NO./FT 1.4533 X 1,000,000

RUN 107
B1 F1 W1
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	-00.48	-0.0	02.2480	01.0838	00.3729	-00.1491	-00.0395	00.0178
02	-00.48	-4.0	02.6020	02.4655	00.4982	-00.7395	00.0047	00.1721
03	-00.48	-3.0	02.1498	01.2875	00.3959	-00.7562	-00.0337	00.0514
04	-00.48	-2.0	02.1919	01.1893	00.3950	-00.5777	-00.0445	-00.0131
05	-00.48	-1.0	02.1797	01.0781	00.3739	-00.3348	-00.0493	00.0237
06	-00.48	-0.0	02.2055	01.1264	00.3489	-00.1633	-00.0207	-00.0042
07	-00.48	1.0	02.2602	01.0327	00.3597	-00.0649	-00.0582	-00.0167
08	-00.48	2.0	02.2598	01.1462	00.3552	00.1043	-00.0441	-00.1488
09	-00.48	3.0	02.0764	01.1221	00.3424	00.2920	-00.0397	-00.0730
10	-00.48	4.0	01.9196	01.2242	00.3297	00.5505	-00.0390	-00.1050
11	-00.48	-0.0	02.2339	01.1122	00.3695	-00.1491	-00.0114	00.0178

UNCLASSIFIED

REPORT NO. LSWT 167

PANEL NO. A-110

LWT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 210.4 KNOTS
 BAROMETRIC PRESSURE 29.46 IN. HG
 TUNNEL TEMPERATURE 175 DEG F
 REYNOLDS NO./FT 1.9115 X 1,000,000

NO. 167
 BL 110
 PSI 0.150
 09/17/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CX	CYP
01	-00.46	-0.0	02.1927	01.1422	00.3402	-00.1029	-00.0126	-00.0724
02	-04.45	-0.0	01.0122	00.7835	00.3536	-00.1277	00.0020	00.0457
03	-03.47	-0.0	01.2665	00.5529	00.3511	-00.1358	-00.0115	00.0214
04	-02.45	-0.0	01.6140	00.9498	00.3600	-00.0800	00.0001	00.0510
05	-01.47	-0.0	01.9052	01.4253	00.3528	-00.1039	-00.0211	00.0254
06	-00.46	-0.0	02.2047	01.1241	00.3420	-00.0800	00.0019	00.0112
07	00.53	-0.0	02.4894	01.1808	00.3537	-00.0022	00.0026	00.0111
08	01.52	-0.0	02.7900	01.3525	00.3249	-00.0002	00.0119	00.0307
09	02.46	-0.0	03.0264	01.4849	00.3697	00.0477	-00.0123	00.0143
10	03.54	-0.0	03.2722	01.6523	00.3650	00.0551	-00.0040	-00.0200
11	05.55	-0.0	03.7969	01.9561	00.3955	00.1233	00.0040	-00.0200
12	07.46	-0.0	04.1293	02.2605	00.4129	00.1747	00.0023	-00.0337
13	11.53	-0.0	04.7381	02.8814	00.5258	00.3045	-00.0064	-00.0379
14	15.54	-0.0	06.0436	03.9433	00.5645	00.3688	-00.0128	-00.0706
15	19.53	-0.0	07.1596	04.9242	00.4306	00.5772	-00.0157	-00.0846
16	00.71	-0.0	02.5590	01.3547	00.3476	-00.0002	00.0002	-00.0034
17	00.71	-0.0	02.4312	01.2670	00.3537	00.0078	00.0103	00.0169
18	-00.47	-0.0	02.2040	01.1523	00.3541	-00.0083	00.0027	00.0420

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-111

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 211.7 KNOTS
BAROMETRIC PRESSURE 29.46 IN. HG
TUNNEL TEMPERATURE 113 DEG F
REYNOLDS NO./FT 1.8817 X 1,000,000RUN 109
B1 F1 W1
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	-00.47	-0.0	02.2086	01.1483	00.3350	-00.0242	00.0015	00.0430
02	-00.48	-4.0	02.0630	01.3551	00.4044	-01.3626	-00.2056	00.1955
03	-00.48	-3.0	02.1071	01.2428	00.3772	-00.5287	00.0030	00.1022
04	-00.48	-2.0	02.2139	01.1774	00.3813	-00.3079	-00.0117	00.0457
05	-00.48	-1.0	02.1805	01.2080	00.3528	-00.2376	-00.0025	00.0220
06	-00.48	-0.0	02.1765	01.1245	00.3409	-00.0242	-00.0117	00.0430
07	-00.48	1.0	02.2365	01.1522	00.3443	00.1468	-00.0105	-00.0399
08	-00.48	2.0	02.2047	01.1201	00.3353	00.2229	-00.0039	-00.1101
09	-00.48	3.0	02.1404	01.1265	00.3299	00.4071	00.0024	-00.0894
10	-00.48	4.0	02.0114	01.1191	00.3193	00.6397	00.0100	-00.0666
11	-00.48	-1.0	02.1965	01.1043	00.3434	-00.0941	-00.0239	00.0397
12	-00.48	-0.0	02.2482	01.1562	00.3495	-00.0245	-00.0011	00.0451

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-112

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 212.1 KNOTS
BAROMETRIC PRESSURE 29.46 IN. HG
TUNNEL TEMPERATURE 115 DEG F
RENOIDS NO./FT 1.8733 X 1,000,000

RUN 110
B1 F1 W1
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	03.55	-0.0	03.2963	01.6123	00.3466	00.1076	00.0070	00.0093
02	03.54	-4.0	03.3486	01.8437	00.4167	-00.8732	-00.0935	00.1826
03	03.54	-3.0	03.3567	01.7003	00.3969	-00.2194	00.0661	00.2575
04	03.54	-2.0	03.3727	01.6762	00.3834	-00.0280	00.0820	00.0424
05	03.54	-1.0	03.3170	01.7138	00.3580	00.0039	00.0476	00.0095
06	03.54	-0.0	03.2961	01.6364	00.3548	00.0438	00.0029	00.0134
07	03.54	1.0	03.2950	01.6103	00.3647	00.1635	00.0038	00.0459
08	03.54	2.0	03.3319	01.6664	00.3782	00.1157	00.0000	00.0268
09	03.54	3.0	03.1959	01.6266	00.3528	00.2513	00.0334	00.0455
10	03.54	4.0	03.1778	01.6686	00.3762	00.4028	00.0613	00.0577
11	03.54	-0.0	03.3360	01.6364	00.3561	00.0678	00.0059	00.0136
12	03.54	-1.0	03.3887	01.6744	00.3688	00.0199	00.0392	00.0140

PRELIMINARY DATA

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-113

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 209.6 KNOTS
BARGMETRIC PRESSURE 29.50 IN. HG
TUNNEL TEMPERATURE 102 DEG F
RENOlds NO./FT 1.9302 X 1,000,000

RUN 114
B1 F1 W1
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.44	-0.0	04.0574	02.3047	00.3944	00.2027	00.0008	-00.0414
02	07.44	-4.0	04.2115	02.5469	00.4577	-00.8282	-00.2719	00.2633
03	07.44	-3.0	04.0919	02.3639	00.4040	-00.0089	-00.0020	00.0544
04	07.44	-2.0	04.0681	02.2729	00.3882	00.2031	00.0010	-00.0844
05	07.44	-1.0	04.1017	02.3408	00.3959	00.2028	-00.0141	-00.0765
06	07.44	-0.0	04.1131	02.3125	00.4101	00.1387	-00.0234	-00.0326
07	07.44	1.0	04.0817	02.3201	00.4054	00.1313	-00.0141	00.0200
08	07.44	2.0	04.1389	02.3221	00.4138	00.1077	-00.0319	00.0450
09	07.44	3.0	04.1308	02.3143	00.4201	00.0791	-00.0092	00.0746
10	07.44	4.0	04.1244	02.3343	00.4467	00.1147	-00.0079	00.0394
11	07.44	-0.0	04.1131	02.2567	00.4005	00.2025	-00.0056	-00.0417
12	07.44	-1.0	04.1415	02.2531	00.4051	00.2028	-00.0324	-00.0577
13	07.44	-2.0	04.0841	02.2649	00.3916	00.1553	-00.0267	-00.0847

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-114

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 211.0 KNOTS
BAROMETRIC PRESSURE 29.50 IN. HG
TUNNEL TEMPERATURE 110 DEG F
RENCLOS NO./FT 1.8957 X 1,000,000

RUN 115
81 F1 W1
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	11.60	-0.0	04.8446	02.9291	00.5227	00.3220	-00.0088	-00.0520
02	11.45	-4.0	05.0917	03.1588	00.5333	-00.2524	-00.3078	00.3318
03	11.45	-3.0	04.9325	02.9962	00.5009	00.4152	-00.0113	00.1623
04	11.45	-2.0	04.8487	02.9520	00.4736	00.4621	-00.0346	00.0709
05	11.45	-1.0	04.8904	02.9365	00.5120	00.3386	-00.0089	00.0170
06	11.45	-0.0	04.8350	03.0097	00.5240	00.2956	-00.0197	-00.0411
07	11.45	1.0	04.7937	02.9015	00.5231	00.1693	00.0129	00.0013
08	11.45	2.0	04.7840	02.9432	00.5154	00.0521	-00.0185	00.0555
09	11.45	3.0	04.8053	02.8984	00.5195	-00.0790	-00.0014	00.0530
10	11.45	4.0	04.8822	02.9752	00.5602	-00.2102	-00.0092	00.0198
11	11.45	-0.0	04.7553	02.9140	00.5042	00.3275	-00.0050	-00.0312
12	11.45	3.0	04.7654	02.9143	00.5112	-00.1109	-00.0182	00.0670
13	11.45	3.0	04.7415	02.9382	00.5069	-00.1109	-00.0206	00.0383

UNCLASSIFIED

REPORT NO. D-115
A-115

TEST RUN 115 - 115 TO A-115

DYNAMIC PRESSURE 100.0 PSI
TUNNEL VELOCITY 211.4 KNOTS
BAROMETRIC PRESSURE 29.50 IN. HG
TUNNEL TEMPERATURE 112 DEG F
REYNOLDS NO./FT 1.0072 X 1,000,000

115-115
1-1-115
115-115
115-115-115
115-115-115

PT	ALPHA	PSI	CL	CU	CPH	CV	CC	YM
01	15.59	-0.0	06.0104	05.9077	00.0170	00.0919	-00.0047	-00.0000
02	15.63	-4.0	06.3010	04.2074	00.0105	-00.0130	-00.0142	00.0070
03	15.63	-5.0	06.1920	04.0043	00.0100	00.0141	-00.0041	-00.0002
04	15.63	-2.0	06.1575	05.4000	00.0040	00.0100	-00.0040	-00.0002
05	15.63	-1.0	06.1054	05.0209	00.0240	00.0100	-00.0000	-00.0000
06	15.63	-0.0	06.1005	05.0009	00.0140	00.0100	-00.0221	-00.0070
07	15.63	1.0	06.0274	05.9437	00.0374	00.0100	-00.0014	-00.0070
08	15.63	2.0	06.0000	05.9000	00.0100	00.0100	-00.0000	-00.0000
09	15.63	3.0	06.0702	05.8000	00.0100	00.0100	-00.0000	-00.0000
10	15.63	4.0	06.1011	05.7137	00.0114	00.0100	-00.0070	-00.0000
11	15.63	-0.0	06.1000	05.7000	00.0100	00.0100	-00.0127	-00.0000
12	15.63	-1.0	06.1454	05.9175	00.0100	00.0100	-00.0000	-00.0000
13	15.63	-3.0	06.0900	05.8072	00.0100	00.0100	-00.0000	-00.0000

UNCLASSIFIED

~~TOP SECRET~~ CLASSIFIEDREPORT NO. LS-7 1-7
PAGE NO. A-116

LVT LOW SPEED WIND TUNNEL TEST 1-7

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 114.7 KNOTS
BAROMETRIC PRESSURE 29.92 IN. HG
TUNNEL TEMPERATURE 69.4 DEG F
RENCLOS NO. 7 FT 0.9030 X 1.000,000NO. 1-7
OF FILE 1-7
KRI 0 010
09/13/ 4-1
X-110 2-1-7

PT	ALPHA	PSI	CL	CD	CFM	CY	CM	CY
01	-00.45	0.0	02.5981	02.5049	00.4530	-00.1454	-00.0514	00.0047
02	-04.44	0.0	01.0733	01.7561	00.3826	-00.2708	-00.0470	00.0087
03	-03.45	0.0	01.4860	02.1595	00.4046	-00.2071	-00.0471	00.1015
04	-02.45	0.0	01.0404	02.3587	00.3516	-00.2390	-00.0107	00.0011
05	-01.46	0.0	01.0752	02.3551	00.3833	-00.0797	-00.0101	00.0007
06	-00.47	0.0	02.1431	02.5007	00.3545	-00.1752	-00.0109	00.0000
07	00.50	0.0	02.5117	02.8857	00.3797	-00.0797	00.0205	00.0000
08	01.55	0.0	02.7445	02.9505	00.4217	-00.0071	00.0198	00.0000
09	02.46	0.0	02.5706	02.7373	00.4414	-00.0478	-00.0000	00.0000
10	03.55	0.0	03.1542	02.9645	00.4287	00.0159	-00.0420	00.0000
11	05.51	-0.0	03.5542	03.1929	00.4735	00.1552	00.0351	-00.0002
12	07.45	0.0	04.0502	03.0505	00.4790	00.0712	00.0127	00.0000
13	11.55	0.0	04.5525	03.0016	00.5672	00.1537	-00.0034	00.0000
14	15.55	-0.0	05.0790	03.2741	00.5554	00.3154	-00.0226	-00.0175
15	19.55	-0.0	05.0440	05.0007	00.4507	00.5816	-00.0400	-00.0110
16	-00.45	0.0	02.5027	02.4092	00.4501	-00.1434	00.0000	00.0014
17	03.57	-0.0	03.5559	03.0401	00.4069	00.0479	00.0429	-00.0720
18	-04.44	0.0	01.0733	02.5049	00.3826	-00.2708	-00.0470	00.0087
19	00.55	0.0	02.5485	02.7205	00.3445	-00.0475	-00.0117	00.0000
20	01.55	0.0	02.7445	02.8084	00.3513	-00.0478	-00.0421	00.0000
21	02.47	0.0	02.5207	02.6071	00.4005	-00.0115	-00.0222	00.0000
22	05.55	0.0	03.5559	03.5520	00.5520	00.0000	-00.0000	-00.0000
23	11.54	0.0	04.5729	04.3404	00.5506	00.0000	00.0000	00.0000

~~TOP SECRET~~ CLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167
 PAGE NO. A-117

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
 TUNNEL VELOCITY 103.8 KNOTS
 BAROMETRIC PRESSURE 29.52 IN. HG
 TUNNEL TEMPERATURE 092 DEG F
 RENOLDS NO./FT 0.9882 X 1,000,000

RUN 118
 B1 F1 W1 CA10
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	-00.47	0.0	02.1431	02.6006	00.3370	-00.0956	-00.0262	00.1496
02	-00.48	-4.0	02.0138	02.5445	00.4517	-00.8993	-00.0821	00.3314
03	-00.47	-3.0	02.1216	02.8704	00.4448	-00.7670	-00.0413	00.1287
04	-00.47	-2.0	02.2598	02.7409	00.4889	-00.6980	-00.0329	00.1708
05	-00.47	-1.0	02.1950	02.5806	00.4401	-00.3486	-00.0644	00.1613
06	-00.47	-0.0	02.1430	02.5048	00.3741	-00.2233	-00.0628	00.0879
07	-00.47	1.0	02.3144	02.6839	00.3812	-00.0046	-00.0303	-00.0226
	-00.47	2.0	02.1086	02.6204	00.3101	00.2778	-00.0385	-00.0564
8	-00.47	3.0	01.9399	02.3875	00.3204	00.3270	-00.0503	-00.1235
10	-00.47	4.0	01.9526	02.6026	00.4034	00.5040	-00.0429	-00.1220
11	-00.47	-0.0	02.1430	02.6641	00.3738	-00.0322	00.0107	00.0687
12	-00.47	-4.0	01.8540	02.8308	00.4247	-00.9953	-00.0421	00.3258
13	-00.47	3.0	01.9713	02.4193	00.3070	00.2954	-00.0401	-00.0454

UNCLASSIFIED

UNCLASSIFIEDREPORT NO. LSWT 167
PAGE NO. A-118

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 103.7 KNOTS
BAROMETRIC PRESSURE 29.52 IN. HG
TUNNEL TEMPERATURE 090 DEG F
RENOIDS NO./FT 0.9927 X 1,000,000RUN 119
B1 F1 W1 CA10
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.46	0.0	03.8195	03.6566	00.3394	00.2941	-00.0918	00.0761
02	07.46	-4.0	03.9893	03.8748	00.3936	-00.3063	-00.1126	00.2806
03	07.46	-3.0	03.9893	03.6909	00.4156	-00.2224	-00.0413	00.1598
04	07.46	-2.0	03.8937	03.4567	00.4068	-00.0094	-00.0516	00.0443
05	07.46	-1.0	03.8080	03.6366	00.3732	-00.1118	-00.0852	-00.0256
06	07.46	-0.0	03.7556	03.4327	00.3700	00.0389	-00.0458	00.0799
07	07.46	1.0	03.8198	03.6000	00.3797	-00.2073	-00.1241	00.0173
08	07.46	2.0	03.8132	03.7694	00.3900	-00.1676	-00.0773	00.0847
09	07.46	3.0	03.9248	03.7376	00.4202	-00.0130	-00.0993	-00.2025
10	07.46	4.0	03.7509	03.5901	00.4067	00.3008	-00.0390	-00.0762
11	07.46	-0.0	03.9150	03.4648	00.3761	00.3578	-00.0787	-00.0366
12	07.46	-1.0	03.9353	03.6045	00.4012	-00.0164	-00.1449	-00.0356
13	07.46	4.0	03.6553	03.5901	00.3954	-00.0497	-00.0796	-00.1563

UNCLASSIFIED

PRELIMINARY DATA

~~SECRET~~ ASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-119

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 103.7 KNOTS
BAROMETRIC PRESSURE 29.52 IN. HG
TUNNEL TEMPERATURE 090 DEG F
REYNOLDS NO./FT 0.9927 X 1,000,000

RUN 120
B1 F1 W1 CA10
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	15.58	-0.0	05.7907	05.1618	00.4510	00.4750	-00.1231	00.0724
02	15.57	-4.0	06.0413	05.2539	00.2856	00.8094	-00.0777	00.0727
03	15.56	-3.0	06.1715	05.4925	00.4195	00.7752	-00.0540	00.1087
04	15.55	-2.0	06.0011	05.3706	00.4253	00.4861	-00.0495	00.0400
05	15.53	-1.0	05.8855	05.3990	00.4696	00.4958	00.0038	-00.0401
06	15.53	-1.0	05.8218	05.3671	00.4851	00.4320	-00.0531	-00.0752
07	15.50	-0.0	05.7897	05.2581	00.4240	00.4418	-00.1253	-00.0401
08	15.50	1.0	05.7532	05.1631	00.4721	00.3556	-00.0717	-00.1676
09	15.48	2.0	05.7941	05.3352	00.4650	00.3002	-00.0905	-00.0861
10	15.48	3.0	05.8495	05.3380	00.4792	00.1718	-00.1448	-00.1173
11	15.48	4.0	05.7656	05.2437	00.4269	-00.0523	-00.0854	-00.1626
12	15.48	-4.0	06.0404	05.3179	00.3090	00.9009	-00.1038	00.0554
13	15.48	0.0	05.6938	05.1313	00.4376	00.4736	-00.0510	00.0416

UNCLASSIFIED

PROJECT NO. LWT 167

PAGE NO. A-120

LWT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 07.62 PSF
 TUNNEL VELOCITY 155.7 KNOTS
 BAROMETRIC PRESSURE 29.92 IN. HG
 TUNNEL TEMPERATURE 65.2 DEG F
 DENSITY NO./FT 1.4015 X 1,000,000

WIND 121
 T1 F1 11 0413
 0.11 0.11
 0.11 0.11
 0.11 0.11
 0.11 0.11

FT	ALPHA	PSI	CL	CD	CFM	CY	CMF	CYC
01	-00.48	0.0	02.1917	02.3274	00.3338	-00.1412	-00.0144	00.0244
02	-04.58	0.0	01.4954	02.9554	00.4283	-00.3213	-00.0225	00.0481
03	-05.40	0.0	01.3855	02.0779	00.3805	-00.0434	-00.0340	00.0029
04	-02.45	0.0	01.8595	02.2072	00.2697	-00.1037	-00.0215	00.0071
05	-01.44	0.0	01.7530	02.3507	00.3557	-00.1979	-00.0515	00.0014
06	-00.46	0.0	02.1519	02.3229	00.3454	-00.1695	-00.0195	00.0173
07	00.54	0.0	02.4892	02.8572	00.3656	-00.0958	-00.0145	00.0155
08	01.54	0.0	02.7297	02.7201	00.3715	-00.1415	-00.0245	00.0223
09	02.45	0.0	02.9127	02.0252	00.4044	-00.0424	-00.0245	00.0142
10	03.57	0.0	03.1667	03.1025	00.4278	-00.0707	-00.0155	00.0257
11	05.52	0.0	03.5449	03.3950	00.4234	-00.0876	-00.0303	00.0739
12	07.44	0.0	03.9510	03.8405	00.4208	00.1271	-00.0570	00.0747
13	11.55	0.0	04.0704	04.1601	00.4797	00.3849	-00.0454	00.1421
14	15.57	0.0	06.0591	05.1704	00.5255	00.2590	-00.0473	00.1561
15	19.55	0.0	00.3983	04.1516	00.3480	00.4603	-00.0530	00.1352
16	-00.46	0.0	02.1519	02.4237	00.3643	-00.1554	-00.0093	00.0774
17	-00.46	0.0	02.1519	2.5513	00.3575	-00.1979	-00.0186	00.0160

REPORT NO. LSWT 167
PAGE NO. A-121

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 155.7 KNOTS
BAROMETRIC PRESSURE 29.52 IN. HG
TUNNEL TEMPERATURE 092 DEG F
RENOIDS NO./FT 1.4815 X 1,000,000

RUN 122
81 F1 W1 CA10
PHI 0 DEG
09/03/64-1
WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	-00.45	0.0	02.1921	02.5370	00.3809	-00.1483	-00.0751	00.1119
02	-00.45	-4.0	02.1752	02.6717	00.4154	-00.9359	-00.0336	00.2589
03	-00.45	-3.0	02.1073	02.6270	00.4026	-00.6570	-00.0322	00.1848
04	-00.45	-2.0	02.2349	02.6708	00.4165	-00.5065	-00.0374	00.0616
05	-00.45	-1.0	02.3638	02.6013	00.4183	-00.3209	-00.0508	00.0436
06	-00.45	0.0	02.2910	02.4941	00.3825	-00.0496	-00.0210	00.0836
07	-00.45	1.0	02.2462	02.5139	00.3538	-00.0366	-00.0324	-00.0136
	-00.45	2.0	02.2882	02.4999	00.3360	00.1752	-00.0234	-00.1169
08	00.45	3.0	02.2465	02.5183	00.3370	00.3913	-00.0254	-00.1318
10	-00.45	4.0	01.9763	02.5070	00.3265	00.5363	-00.0327	-00.1252
11	-00.45	-0.0	02.2909	02.4230	00.3662	-00.1066	-00.0185	00.0605

UNCLASSIFIED

UNCLASSIFIED

 REPORT NO. LSNT 167
 PAGE NO. A-122

LWT LOW SPEED WIND TUNNEL TEST 167

 DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 156.1 KNOTS
 BAROMETRIC PRESSURE 29.92 IN. HG
 TUNNEL TEMPERATURE 69.5 DEG F
 RENCLOS NO./FT 1.4713 X 1,000,000

 ROR 123
 FI FI FI CA10
 PHI 0.010
 09/15/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CMX	CY	CMX	CY
01	07.45	-0.0	04.0485	03.5627	00.3610	00.3087	-00.0592	-00.0102
02	07.45	-4.0	04.1971	03.8366	00.4108	-00.3135	-00.0575	00.3138
03	07.45	-3.0	04.1830	03.2533	00.3923	-00.2506	-00.0822	00.1829
04	07.45	-3.0	04.1404	03.5368	00.4151	-00.2506	-00.0543	00.1558
05	07.45	-2.0	04.1405	03.3302	00.4144	-00.1552	-00.0547	-00.0485
06	07.45	-2.0	04.1121	03.4062	00.3905	-00.0553	-00.0578	-00.0907
07	07.45	-1.0	04.0794	03.4072	00.3903	-00.0450	-00.0504	-00.0515
08	07.45	-0.0	04.0409	03.4834	00.4193	-00.1185	-00.0520	-00.0746
09	07.45	1.0	03.9038	02.5514	00.3956	-00.0286	-00.0587	-00.0524
10	07.45	2.0	03.9055	03.0323	00.3720	-00.0242	-00.0651	00.1145
11	07.45	3.0	04.0122	03.7175	00.4156	00.0526	-00.0550	00.0542
12	07.45	4.0	03.8948	03.6451	00.4414	00.0727	-00.0352	-00.0915
13	07.45	-1.0	04.0653	03.5707	00.4046	00.0281	-00.0539	00.0562
14	07.45	-2.0	04.0633	03.3302	00.3874	-00.0586	-00.0325	00.0069
15	07.45	-3.0	04.1972	03.4941	00.4054	-00.1264	-00.0375	00.0807
16	07.45	-4.0	04.3246	03.4970	00.4302	-00.1806	-00.0351	00.2915
17	07.45	-1.5	04.0936	03.3040	00.3722	-00.0005	-00.0347	-00.0520
18	07.45	0.0	03.9442	03.3419	00.4013	00.0502	-00.0304	00.0320

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-123

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 156.2 KNOTS
 BAROMETRIC PRESSURE 29.52 IN. HG
 TUNNEL TEMPERATURE 096 DEG F
 RENOIDS NO./FT 1.4679 X 1,000,000

RUN 124
 B1 F1 W1 CA10
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	15.54	-0.0	05.9750	05.1778	00.4554	00.2886	-00.0596	-00.0905
02	15.54	-4.0	06.2334	05.3014	00.3500	00.7330	-00.0810	-00.1081
03	15.54	-3.0	06.0698	05.2962	00.3752	00.6356	-00.0920	-00.2262
04	15.54	-2.0	05.8352	05.1380	00.4253	00.3674	-00.0466	-00.0579
05	15.54	-1.0	05.9748	05.1130	00.4398	00.3210	-00.0469	-00.0500
06	15.54	-0.0	05.8474	05.1773	00.4573	00.2885	-00.0382	-00.0721
07	15.54	1.0	05.9134	05.1353	00.4867	00.2133	-00.0917	-00.1321
08	15.54	2.0	05.8764	05.1865	00.4618	00.2090	-00.0940	-00.1151
09	15.54	3.0	05.9925	05.0844	00.4909	00.2089	-00.1268	-00.1412
10	15.54	4.0	05.9441	05.1693	00.4797	00.0954	-00.1080	-00.1109
11	15.54	-4.0	06.2050	05.4148	00.3601	00.7472	-00.0899	-00.0880
12	15.54	-3.0	06.1406	05.3388	00.4077	00.6639	-00.1128	-00.1125
13	15.54	-2.0	05.9913	05.2521	00.4577	00.3819	-00.0635	-00.0319
14	15.54	-1.0	05.9891	05.1845	00.4475	00.3211	-00.0565	-00.0265
15	15.54	3.0	05.8508	05.1270	00.4667	00.2089	-00.1157	-00.1548
16	15.54	-0.0	05.8899	05.2482	00.4664	00.2602	-00.0446	-00.0221

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-124

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 209.1 KNOTS
 BAROMETRIC PRESSURE 29.52 IN. HG
 TUNNEL TEMPERATURE 100 DEG F
 RENOLDS NO./FT 1.9397 X 1,000,000

RUN 125
 B1 F1 W1 CA10
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	-00.48	-0.0	02.3360	02.4757	00.3329	-00.1797	-00.0299	00.0361
02	-00.48	-4.0	02.1272	02.7863	00.4719	-01.3742	-00.1993	00.2964
03	-00.48	-3.0	02.0920	02.6426	00.4213	-00.7073	-00.0182	00.1362
04	-00.48	-2.0	02.2068	02.5769	00.4034	-00.3908	-00.0171	00.0836
05	-00.48	-1.0	02.3001	02.3997	00.3886	-00.3771	-00.0229	00.0509
06	-00.48	-0.0	02.2323	02.5315	00.3854	-00.2036	-00.0167	00.0648
07	-00.48	1.0	02.3641	02.5432	00.3605	00.0631	-00.0241	00.0017
08	-00.48	2.0	02.2859	02.4716	00.3273	00.2896	-00.0175	-00.1193
09	-00.48	3.0	02.2919	02.5414	00.3515	00.3314	-00.0071	-00.1425
10	-00.48	4.0	02.1218	02.4937	00.3211	00.6518	00.0055	-00.1625
11	-00.48	4.0	02.0899	02.4778	00.3481	00.6677	00.0113	-00.1696
12	-00.48	2.0	02.3097	02.4556	00.3276	00.3536	-00.0232	-00.1867
13	-00.48	1.0	02.3481	02.5033	00.3569	00.1189	-00.0294	-00.0700
14	-00.48	-1.0	02.2926	02.4082	00.3473	-00.3047	-00.0312	00.0713
15	-00.48	0.0	02.3441	02.4918	00.3466	-00.0996	-00.0051	00.0630
16	-00.48	3.0	02.2759	02.4457	00.3296	00.4510	00.0007	-00.1504

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSAT 167
PAGE NO. A-125

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 207.7 KNOTS
BAROMETRIC PRESSURE 29.55 IN. HG
TUNNEL TEMPERATURE 69.3 DEG F
REAR LEG NO./FI 1.9720 X 1,000,000

NO. 125
SI FI 41 3410
PHI 0.180
09/01/64-1
VINC AXES

PT	ALPHA	PSI	CL	CU	CPM	CY	CX	CYM
01	-00.45	0.0	02.2444	02.3280	00.3155	-00.1592	-00.0209	00.0443
02	-04.44	0.0	01.1351	02.0110	00.2639	-00.2389	-00.0116	00.0730
03	-12.44	0.0	01.6740	02.1755	00.3550	-00.1831	-00.0115	00.0373
04	-01.46	0.0	02.0091	02.3487	00.3380	-00.1352	00.0017	00.0488
05	-00.45	0.0	02.3246	02.4550	00.3580	-00.1195	-00.0104	00.0424
06	00.57	0.0	02.5141	02.7032	00.3696	-00.1114	-00.0135	00.0439
07	01.52	0.0	02.7902	02.8077	00.3752	-00.0477	-00.0189	00.0470
08	03.57	0.0	03.2408	03.1431	00.4124	-00.0477	-00.0219	00.0418
09	05.56	0.0	03.5815	03.4391	00.4071	00.0199	-00.0393	00.0108
10	07.45	0.0	04.1053	03.6041	00.4402	00.2043	-00.0137	-00.0707
11	11.55	0.0	04.7126	04.0695	00.4977	00.2250	-00.0162	-00.0510
12	15.55	0.0	05.9182	05.1394	00.4820	00.2756	-00.0125	-00.0570
13	19.55	0.0	06.3209	05.1670	00.3065	00.5000	-00.0328	-00.1090
14	-00.45	0.0	02.4087	02.3282	00.4300	-00.1044	-00.0078	00.0503

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-126

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 210.3 KNOTS
 BAROMETRIC PRESSURE 29.55 IN. HG
 TUNNEL TEMPERATURE 107 DEG F
 RENOLDS NO./FT 1.9101 X 1,000,000

RUN 127
 B1 F1 W1 CA10
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.45	0.0	04.1532	03.5127	00.4369	00.1467	-00.0275	00.0042
02	07.45	-4.0	04.2434	03.5951	00.4595	-00.9643	-00.3008	00.4297
03	07.45	-3.0	04.1478	03.4597	00.4154	-00.2572	-00.0286	00.0861
04	07.45	-2.0	04.0840	03.3926	00.4070	00.0753	00.0382	00.0539
05	07.45	-1.0	04.0938	03.4367	00.4191	-00.0922	-00.0402	-00.0139
06	07.46	-0.0	04.0974	03.5040	00.4212	00.1069	-00.0309	-00.0426
07	07.46	1.0	04.0181	03.5277	00.4087	00.1711	-00.0166	00.0075
08	07.46	2.0	03.9953	03.7132	00.4234	00.0987	-00.0460	-00.0269
09	07.46	3.0	03.9558	03.7451	00.4337	00.2382	-00.0355	-00.0541
10	07.46	4.0	03.9651	03.7171	00.4630	00.2493	-00.0242	-00.1244
11	07.46	3.0	04.0195	03.7849	00.4495	00.2461	-00.0281	-00.0835
12	07.46	2.0	04.1071	03.6892	00.4452	00.1791	-00.0205	-00.0172
13	07.46	1.0	04.0181	03.5990	00.4107	00.2830	00.0054	-00.0199
14	07.46	-0.0	04.1372	03.4801	00.4296	00.1388	-00.0168	-00.0274
15	07.46	-1.0	04.1337	03.4446	00.4102	00.1470	00.0172	-00.0304
16	07.46	-2.0	04.1717	03.3446	00.4073	00.1629	00.0202	-00.0523
17	07.46	-3.0	04.2515	03.4992	00.4378	-00.2663	-00.1438	00.1773
18	07.46	-4.0	07.9661	01.2726	07.4978	05.4729	-06.3423	01.6405

UNCLASSIFIED

REPORT NO. LSVT 127

PAGE NO. A-127

LVT LOW SPEED WIND TUNNEL TEST 127

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 211.2 KNOTS
 BAROMETRIC PRESSURE 29.57 IN. HG
 TUNNEL TEMPERATURE 112 DEG F
 REFRIGS NO./FT 1.85:4 X 1,000,000

RJM 125
 11 F1 W1 CALO
 PHIL DEC
 09/10/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CFM	CY	CFR	CYM
01	15.50	-0.0	05.9256	05.1751	00.4737	00.3584	-00.0118	-00.0455
02	15.50	-4.0	06.2804	05.3060	00.4164	-00.1446	-00.4085	00.0962
03	15.50	-3.0	06.1310	05.2252	00.4254	00.5321	-00.0751	-00.0432
04	15.52	-2.0	06.0010	05.2428	00.4155	00.5049	-00.0150	-00.0135
05	15.52	-1.0	05.9258	05.2132	00.4562	00.4002	-00.0017	-00.0500
06	15.52	-0.0	06.0214	05.1671	00.4707	00.5227	00.0110	-00.0252
07	15.52	1.0	05.9529	05.1517	00.4727	00.4149	-00.0097	-00.0521
08	15.52	2.0	06.0019	05.1481	00.4757	00.4053	-00.0380	-00.1160
09	15.52	3.0	05.9855	05.0550	00.4600	00.3253	-00.0584	-00.0384
10	15.52	4.0	05.9457	05.0557	00.4585	00.2352	-00.0076	-00.0097
11	15.52	3.0	05.9407	05.2009	00.4600	00.3452	-00.0458	-00.0437
12	15.52	-0.0	05.9475	05.2009	00.4700	00.3506	00.0225	00.0279

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-128

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 157.4 KNOTS
 BAROMETRIC PRESSURE 29.57 IN. HG
 TUNNEL TEMPERATURE 105 DEG F
 RENOIDS NO./FT 1.4394 X 1,000,000

RUN 129
 B1 F1 W1
 PHI 0 DEG
 09/03/64-1
 WIND AXES

PT	ALPHA	PSI	CL	CD	CPM	CY	CRM	CYM
01	07.41	-0.0	04.1753	02.2790	00.4280	00.2001	-00.0572	-00.0344
02	07.41	-4.0	04.2395	02.4195	00.4035	-00.2425	-00.0727	00.1948
03	07.41	-3.0	04.1119	02.2464	00.4047	-00.1731	-00.0467	00.0449
04	07.41	-2.0	04.0977	02.2957	00.3896	00.0530	00.0092	-00.0921
05	07.41	-1.0	04.0222	02.2310	00.3861	00.1906	-00.0013	-00.0889
06	07.41	-0.0	04.0762	02.2650	00.4189	00.1578	00.0000	-00.0720
07	07.41	1.0	04.0059	02.2759	00.4050	00.0494	-00.0365	-00.0420
08	07.41	2.0	04.0420	02.2149	00.4099	-00.0449	-00.0517	00.0235
09	07.42	3.0	04.0540	02.2292	00.4201	00.0037	-00.0379	-00.0166
10	07.43	4.0	04.0499	02.2658	00.4555	00.0380	-00.0195	-00.0182
11	07.44	-3.0	04.1971	02.2895	00.4070	-00.1156	-00.0778	00.0794
12	07.46	-0.0	04.0909	02.1510	00.4004	00.1295	-00.0452	-00.0601

UNCLASSIFIED

Listed on pages A-128 through A-217 are the body axes coefficient Data referenced to the C.G.

UNCLASSIFIED

REPORT NO. 1547 167

PAGE NO. A-130

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
 TUNNEL VELOCITY 104.1 KNOTS
 BAROMETRIC PRESSURE 29.48 IN. HG
 TUNNEL TEMPERATURE 094 DEG F
 RHO DENS NO./FT 0.9829 X 1,000,000

FOR C39
 11 11 11 0.15
 PSI 0.150
 0.001/64-1
 0.001/64-1

PT	ALPHA	PSI	CA	CB	CPA	CPY	CPX	CPY
01	-00.47	0.0	02.1710	02.4273	00.3906	-00.0797	-00.0147	00.0005
02	-04.44	0.0	01.0433	01.8763	00.4024	-00.2708	-00.0419	00.0114
03	-02.44	0.0	01.4762	02.0208	00.3590	-00.0797	00.0210	-00.0120
04	-01.47	0.0	01.8354	02.2149	00.3733	-00.1434	-00.0124	00.0000
05	-00.47	0.0	02.1080	02.2675	00.3850	-00.0797	00.0110	00.0017
06	00.51	0.0	02.4170	02.4441	00.3913	-00.1170	00.0575	00.0100
07	01.52	0.0	02.7985	02.6075	00.4235	00.0478	-00.0040	-00.0110
08	03.57	0.0	03.2520	02.7551	00.4175	00.0470	00.0132	00.0721
09	05.50	0.0	03.7430	02.8754	00.4429	-00.0194	-00.0007	-00.0174
10	07.40	0.0	04.3520	03.0051	00.4755	00.0075	00.0000	00.0100
11	11.50	0.0	05.3149	03.2211	00.5003	-00.0170	-00.0140	-00.0100
12	15.50	0.0	07.1015	03.3770	00.5229	-00.0204	00.0000	00.0101
13	19.47	-0.0	08.0037	03.4094	00.5213	00.0110	00.0000	00.0110
14	-00.40	0.0	02.1400	02.1747	0.3823	-00.1110	-00.0140	00.0104

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSNT 167
PAGE NO. A-131

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 035.9 PSF
TUNNEL VELOCITY 104.5 KNOTS
BAROMETRIC PRESSURE 29.48 IN. HG
TUNNEL TEMPERATURE 096 DEG F
REYNOLDS NO./FT 0.9784 X 1,000,000

BOX 040
SI FI FI 0410
PHI 1 146
09/13/64-1
X COPY 2XPS

PT	ALPHA	PCI	CA	CA	CPM	CY	CM	SYM
01	-00.46	0.0	02.0755	02.4298	00.3879	-00.0159	00.0150	-00.0072
02	-00.45	-4.0	01.9132	02.0194	00.4370	-01.0672	-00.1117	00.2075
03	-00.40	-2.0	01.0736	02.0767	00.3858	-00.0200	00.0000	00.0100
04	-00.45	-1.0	02.1292	02.3048	00.4090	-00.3400	00.0120	-00.0077
05	-00.45	-0.0	02.2028	02.5036	00.3810	-00.0400	00.0420	-00.0000
06	-00.45	1.0	01.4535	02.3470	00.3757	00.1153	-00.1102	-00.1200
07	-00.45	2.0	02.1374	02.4033	00.4053	00.4097	00.0071	-00.0040
08	-00.45	4.0	01.9512	02.2215	00.4305	00.7390	00.0274	-00.2700
09	-00.45	0.0	02.1420	02.2354	00.3500	-00.1102	-00.0422	00.0140

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-132

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 103.5 KNOTS
BAROMETRIC PRESSURE 29.50 IN. HG
TUNNEL TEMPERATURE 088 DEG F
REYNOLDS NO./FT 0.9970 X 1,000,000

RUN 041
B1 F1 W1 CA16
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.46	0.0	04.5026	03.3712	00.4214	-00.0557	-00.0842	-00.0631
02	07.46	-4.0	04.5597	03.2360	00.4248	-00.5083	-00.1754	00.2701
03	07.46	-2.0	04.5712	03.3239	00.4492	00.0120	-00.0685	00.0540
04	07.46	-1.0	04.5413	03.0194	00.4341	-00.3330	-00.1260	00.1391
05	07.46	0.0	04.1851	03.1553	00.3791	00.0394	-00.0427	00.0917
06	07.46	1.0	04.5416	03.1763	00.4319	00.2715	-00.0983	00.0211
07	07.46	2.0	04.5428	02.9913	00.4315	00.2428	-00.1133	-00.1361
08	07.46	4.0	04.4143	03.2255	00.5343	00.5007	-00.0392	-00.1625
09	07.46	0.0	04.6232	03.0658	00.4275	00.0713	-00.0895	00.0503

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-133

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 103.7 KNOTS
BAROMETRIC PRESSURE 29.50 IN. HG
TUNNEL TEMPERATURE 090 DEG F
REYNOLDS NO./FT 0.9924 X 1,000,000

RUN 042
B1 F1 W1 CA16
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	15.57	-0.0	07.1003	03.3143	00.4249	00.2838	-00.1245	-00.1949
02	15.54	-4.0	07.1957	03.5646	00.3297	00.4377	-00.1122	-00.1362
03	15.52	-2.0	06.9994	03.6128	00.4558	00.2987	-00.0749	00.0172
04	15.50	-1.0	07.2802	03.3934	00.5276	00.4034	-00.0458	00.0290
05	15.47	-0.0	07.0062	03.2526	00.4817	00.2811	00.0290	-00.0977
06	15.47	1.0	07.0428	03.4019	00.4806	00.4118	-00.0404	-00.2195
08	15.47	4.0	06.9088	03.3481	00.4643	00.3961	-00.0524	-00.0271
07	15.47	2.0	07.1560	03.6557	00.4808	00.0731	-00.0495	-00.1158
09	15.47	4.0	07.1644	03.5550	00.4896	00.2232	-00.0016	-00.1406
10	15.47	0.0	06.8560	03.4268	00.4371	00.5698	-00.0741	-00.1360

UNCLASSIFIED

REPORT NO. 15-1 1-7
PAGE NO. A-134

LWT LOW SPEED WIND TUNNEL TEST 1-7

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 150.3 KNOTS
BAROMETRIC PRESSURE 29.50 IN. HG
TUNNEL TEMPERATURE 350.160 F
REYNOLDS NO./FT 1.4074 X 1,000,000

REF 240
SI PL 51 031-
PHI 0 00
05/12/04-1
43510Y 4X4382

PT	ALPHA	PSI	Cx	Cy	CX	CY	CX	CY
01	-00.51	0.0	02.0082	02.0081	00.0078	-00.1086	-00.1407	00.0470
02	-04.40	0.0	01.1243	02.1409	00.0758	-00.1701	-00.0048	00.0220
03	-02.47	0.0	01.0948	02.3135	00.0004	-00.1340	-00.0200	00.0700
04	-01.40	0.0	02.0100	02.3570	00.0716	-00.1190	-00.0477	00.0340
05	-00.45	0.0	02.0700	02.5342	00.0889	-00.1100	-00.0487	00.0030
06	-03.11	0.0	01.0025	02.1540	00.0535	-00.1007	-00.0365	00.0000
07	00.55	0.0	02.7400	02.0659	00.4102	-00.0770	-00.0304	00.0000
08	01.50	0.0	02.9444	02.7044	00.4073	-00.0400	-00.0400	00.0110
09	02.40	0.0	03.2200	02.0545	00.4055	-00.0000	-00.0000	00.0070
10	03.57	0.0	03.4971	02.0907	00.4487	-00.0773	-00.0207	-00.0000
11	05.00	0.0	04.0000	01.9070	00.4472	-00.0312	-00.0041	00.0071
12	07.44	0.0	04.5971	00.0000	00.4538	-00.0000	-00.0140	00.0000
13	11.40	0.0	00.5274	00.2526	00.5091	-00.0040	-00.0172	00.0710
14	15.02	0.0	07.0704	00.4300	00.5270	00.4000	-00.0100	00.0000
15	17.00	0.0	00.7000	00.5000	00.4000	00.5000	-00.0000	00.0000
16	-00.45	0.0	02.0000	02.0000	00.7000	-00.0000	-00.0000	00.7000

PRELIMINARY DATA

UNCLASSIFIED

REPORT NO. 1-7-1
PAGE NO. A-135

CUT LOW SPEED WIND TUNNEL TEST 157

DYNAMIC PRESSURE 0.752 PS
TUNNEL VELOCITY 10.4 KNOTS
BAROMETRIC PRESSURE 29.90 IN. HG
TUNNEL TEMPERATURE 197 DEG F
REGRIDS NO./FT 1.4041 X 1,000,000

1-1-1-1-1
1-1-1-1-1
1-1-1-1-1
1-1-1-1-1

PT	ALPHA	PSI	CX	CA	CPX	CY	CPY	CZ
01	-00.44	0.0	02.4037	0.47202	00.4012	-0.40484	-00.0180	-00.0157
02	-00.43	-4.0	02.1550	0.40451	00.4004	-0.40173	-00.0003	00.1477
03	-00.43	-2.0	02.4043	0.4701	00.4030	-0.40124	-0.4012	0.4045
04	-00.43	-1.0	02.4004	0.47470	00.4111	-0.40217	-0.40277	00.0077
05	-00.43	-0.0	02.3910	0.4700	00.4000	-0.40004	-0.4000	00.1010
06	-00.43	1.0	02.4040	0.4700	00.4000	00.1400	-00.0000	-0.0000
07	-00.43	2.0	02.4010	0.4700	00.4000	0.3010	-0.4000	-00.2100
08	-00.43	3.0	02.4020	0.4700	00.4000	00.4400	-00.0240	-00.2000
09	-00.43	4.0	02.4030	0.4700	00.4000	00.4500	-00.0100	-00.2100
10	-00.43	0.0	02.4000	0.4700	00.4000	-00.0070	-00.0070	00.1000

UNCLASSIFIED

~~UNCLASSIFIED~~REPORT NO. LSWT 167
PAGE NO. A-136

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 156.6 KNOTS
BAROMETRIC PRESSURE 29.50 IN. HG
TUNNEL TEMPERATURE 098 DEG F
RENOIDS NO./FT 1.4607 X 1,000,000RUN 045
B1 F1 W1 CA16
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.51	0.0	04.4804	03.1164	00.4012	-00.0255	-00.0607	-00.0496
02	07.51	-4.0	04.6903	03.2483	00.4377	-00.4877	-00.1432	00.2280
03	07.52	-3.0	04.5960	03.1778	00.4415	-00.4447	-00.0757	00.1324
04	07.52	-2.0	04.6295	03.1069	00.4509	-00.2174	-00.0423	-00.0087
05	07.52	-1.0	04.5431	03.0267	00.4473	-00.1846	-00.0311	00.0343
06	07.52	-0.0	04.4755	03.0729	00.4279	-00.0116	00.0073	-00.0757
07	07.52	1.0	04.4521	03.1117	00.4158	00.2687	-00.0462	-00.0002
08	07.52	2.0	04.4863	03.0978	00.4193	00.3366	-00.0478	-00.0282
09	07.52	3.0	04.3473	03.1365	00.4244	00.4356	-00.0559	-00.0822
10	07.52	4.0	04.4690	03.2182	00.5008	00.5408	-00.0014	-00.1268
11	07.52	-0.0	04.4911	03.0848	00.4127	00.1284	-00.0343	00.0408

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-137

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 156.6 KNOTS
 BAROMETRIC PRESSURE 29.50 IN. HG
 TUNNEL TEMPERATURE 098 DEG F
 RENOLDS NO./FT 1.4607 X 1,000,000

RUN 046
 B1 F1 W1 CA16
 PHI 0 DEG
 09/03/64-1
 BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	15.55	-0.0	07.3407	03.4045	00.4959	00.4640	-00.0139	-00.0771
02	15.55	-4.0	07.4348	03.4132	00.3427	00.3457	-00.1080	-00.1569
03	15.54	-3.0	07.4094	03.4087	00.4079	00.4381	-00.0938	-00.0867
04	15.54	-2.0	07.3152	03.3618	00.4412	00.4062	-00.0343	-00.1456
05	15.54	-1.0	07.1161	03.3948	00.4342	00.3371	-00.0051	-00.1358
06	15.54	-0.0	07.1656	03.3083	00.4488	00.5650	-00.0027	-00.0698
07	15.54	1.0	07.1994	03.2905	00.4964	00.4948	-00.0168	-00.0973
08	15.54	2.0	07.2000	03.4816	00.4497	00.1718	-00.0376	-00.1314
09	15.54	3.0	07.1459	03.3836	00.4387	00.3162	-00.0387	-00.0671
10	15.54	4.0	07.1476	03.4651	00.4307	00.3838	-00.0488	-00.0227
11	15.54	0.0	07.2642	03.3985	00.4787	00.4385	-00.0002	-00.0837

UNCLASSIFIED

REPORT TO. LOWT 147
PAGE NO. A-138

LVT LOW SPEED WIND TUNNEL TEST 147

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 209.9 KNOTS
BAROMETRIC PRESSURE 29.50 IN. HG
TUNNEL TEMPERATURE 104 DEG F
REYNOLDS NO./FT 1.9215 X 1,000,000

UCA 047
PI F1 #1 C#16
PHI 0 DEG
09/05/64-1
+4 BODY AXES +

PT	ALPHA	PSI	CL	CA	CPH	CY	CM	CYM
01	-00.47	0.0	02.2324	02.4704	00.3150	00.0206	00.0083	00.0561
02	-04.44	0.0	00.3886	02.0338	00.3343	-00.0512	00.0075	00.0845
03	-03.45	0.0	01.2765	02.1312	00.3301	-00.0592	00.0131	00.0725
04	-02.43	0.0	01.6005	02.2432	00.3314	-00.0432	00.0020	00.0533
05	-01.47	0.0	01.9494	02.3479	00.3415	-00.0511	00.0027	00.0442
06	-00.45	0.0	02.2855	02.4856	00.3462	-00.0552	00.0111	00.0069
07	00.56	0.0	02.5397	02.6267	00.3720	00.0704	00.0078	00.0450
08	01.54	0.0	02.8156	02.6852	00.3877	00.0445	00.0038	00.0638
09	02.48	0.0	03.0604	02.7465	00.4017	00.0843	-00.0054	00.0222
10	03.55	0.0	03.3060	02.8842	00.3890	00.1002	00.0082	00.0193
11	05.53	0.0	03.5163	03.0519	00.4034	00.0004	00.0111	-00.0059
12	07.45	0.0	04.5790	03.1057	00.3997	00.0039	00.0018	00.0372
13	11.56	0.0	05.4559	03.2573	00.4723	00.1347	00.0320	00.0519
14	15.58	0.0	07.1548	03.4322	00.4690	00.5043	00.0257	-00.0195
15	19.55	0.0	08.5604	03.5307	00.2778	00.6626	00.0279	-00.1006
16	-00.46	0.0	02.3640	02.4944	00.3342	00.0047	00.0031	00.0577

UNCLASSIFIED

REPORT NO. LS-1 167

PAGE NO. A-139

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 211.4 KNOTS
 BAROMETRIC PRESSURE 29.50 IN. HG
 TUNNEL TEMPERATURE 112 DEG F
 RENDLOS NO./FT 1.8872 X 1,000,000

SLA 04-
 21 FL WL 0114
 PHI 0 DEG
 04/03/64-1
 CLLY AXIS

PT	ALPHA, °	PSI	CA	CA	CPM	CY	CM*	CYA
01	-00.45	0.0	02.7655	02.4657	00.3205	-00.0197	00.0084	00.0054
02	-00.45	-4.0	02.0601	02.7020	00.4528	-01.1413	-00.1132	00.2217
03	-00.45	-3.0	02.1226	02.5908	00.4170	-00.7095	-00.0107	00.1521
04	-00.45	-2.0	02.1670	02.4647	00.3721	-00.4534	-00.0077	00.0510
05	-00.45	-1.0	02.2450	02.4609	00.3591	-00.2451	-00.0147	00.0849
06	-00.45	0.0	02.2653	02.4690	00.3537	-00.0033	-00.0051	00.0049
07	-00.45	1.0	02.3088	02.4972	00.3307	00.2647	00.0007	-00.0908
08	-00.45	2.0	02.2702	02.5019	00.3411	00.4800	00.0204	-00.1807
09	-00.45	3.0	02.1491	02.4566	00.5312	00.7147	00.0111	-00.1769
10	-00.45	4.0	02.0151	02.5576	00.3512	00.9426	00.0235	-00.1695
11	-00.45	-0.0	02.3370	02.4417	00.3456	-00.0134	-00.0074	00.0478
12	-00.45	5.0	02.2203	02.5264	00.5421	00.7264	00.0160	-00.1875

UNCLASSIFIED

PRELIMINARY DATA

REPORT NO. LSWT 167
PAGE NO. A-140

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 211.8 KNOTS
BAROMETRIC PRESSURE 29.50 IN. HG
TUNNEL TEMPERATURE 114 DEG F
RENDLDS NO./FT 1.8788 X 1,000,000RUN 049
B1 F1 W1 CA16
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.50	-0.0	04.4940	03.0794	00.4210	00.0627	-00.0291	00.0441
02	07.50	-4.0	04.6059	03.0556	00.4345	-00.7633	-00.2112	00.3144
03	07.50	-3.0	04.5800	03.1035	00.4240	-00.2493	-00.0456	00.0868
04	07.50	-2.0	04.4849	02.9305	00.4190	00.0195	-00.0077	-00.0054
05	07.50	-1.0	04.4727	03.1900	00.4250	-00.0898	-00.0060	00.0847
06	07.50	-0.0	04.4633	03.0913	00.4112	00.1893	-00.0047	-00.0300
07	07.50	1.0	04.4532	03.0725	00.4011	00.2617	-00.0170	-00.0093
08	07.50	2.0	04.4519	03.0527	00.4148	00.3478	00.0036	-00.0479
09	07.50	3.0	04.3850	03.0908	00.4160	00.4958	00.0164	-00.0835
10	07.50	4.0	04.4338	03.1436	00.4792	00.5588	00.0217	-00.0579
11	07.50	-2.0	04.5256	03.0558	00.4493	-00.1662	-00.0265	00.0466
12	07.50	-1.0	04.4039	03.0948	00.4013	-00.0721	00.0004	00.0816
13	07.50	-0.0	04.4539	03.1409	00.4012	00.1264	-00.0183	00.0576

REPORT NO. LSWT 167

PAGE NO. A-141

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 211.8 KNOTS
BAROMETRIC PRESSURE 29.50 IN. HG
TUNNEL TEMPERATURE 114 DEG F
RENOIDS NO./FT 1.8788 X 1,000,000

RUN 050
B1 F1 W1 CA16
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	15.59	-0.0	07.0982	03.4449	00.4273	00.5623	00.0203	-00.0303
02	15.59	-4.0	07.3771	03.4227	00.3828	-00.2831	-00.3861	-00.0464
03	15.59	-3.0	07.2979	03.3970	00.3939	00.3981	-00.0645	-00.1120
04	15.59	-2.0	07.1442	03.4201	00.3941	00.4400	-00.0232	-00.0883
05	15.59	-1.0	07.1269	03.4009	00.4373	00.3501	-00.0071	-00.0424
06	15.59	-0.0	07.1318	03.3279	00.4351	00.4985	00.0031	-00.0225
07	15.59	1.0	07.1391	03.4327	00.4478	00.5838	-00.0011	-00.0666
08	15.59	2.0	07.1066	03.4320	00.4290	00.5255	-00.0063	-00.1033

UNCLASSIFIEDREPORT NO. 1587 157
CASE NO. A-142

LVT LOW SPEED - IN TUNNEL TEST 157

DYNAMIC PRESSURE 0.350 PSF
 TUNNEL VELOCITY 104.0 KNOTS
 BAROMETRIC PRESSURE 29.94 IN. HG
 TUNNEL TEMPERATURE 094 DEG F
 PENULTS NO./FT 0.783 X 1,000,000

NO. OF
 H₁ +1 13 0010
 PH₁ 1 013
 047 1/14-1
 1 - 14Y AXES

PT	ALPHA	PSI	U ₁	U ₂	U ₃	U ₄	U ₅	U ₆
01	-00.45	0.0	02.1121	01.8891	00.4210	00.0003	-00.0370	-00.0077
02	-04.44	0.0	00.0215	01.0150	00.4050	-00.1428	-00.0024	01.0104
03	-03.47	0.0	01.0012	01.7005	00.3010	-00.1109	-00.0227	01.0040
04	-02.40	0.0	01.0315	01.6531	00.4025	00.1708	-00.0148	00.1417
05	-01.40	0.0	01.7019	01.4120	00.3009	-00.0150	-00.0000	00.0000
06	-00.45	0.0	02.0017	01.0037	00.0777	00.0051	-00.0400	-00.0010
07	00.50	0.0	02.0002	01.4000	00.0004	-00.0701	-00.0154	-00.0007
08	01.51	0.0	02.0000	02.1144	00.0072	-00.1427	-00.0704	-00.0000
09	02.47	0.0	03.1000	01.1700	00.4341	0.1400	-00.0200	0.0000
10	03.50	0.0	03.2770	02.0000	00.3000	-00.0470	00.0417	-00.0000
11	05.00	0.0	03.0704	0.4000	00.0000	00.0200	-00.0000	-00.0000
12	07.45	0.0	04.0100	0.5000	00.4000	00.1000	-00.0400	-00.0000
13	11.50	0.0	05.0000	02.0000	00.0000	00.1000	-00.0000	-00.0000
14	15.04	0.0	06.0000	00.0000	00.0000	00.0000	-00.0000	-00.0000
15	19.00	0.0	08.4000	02.0000	00.0000	00.0000	-00.0000	-00.0000
16	-00.40	0.0	02.1270	01.9010	00.0700	-00.0470	-00.0200	00.0000

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-143

LWT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 103.9 KNOTS
BAROMETRIC PRESSURE 29.54 IN. HG
TUNNEL TEMPERATURE 99.5 DEG F
RHO CLOS NO./FT 0.9462 X 1,000,000

RUN 052
01 F1 W1 C016
PHI 0 DEG
09/03/64-1
BODY A7FS

PT	ALPHA	PSI	CN	LA	CPM	CY	CM	CYM
01	-00.48	0.0	02.0488	01.7579	00.3049	-00.0154	-00.1170	-00.0549
02	-00.48	-4.0	01.9165	02.1182	00.4715	-00.9303	-00.0829	00.2476
03	-00.48	-3.0	02.0892	02.0246	00.4092	-00.7293	-00.0522	00.0878
04	-00.48	-2.0	02.1017	01.9211	00.4245	-00.4266	-00.0595	00.0975
05	-00.47	-1.0	02.2265	01.9874	00.3966	-00.3671	-00.0602	00.0074
06	-00.47	-0.0	01.9192	02.0427	00.3594	00.1109	-00.0731	00.1130
07	-00.47	1.0	02.1549	01.9656	00.3714	00.2043	-00.0457	-00.1112
08	-00.47	2.0	01.9822	01.8300	00.3698	00.0250	00.0173	-00.0139
09	-00.47	3.0	02.0041	01.8336	00.4145	00.5981	00.0606	-00.1206
10	-00.47	4.0	01.8886	01.9903	00.3466	00.8506	00.0114	-00.1785
11	-00.48	-1.0	01.9410	01.7955	00.4057	-00.3901	-00.1060	-00.1904
12	-00.48	0.0	02.0237	01.8330	00.3859	00.0526	-00.0403	-00.1220
13	-00.47	-0.0	02.1741	02.0448	00.4177	-00.0106	-00.0532	-00.0642

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-144

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
 TUNNEL VELOCITY 103.8 KNOTS
 BAROMETRIC PRESSURE 29.54 IN. HG
 TUNNEL TEMPERATURE 092 DEG F
 RENOLDS NO./FT 0.9885 X 1,000,000

RUN 053
 B1 F1 W1 CC16
 PHI 0 DEG
 09/03/64-1
 BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.50	-0.0	04.4644	02.3286	00.3803	00.1504	-00.0443	-00.0321
02	07.50	-4.0	04.5919	02.4859	00.4333	-00.3148	-00.1512	00.2449
03	07.50	-3.0	04.4565	02.6776	00.4128	-00.2502	-00.0857	00.1623
04	07.50	-2.0	04.4505	02.3885	00.4110	-00.0001	-00.0754	00.0583
05	07.50	-1.0	04.3831	02.2885	00.4089	00.0455	-00.0460	00.1411
06	07.50	0.0	04.1993	02.2672	00.4245	00.1511	00.0189	00.0935
07	07.50	1.0	04.3266	02.2578	00.4469	00.0810	-00.0820	-00.1048
08	07.50	2.0	04.2707	02.3713	00.3767	00.0766	-00.0753	00.0644
09	07.51	3.0	04.3268	02.4225	00.4151	00.1892	00.0046	-00.1013
10	07.51	4.0	04.2925	02.2708	00.4475	00.2890	00.0194	-00.0022
11	07.50	-3.0	04.3772	02.5638	00.3583	-00.1771	-00.1821	00.1958
12	07.51	4.0	04.2939	02.2818	00.4696	00.1301	00.0063	-00.0087
13	07.51	-0.0	04.3783	02.4032	00.3917	00.2134	-00.0746	00.0527

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-145

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 103.6 KNOTS
BAROMETRIC PRESSURE 29.54 IN. HG
TUNNEL TEMPERATURE 090 DEG F
REYNOLDS NO./FT 0.9931 X 1,000,000RUN 054
B1 F1 W1 CC16
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	15.57	-0.0	07.1619	02.8828	00.5754	00.4094	-00.0042	-00.0451
02	15.56	-4.0	06.9752	02.9440	00.3439	00.4509	-00.1459	-00.1656
03	15.56	-3.0	07.2078	02.8185	00.4956	00.5007	-00.1074	-00.0178
04	15.56	-2.0	06.8302	02.8096	00.4312	00.2646	-00.0539	-00.2055
05	15.56	-1.0	06.9845	02.7248	00.5386	00.3243	-00.0322	-00.1834
06	15.56	-0.0	07.1014	02.6694	00.5509	00.2181	00.0019	-00.0327
07	15.56	1.0	07.0203	02.7532	00.5223	00.3719	-00.0518	-00.0473
08	15.56	2.0	06.9299	02.7512	00.5074	00.4285	-00.0692	00.1006
09	15.56	3.0	07.1101	02.8341	00.5614	00.4186	-00.0055	-00.1275
10	15.56	4.0	07.1291	02.7403	00.5906	00.2066	-00.0145	-00.0170
11	15.56	-0.0	07.0163	02.9577	00.5207	00.3773	-00.0211	-00.1885

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-146

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 155.6 KNOTS
 BAROMETRIC PRESSURE 29.54 IN. HG
 TUNNEL TEMPERATURE 092 DEG F
 REYNOLDS NO./FT 1.4820 X 1,000,000

RUN 055
 81 FL W1 CC16
 PHF 0 DEG
 09/03/64-1
 BODY AYES

PT	ALPHA	PSI	CX	CA	CPM	CY	CPM	CYM
01	-00.46	-0.0	02.1415	01.8577	00.3479	-00.1655	-00.0203	00.0561
02	-04.58	-0.0	01.1077	02.5360	00.4694	-00.2135	-00.0066	00.1091
03	-03.45	-0.0	01.0468	01.5975	00.3518	-00.2421	-00.0250	-00.0068
04	-02.45	-0.0	01.4803	01.6091	00.3695	-00.1146	-00.0012	00.0010
06	-00.47	-0.0	02.2114	01.8813	00.3501	-00.1288	-00.0022	-00.0201
07	00.56	-0.0	02.2883	01.9180	00.3550	-00.0882	-00.0395	-00.0298
08	01.51	-0.0	02.8751	01.9483	00.3521	-00.0801	00.0119	-00.0060
09	02.46	-0.0	03.0125	02.1110	00.3800	-00.0009	-00.0192	-00.0201
10	03.57	-0.0	03.2757	02.1858	00.3856	00.0135	-00.0168	00.0242
11	05.53	-0.0	03.9015	02.2603	00.4104	00.0249	-00.0270	-00.1229
12	07.46	-0.0	04.6426	02.3652	00.4302	00.1212	00.0100	-00.0515
13	11.50	-0.0	05.2033	02.5278	00.5066	00.1572	00.0076	-00.0579
14	15.53	-0.0	06.9615	02.7703	00.5584	00.2380	00.0115	-00.0810
15	19.55	-0.0	08.2670	02.8625	00.4123	00.3790	00.0418	-00.1196
16	-01.46	-0.0	01.3091	01.8690	00.4050	-00.1146	-00.0079	-00.0594
17	-00.47	-0.0	02.1270	01.8097	00.3869	-00.1571	00.0120	-00.0080

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-147

LWT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSI
TUNNEL VELOCITY 155.9 KNOTS
BAROMETRIC PRESSURE 29.54 IN. HG
TUNNEL TEMPERATURE 69.4 DEG F
RENCLOS NO./FT 1.4752 X 1,000,000

RPT 050
S1 FL W1 C017
PHI 0 DEG
09/03/04-1
FREEDY AA-S

PT	ALPHA	PSI	CA	CPM	CV	CPM	CV
01	-00.48	-0.0	02.1828	01.8605	00.3974	-00.0579	00.0155
02	-00.48	-4.0	02.2098	01.8761	00.4680	-00.9750	00.1521
03	-00.48	-3.0	02.2254	01.8816	00.4511	-00.8205	00.0479
04	-00.48	-2.0	02.2977	01.7851	00.4575	-00.5897	00.0411
05	-00.48	-1.0	02.3136	01.7516	00.4391	-00.2877	-00.0354
06	-00.48	0.0	02.2121	01.7903	00.4419	-00.0845	00.0192
07	-00.48	1.0	02.3379	01.7254	00.4138	00.0284	-00.0551
08	-00.48	2.0	02.1955	01.7878	00.3905	00.2575	-00.0247
09	-00.48	3.0	02.0834	01.7055	00.3706	00.4725	-00.0101
10	-00.48	4.0	01.8851	01.5001	00.4188	00.6872	-00.1554
11	-00.48	5.0	02.0402	01.7508	00.4195	00.4631	-00.0551
12	-00.48	-0.0	02.3254	01.7725	00.4258	-00.1430	00.0147

REPORT NO. LSWT 167

PAGE NO. A-148

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 156.1 KNOTS
BAROMETRIC PRESSURE 29.54 IN. HG
TUNNEL TEMPERATURE 095 DEG F
REYNOLDS NO./FT 1.4718 X 1,000,000

RUN 057
B1 F1 W1 CC16
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.45	-0.0	04.4209	02.3130	00.4177	00.1070	-00.0437	-00.0550
02	07.44	-4.0	04.6146	02.4316	00.4275	-00.5035	-00.1374	00.2069
03	07.44	-3.0	04.5540	02.4057	00.3765	-00.3790	-00.0858	00.0250
04	07.44	-2.0	04.4528	02.3969	00.3790	-00.0863	-00.0450	-00.0626
05	07.44	-1.0	04.4085	02.3108	00.4035	00.0063	-00.0657	-00.1387
06	07.44	-0.0	04.3586	02.2791	00.4080	00.0786	-00.0194	-00.0300
07	07.44	1.0	04.3453	02.3917	00.3982	00.0646	-00.0424	00.0150
08	07.44	2.0	04.3872	02.3256	00.4307	00.0474	-00.0386	00.0438
09	07.44	3.0	04.4506	02.3872	00.4626	00.1074	-00.0341	-00.0077
10	07.44	4.0	04.5203	02.4062	00.4895	00.2522	-00.0016	00.0015
11	07.44	-0.0	04.4362	02.3262	00.4259	00.1778	-00.0425	-00.0479

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-149

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 156.2 KNOTS
BAROMETRIC PRESSURE 29.54 IN. HG
TUNNEL TEMPERATURE 096 DEG F
RENOIDS NO./FT 1.4684 X 1,000,000

RUN 058
B1 F1 W1 CC16
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	15.57	-0.0	07.0705	02.8222	00.5484	00.2662	-00.0086	-00.0630
02	15.57	-4.0	07.2305	02.8587	00.3909	00.4001	-00.0516	-00.1337
03	15.57	-3.0	07.2153	02.7818	00.4592	00.3432	-00.0657	-00.1651
04	15.57	-2.0	07.0785	02.7381	00.4867	00.3733	-00.0696	-00.1004
05	15.58	-1.0	07.0393	02.8138	00.4936	00.3178	-00.0109	-00.1134
06	15.58	-0.0	06.9718	02.8337	00.5256	00.3231	00.0196	-00.0810
07	15.58	1.0	06.9250	02.8434	00.5429	00.2867	-00.0426	-00.0506
08	15.58	2.0	07.0413	02.7155	00.5369	00.2196	-00.0080	-00.1025
09	15.58	3.0	07.0143	02.8701	00.5047	00.1765	-00.0721	00.0127
10	15.58	4.0	07.1009	02.8337	00.5207	00.1434	-00.0810	00.0538
11	15.58	2.0	06.8914	02.8617	00.5260	00.2072	-00.0440	-00.0573
12	15.58	-0.0	06.8961	02.8263	00.5203	00.3249	00.0062	-00.0256

UNCLASSIFIED

REPORT NO. LS&T 167

PAGE NO. A-150

LVT LOW SPEED WIND TUNNEL TEST 157

DYNAMIC PRESSURE 135.2 PSF
 TUNNEL VELOCITY 209.1 KNOTS
 BAROMETRIC PRESSURE 29.57 IN. HG
 TUNNEL TEMPERATURE 101 DEG F
 RECNLOS NO./FT 1.9369 X 1,000,000

RUN 050
 BI F1 w1 CC16
 PHI 0 DEG
 09/01/64-1
 BODY AXES

PT	ALPHA	PSI	CM	CA	CPM	CY	CPM	CYN
01	-00.45	0.0	02.2022	01.8751	00.3620	-00.0837	-00.0115	00.0240
02	-04.58	0.0	01.1989	02.5308	00.4520	-00.1554	-00.0120	00.0617
03	-02.43	0.0	01.5300	01.7185	00.3820	-00.0757	00.0088	00.0985
04	-01.43	0.0	01.9621	01.7600	00.3904	-00.0837	-00.0105	00.0470
05	-00.46	0.0	02.2657	01.8801	00.2755	-00.0513	-00.0354	00.0137
06	00.57	0.0	02.5575	01.9444	00.3701	-00.0518	-00.0120	00.0240
07	01.54	0.0	02.8014	02.0156	00.3752	-00.0040	-00.0023	00.0340
08	03.59	0.0	03.4130	02.2002	00.4090	00.0301	00.0144	00.0114
09	05.55	0.0	03.8741	02.3020	00.3671	00.1504	00.0091	00.0116
10	07.48	-0.0	04.4873	02.4220	00.4506	00.1232	00.0224	-00.0305
11	11.56	0.0	05.3333	02.5155	00.5152	00.1898	00.0346	00.1573
12	15.50	-0.0	07.0632	02.5715	00.5513	00.2514	-00.0055	-00.0024
13	19.55	-0.0	08.5000	02.8048	00.5795	00.4701	00.0002	-00.0434
14	-00.45	0.0	02.2423	01.8515	00.3844	-00.0757	-00.0300	00.0265

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 211.7 KNOTS
 BAROMETRIC PRESSURE 29.58 IN. HG
 TUNNEL TEMPERATURE 115 DEG F
 RENDLES NO./FT 1.0771 X 1,000,000

RUN 040
 01 F1 W1 C010
 PHI 0 DEG
 09/03/54-1
 BODY AXES

PT	ALPHA	FSI	CX	CY	CPX	CY	CPX	CY
01	-00.45	0.0	02.3019	01.8758	00.3982	-00.0359	-00.0354	00.0149
02	-00.45	-4.0	02.0602	01.8265	00.3974	-01.3648	-00.2224	00.1493
03	-00.45	-3.0	02.2009	01.9266	00.4196	-00.7438	-00.0751	00.0992
04	-00.45	-2.0	02.1802	01.8701	00.4130	-00.4361	-00.0397	00.0196
05	-00.45	-1.0	02.2740	01.8608	00.4089	-00.2895	-00.0410	-00.0027
06	-00.45	0.0	02.3016	01.8638	00.3903	-00.0040	-00.0100	-00.0019
07	-00.45	1.0	02.2620	01.8603	00.3923	00.2060	00.0141	-00.0466
08	-00.45	2.0	02.2514	01.8439	00.3852	00.2695	-00.0419	-00.1126
09	-00.45	3.0	02.1460	01.8239	00.3661	00.5624	00.0122	-00.1462
10	-00.45	4.0	02.1046	01.8058	00.3729	00.7718	00.0172	-00.1693
11	-00.45	-0.0	02.2542	01.8354	00.3755	00.0432	-01.0381	00.0326

REPORT NO. LSWT 167
PAGE NO. A- 152

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 210.6 KNOTS
BAROMETRIC PRESSURE 29.58 IN. HG
TUNNEL TEMPERATURE 109 DEG F
REYNOLDS NO./FT 1.9025 X 1,000,000RUN 061
B1 F1 W1 CC16
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.37	-0.0	04.3738	02.4696	00.3921	00.1099	00.1598	00.0147
02	07.37	-4.0	04.5404	02.4281	00.3996	-00.9015	-00.2919	00.3245
03	07.37	-3.0	04.5048	02.4631	00.4059	-00.2354	-00.1520	00.2133
04	07.37	-2.0	04.4313	02.3925	00.3888	00.0249	-00.0210	-00.0643
05	07.37	-1.0	04.4591	02.4088	00.4013	00.0986	-00.0343	-00.0284
06	07.37	-0.0	04.4329	02.4298	00.3925	00.1657	-00.0025	-00.0546
07	07.37	1.0	04.4294	02.4589	00.4016	00.1952	00.0302	00.0019
08	07.37	2.0	04.3914	02.4635	00.3967	00.2004	00.0790	00.0125
09	07.37	3.0	04.3971	02.4519	00.4079	00.2327	00.1244	00.0503
10	07.37	4.0	04.3629	02.4936	00.4357	00.3158	-00.0049	-00.0162
11	07.37	-0.0	04.4578	02.4348	00.4061	00.1664	00.0251	-00.0320

PRELIMINARY DATA

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-153

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 210.6 KNOTS
BAROMETRIC PRESSURE 29.58 IN. HG
TUNNEL TEMPERATURE 109 DEG F
RENOLOS NO./FT 1.9025 X 1,000,000RUN 062
B1 F1 W1 CC16
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	15.57	-0.0	06.9552	02.8216	00.4947	00.3397	-00.0281	-00.0320
02	15.56	-4.0	07.2572	02.9742	00.3986	-00.4029	-00.4957	-00.1152
03	15.56	-3.0	07.1913	02.9647	00.4526	00.4302	-00.1133	-00.1343
04	15.56	-2.0	07.0949	02.7788	00.4708	00.4298	-00.0431	-00.0604
05	15.56	-1.0	06.9604	02.8442	00.4846	00.4165	-00.0013	-00.0744
06	15.56	-0.0	06.9446	02.8171	00.5040	00.3784	-00.0063	-00.0170
07	15.56	1.0	06.9282	02.8662	00.5030	00.3575	-00.0175	00.0054
08	15.56	2.0	06.9587	02.8528	00.4855	00.2647	-00.0383	-00.0079
09	15.56	3.0	07.0324	02.8502	00.4827	00.2986	-00.0139	00.0560
10	15.56	4.0	06.9816	02.7725	00.4609	00.2778	-00.0139	00.0872
11	15.56	-0.0	06.9485	02.8905	00.5023	00.3705	00.0070	-00.0371

UNCLASSIFIED

REPORT NO. LSNT 167
PAGE NO. A-154

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 035.9 PSF
TUNNEL VELOCITY 104.5 KNOTS
BAROMETRIC PRESSURE 29.57 IN. HG
TUNNEL TEMPERATURE 100 DEG F
RENCLOS AC./FT 0.9710 X 1,000,000

RUN 067
81 FL W1 CA13
PHI C DEG
C9/03/84-1
COPY AX25

PT	ALPHA	PSI	CY	CA	CRM	CY	CRM	CY
01	-00.44	-0.0	02.3626	02.5704	00.4453	00.0948	00.0363	-00.0650
02	-04.44	-0.0	01.2816	02.1023	00.4363	00.0949	00.0340	-00.0173
03	-02.47	-0.0	01.6830	02.3657	00.3870	00.0949	00.0344	-00.0362
04	-01.45	-0.0	02.0519	02.4907	00.4127	00.1267	00.0044	00.0153
05	-00.46	-0.0	02.1400	02.3780	00.3834	-00.0526	00.0049	-00.0520
06	00.54	-0.0	02.5152	02.5215	00.3929	00.0949	00.0156	00.0610
07	01.51	-0.0	02.9289	02.7400	00.4537	00.0749	00.0092	-00.1187
08	03.54	-0.0	00.3791	02.7052	00.4450	00.2235	00.0290	00.0169
09	05.53	-0.0	04.0505	03.0519	00.4400	00.0115	-00.0123	-00.0314
10	07.45	-0.0	04.4453	02.9547	00.4677	00.1500	00.0423	-00.0845
11	11.55	-0.0	05.4791	01.0741	00.5566	00.3557	-00.0153	-00.1313
12	15.56	-0.0	06.9710	07.4502	00.5428	00.5855	00.0600	-00.1779
13	19.55	-0.0	08.5500	03.5015	00.4738	00.5284	00.0512	-00.1947
14	-00.45	-0.0	02.2035	02.4741	00.3874	-00.0563	-00.0370	-00.0355

REPORT NO. LSNT 167

PAGE NO. A-155

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
 TUNNEL VELOCITY 104.5 KNOTS
 BAROMETRIC PRESSURE 29.57 IN. HG
 TUNNEL TEMPERATURE 100 DEG F
 REYNOLDS NO./FT 0.9710 X 1,000,000

RUN 064
 81 F1 W1 CA13
 PHI 0 DEG
 09/03/64-1
 BODY ACTS

PT	ALPHA	PSI	CX	CY	CPM	CY	CXM	CYM
01	-00.45	-0.0	02.1488	02.3488	00.3945	-00.0156	-00.0478	-00.0221
02	-00.45	-4.0	02.1522	02.6735	00.4445	-01.0357	-00.1144	00.2745
03	-00.45	-3.0	02.1554	02.4171	00.4579	-00.8448	-00.0580	00.1347
04	-00.45	-2.0	02.0806	02.0944	00.4145	-00.6132	-00.0543	00.0441
05	-00.45	-1.0	02.3557	02.3544	00.4278	-00.5105	-00.0024	00.1535
06	-00.45	-0.0	02.1575	02.1559	00.3979	00.1108	00.0056	00.0597
07	-00.45	1.0	02.2783	02.3323	00.4081	00.2100	00.0134	-00.0575
08	-00.45	2.0	02.2504	02.4622	00.4129	00.4114	-00.0115	-00.2660
09	-00.45	3.0	02.1122	02.3604	00.3750	00.5937	-00.0408	-00.2583
10	-00.44	4.0	01.9565	02.0533	00.4121	00.7532	00.0751	-00.1557
11	-00.44	-0.0	02.1253	02.3774	00.3482	00.1152	-00.0581	-00.0147

REPORT NO. LSWT 167

PAGE NO. A-156

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 104.3 KNOTS
BAROMETRIC PRESSURE 29.57 IN. HG
TUNNEL TEMPERATURE 098 DEG F
RENOIDS NO./FT 0.9755 X 1,000,000

RUN 065
B1 F1 W1 CA13
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.46	-0.0	04.3030	03.0754	00.3799	00.0067	-00.1246	00.0200
02	07.46	-4.0	04.7037	03.3543	00.4467	-00.3900	-00.1158	00.3371
03	07.46	-3.0	04.6541	03.2208	00.4434	-00.1960	-00.0814	00.1934
04	07.46	-2.0	04.5097	03.0989	00.4194	-00.2310	-00.0746	-00.0373
05	07.46	-1.0	04.4432	03.0080	00.4060	00.1436	-00.0730	00.0113
06	07.46	-0.0	04.3621	03.0355	00.4041	00.1341	-00.0386	-00.1201
07	07.46	1.0	04.2713	02.8295	00.3738	00.0738	-00.0445	-00.0282
08	07.46	2.0	04.2208	03.2306	00.3594	00.1216	-00.0671	00.0544
09	07.46	3.0	04.3106	03.0577	00.3980	00.1427	-00.0717	00.1017
10	07.46	4.0	04.1113	03.1206	00.3937	00.2672	-00.0427	00.0171
11	07.46	-0.0	04.3538	02.9723	00.4128	-00.0570	-00.1214	-00.1006

REPORT NO. LSWT 167

PAGE NO. A-157

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 104.2 KNOTS
BAROMETRIC PRESSURE 29.58 IN. HG
TUNNEL TEMPERATURE 097 DEG F
RENOIDS NO./FT 0.9779 X 1,000,000

RUN 066
B1 F1 W1 CA13
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	15.54	-0.0	06.8959	03.7219	00.4351	00.4414	-00.0487	00.0817
02	15.53	-4.0	07.3311	03.6408	00.3427	00.3964	-00.1075	00.0207
03	15.53	-3.0	07.1122	03.6775	00.3530	00.5203	-00.0417	-00.1466
04	15.52	-2.0	06.9670	03.6748	00.4060	00.3926	-00.0645	-00.0129
05	15.50	-1.0	06.9832	03.4552	00.4911	00.1806	00.0017	-00.0968
06	15.53	-0.0	06.8405	03.4083	00.3860	00.2830	-00.0525	-00.1200
07	15.53	1.0	06.7434	03.4339	00.4085	00.1260	00.0456	00.0548
08	15.53	2.0	06.7912	03.6908	00.3963	00.3297	-00.0350	-00.0542
09	15.53	3.0	06.8990	03.3943	00.4248	00.4102	-00.0601	-00.0675
10	15.53	4.0	06.7912	03.3202	00.3894	00.4287	-00.0002	00.0713
11	15.53	-0.0	06.8080	03.6483	00.3938	00.1227	-00.0600	00.0487

LVT LOW SPEED WIND TUNNEL TEST 107

DYNAMIC PRESSURE 070.2 PSF
 TUNNEL VELOCITY 150.8 KNOTS
 BAROMETRIC PRESSURE 29.95 IN. HG
 TUNNEL TEMPERATURE 101 DEG F
 RENDLES NO./FT 1.4527 X 1,000,000

RUN 007
 01 F1 W1 C413
 PHI 1 DEG
 09/07/64-1
 ***BODY WYES**

PT	ALPHA	PSI	CN	CA	CP*	CY	CX*	CYY
01	-00.45	-0.0	02.2074	02.5183	00.3490	-00.1070	-00.0370	00.0443
02	-04.50	-0.0	01.3044	03.0700	00.4257	-00.2486	-00.0446	00.0921
03	-02.45	-0.0	01.5118	02.2424	00.7570	-00.1920	-00.0442	00.0307
04	-01.44	-0.0	01.3590	02.4200	00.3509	-00.1490	-00.0831	00.0682
05	-00.45	-0.0	02.3060	02.4908	00.3719	-00.1354	-00.0513	00.0034
06	00.55	-0.0	07.4793	02.6682	00.3850	-00.1212	-00.0428	00.0473
07	01.52	-0.0	02.7811	02.7250	01.0954	-00.0786	-00.0180	00.0211
08	03.50	-0.0	03.3659	02.8855	00.4167	00.0708	-00.0344	00.0561
09	05.50	-0.0	03.8059	03.0316	00.3870	00.0460	-00.0362	-00.0503
10	07.40	-0.0	04.4185	03.0897	00.4102	00.1002	-00.0285	-00.0117
11	11.59	-0.0	05.4212	03.1472	00.4587	00.4452	-00.0468	-00.1342
12	15.55	-0.0	07.1497	03.4580	00.5060	00.2878	-00.0625	-00.0511
13	19.55	-0.0	08.3596	03.8005	00.3531	00.4012	00.0107	-00.1329
14	-00.45	-0.0	02.3348	02.5477	00.3737	-00.3329	-00.0453	00.0571

REPORT NO. LSWT 167
PAGE NO. A-159

LWT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 0.762 PSF
TUNNEL VELOCITY 157.4 KNOTS
BAROMETRIC PRESSURE 29.58 IN. HG
TUNNEL TEMPERATURE 105 DEG F
CLOUDS NO./FT 1.4393 X 1,000,000

RUN 068
01 F1 V1 C113
P11 C DEC
09/0 104-1
-4 RUDY EXFCS*

PT	ALPHA	PSI	CA	CA	CFM	CV	CRM	LYA
01	-00.45	-0.0	02.1791	02.5110	00.3354	-00.1070	-00.0537	00.0092
02	-00.45	-4.0	02.1031	02.7162	00.4348	-01.0978	-00.0712	00.1346
03	-00.45	-3.0	01.9152	02.4807	00.3792	-00.8730	-00.0449	00.0872
04	-00.45	-2.0	02.0800	02.5815	00.2852	-00.6780	-00.0132	00.0667
05	-00.45	-1.0	02.1012	02.5415	00.3600	-00.4930	-00.0505	00.0478
06	-00.45	0.0	02.1790	02.5320	00.3330	-00.1630	-00.0000	00.0100
07	-00.45	1.0	02.2755	02.5681	00.3516	00.0355	-00.0345	-00.1237
08	-00.45	2.0	02.1897	02.5240	00.3427	00.2766	-00.0441	-00.1000
09	-00.45	3.0	02.2055	02.5054	00.3144	00.5103	-00.0247	-00.1459
10	-00.45	4.0	01.9614	02.6751	00.1873	00.7516	-00.0050	-00.2280
11	-00.45	-0.0	02.2210	02.5081	00.3310	-00.1029	-00.0207	00.0264

REPORT NO. LSWT 167
PAGE NO. A-160

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 157.8 KNOTS
BAROMETRIC PRESSURE 29.58 IN. HG
TUNNEL TEMPERATURE 108 DEG F
REYNOLDS NO./FT 1.4299 X 1,000,000

RUN 069
B1 F1 W1 CA13
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.46	0.0	04.4784	03.1269	00.4052	00.0306	00.0070	00.0620
02	07.46	-4.0	04.6690	03.0011	00.4259	-00.5247	-00.1161	00.2969
03	07.46	-3.0	04.5284	02.9095	00.4062	-00.4853	-00.0923	00.1055
04	07.46	-2.0	04.4293	02.9175	00.3908	-00.1683	-00.0349	00.0144
05	07.46	-1.0	04.4155	02.8454	00.4085	00.0749	-00.0224	00.0152
06	07.46	-0.0	04.5460	02.9892	00.4115	00.1573	-00.0073	-00.0338
07	07.46	1.0	04.4455	03.2008	00.3955	-00.0418	-00.0453	00.0089
08	07.46	2.0	04.5346	03.1688	00.4051	00.0841	-00.0140	00.0649
09	07.46	3.0	04.5063	03.1823	00.4444	00.1981	-00.0269	-00.0192
10	07.46	4.0	04.4417	03.1571	00.4524	00.3954	00.0451	-00.0448
11	07.46	1.0	04.5111	03.0468	00.4240	00.0975	-00.0086	00.0884
12	07.46	2.0	04.4989	03.1143	00.4118	00.1388	-00.0179	-00.0697
13	07.46	3.0	04.3815	03.1090	00.4077	00.2653	-00.0376	00.0375
14	07.46	4.0	04.4945	03.2297	00.4698	00.2869	00.0230	-00.0065
15	07.46	0.0	04.4466	03.1029	00.3982	00.2294	-00.0386	00.0029
16	07.46	-4.0	07.9788	00.6365	07.0270	06.0074	-06.7283	00.7478

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-161

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 157.8 KNOTS
 BAROMETRIC PRESSURE 29.58 IN. HG
 TUNNEL TEMPERATURE 108 DEG F
 RENOLDS NO./FT 1.4299 X 1,000,000

RUN 070
 B1 F1 W1 CA13
 PHI 0 DEG
 09/03/64-1
 BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	15.54	-0.0	06.9838	03.3952	00.4417	00.3443	00.0100	-00.0078
02	15.53	-4.0	07.3700	03.5606	00.3273	00.3703	-00.0440	-00.1436
03	15.53	-3.0	07.3248	03.5334	00.3997	00.2539	-00.0621	-00.0783
04	15.53	-2.0	07.1447	03.5469	00.4180	00.3091	-00.0193	-00.0050
05	15.53	-1.0	07.0627	03.3129	00.4554	00.2038	-00.0031	-00.0270
06	15.53	-0.0	06.9944	03.4377	00.4301	00.4434	00.0147	-00.0371
07	15.53	1.0	06.9455	03.3855	00.4420	00.4575	-00.0205	-00.0799
08	15.53	2.0	07.0282	03.2917	00.4243	00.4693	-00.0091	-00.1737
09	15.53	3.0	06.9940	03.3702	00.4267	00.4191	-00.0362	-00.0206
10	15.53	4.0	07.0278	03.4614	00.4146	00.4292	-00.0423	00.0842
11	15.53	-4.0	07.3430	03.5679	00.3191	00.3573	-00.0859	-00.1192
12	15.53	-3.0	07.0573	03.5218	00.3462	00.2749	-00.0839	-00.1037
13	15.53	-2.0	07.0401	03.4878	00.4081	00.2989	-00.0188	-00.0120
14	15.53	-1.0	07.0675	03.4896	00.4375	00.3132	00.0042	-00.0436
15	15.53	1.0	06.9536	03.4147	00.4342	00.3446	-00.0176	-00.0467
16	15.53	2.0	06.9781	03.4820	00.4181	00.4752	-00.0283	-00.1728
17	15.53	3.0	06.9073	03.3758	00.3931	00.4892	-00.0183	-00.1065
18	15.53	4.0	06.9824	03.5095	00.3977	00.3464	00.0076	-00.0282

UNCLASSIFIED

LWT LOW SPEED WIND TUNNEL TEST 1-7

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 212.2 KNOTS
BAROMETRIC PRESSURE 29.9 IN. HG
TUNNEL TEMPERATURE 114 °F
REYNOLDS NO./FT 1.0047 X 1,000,000

OF 171
PI 11 11 11
PI 11 11
11/11/11
11/11/11

PT	ALPHA	PSI	Cx	Cy	CPx	Cy	Cx	Cy
01	-00.45	-0.0	02.1181	02.3890	00.3254	-00.1041	-00.0022	01.01
02	-04.44	-0.0	00.9037	01.9518	00.332	-00.2318	-00.0141	00.02
03	-02.45	-0.0	01.0121	02.2045	00.3391	-00.0240	-00.01	01.04
04	-01.45	-0.0	01.3300	02.3148	00.3440	-00.1041	-00.0141	00.041
05	-00.45	-0.0	02.2714	02.4454	00.3464	00.0072	00.0012	00.051
06	00.50	-0.0	02.5195	02.1189	00.3474	00.0232	-00.0112	00.044
07	01.52	-0.0	02.3351	02.0571	00.3591	00.0332	00.0071	00.041
08	03.51	-0.0	03.4535	02.0572	00.3505	00.1112	-00.0114	-00.011
09	05.50	-0.0	03.9112	02.9530	00.3474	00.0401	00.0116	00.011
10	07.48	-0.0	04.4504	03.0113	00.4131	00.1001	-00.0017	-00.040
11	11.50	-0.0	05.7230	03.1379	00.4020	00.5434	-00.0022	-00.012
12	15.53	-0.0	07.0374	03.4231	00.4731	00.5135	-00.0116	-00.011
12	19.52	-0.0	08.4109	03.4177	00.2741	00.5701	00.0170	-00.011
14	-00.46	-0.0	02.3310	02.4002	00.3010	00.0152	00.0112	00.011

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 212.2 KNOTS
 BAROMETRIC PRESSURE 29.58 IN. HG
 TUNNEL TEMPERATURE 113 DEG F
 REYNOLDS NO. 7.1 1.8647 X 1,000,000

CON 070
 C1 P1 - 1 CA13
 P1 0 DEG
 14/07/64-1
 CY AXES#1

PT	ALPHA	PSI	CN	CA	CFM	CY	C-4	CYN
01	-00.46	-0.0	02.2088	02.4773	00.3253	00.0152	-00.0534	00.0680
02	-00.46	-4.0	02.0865	02.6826	00.4344	-01.0312	-00.0770	00.2249
03	-00.46	-3.0	02.1470	02.5330	00.4155	-00.6534	-00.0171	00.1411
04	-00.46	-2.0	02.1607	02.5247	00.3709	-00.4427	-00.0187	00.1263
05	-00.46	-1.0	02.2669	02.4543	00.3608	-00.2320	-00.0108	00.0631
06	-00.46	0.0	02.2667	02.4545	00.3439	00.0044	-00.0311	00.0504
07	-00.46	1.0	02.2636	02.4545	00.3250	00.2126	-00.0334	00.0919
08	-00.46	2.0	02.2539	02.4832	00.3234	00.4337	00.0431	-00.0072
09	-00.46	3.0	02.1324	02.5033	00.3232	00.6652	00.0152	-00.1400
10	-00.46	4.0	02.0173	02.5077	00.3511	00.8934	00.0407	-00.1467
11	-00.46	0.0	02.2564	02.5257	00.3271	00.0077	00.0085	00.0667

REPORT NO. LSMT 167

PAGE NO. A-164

LVI LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.0 PSF
 TUNNEL VELOCITY 213.0 KNOTS
 BAROMETRIC PRESSURE 29.58 IN. HG
 TUNNEL TEMPERATURE 122 DEG F
 REYNOLDS NO./FT 1.8482 X 1,000,000

RUN 071
 01 P1 41 CA13
 PSI 0 OFG
 09/10/64-1
 BULKY AXES

PT	ALPHA	PSI	CA	CM	CPM	CY	CM*	CY*
01	07.50	-0.0	04.4614	03.0440	00.4168	00.0760	-00.0438	00.0485
02	07.50	-4.0	04.5801	00.0432	00.4227	-00.0200	-00.2660	00.2767
03	07.50	-3.0	04.5050	02.9495	00.4075	-00.2552	-00.1059	00.1480
04	07.50	-2.0	04.5200	02.9526	00.4095	-00.0214	-00.0200	00.0070
05	07.51	-1.0	04.5987	02.9874	00.4069	-00.0056	-00.0222	00.0229
06	07.51	-0.0	04.4467	02.9758	00.4113	00.3565	-00.0240	00.0486
07	07.51	1.0	04.4851	02.9421	00.4151	00.2595	-00.0194	-00.0116
08	07.51	2.0	04.4765	02.9931	00.4200	00.4428	-00.0103	-00.0280
09	07.51	3.0	04.4372	03.1189	00.4222	00.1947	-00.0054	-00.0017
10	07.51	4.0	04.3900	03.2158	00.4504	00.4513	00.0042	-00.0067
11	07.51	-0.0	04.4903	03.1070	00.4055	00.2452	-00.0061	00.0099

PCD FT NO. LSNT 107
 PWD NO. A-165

LVT LOW SPEED WIND TUNNEL TEST 107

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 212.5 KNOTS
 BAROMETRIC PRESSURE 29.57 IN. HG
 TUNNEL TEMPERATURE 121 DEG
 REAGLOS NO./FT 1.0020 X 1,000, 100

REF 74
 H1 F1 #1 0/13
 PWD 0 DEB
 0/10/64-1
 1401V AX 0000

PT	ALPHA	PSI	CN	CA	CDN	CY	CPX	CYX
01	15.48	-0.0	07.1454	04.4852	00.4460	00.3400	-00.0000	-00.0502
02	15.47	-4.0	07.0008	03.0000	00.0000	-00.0000	-00.0000	-00.0000
03	15.48	-3.0	07.0020	03.0000	00.4040	00.3000	-00.0000	-00.0000
04	15.48	-2.0	07.2200	03.0000	00.4024	00.4000	-00.0000	-00.0000
05	15.48	-1.0	07.1524	03.0000	00.4410	00.4000	-00.0000	-00.0000
06	15.48	-0.0	07.1020	03.0000	00.4580	00.5000	-00.0000	-00.0000
07	15.48	1.0	07.1403	03.0000	00.4000	00.4000	-00.0000	-00.0000
08	15.48	2.0	07.2000	03.0000	00.4000	00.4000	-00.0000	-00.0000
09	15.48	3.0	07.0700	03.0000	00.4000	00.4000	-00.0000	-00.0000
10	15.48	4.0	07.2000	03.0000	00.4000	00.4000	-00.0000	-00.0000
11	15.48	0.0	07.0845	03.0000	00.4000	00.4000	-00.0000	-00.0000

UNCLASSIFIED

REPORT NO. TEST 167

PAGE NO. A-166

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
 TUNNEL VELOCITY 105.4 KNOTS
 BAROMETRIC PRESSURE 29.55 IN. HG
 TUNNEL TEMPERATURE 109 DEG F
 REYNOLDS NO./FT 0.9513 X 1,000,000

DATA 075
 P1 P2 P3 P4 P5
 PHI C PFS
 09/05/64-1
 ***ECLY AXES**

PT	ALPHA	PSI	CX	CA	CPM	CY	CYM	CYM
01	-00.48	0.0	02.0953	02.0282	00.3941	-00.2543	-00.0469	00.0180
02	-04.58	0.0	00.9387	02.6482	00.3909	-00.0633	00.0112	00.1402
03	-02.44	0.0	01.4598	02.0360	00.5257	00.0962	-00.0029	00.0717
04	-01.47	0.0	01.6640	02.0572	00.3442	-00.1567	-00.0225	00.1137
05	-00.46	0.0	02.0300	02.2186	00.2946	00.0644	-00.0375	00.0072
06	00.55	0.0	02.3384	02.2681	00.5204	-00.1906	-00.0157	-00.0510
07	01.51	0.0	02.4584	02.5465	00.2812	00.0843	00.0265	00.0175
08	03.55	0.0	03.3066	02.3544	00.3656	00.1558	-00.0056	00.0023
09	05.56	0.0	03.4673	02.5025	00.3475	00.1399	-00.0163	00.0555
10	07.45	0.0	04.2447	02.6346	00.3771	-00.0400	-00.0546	-00.0591
11	11.53	0.0	05.0426	02.8119	00.4829	00.3925	-00.0274	-00.0133
12	15.58	0.0	07.0500	03.0101	00.5916	00.3006	-00.0097	-00.0554
13	19.55	0.0	08.7130	03.5341	00.4394	00.4352	-00.0182	00.0542
14	-00.46	0.0	02.1906	02.0606	00.3317	00.0325	-00.0475	00.0104

UNCLASSIFIED

REPORT NO. LS-167
PAGE NO. A-167

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 0.35 - PSF
TUNNEL VELOCITY 105.2 KNOTS
BAROMETRIC PRESSURE 24.57 IN. HG
TUNNEL TEMPERATURE 104 DEG F
REYNOLDS NO./FT 0.00036 X 1,000,000

70
91.11 0.13
1.11
0.11/0.11-1
-4.11 0.11

PT	ALPHA	PSI	CM	CA	CPX	CY	CPZ	CVX
01	-00.40	0.0	02.0322	01.9475	00.3042	00.4140	-00.0001	0.1110
02	-00.40	-4.0	02.0365	01.3284	00.5697	-00.7507	-00.1100	00.2750
03	-00.40	-5.0	02.1600	02.3971	00.3033	-00.9240	-00.0001	0.1100
04	-00.40	-1.0	01.9502	01.9831	00.4202	-00.4700	-00.0515	0.1030
05	-00.40	0.0	02.0308	02.1071	00.3792	-00.1503	00.0073	0.2102
06	-00.40	1.0	02.2579	02.0066	00.4784	-00.0040	-00.0511	0.1507
07	-00.40	2.0	01.9512	02.1921	00.3413	-00.0278	-00.0774	-0.0012
08	-00.40	3.0	02.0187	02.0455	00.3900	00.0105	00.0106	-0.0000
09	-00.40	4.0	01.0737	01.9411	00.3815	01.0065	-00.0175	-0.1765
10	-00.40	0.0	02.0626	02.1706	00.4600	-00.0000	-00.0155	0.1055

REPORT NO. LSWT 167
PAGE NO. A-168

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 104.3 KNOTS
BAROMETRIC PRESSURE 29.57 IN. HG
TUNNEL TEMPERATURE 098 DEG F
REYNOLDS NO./FT 0.9755 X 1,000,000RUN 077
B1 F1 W1 CB38
PHI 3 DEG
09/10/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.46	-0.0	04.6554	02.8206	00.4772	00.1191	-00.0349	-00.1123
02	07.46	-4.0	04.5662	03.0408	00.4254	-00.2887	-00.1735	00.2266
03	07.46	-3.0	04.7126	02.6859	00.3760	-00.1223	-00.0840	00.0199
04	07.46	-2.0	04.8255	02.8125	00.4026	-00.3350	-00.0671	-00.0924
05	07.46	-1.0	04.5427	02.7855	00.4450	00.1003	-00.0598	-00.1032
06	07.46	-0.0	04.5247	02.8053	00.4364	00.0864	-00.1259	-00.1957
07	07.46	1.0	03.9684	02.7254	00.3086	00.0235	-00.0090	-00.0671
08	07.46	2.0	04.5990	02.6839	00.4640	00.0890	-00.0927	00.0013
09	07.46	3.0	04.5125	02.6360	00.4577	00.0106	-00.0023	-00.0474
10	07.46	4.0	04.3498	02.7338	00.4308	00.5141	00.0162	-00.1415
11	07.46	-0.0	04.3435	02.8934	00.4367	00.4050	-00.0608	-00.2944

REPORT NO. LSWT 167
PAGE NO. A-169

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 104.4 KNOTS
BAROMETRIC PRESSURE 29.55 IN. HG
TUNNEL TEMPERATURE 099 DEG F
REYNOLDS NO./FT 0.9729 X 1,000,000

RUN 078
B1 F1 W1 CB38
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	15.55	-0.0	07.0968	02.9537	00.4763	00.4736	-00.0701	-00.0702
02	15.54	-4.0	07.0766	03.3752	00.3410	00.5791	-00.0591	-00.1654
03	15.54	-3.0	07.4226	03.3002	00.3953	00.3465	-00.1259	-00.1562
04	15.54	-2.0	07.1585	03.3443	00.4873	00.5926	00.0044	-00.1786
05	15.54	-1.0	07.3577	03.3016	00.5721	00.3744	-00.0061	-00.1426
06	15.54	-0.0	07.2172	03.1530	00.5041	00.3459	-00.0120	-00.0725
07	15.54	1.0	07.2276	03.2084	00.5383	00.5073	-00.0083	-00.1350
08	15.54	2.0	07.1881	03.0326	00.4613	00.3438	-00.0060	-00.1199
09	15.54	3.0	07.2919	03.1975	00.5103	00.4703	-00.0492	-00.0945
10	15.54	4.0	07.4176	03.0119	00.5212	00.1971	-00.0251	-00.0549
11	15.54	0.0	07.1644	03.2012	00.4714	00.2523	-00.0292	-00.1535

UNCLASSIFIED

REPORT NO. LSMT 167
PAGE NO. A-170

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 156.9 KNOTS
BAROMETRIC PRESSURE 29.53 IN. HG
TUNNEL TEMPERATURE 101 DEG F
ENCLOS NO./FT 1.4515 X 1,000,000RUN 079
BL F1 #1 CH35
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CYM	CY	CRM	CYS
01	-00.44	0.0	02.0336	02.2051	00.3439	-00.2687	-00.0386	00.0869
02	-04.56	0.0	01.2396	02.7297	00.3990	-00.2830	-00.0130	00.0357
03	-02.44	0.0	01.4858	02.0525	00.3633	-00.2262	-00.0227	00.0214
04	-01.44	0.0	01.9713	02.1102	00.3510	-00.0702	-00.0673	00.0163
05	-00.44	0.0	02.2606	02.1784	00.2837	-00.0277	-00.0262	-00.0499
06	00.56	0.0	02.6244	02.1989	00.3036	-00.0419	-00.0405	00.0444
07	01.51	0.0	02.7092	02.4301	00.3060	-00.2262	-00.0460	00.0007
08	03.59	0.0	03.6551	02.4170	00.3673	-00.1269	-00.0336	-00.0532
09	05.52	0.0	03.9551	02.5983	00.3689	-00.0728	-00.0301	-00.0719
10	07.46	0.0	04.4425	02.6533	00.3665	00.0047	-00.0371	00.0133
11	11.60	0.0	05.4449	02.9724	00.4216	00.0751	-00.0426	-00.0307
12	15.54	0.0	07.1906	03.2130	00.4851	00.2542	-00.0565	00.0236
13	19.54	0.0	08.6950	03.2392	00.3161	00.4246	-00.0257	-00.1750
14	-00.46	0.0	02.2672	02.2051	00.2947	00.0148	-00.0446	00.0070

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-171

LWT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 016.2 PSF
 TUNNEL VELOCITY 157.3 KNOTS
 BAROMETRIC PRESSURE 29.53 IN. HG
 TUNNEL TEMPERATURE 134 DEG F
 REYNOLDS NO./FT 1.4417 X 1,000,000

RUN 080
 01 F1 W1 CR30
 PHI 0 DEG
 09/03/64-1
 BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	-00.46	0.0	01.8829	02.2970	00.2226	-00.3112	-00.0442	-00.0495
02	-00.45	-4.0	01.7241	02.4019	00.3622	-01.0981	-00.0576	00.1776
03	-00.45	-3.0	02.3369	02.2366	00.3294	-00.3108	-00.0384	00.0899
04	-00.45	-2.0	02.3240	02.2031	00.2976	-00.5618	-00.0403	-00.0396
05	-00.45	-1.0	02.3110	02.2148	00.4224	-00.4660	-00.0152	00.0513
06	-00.45	-0.0	02.0963	02.2268	00.2857	-00.2552	-00.0395	-00.0083
07	-00.45	1.0	02.3654	02.2318	00.3273	00.1931	-00.0257	-00.0619
08	-00.45	2.0	02.2635	02.2504	00.3752	00.2176	-00.0095	-00.2044
09	-00.45	3.0	02.2067	02.3670	00.4577	00.5784	-00.0100	-00.1962
10	-00.45	4.0	02.0077	02.3254	00.4018	00.6774	00.0094	-00.1913
11	-00.45	0.0	01.8827	02.3816	00.2694	-00.3253	-00.0397	-00.0341

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-172

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 157.3 KNOTS
BAROMETRIC PRESSURE 29.53 IN. HG
TUNNEL TEMPERATURE 104 DEG F
REYNOLDS NO./FT 1.4417 X 1,000,000

RUN 081
B1 F1 W1 CB38
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.46	0.0	04.4370	02.8111	00.3115	-00.1604	-00.0536	-00.0631
02	07.43	-4.0	04.8077	02.8760	00.3059	-00.3634	-00.1196	00.1760
03	07.43	-3.0	04.4473	02.8529	00.3374	-00.5985	-00.0743	00.1659
04	07.43	-2.0	04.6771	02.8613	00.3018	-00.3147	-00.0561	-00.0495
05	07.43	-1.0	04.8110	02.8269	00.4014	-00.2171	-00.0188	-00.0447
06	07.43	-0.0	04.6053	02.8054	00.4018	-00.0343	-00.0255	-00.1016
07	07.43	1.0	04.3680	02.8448	00.3777	00.1713	-00.0400	-00.0715
08	07.43	2.0	04.6011	02.8198	00.3456	-00.1331	-00.0234	00.0491
09	07.43	3.0	04.4601	02.9593	00.4234	00.1089	-00.0062	-00.0013
10	07.43	4.0	04.6882	02.8779	00.4723	00.1729	00.0240	-00.0063
11	07.43	-0.0	04.5780	02.9236	00.4189	00.2359	-00.0245	-00.0295

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-173

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 157.6 KNOTS
 BAROMETRIC PRESSURE 29.53 IN. HG
 TUNNEL TEMPERATURE 106 DEG F
 RENOLDS NO./FT 1.4352 X 1,000,000

RUN 082
 B1 F1 W1 CB38
 PHI 0 DEG
 09/03/64-1
 BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	15.56	0.0	07.3018	03.2603	00.4263	00.2961	-00.0064	00.0739
02	15.56	-4.0	07.4863	03.3844	00.3352	00.2745	-00.0786	-00.1677
03	15.56	-3.0	07.3597	03.3267	00.3477	00.2033	-00.0791	-00.1498
04	15.56	-2.0	07.3824	03.1204	00.3805	00.2428	-00.0216	-00.0952
05	15.56	-1.0	07.3463	03.2617	00.3868	00.3245	00.0117	-00.1222
06	15.56	-0.0	06.9997	03.2852	00.5134	00.5219	00.0039	-00.1634
07	15.56	1.0	07.1882	03.2411	00.4343	00.4217	-00.0180	-00.0051
08	15.56	2.0	07.3657	03.1711	00.4769	00.2783	-00.0716	-00.0412
09	15.56	3.0	07.3555	03.2816	00.3917	00.1296	-00.0832	-00.0381
10	15.56	4.0	07.4063	03.1707	00.3708	00.2565	-00.0249	00.0932
11	15.56	-0.0	07.4209	03.2125	00.4163	00.2678	00.0381	-00.0225

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-174

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 211.4 KNOTS
 BAROMETRIC PRESSURE 29.51 IN. HG
 TUNNEL TEMPERATURE 112 DEG F
 REYNOLDS NO./FT 1.8675 X 1,000,000

RUN ON
 81 F1 41 C23c
 PHI C 18.5
 09/03/64-1
 BODY AXES

PT	ALPHA	PSI	CN	CA	CPX	CY	CPY	CYM
01	-00.44	0.0	02.3833	02.2466	00.3840	-00.1515	00.0325	00.0550
02	-04.45	0.0	01.0047	02.0475	00.4105	-00.2073	00.0036	00.0766

UNCLASSIFIED

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
 TUNNEL VELOCITY 104.8 KNOTS
 BAROMETRIC PRESSURE 29.46 IN. HG
 TUNNEL TEMPERATURE 101 DEG F
 REYNOLDS NO./FT 0.9673 X 1,000,000

RUN 084
 01 H1 W1 0430
 PH1 0 DEG
 09/03/64-1
 ***BODY AXES**

PT	ALPHA	PSI	LN	CA	CPX	CY	CPH	CYM
01	-00.44	0.0	01.9480	02.0630	00.3705	-00.0478	-00.0155	00.0542
02	-04.58	0.0	00.9482	03.1284	00.4353	-00.2708	-00.0498	00.0413
03	-02.43	0.0	01.3975	02.5835	00.4654	-00.1434	-00.0047	-00.0204
04	-01.43	0.0	01.5745	02.5412	00.4181	-00.0797	-00.0150	00.0160
05	-00.44	0.0	01.3295	02.5909	00.3287	-00.2590	-00.0474	-00.0414
06	00.55	0.0	02.2526	02.4915	00.3309	00.0478	-00.0098	00.0451
07	01.51	0.0	02.7010	02.5940	00.3540	-00.0159	-00.0378	00.0284
08	03.50	0.0	03.2011	02.8959	00.3972	-00.0477	-00.0359	-00.0125
09	05.53	-0.0	03.8208	03.1087	00.3493	-00.1315	-00.0480	-00.1364
10	07.43	0.0	04.2454	03.0213	00.3561	00.0711	-00.0550	-00.3509
11	11.56	-0.0	05.3917	03.3175	00.4750	00.1220	-00.0490	-00.1240
12	15.55	-0.0	07.1279	03.5407	00.5156	00.3152	-00.0103	-00.1245
13	19.55	-0.0	08.2470	03.4305	00.3322	00.3544	-00.0712	-00.1400
14	-00.40	0.0	01.8574	02.5039	00.3485	-00.0797	-00.0010	-00.0150

UNCLASSIFIED

REPORT NO. LSMT 167
PAGE NO. A-176

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 104.7 KNOTS
BAROMETRIC PRESSURE 29.49 IN. HG
TUNNEL TEMPERATURE 101 DEG F
REYNOLDS NO./FT 0.9675 X 1,000,000RUN 085
P1 F1 P1 CA38
PHI 0 DEG
09/03/64-1
BODY AXES

P1	ALPHA	PSI	CN	CA	CPN	CY	CPN	CYN
01	-00.46	0.0	01.8817	02.8228	00.4060	-00.1752	-00.0400	00.0630
02	-00.45	-4.0	01.8809	02.6681	00.4043	-01.0395	-00.0155	00.2679
03	-00.45	-3.0	02.0844	02.7695	00.4040	-00.8003	-00.0134	00.1507
04	-00.45	-2.0	01.7773	02.6211	00.4008	-00.6786	-00.0926	00.0874
05	-00.45	-1.0	01.9663	02.7327	00.3922	-00.3809	00.0122	-00.0209
06	-00.45	-0.0	02.2502	02.6021	00.4283	-00.1441	-00.0209	-00.0149
07	-00.45	1.0	02.1499	02.7134	00.4011	-00.0695	-00.0022	-00.0352
08	-00.45	2.0	02.2313	02.6499	00.4059	00.1622	00.0263	-00.1523
09	-00.45	3.0	02.1270	02.5549	00.4335	00.5394	-00.0318	-00.1713
10	-00.45	4.0	01.7565	02.6195	00.5613	00.7349	00.0359	-00.2424
11	-00.45	0.0	02.0098	02.6230	00.3376	-00.1108	-00.0532	-00.0791

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-177

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 104.8 KNOTS
BAROMETRIC PRESSURE 29.47 IN. HG
TUNNEL TEMPERATURE 101 DEG F
REYNOLDS NO./FT 0.9672 X 1,000,000RUN 086
B1 F1 W1 CA38
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.45	0.0	04.4887	03.1489	00.3180	00.1672	-00.1138	00.0112
02	07.46	-4.0	04.7201	03.6019	00.3772	-00.5031	-00.1158	00.3908
03	07.46	-3.0	04.4279	03.3341	00.3710	-00.4268	-00.0673	00.2456
04	07.46	-2.0	04.3477	03.2125	00.3178	-00.3323	-00.1062	00.0799
05	07.48	-1.0	04.5096	03.3788	00.3691	-00.1170	-00.0658	00.0212
06	07.42	-0.0	04.4437	03.3174	00.3703	-00.0892	-00.0873	-00.0023
07	07.42	1.0	04.4054	03.2650	00.3837	00.0815	-00.0662	00.1783
08	07.42	2.0	04.4526	03.4316	00.3695	00.0346	-00.0197	00.0251
09	07.41	3.0	04.1950	03.5613	00.3089	00.1049	-00.0882	00.0754
10	07.41	4.0	04.3352	03.5206	00.3885	00.1702	00.0191	-00.0551
11	07.41	-0.0	04.3358	03.2359	00.3032	-00.0893	-00.1195	00.1637

REPORT NO. LSWT 167
PAGE NO. A-178

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 104.8 KNOTS
BAROMETRIC PRESSURE 29.47 IN. HG
TUNNEL TEMPERATURE 101 DEG F
RENOIDS NO./FT 0.9672 X 1,000,000

RUN 087
B1 F1 W1 CA38
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	15.55	-0.0	07.2975	03.6750	00.4963	00.3938	00.0388	00.0512
02	15.55	-4.0	07.4432	-03.7376	00.3500	00.3728	-00.0615	-00.0068
03	15.55	-3.0	07.5132	03.6222	00.4187	00.3760	00.0277	-00.1294
04	15.55	-2.0	07.4574	03.7008	00.4684	00.4346	00.0194	-00.0802
05	15.55	-1.0	07.0354	03.8027	00.3991	00.2902	00.0441	-00.0824
06	15.55	-0.0	07.1320	03.5557	00.4897	00.3620	00.0303	00.0743
07	15.56	1.0	07.2185	03.7616	00.4976	00.0869	00.0311	-00.0025
08	15.56	2.0	07.2592	03.5175	00.4825	00.5040	-00.0398	00.0606
09	15.56	3.0	07.0452	03.2546	00.3913	00.3272	-00.0072	00.0042
10	15.56	4.0	07.3205	03.4869	00.4586	00.1486	-00.0161	00.0677
11	15.57	-0.0	07.1165	03.4912	00.4545	00.2350	00.0445	-00.0059
12	15.57	3.0	07.2494	03.6276	00.4778	00.3172	00.0740	-00.0850

LVI LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 157.3 KNOTS
 BAROMETRIC PRESSURE 29.48 IN. Hg
 TUNNEL TEMPERATURE 103 DEG F
 RENOLDS NO./FT 1.4437 X 1,000,000

NO. 006
 31 FL W1 CARP
 PHI C D10
 09/03/64-1
 BODY AXES

PT	ALPHA	PSI	CX	CA	CM	CY	CRY	CYM
01	-00.48	0.0	02.0924	02.5408	00.3882	-00.1552	-00.0274	00.0360
02	-04.56	0.0	01.0947	02.2087	00.4817	-00.2685	-00.0415	00.0812
03	-02.44	0.0	01.4344	02.4253	00.3869	-00.1878	-00.0211	00.0757
04	-01.45	0.0	01.6880	02.4367	00.3873	-00.1552	-00.0218	00.0707
05	-00.46	0.0	02.0351	02.7510	00.3842	-00.1835	-00.0091	00.0007
06	00.56	0.0	02.5094	02.7600	00.4107	-00.1836	-00.0517	-00.0307
07	01.52	0.0	02.8581	02.8776	00.3810	-00.1553	-00.0429	-00.0134
08	03.57	0.0	03.3258	02.9850	00.3832	-00.0560	-00.0482	-00.0258
09	05.53	0.0	03.5293	03.1341	00.3841	-00.0018	-00.0176	-00.0143
10	07.44	0.0	04.4880	03.2567	00.4025	00.0575	-00.0112	-00.0874
11	11.55	0.0	05.0185	03.4251	00.4578	00.1877	-00.0040	-00.1020
12	15.54	0.0	07.0173	03.6217	00.5240	00.2542	-00.0501	-00.0257
13	19.54	0.0	06.5384	03.5874	00.5081	00.4246	00.0068	-00.0738
14	-00.45	0.0	02.2511	02.5818	00.3954	-00.1127	-00.0277	00.0313

REF: T. C. LSW# 167
FILE NO. A-180

LVP LOW SPEED WIND TUNNEL TEST 17

DYNAMIC PRESSURE 176.0 PSF
TUNNEL VELOCITY 127.4 KNOTS
BAROMETRIC PRESSURE 29.45 IN. HG
TUNNEL TEMPERATURE 105 DEG F
REYNOLDS NO./FT 1.4372 X 10⁶, CO

REF: C69
EL. PL. 1 C67
PMT. 0.020
09/13/4-1
3-2-00 04.55

PT	ALPHA	PSI	CX	CY	CPX	CY	CX	CY
01	-00.43	0.0	02.2547	02.0515	00.3952	-00.1481	-00.0910	00.0447
02	-00.41	-4.0	02.2221	02.0377	00.4589	-01.1194	-00.0112	00.1781
03	-00.41	-3.0	02.0900	01.5938	00.4510	-00.1524	-00.0000	00.1144
04	-00.41	-2.0	02.2252	02.0717	00.4575	-00.0708	-00.0557	00.0624
05	-00.41	-1.0	02.0051	02.7170	00.4210	-00.3443	-00.0371	00.0070
06	-00.41	-0.0	02.1374	02.0883	00.4218	-00.1421	-00.0344	00.0574
07	-00.41	1.0	02.2570	02.0526	00.4175	-00.0905	-00.0747	-00.0421
08	-00.41	2.0	02.1210	02.8405	00.5617	00.1350	-00.0288	-00.1510
09	-00.41	3.0	02.2350	02.0090	00.5943	00.3090	-00.0129	-00.1440
10	-00.41	4.0	01.5780	02.7577	00.4241	00.6431	00.0001	-00.1474
11	-00.41	-0.0	02.2058	02.0072	00.4573	-00.1212	-00.0556	00.0580

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-181

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 157.8 KNOTS
BAROMETRIC PRESSURE 29.48 IN. HG
TUNNEL TEMPERATURE 106 DEG F
RENOIDS NO./FT 1.4339 X 1,000,000

RUN 090
B1 F1 W1 CA38
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.42	-0.0	04.5646	03.2119	00.3806	00.0011	-00.0223	00.0087
02	07.42	-4.0	04.6969	03.2930	00.3930	-00.5554	-00.1205	00.3902
03	07.42	-3.0	04.4852	03.3141	00.3836	-00.4479	-00.0242	00.1504
04	07.43	-2.0	04.5899	03.2341	00.4021	-00.2066	-00.0313	-00.0473
05	07.44	-1.0	04.5013	03.2406	00.3882	-00.0880	-00.0282	-00.0799
06	07.44	-0.0	04.5080	03.2032	00.3769	-00.0272	-00.0366	-00.0329
07	07.44	1.0	04.5192	03.2853	00.3871	-00.0118	-00.0643	00.0134
08	07.45	2.0	04.5043	03.3251	00.3783	00.0469	-00.0477	00.0188
09	07.45	3.0	04.5303	03.3193	00.3821	00.1348	-00.0184	-00.0894
10	07.45	4.0	04.4063	03.2765	00.4308	00.3040	-00.0001	-00.0527
11	07.45	-0.0	04.5149	03.3587	00.3597	00.0154	-00.0663	-00.0128

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 187

PAGE NO. A-182

LWT LOW SPEED WIND TUNNEL TEST 187

DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 157.6 KNOTS
 BAROMETRIC PRESSURE 29.48 IN. HG
 TUNNEL TEMPERATURE 100 DEG F
 REYNOLDS NO./FT 1.433V X 1,000,000

RUN 091
 31 FL #1 CASE
 PHI C DEG
 04/10/64-1
 *ADJY AXUSSY

PT	ALPHA	PSI	CL	CA	CPM	CY	CRF	CYM
01	15.55	-0.0	07.1873	03.6462	00.4277	00.2544	00.0129	-00.1606
02	15.55	-4.0	07.4382	03.7503	00.2634	00.2666	-00.0714	-00.0476
03	15.55	-3.0	07.3139	03.6410	00.3406	00.2957	-00.0697	-00.0889
04	15.55	-2.0	07.2211	03.6546	00.3442	00.3341	-00.0646	-00.0759
05	15.55	-1.0	07.2331	03.7056	00.1807	00.3092	-00.0595	-00.0703
06	15.55	-0.0	07.1812	03.6773	00.3987	00.2311	-00.0763	-00.0215
07	15.55	1.0	07.1666	03.6218	00.4211	00.2079	-00.0250	-00.0734
08	15.55	2.0	07.0380	03.5852	00.3744	00.3951	-00.0436	-00.0380
09	15.55	3.0	07.1351	03.5448	00.3804	00.2627	-00.0675	-00.0557
10	15.55	4.0	07.2300	03.5455	00.4040	00.2568	-00.0667	-00.0619
11	15.55	-0.0	07.1896	03.6014	00.4142	00.2453	00.0011	-00.1038

UNCLASSIFIED

REPORT NO. LSNT 167

PAGE NO. A-183

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 211.9 KNOTS
 BAROMETRIC PRESSURE 29.48 IN. HG
 TUNNEL TEMPERATURE 114 DEG F
 REYNOLDS NO./FT 1.8781 X 1,000,000

RUN 002
 BL H1 V1 CASE
 PHI 0 DEG
 09/03/64-J
 BODY /XES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	-00.45	-0.0	02.2169	02.5360	00.3839	-00.1163	-00.0177	00.0641
02	-04.44	-0.0	00.9465	02.1623	00.3682	-00.1960	-00.0140	00.1476
03	-03.46	-0.0	01.2739	02.2950	00.3705	-00.1800	00.0051	00.0421
04	-02.45	-0.0	01.5811	02.2944	00.4023	-00.1242	-00.0253	00.0597
05	-01.45	-0.0	01.9370	02.4872	00.4008	-00.1243	-00.0035	00.0467
06	-00.46	-0.0	02.2633	02.6411	00.3947	-00.0446	-00.0098	00.0835
07	00.55	-0.0	02.5561	02.7553	00.4088	-00.0286	00.0078	00.0232
08	01.51	-0.0	02.7706	02.8547	00.3843	-00.0206	00.0100	00.0248
09	02.46	-0.0	03.0579	02.9111	00.3813	-00.0046	-00.0119	00.0379
10	03.55	-0.0	03.3912	02.9704	00.3914	00.0032	00.0002	00.0239
11	05.57	-0.0	04.0190	03.1592	00.3757	00.0951	00.1062	00.0220
12	07.46	-0.0	04.5166	03.2556	00.3554	00.1621	-00.0001	00.0391
13	11.55	-0.0	05.4843	03.3648	00.4331	00.2363	00.0470	-00.0325
14	15.55	-0.0	07.1764	03.5472	00.4270	00.3430	00.0103	-00.0550
15	19.55	-0.0	08.6179	03.6709	00.2482	00.5645	00.0377	-00.0717
16	-02.44	-0.0	01.6164	02.4156	00.3446	-00.0924	-00.0018	00.0101
17	-00.47	-0.0	02.2452	02.7133	00.4013	-00.0127	-00.0285	00.0565

PEPLER NO. LSRT 167
PAGE NO. A-184

LVT LOW SPEED WIND TUNNEL TEST 157

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 212.2 KNOTS
BAROMETRIC PRESSURE 24.46 IN. HG
TUNNEL TEMPERATURE 116 DEG F
RENCLOS NO./FT 1.80VE X 1,000,000

ROM 093
61 F1 W1 CABB
PHI 6 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CM	CYN
01	-00.47	-0.0	02.2140	02.6373	00.3915	00.0271	-00.0249	00.0287
02	-00.47	-4.0	02.0619	02.6265	00.4530	-01.3439	-00.1453	00.2430
03	-00.47	-3.0	02.0577	02.6829	00.4257	-00.6312	-00.0215	00.1215
04	-00.47	-2.0	02.1254	02.6386	00.4367	-00.3789	-00.0165	00.0161
05	-00.47	-1.0	02.1618	02.7484	00.4279	-00.2187	-00.0178	00.0283
06	-00.46	0.0	02.2072	02.6847	00.3935	-00.0120	00.0087	00.0011
07	-00.46	1.0	02.2112	02.6861	00.3962	00.1650	-00.0090	-00.0191
08	-00.46	2.0	02.2519	02.7419	00.3820	00.3608	00.0135	-00.0093
09	-00.46	3.0	02.0915	02.6268	00.3651	00.5279	00.0181	-00.1351
10	-00.46	4.0	01.9348	02.6782	00.3509	00.3790	00.0308	-00.1280
11	-00.46	-0.0	02.2529	02.6850	00.4157	-00.0207	-00.0084	00.1020

REPORT NO. LSWT 167
PAGE NO. A-185

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 212.6 KNOTS
BAROMETRIC PRESSURE 29.48 IN. HG
TUNNEL TEMPERATURE 118 DEG F
RENOIDS NO./FT 1.8615 X 1,000,000

RUN 094
81 F1 W1 CA38
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.44	-0.0	04.4714	03.3078	00.3433	00.1898	00.0158	-00.0256
02	07.44	-4.0	04.5703	03.4275	00.3778	-00.9359	-00.2938	00.3733
03	07.44	-3.0	04.5382	03.3665	00.3733	-00.2530	-00.0560	00.1512
04	07.44	-2.0	04.4614	03.2698	00.3507	-00.0522	-00.0334	-00.0276
05	07.44	-1.0	04.5150	03.3000	00.3540	00.0739	-00.0082	-00.0257
06	07.44	-0.0	04.4869	03.2414	00.3521	00.1898	00.0095	00.0029
07	07.44	1.0	04.4962	03.3090	00.3711	00.1936	00.0783	00.0153
08	07.44	2.0	04.4320	03.3608	00.3379	00.1276	00.1380	00.0138
09	07.44	3.0	04.4624	03.2867	00.3598	00.2517	00.0763	00.0054
10	07.44	4.0	04.3839	03.2305	00.3862	00.4456	00.0664	-00.0576
11	07.44	-0.0	04.5175	03.2294	00.3697	00.1898	00.0079	-00.0053

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167
 PAGE NO. A-186

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 212.8 KNOTS
 BAROMETRIC PRESSURE 29.48 IN. HG
 TUNNEL TEMPERATURE 119 DEG F
 RENCLDS NO./FT 1.8574 X 1,000,000

RUN 095
 B1 F1 W1 CA38
 PHI 0 DEG
 09/03/64-1
 BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	15.53	-0.0	07.1120	03.6102	00.3870	00.3857	00.0096	-00.0135
02	15.53	-4.0	07.4266	03.8642	00.2956	-00.5641	-00.4460	00.0033
03	15.53	-3.0	07.2994	03.6915	00.3296	00.2340	-00.0812	-00.1005
04	15.53	-2.0	07.1983	03.5482	00.3577	00.3804	-00.0408	-00.0644
05	15.53	-1.0	07.1877	03.7037	00.3790	00.3637	-00.0214	-00.0364
06	15.53	-0.0	07.1847	03.4250	00.3947	00.3788	00.0025	-00.0251
07	15.53	1.0	07.1027	03.6245	00.3982	00.3461	-00.0079	-00.0406
08	15.53	2.0	07.0791	03.6543	00.3864	00.4109	-00.0160	-00.0302
09	15.53	3.0	07.0913	03.3986	00.3777	00.5159	-00.0407	-00.0245
09	15.53	3.0	07.1304	03.5391	00.3815	00.4756	-00.0360	-00.0517
10	15.53	4.0	07.2647	03.5933	00.3844	00.4230	-00.0424	00.0222
11	15.53	-0.0	07.1952	03.6119	00.4009	00.3060	-00.0001	-00.0264

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LPT 157
PAGE NO. A-187

LVT LOW SPEED WIND TUNNEL TEST 157

DYNAMIC PRESSURE 0.35.7 PSF
TUNNEL VELOCITY 104.7 KNOTS
BAROMETRIC PRESSURE 29.46 IN. HG
TUNNEL TEMPERATURE 100 DEG F
RENCLOS NL/FT 0.9892 X 1,000,000RUN 096
E1 F1 W1
PFI 0 DEG
09/05/64-1
BODY AXES

PT	ALPHA	PSI	CA	CA	CPM	CY	CRM	CYM
01	-00.47	-0.0	02.0220	01.1673	00.3055	00.0792	-00.0009	-00.0162
02	-04.44	-0.0	00.6373	00.9337	00.2874	-00.1120	-00.0044	00.0543
03	-03.45	-0.0	01.0181	00.9003	00.3047	-00.0482	-00.0003	-00.0155
04	-02.45	-0.0	01.3195	01.2011	00.3036	00.0154	-00.0185	00.0639
05	-01.47	-0.0	01.6557	01.3012	00.2850	00.0154	-00.0105	00.0110
06	-00.45	-0.0	01.9571	01.5889	00.2883	00.0154	-00.0209	00.0220
07	00.50	-0.0	02.2480	01.2165	00.2597	00.1111	00.0217	-00.0196
08	01.54	-0.0	02.4460	01.3254	00.3210	00.0474	-00.0207	00.0087
09	02.44	-0.0	02.7722	01.4261	00.2868	00.0474	00.0010	-00.0037
10	03.50	-0.0	03.1721	01.4878	00.3450	00.1432	-00.0111	00.0489
11	05.57	-0.0	03.5618	01.6590	00.3376	00.2506	00.0137	-00.0790
12	07.44	-0.0	04.1524	01.8115	00.3663	00.1025	00.0107	-00.0571
13	11.55	-0.0	05.1310	02.1695	00.5185	00.2483	-00.0085	-00.0587
14	15.58	-0.0	06.5257	02.3202	00.6000	00.1370	-00.0206	-00.1071
15	19.55	-0.0	08.1271	02.4020	00.5500	00.4171	-00.0180	-00.0799
16	-00.47	-0.0	01.7964	01.2172	00.2510	-00.0802	-00.0307	00.0940

UNCLASSIFIED

REF ID: A-188
 REF ID: A-188

LVI LOW SPEED WIND TUNNEL TEST 1-7

DYNAMIC PRESSURE 0.55. PSF
 TUNNEL VELOCITY 104.6 KNOTS
 BAROMETRIC PRESSURE 29.40 IN. HG
 TUNNEL TEMPERATURE 65.2 F
 KENSLETS 10.7 FT 0. 714 X 1,000,000

REF ID: A-188
 REF ID: A-188
 REF ID: A-188
 REF ID: A-188

PT	ALPHA	PSI	U	V	W	U	V	W	U
01	-00.47	-0.0	01.8457	01.833	00.7143	-00.0165	-0.0043	-0.0121	
02	-00.47	-4.0	01.6552	01.2977	00.2945	-00.0119	-0.0087	-0.0114	
03	-00.47	-1.0	01.5505	01.413	00.3502	-00.0705	-0.0946	-0.0725	
04	-00.47	-2.0	01.5310	01.000	00.3505	-00.0777	-0.0010	-0.0000	
05	-00.47	-1.0	01.5430	01.1700	00.3200	-00.0907	-00.0014	-0.0001	
06	-00.47	-0.0	02.0000	01.1000	00.3420	-00.1757	-00.0422	-0.0000	
07	-00.47	1.0	01.220	01.2271	00.3120	00.0034	-00.0001	-00.0000	
08	-00.47	2.0	01.000	01.0040	00.2200	00.0007	-00.0000	-0.0000	
09	-00.40	3.0	01.0020	01.0000	00.2500	00.0000	-00.0000	-00.0000	
10	-00.40	4.0	01.0000	01.0000	00.2000	00.0000	-00.0000	-00.0000	
11	-00.40	-0.0	01.0000	01.0000	00.2000	-00.0000	-00.0000	-00.0000	
12	-00.40	-4.0	01.7007	01.0000	00.2000	-01.0000	-00.0000	-00.0000	
13	-00.40	-1.0	01.0000	01.0000	00.2000	-00.0000	-00.0000	-00.0000	

REPORT NO. LSWT 167
PAGE NO. A-189

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 104.5 KNOTS
BAROMETRIC PRESSURE 29.46 IN. HG
TUNNEL TEMPERATURE 098 DEG F
RENOIDS NO./FT 0.9736 X 1,000,000

RUN 098
B1 F1 W1
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	03.59	-0.0	03.2097	01.5439	00.3183	-00.0001	-00.0304	-00.0700
02	03.57	-4.0	05.3477	01.1115	03.9619	02.7382	-03.5459	00.7809
03	03.57	-3.0	03.3011	01.4047	00.3755	-00.4678	-00.0115	00.0997
04	03.57	-2.0	03.2507	01.6208	00.3588	-00.2869	00.0407	00.0463
05	03.57	-1.0	03.1160	01.5068	00.2967	-00.0937	00.0119	-00.0159
06	03.57	-0.0	03.1039	01.3916	00.3044	-00.0001	00.0473	00.0405
07	03.57	1.0	03.0647	01.5497	00.3133	00.1256	00.0395	-00.0142
08	03.57	2.0	03.1272	01.4480	00.3204	00.1525	-00.0246	00.1373
09	03.57	3.0	03.1664	01.4427	00.3419	00.1809	00.0298	00.0356
10	03.57	4.0	02.9390	01.6653	00.3367	00.4156	00.0873	-00.0185
11	03.57	-0.0	03.1158	01.5825	00.3004	00.1595	00.0338	00.0028

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-190

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 104.4 KNOTS
BAROMETRIC PRESSURE 29.46 IN. HG
TUNNEL TEMPERATURE 097 DEG F
REYNOLDS NO./FT 0.9759 X 1,000,000

RUN 099
B1 F1 W1
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.45	0.0	04.1303	01.6370	00.3242	00.2942	-00.0681	00.0196
02	07.45	-4.0	04.4905	01.8532	00.3644	-00.3807	-00.1870	00.1713
03	07.45	-3.0	04.2241	01.7817	00.3384	-00.1846	-00.0632	00.0625
04	07.45	-2.0	04.2426	01.6778	00.3613	-00.0539	-00.1038	-00.0961
05	07.45	-1.0	04.2678	01.7951	00.3399	00.1659	-00.0399	00.0103
06	07.45	-0.0	04.0777	01.4828	00.3435	00.0382	-00.0829	-00.1269
07	07.45	1.0	04.2154	01.7934	00.3560	00.0559	-00.0710	00.0068
08	07.45	2.0	04.1658	01.7110	00.3854	00.1333	-00.1106	00.0731
09	07.45	3.0	04.1645	01.5836	00.3836	00.0974	-00.1057	00.0337
10	07.45	4.0	04.0739	01.7363	00.3993	00.1074	-00.0097	-00.1004
11	07.45	-0.0	04.1343	01.6684	00.3146	00.1343	-00.0150	-00.1382

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-191

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 104.3 KNOTS
BAROMETRIC PRESSURE 29.46 IN. HG
TUNNEL TEMPERATURE 096 DEG F
RENOIDS NO./FT 0.9781 X 1,000,000RUN 100
B1 F1 W1
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	11.56	-0.0	05.1062	01.9624	00.4687	00.2167	00.0732	-00.2108
02	11.56	-4.0	05.5316	02.0496	00.4631	00.1386	-00.1116	00.1137
03	11.56	-3.0	05.2752	01.9444	00.4543	00.2377	-00.0682	-00.0004
04	11.56	-2.0	05.2031	02.0096	00.4198	00.1330	-00.0461	-00.0368
05	11.56	-1.0	05.1468	01.8430	00.4249	00.2267	-00.0169	-00.0703
06	11.56	-0.0	05.0998	01.9312	00.4250	00.0892	00.0129	-00.1557
07	11.56	1.0	05.0850	01.9446	00.4666	00.0305	00.0069	-00.1489
08	11.56	2.0	05.2217	02.0250	00.4453	00.0384	-00.0391	-00.0466
09	11.56	3.0	05.1643	01.8786	00.4723	00.0234	-00.0591	-00.0084
10	11.58	4.0	05.0805	01.8747	00.4755	-00.0819	00.0516	-00.1048
11	11.58	-0.0	05.1072	01.9608	00.4232	00.1223	-00.0032	-00.0876

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LS&T 107
PAGE NO. A-192

LVT LOW SPEED WIND TUNNEL TEST 107

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 104.2 KNOTS
BAROMETRIC PRESSURE 29.46 IN. HG
TUNNEL TEMPERATURE 095 DEG F
RENOIDS NO./FT 0.9804 X 1,000,000RUN 101
01 F1 R1
PHI 0 DEG
09/10/64-1
BODY AXES

PT	ALPHA	PSI	CX	CY	CPR	CY	CPR	CY
01	15.59	0.0	06.5662	02.1701	00.4971	00.3798	-00.0523	00.0005
02	15.59	-4.0	06.9535	02.1449	00.4204	00.6012	-00.1001	-00.1403
03	15.59	-3.0	06.8721	02.1983	00.4588	00.5372	-00.1405	00.0030
04	15.59	-2.0	06.8207	02.1727	00.5019	00.5106	-00.1119	-00.0884
05	15.59	-1.0	06.7406	02.0779	00.5553	00.5981	-00.0413	-00.1148
06	15.59	-0.0	06.5517	02.1137	00.4847	00.3798	00.0216	00.0102
07	15.59	1.0	06.8166	02.1310	00.5692	00.2019	00.0128	-00.1345
08	15.59	2.0	06.8247	02.0062	00.5458	00.1483	-00.0340	-00.0204
09	15.59	3.0	06.9074	02.2187	00.5670	00.2579	-00.0730	00.0082
10	15.59	4.0	06.7555	02.1050	00.5423	00.0930	00.0017	00.1250
11	15.59	-0.0	06.7130	02.0961	00.5009	00.1560	-00.0254	-00.0970

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LS-7 1-7

PAGE NO. A-193

LVT LCP SPEED WIND TUNNEL TEST 157

DYNAMIC PRESSURE 070.2 PSF
 TUNNEL VELOCITY 150.4 KNOTS
 BAROMETRIC PRESSURE 29.47 IN. HG
 TUNNEL TEMPERATURE 39.0 DEGR
 REYNOLDS NO./FT 1.4607 X 1,000,000

RUN 102
 -1 FL W1
 FHL 0.00
 09/02/64-3
 BICY AXES

PT	ALPHA	PSI	CX	CY	CPX	CY	CPX	CY
01	-00.47	0.0	02.4010	01.2102	00.3986	-00.1271	-00.0401	00.0000
02	-04.50	0.0	01.3714	01.8799	00.4000	-00.2040	-00.0440	00.0000
03	-00.45	0.0	01.4244	00.9889	00.4203	-00.1000	-00.0010	00.0000
04	-02.41	0.0	01.7099	00.7754	00.4128	-00.1000	-00.0062	00.0000
05	-01.40	0.0	02.0300	01.1273	00.4001	-00.1000	-00.0000	00.0000
06	-00.40	0.0	02.3027	01.0070	00.3072	-00.1413	-00.0000	-00.0000
07	00.50	0.0	02.0927	01.2562	00.4100	-00.1000	-00.0000	-00.0000
08	01.50	0.0	02.0909	01.3607	00.4271	-00.0200	-00.0000	-00.0000
09	02.40	0.0	03.2900	01.3400	00.4000	-00.0700	-00.0000	-00.0000
10	03.50	0.0	03.0201	01.4207	00.4240	-00.0000	-00.0000	-00.0000
11	05.50	0.0	04.1030	01.5720	00.4807	-00.0000	-00.0000	-00.0000
12	07.45	0.0	04.0590	01.7021	00.5120	00.0000	-00.0000	-00.0000
13	11.50	0.0	05.0000	01.7730	00.5110	00.0000	-00.0000	-00.0000
14	15.50	0.0	07.1040	02.1000	00.4800	00.0000	-00.0000	-00.0000
15	19.54	0.0	08.4040	02.2070	00.5000	00.0000	-00.0000	-00.0000
16	-00.45	0.0	02.4020	01.1949	00.4000	-00.1129	-00.0444	00.0000

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-194

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 156.7 KNOTS
BAROMETRIC PRESSURE 29.47 IN. HG
TUNNEL TEMPERATURE 098 DEG F
REYNOLDS NO./FT 1.4600 X 1,000,000

RUN 103
B1 F1 W1
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	03.57	0.0	03.6379	01.3896	00.4304	-00.0279	-00.0242	-00.0203
02	03.57	-4.0	03.7640	01.5132	00.4669	-00.5347	00.0829	00.1645
03	03.57	-3.0	03.6459	01.4413	00.4459	-00.4857	00.0633	00.0833
04	03.57	-2.0	03.6341	01.4811	00.4344	-00.3153	00.0496	00.0104
05	03.59	-1.0	03.6723	01.4019	00.4429	-00.1563	00.0125	-00.0326
06	03.59	-0.0	03.6029	01.5041	00.4172	-00.0429	00.0142	-00.0222
07	03.59	1.0	03.6247	01.3915	00.4349	-00.0288	-00.0008	00.0227
08	03.59	2.0	03.6632	01.4725	00.4456	00.0730	00.0043	00.0091
09	03.59	3.0	03.6050	01.4396	00.4444	00.2282	00.0519	-00.0122
10	03.59	4.0	03.4690	01.4782	00.4578	00.3587	00.0864	-00.0073
11	03.59	-0.0	03.6303	01.4883	00.4236	-00.0710	-00.0047	-00.0343

UNCLASSIFIEDREPORT NO. LSWT 167
PAGE NO. A-195

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 156.8 KNOTS
BAROMETRIC PRESSURE 29.47 IN. HG
TUNNEL TEMPERATURE 099 DEG F
RENOIDS NO./FT 1.4567 X 1,000,000RUN 104
B1 F1 W1
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.46	-0.0	04.5321	01.6830	00.4552	00.1433	00.0019	-00.0169
02	07.46	-4.0	04.7147	01.8222	00.4644	-00.3995	-00.1093	00.2402
03	07.46	-3.0	04.6485	01.7533	00.4624	-00.2684	-00.0794	00.0992
04	07.46	-2.0	04.5619	01.6372	00.4346	-00.0818	-00.0445	-00.0947
05	07.46	-1.0	04.5803	01.7015	00.4514	00.0666	-00.0149	-00.0281
06	07.46	-0.0	04.5743	01.6775	00.4649	00.1292	-00.0345	-00.0675
07	07.46	1.0	04.4815	01.7293	00.4554	00.0324	-00.0400	-00.0254
08	07.46	2.0	04.5287	01.7040	00.4562	00.0618	-00.0417	00.0510
09	07.46	3.0	04.4663	01.7865	00.4630	00.0265	-00.0236	00.0173
10	07.46	4.0	04.5366	01.8080	00.5230	00.1466	00.0137	-00.0354
11	07.46	-0.0	04.6012	01.7740	00.4759	00.1008	-00.0211	-00.0676

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-196

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 156.9 KNOTS
 BAROMETRIC PRESSURE 29.47 IN. HG
 TUNNEL TEMPERATURE 100 DEG F
 RENOLDS NO./FT 1.4533 X 1,000,000

RUN 105
 B1 F1 W1
 PHI 0 DEG
 09/03/64-1
 BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	11.60	-0.0	05.4554	01.8296	00.5503	00.2370	00.0099	-00.0902
02	11.60	-4.0	05.8052	02.0039	00.5243	00.1218	-00.1289	00.1630
03	11.60	-3.0	05.4996	01.9429	00.5000	00.1090	-00.0799	00.0477
04	11.60	-2.0	05.5085	01.8567	00.4885	00.2315	-00.0939	00.0136
05	11.60	-1.0	05.3662	01.8885	00.5103	00.2210	-00.0340	00.0195
06	11.60	-0.0	05.4199	01.9382	00.5374	00.2653	00.0133	-00.0302
07	11.60	1.0	05.2745	01.8627	00.5255	00.0436	00.0171	-00.0745
08	11.60	2.0	05.3312	01.9059	00.5150	00.0069	-00.0227	00.0045
09	11.60	3.0	05.3745	01.8986	00.5337	-00.0151	-00.0269	00.0054
10	11.60	4.0	05.3374	01.8979	00.5514	-00.1089	00.0276	-00.0323
11	11.60	-0.0	05.2974	01.9054	00.5138	00.2086	00.0091	-00.1161

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-197

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 156.9 KNOTS
BAROMETRIC PRESSURE 29.47 IN. HG
TUNNEL TEMPERATURE 100 DEG F
RENOIDS NO./FT 1.4533 X 1,000,000RUN 106
B1 F1 W1
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	15.54	-0.0	06.9501	02.1098	00.5747	00.3162	00.0029	-00.1380
02	15.58	-4.0	07.2272	02.2882	00.4743	00.4610	-00.0676	-00.2337
03	15.59	-3.0	07.0562	02.1775	00.5015	00.3703	-00.0279	-00.2142
04	15.59	-2.0	06.8811	02.2624	00.5062	00.4401	-00.0007	-00.1560
05	15.59	-1.0	06.9011	02.1304	00.5397	00.3375	00.0312	-00.1337
06	15.59	-0.0	06.7925	02.1613	00.5429	00.3164	00.0145	-00.1254
07	15.59	1.0	06.7984	02.0972	00.5582	00.2825	-00.0079	-00.0980
08	15.63	2.0	06.8049	02.1443	00.5413	00.2188	-00.0342	-00.0936
09	15.63	3.0	06.8730	02.1672	00.5545	00.1899	-00.0564	-00.0508
10	15.63	4.0	06.8267	02.0766	00.5321	00.1809	-00.0299	00.0302
11	15.63	-0.0	06.7571	02.1825	00.5348	00.3178	00.0117	-00.1503

UNCLASSIFIED

PRELIMINARY DATA

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-198

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 156.9 KNOTS
BAROMETRIC PRESSURE 29.47 IN. HG
TUNNEL TEMPERATURE 100 DEG F
RENOIDS NO./FT 1.4533 X 1,000,000RUN 107
B1 F1 W1
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	-00.48	-0.0	02.2389	01.1026	00.3729	-00.1493	-00.0394	00.0182
02	-00.48	-4.0	02.5817	02.4294	00.4973	-00.9101	-00.0287	00.1724
03	-00.48	-3.0	02.1393	01.2642	00.3936	-00.8224	-00.0539	00.0518
04	-00.48	-2.0	02.1821	01.1866	00.3932	-00.6191	-00.0584	-00.0126
05	-00.48	-1.0	02.1706	01.0904	00.3729	-00.3535	-00.0556	00.0241
06	-00.48	-0.0	02.1960	01.1448	00.3489	-00.1635	-00.0208	-00.0040
07	-00.48	1.0	02.2514	01.0525	00.3606	-00.0471	-00.0521	-00.0163
08	-00.48	2.0	02.2502	01.1608	00.3565	00.1441	-00.0330	-00.1485
09	-00.48	3.0	02.0670	01.1227	00.3440	00.3502	-00.0224	-00.0728
10	-00.48	4.0	01.9096	01.1989	00.3316	00.6343	-00.0168	-00.1049
11	-00.48	-0.0	02.2245	01.1308	00.3695	-00.1493	-00.0113	00.0179

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-199

LWT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 210.4 KNOTS
BAROMETRIC PRESSURE 29.46 IN. HG
TUNNEL TEMPERATURE 106 DEG F
RENCLOS NO./FT 1.9115 X 1,000,000

RUN 103
81 F1 W1
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	-00.46	-0.0	02.1874	01.1858	00.3402	-00.1041	-00.0157	-00.0083
02	-04.45	-0.0	00.9514	00.8598	00.3536	-00.1678	00.0057	00.0354
03	-03.47	-0.0	01.2122	00.9340	00.3511	-00.1360	-00.0172	00.0234
04	-02.45	-0.0	01.5719	01.0179	00.3606	-00.0802	00.0083	00.0513
05	-01.47	-0.0	01.8782	01.0738	00.3520	-00.1041	-00.0225	00.0260
06	-00.46	-0.0	02.1953	01.1818	00.3420	-00.0802	00.0030	00.0182
07	00.53	-0.0	02.5001	01.1577	00.3537	-00.0084	00.0026	00.0166
08	01.52	-0.0	02.0252	01.2810	00.3649	-00.0004	00.0110	00.0308
09	02.48	-0.0	02.0877	01.3527	00.3697	00.0475	-00.0130	00.0142
10	03.54	-0.0	03.3680	01.4471	00.3650	00.0555	-00.0027	-00.0210
11	05.55	-0.0	03.9682	01.5800	00.3956	00.1630	00.0065	-00.0263
12	07.46	-0.0	04.3879	01.7051	00.4189	00.1743	00.0071	-00.0330
13	11.53	-0.0	05.2164	01.8768	00.5258	00.3040	00.0008	-00.0366
14	15.54	-0.0	06.3610	02.1797	00.5646	00.3361	00.0073	-00.0743
15	19.53	-0.0	08.2998	02.2611	00.4306	00.5763	00.0133	-00.0551
16	00.71	-0.0	02.5561	01.3233	00.3476	-00.0004	00.0002	-00.0034
17	00.71	-0.0	02.5072	01.2362	00.3337	00.0075	00.0105	00.0170
18	-00.47	-0.0	02.1950	01.1745	00.3341	-00.0085	00.0031	00.0480

PRELIMINARY DATA

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-200

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 211.7 KNOTS
BAROMETRIC PRESSURE 29.46 IN. HG
TUNNEL TEMPERATURE 113 DEG F
RENOlds NO./FT 1.8817 X 1,000,000RUN 109
B1 F1 W1
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	-00.47	-0.0	02.1991	01.1664	00.3350	-00.0244	00.0017	00.0430
02	-00.48	-4.0	02.0524	01.2740	00.3890	-01.4538	-00.2316	00.1975
03	-00.48	-3.0	02.0968	01.2309	00.3769	-00.5934	-00.0160	00.1024
04	-00.48	-2.0	02.2040	01.1843	00.3806	-00.3492	-00.0247	00.0459
05	-00.48	-1.0	02.1704	01.2218	00.3527	-00.2588	-00.0086	00.0221
06	-00.48	-0.0	02.1670	01.1427	00.3409	-00.0244	-00.0114	00.0431
07	-00.48	1.0	02.2268	01.1682	00.3444	00.1667	-00.0049	-00.0399
	-00.48	2.0	02.1953	01.1300	00.3352	00.2625	00.0071	-00.1102
8	-00.48	3.0	02.1311	01.1216	00.3293	00.4653	00.0189	-00.0895
10	-00.48	4.0	02.0023	01.0888	00.3178	00.7158	00.0316	-00.0669
11	-00.48	-1.0	02.1872	01.1209	00.3430	-00.1135	-00.0296	00.0400
12	-00.48	-0.0	02.2384	01.1750	00.3495	-00.0249	-00.0008	00.0451

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-201

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 212.1 KNOTS
BAROMETRIC PRESSURE 29.46 IN. HG
TUNNEL TEMPERATURE 115 DEG F
REYNOLDS NO./FT 1.8733 X 1,000,000RUN 110
B1 F1 W1
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	03.55	-0.0	03.3899	01.4050	00.3466	00.1071	00.0063	00.0098
02	03.54	-4.0	03.4521	01.5682	00.4092	-00.9993	-00.1333	00.1747
03	03.54	-3.0	03.4544	01.4760	00.3999	-00.3078	00.0293	00.2598
04	03.54	-2.0	03.4697	01.4627	00.3860	-00.0865	00.0658	00.0466
05	03.54	-1.0	03.4165	01.5055	00.3588	-00.0263	00.0406	00.0121
06	03.54	-0.0	03.3909	01.4297	00.3549	00.0436	00.0020	00.0136
07	03.54	1.0	03.3880	01.4007	00.3646	00.1913	00.0073	00.0464
08	03.54	2.0	03.4281	01.4525	00.3780	00.1732	00.0114	00.0275
09	03.54	3.0	03.2893	01.4108	00.3505	00.3358	00.0489	00.0486
10	03.54	4.0	03.2728	01.4371	00.3711	00.5179	00.0836	00.0630
11	03.54	-0.0	03.4307	01.4272	00.3561	00.0675	00.0050	00.0140
12	03.54	-1.0	03.4856	01.4620	00.3694	-00.0091	00.0319	00.0160

UNCLASSIFIED

PRELIMINARY DATA

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-202

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 209.6 KNOTS
BAROMETRIC PRESSURE 29.50 IN. HG
TUNNEL TEMPERATURE 102 DEG F
REYNOLDS NO./FT 1.9302 X 1,000,000RUN 114
B1 F1 W1
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.44	-0.0	04.3217	01.7599	00.3944	00.2027	00.0061	-00.0410
02	07.44	-4.0	04.4976	01.9167	00.4376	-01.0039	-00.3347	00.2219
03	07.44	-3.0	04.3631	01.8105	00.4033	-00.1322	-00.0299	00.0509
04	07.44	-2.0	04.3289	01.7326	00.3880	00.1241	-00.0015	-00.0853
05	07.44	-1.0	04.3706	01.7931	00.3956	00.1619	-00.0109	-00.0786
06	07.44	-0.0	04.3779	01.7604	00.4101	00.1383	-00.0190	-00.0354
07	07.44	1.0	04.3474	01.7694	00.4056	00.1713	-00.0096	00.0189
08	07.44	2.0	04.4041	01.7615	00.4147	00.1879	-00.0232	00.0423
09	07.44	3.0	04.3948	01.7527	00.4200	00.1997	00.0030	00.0756
10	07.44	4.0	04.3902	01.7671	00.4462	00.2765	00.0178	00.0420
11	07.44	-0.0	04.3707	01.7051	00.4005	00.2021	-00.0003	-00.0421
12	07.44	-1.0	04.3988	01.7010	00.4045	00.1634	-00.0316	-00.0623
13	07.44	-2.0	04.3435	01.7210	00.3905	00.0765	-00.0290	-00.0892

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-203

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 211.0 KNOTS
 BAROMETRIC PRESSURE 29.50 IN. HG
 TUNNEL TEMPERATURE 110 DEG F
 RENOLDS NO./FT 1.8957 X 1,000,000

RUN 115
 B1 F1 W1
 PHI 0 DEG
 09/03/64-1
 BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	11.60	-0.0	05.3347	01.8950	00.5227	00.3220	00.0018	-00.0527
02	11.45	-4.0	05.6125	02.0604	00.5106	-00.4716	-00.4032	00.2569
03	11.45	-3.0	05.4327	01.9746	00.4996	00.2578	-00.0690	00.1517
04	11.45	-2.0	05.3410	01.9447	00.4722	00.3593	-00.0641	00.0594
05	11.45	-1.0	05.3771	01.9127	00.5118	00.2868	-00.0210	00.0131
06	11.45	-0.0	05.3362	01.9900	00.5240	00.2951	-00.0112	-00.0442
07	11.45	1.0	05.2736	01.8887	00.5228	00.2205	00.0215	00.0057
08	11.45	2.0	05.2723	01.9314	00.5157	00.1543	-00.0116	00.0543
09	11.45	3.0	05.2850	01.8869	00.5188	00.0723	00.0147	00.0570
10	11.45	4.0	05.3771	01.9540	00.5595	-00.0026	00.0253	00.0253
11	11.45	-0.0	05.2391	01.9121	00.5042	00.3270	00.0012	-00.0316
12	11.45	3.0	05.2495	01.9121	00.5115	00.0413	-00.0050	00.0674
13	11.45	3.0	05.2308	01.9402	00.5073	00.0426	-00.0019	00.0387

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSPT 167
PAGE NO. A-204

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 211.4 KNOTS
BAROMETRIC PRESSURE 29.60 IN. HG
TUNNEL TEMPERATURE 112 DEG F
RENUIDS NO./FT 1.6872 X 1,000,000RUN 110
SI FI #1
PMI C OFG
09/10/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CNM	CYM
01	15.59	-0.0	06.8634	02.2032	00.5170	00.3919	00.0054	-00.0367
02	15.63	-4.0	07.2156	02.4050	00.5056	-00.4710	-00.4956	-00.0484
03	15.63	-3.0	07.0495	02.2136	00.4958	00.4051	-00.0953	-00.0594
04	15.63	-2.0	07.0085	02.1973	00.5022	00.4570	-00.0371	-00.0379
05	15.63	-1.0	06.9657	02.2550	00.5254	00.4079	00.0118	-00.0467
06	15.63	-0.0	06.9494	02.1752	00.5343	00.4054	-00.0069	-00.0727
7	15.63	1.0	06.9572	02.1676	00.5376	00.3745	-00.0144	-00.0325
08	15.63	2.0	06.9148	02.1234	00.5596	00.3970	-00.0171	-00.0006
09	15.63	3.0	06.9001	02.1040	00.5186	00.3279	-00.0186	00.0401
10	15.63	4.0	06.9159	02.1551	00.5121	00.3047	-00.0161	00.0898
11	15.63	-0.0	06.9537	02.1905	00.5274	00.4523	-00.0069	-00.0151
12	15.63	-1.0	06.9976	02.2014	00.5311	00.4003	-00.0200	-00.0646
13	15.63	-3.0	07.1713	02.2651	00.5367	00.0057	-00.2548	-00.0814

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSNT 107
PAGE NO. A-205

LVT LOW SPEED WIND TUNNEL TEST 107

DYNAMIC PRESSURE 035.9 PSF
TUNNEL VELOCITY 104.0 KNOTS
BAROMETRIC PRESSURE 29.52 IN. Hg
TUNNEL TEMPERATURE 69.4 DEG F
RHO LBS/FT³ 0.002376 X 1,000,000

RUN 117
BL FL AT CAR
PT 3 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	C _D	C _L	C _{PM}	C _Y	C _{RM}	C _{YM}
01	-00.46	0.0	02.3779	02.5241	00.4330	-00.1434	-00.0309	00.0000
02	-04.44	0.0	00.9346	01.8359	00.3820	-00.2700	-00.0403	00.1302
03	-03.45	0.0	01.3380	02.2444	00.4046	-00.2071	00.0011	00.0984
04	-02.45	0.0	01.5403	02.3748	00.3910	-00.2390	-00.0174	00.0319
05	-01.46	0.0	01.8151	02.4051	00.3633	-00.0797	-00.0091	00.0377
06	-00.47	0.0	02.1220	02.5082	00.3845	-00.1752	00.0116	00.0099
07	00.50	0.0	02.4348	02.6675	00.3797	-00.0797	00.0200	00.1109
08	01.50	0.0	02.8220	02.8607	00.4257	-00.2071	00.0170	00.0011
09	02.40	0.0	03.0044	02.6077	00.4414	-00.0478	-00.0019	00.0377
10	03.55	0.0	03.3351	02.7834	00.4257	00.0159	-00.0474	00.0827
11	05.51	-0.0	03.5440	02.5271	00.4735	00.1552	00.0412	-00.0515
12	07.45	0.0	04.3298	03.0049	00.4790	00.0712	00.0012	00.0880
13	11.50	0.0	05.5470	03.0110	00.5072	00.1517	-00.0142	00.0521
14	15.50	-0.0	06.8050	03.5573	00.5208	00.3154	00.0252	-00.1780
15	19.50	-0.0	08.4675	03.3920	00.4507	00.4018	00.0025	-00.1163
16	-00.45	0.0	02.2157	02.4272	00.3101	-00.1434	00.0000	00.0014
17	03.57	-0.0	03.2427	02.0110	00.4602	00.0479	00.0473	-00.0097
18	-04.44	0.0	00.6485	02.1109	01.3028	-00.2390	-00.0151	00.1505
19	00.50	0.0	02.3743	02.6970	01.3445	-00.0470	-00.0110	00.0997
20	01.50	0.0	02.8191	02.7333	00.3913	-00.0478	-00.0445	00.0741
21	02.47	0.0	02.9427	02.7100	00.4000	-00.1115	-00.0000	00.0000
22	05.50	0.0	03.8050	02.9951	00.3900	00.0516	-00.0075	-00.0000
23	11.54	0.0	05.4482	03.0200	00.3306	00.0079	00.0000	00.0011

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-206

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 103.8 KNOTS
BAROMETRIC PRESSURE 29.52 IN. HG
TUNNEL TEMPERATURE 092 DEG F
REYNOLDS NO./FT 0.9882 X 1,000,000

RUN 118
B1 F1 W1 CA10
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	-00.47	0.0	02.1217	02.6181	00.3370	-00.0956	-00.0250	00.1498
02	-00.48	-4.0	01.9930	02.4925	00.4449	-01.0742	-00.1105	00.3323
03	-00.47	-3.0	02.0984	02.8435	00.4420	-00.9166	-00.0635	00.1292
04	-00.47	-2.0	02.2374	02.7331	00.4875	-00.7942	-00.0487	00.1712
05	-00.47	-1.0	02.1738	02.5920	00.4389	-00.3936	-00.0708	00.1619
06	-00.47	-0.0	02.1224	02.5223	00.3741	-00.2238	-00.0621	00.0884
07	-00.47	1.0	02.2923	02.7025	00.3817	00.0417	-00.0239	-00.0224
08	-00.47	2.0	02.0872	02.6263	00.3112	00.3686	-00.0282	-00.0562
09	-00.47	3.0	01.9204	02.3831	00.3226	00.4507	-00.0346	-00.1232
10	-00.47	4.0	01.9316	02.5772	00.4054	00.6839	-00.0157	-00.1219
11	-00.47	-0.0	02.1210	02.6816	00.3738	-00.0326	00.0112	00.0686
12	-00.47	-4.0	01.8314	02.7696	00.4207	-01.1903	-00.0689	00.3264
13	-00.47	3.0	01.9516	02.4167	00.3087	00.4211	-00.0244	-00.0452

REPORT NO. LSWT 167
PAGE NO. A-207

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
TUNNEL VELOCITY 103.7 KNOTS
BAROMETRIC PRESSURE 29.52 IN. HG
TUNNEL TEMPERATURE 090 DEG F
RENOIDS NO./FT 0.9927 X 1,000,000RUN 119
B1 F1 W1 CA10
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.46	0.0	04.2621	03.1295	00.3395	00.2947	-00.1008	00.0636
02	07.46	-4.0	04.4547	03.2934	00.3848	-00.5752	-00.1750	00.2600
03	07.46	-3.0	04.4327	03.1249	00.4129	-00.4159	-00.0833	00.1503
04	07.46	-2.0	04.3093	02.9193	00.4047	-00.1306	-00.0711	00.0354
05	07.46	-1.0	04.2477	03.1088	00.3717	-00.1746	-00.0876	-00.0373
06	07.46	-0.0	04.1696	02.9159	00.3699	00.0377	-00.0560	00.0733
07	07.46	1.0	04.2554	03.0764	00.3818	-00.1451	-00.1187	00.0019
08	07.46	2.0	04.2709	03.2457	00.3924	-00.0366	-00.0742	00.0758
09	07.46	3.0	04.3764	03.1918	00.4248	00.1820	-00.0503	-00.2108
10	07.46	4.0	04.1815	03.0432	00.4084	00.5499	-00.0006	-00.0769
11	07.46	-0.0	04.3318	02.9271	00.3760	00.3572	-00.0734	-00.0465
12	07.46	-1.0	04.3700	03.0621	00.3986	-00.0793	-00.1459	-00.0550
13	07.46	4.0	04.0899	03.0798	00.4000	00.2003	-00.0312	-00.1617

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-208

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 033.9 PSF
 TUNNEL VELOCITY 103.7 KNOTS
 BAROMETRIC PRESSURE 29.52 IN. HG
 TUNNEL TEMPERATURE 090 DEG F
 RENOLOS NO./FT 0.9927 X 1,000,000

RUN 120
 B1 F1 W1 CA10
 PHI 0 DEG
 09/03/64-1
 BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	15.58	-0.0	06.9646	03.4165	00.4510	00.4741	-00.1381	00.0367
02	15.57	-4.0	07.2417	03.4813	00.2795	00.4419	-00.1133	00.0438
03	15.56	-3.0	07.4276	03.6673	00.4161	00.4867	-00.1023	00.0844
04	15.55	-2.0	07.2249	03.5785	00.4233	00.2974	-00.0728	00.0213
05	15.53	-1.0	07.1181	03.6341	00.4696	00.4005	00.0064	-00.0398
06	15.53	-1.0	07.0479	03.6194	00.4841	00.3374	-00.0393	-00.0890
07	15.50	-0.0	06.9846	03.5192	00.4240	00.4409	-00.1101	-00.0721
08	15.50	1.0	06.9221	03.4308	00.4733	00.4447	-00.0165	-00.1785
09	15.48	2.0	07.0043	03.5820	00.4679	00.4853	-00.0486	-00.1028
10	15.48	3.0	07.0577	03.5673	00.4862	00.4518	-00.0838	-00.1449
11	15.48	4.0	06.9537	03.5058	00.4318	00.3127	-00.0101	-00.1715
12	15.48	-4.0	07.2540	03.5608	00.3010	00.5277	-00.1353	00.0200
13	15.48	0.0	06.8568	03.4253	00.4376	00.4754	-00.0601	00.0265

UNCLASSIFIED

REPORT NO. LSWT 1-7
PAGE NO. A-209

LWT LOW SPEED WIND TUNNEL TEST 1-7

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 155.7 KNOTS
BAROMETRIC PRESSURE 29.92 IN. HG
TUNNEL TEMPERATURE 092 DEG F
RENCLOS NO./FT 1.4125 X 1,000,000

RUN 121
81 FT WIND TUNNEL
PHI 1.00
09/07/44-1
* * * * *

PT	ALPHA	PSI	CA	CA	CL	CL	CM	CM
01	-00.48	0.0	02.1704	02.5557	00.5358	-00.1403	-00.0229	00.0589
02	-04.58	0.0	01.2549	03.0654	00.4283	-00.0158	-00.0145	00.0497
03	-03.48	0.0	01.2617	02.1501	00.5085	-00.2797	-00.0358	00.0351
04	-02.45	0.0	01.6036	02.2779	00.7697	-00.1854	-00.0275	00.0275
05	-01.44	0.0	01.5933	02.3901	00.2587	-00.1571	-00.0317	00.0022
06	-00.48	0.0	02.1710	02.5455	00.3454	-00.1687	-00.0164	00.0160
07	00.54	0.0	02.5140	02.5357	00.5690	-00.0975	-00.0145	00.0151
08	01.54	0.0	02.8016	02.6405	00.5715	-00.1455	-00.0275	-00.0171
09	02.48	0.0	03.3565	02.7578	00.4044	-00.0414	-00.0223	-00.0152
10	03.57	0.0	03.3560	02.8988	00.4278	-00.0696	-00.0155	-00.0265
11	05.52	0.0	03.8557	03.0427	00.4234	-00.0554	-00.0229	-00.0704
12	07.44	0.0	04.4294	03.0975	00.4209	00.1234	-00.0567	-00.0827
13	11.55	0.0	05.410	03.1464	00.4798	00.3834	-00.0159	-00.1437
14	15.57	0.0	07.2054	03.3573	00.5255	00.2416	-00.0088	-00.1439
15	19.55	0.0	08.5572	03.4851	00.5481	00.4085	-00.0145	-00.1436
16	-00.48	0.0	02.1724	02.4413	00.5645	-00.1545	-00.0365	00.0775
17	-00.48	0.0	02.1714	02.5089	00.5575	-00.1470	-00.0153	00.0161

UNCLASSIFIED

REPORT NO. LSWT 167
 PAGE NO. A-210

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
 TUNNEL VELOCITY 155.7 KNOTS
 BAROMETRIC PRESSURE 29.52 IN. HG
 TUNNEL TEMPERATURE 092 DEG F
 RENOLDS NO./FT 1.4815 X 1,000,000

RUN 122
 B1 F1 W1 CA10
 PHI 0 DEG
 09/03/64-1
 BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	-00.45	0.0	02.1721	02.5542	00.3809	-00.1474	-00.0741	00.1125
02	-00.45	-4.0	02.1547	02.6169	00.4120	-01.1200	-00.0605	00.2594
03	-00.45	-3.0	02.0869	02.6056	00.4004	-00.7932	-00.0517	00.1852
04	-00.45	-2.0	02.2140	02.6690	00.4149	-00.5994	-00.0514	00.0620
05	-00.45	-1.0	02.3433	02.6137	00.4173	-00.3667	-00.0578	00.0441
06	-00.45	0.0	02.2714	02.5120	00.3825	-00.0496	-00.0204	00.0837
	-00.45	1.0	02.2264	02.5317	00.3543	00.0069	-00.0263	-00.0134
08	-00.45	2.0	02.2686	02.5102	00.3366	00.2619	-00.0126	-00.1168
(	-00.45	3.0	02.2268	02.5121	00.3379	00.5221	-00.0089	-00.1318
10	-00.45	4.0	01.9569	02.4790	00.3280	00.7095	-00.0109	-00.1251
11	-00.45	-0.0	02.2718	02.4409	00.3662	-00.1070	-00.0181	00.0606

UNCLASSIFIED

REPORT NO. A-211
 DATE: 1/1/67

FLOW SPEED AND TUNNEL TIME

YAMIC FLOW SPEED AND TUNNEL TIME
 TUNNEL VELOCITY 15.1 KNOTS
 DASH EFFECT PRESSURE 1.2 I.P.
 TUNNEL TIME 10.4/11.5 = 1.100000
 ENCLDS NO. 1/1 1.4/11.5 = 1.100000

1.100000
 1.100000
 1.100000
 1.100000
 1.100000

PT	SLIP	PSI	EN	Y	Y	Y	Y
1	07.41	-1.00	04.4107	1.00275	0.00	0.00	0.00275
02	07.43	-1.00	04.4107	1.00275	0.00	0.00	0.00275
03	07.45	-1.00	04.4107	1.00275	0.00	0.00	0.00275
04	07.45	-1.00	04.4107	1.00275	0.00	0.00	0.00275
05	07.45	-1.00	04.4107	1.00275	0.00	0.00	0.00275
06	07.45	-1.00	04.4107	1.00275	0.00	0.00	0.00275
07	07.46	-1.00	04.4107	1.00275	0.00	0.00	0.00275
08	07.46	-1.00	04.4107	1.00275	0.00	0.00	0.00275
09	07.46	-1.00	04.4107	1.00275	0.00	0.00	0.00275
10	07.46	-1.00	04.4107	1.00275	0.00	0.00	0.00275
11	07.46	-1.00	04.4107	1.00275	0.00	0.00	0.00275
12	07.46	-1.00	04.4107	1.00275	0.00	0.00	0.00275
13	07.46	-1.00	04.4107	1.00275	0.00	0.00	0.00275
14	07.46	-1.00	04.4107	1.00275	0.00	0.00	0.00275
15	07.46	-1.00	04.4107	1.00275	0.00	0.00	0.00275
16	07.46	-1.00	04.4107	1.00275	0.00	0.00	0.00275
17	07.46	-1.00	04.4107	1.00275	0.00	0.00	0.00275
18	07.46	-1.00	04.4107	1.00275	0.00	0.00	0.00275

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-212

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 156.2 KNOTS
BAROMETRIC PRESSURE 29.52 IN. HG
TUNNEL TEMPERATURE 096 DEG F
RENOIDS NO./FT 1.4679 X 1,000,000RUN 124
B1 F1 W1 CA10
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	15.54	-0.0	07.1436	03.3880	00.4554	00.2886	-00.0331	-00.1031
02	15.54	-4.0	07.4359	03.4746	00.3435	00.3624	-00.0723	-00.1323
03	15.54	-3.0	07.2737	03.5017	00.3699	00.3584	-00.0467	-00.2478
04	15.54	-2.0	07.0009	03.3964	00.4234	00.1870	-00.0437	-00.0723
05	15.54	-1.0	07.1275	03.3303	00.4389	00.2308	-00.0393	-00.0629
06	15.54	-0.0	07.0206	03.4217	00.4573	00.2876	-00.0175	-00.0797
07	15.54	1.0	07.0717	03.3592	00.4882	00.3020	-00.0449	-00.1496
08	15.54	2.0	07.0482	03.4127	00.4648	00.3890	-00.0442	-00.1318
09	15.54	3.0	07.1308	03.2761	00.4968	00.4738	-00.0595	-00.1631
10	15.54	4.0	07.1065	03.3696	00.4861	00.4539	-00.0420	-00.1268
11	15.54	-4.0	07.4392	03.5921	00.3530	00.3686	-00.0870	-00.1155
12	15.54	-3.0	07.3537	03.5250	00.4012	00.3845	-00.0989	-00.1442
13	15.54	-2.0	07.1820	03.4649	00.4552	00.1984	-00.0680	-00.0520
14	15.54	-1.0	07.1604	03.3953	00.4464	00.2306	-00.0549	-00.0428
15	15.54	3.0	07.0056	03.3550	00.4721	00.4761	-00.0464	-00.1736
16	15.54	-0.0	07.0806	03.4786	00.4664	00.2593	-00.0371	-00.0332

UNCLASSIFIED

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-213

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF
TUNNEL VELOCITY 209.1 KNOTS
BAROMETRIC PRESSURE 29.52 IN. HG
TUNNEL TEMPERATURE 100 DEG F
RENOULDS NO./FT 1.9397 X 1,000,000RUN 125
B1 F1 W1 CA10
PHI 0 DEG
09/03/64-1
BODY AXFS

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	-00.48	-0.0	02.3152	02.4951	00.3329	-00.1801	-00.0297	00.0363
02	-00.48	-4.0	02.1046	02.7017	00.4568	-01.5647	-00.2292	00.2983
03	-00.48	-3.0	02.0702	02.6194	00.4198	-00.8446	-00.0391	00.1365
04	-00.48	-2.0	02.1852	02.5801	00.4025	-00.4805	-00.0305	00.0838
05	-00.48	-1.0	02.2800	02.4118	00.3882	-00.4193	-00.0293	00.0512
06	-00.48	-0.0	02.2111	02.5500	00.3854	-00.2040	-00.0162	00.0650
07	-00.48	1.0	02.3427	02.5614	00.3608	00.1070	-00.0178	00.0019
08	-00.48	2.0	02.2652	02.4791	00.3277	00.3748	-00.0071	-00.1192
09	-00.48	3.0	02.2707	02.5397	00.3514	00.4635	00.0100	-00.1426
10	-00.48	4.0	02.1013	02.4600	00.3199	00.8237	00.0265	-00.1627
11	-00.48	4.0	02.0695	02.4427	00.3464	00.8385	00.0341	-00.1699
12	-00.48	2.0	02.2892	02.4611	00.3282	00.4387	-00.0133	-00.1866
13	-00.48	1.0	02.3271	02.5205	00.3573	00.1621	-00.0238	-00.0698
14	-00.48	-1.0	02.2723	02.4216	00.3467	-00.3463	-00.0366	00.0716
15	-00.48	0.0	02.3231	02.5113	00.3466	-00.0996	-00.0046	00.0631
16	-00.48	3.0	02.2556	02.4379	00.3291	00.5779	00.0167	-00.1506

UNCLASSIFIED

UNCLASSIFIED

 REPORT NO. LS-1 167
 PAGE NO. A-214

LVT LOW SPEED WIND TUNNEL TEST 167

 DYNAMIC PRESSURE 135.5 PSF
 TUNNEL VELOCITY 207.7 KNOTS
 BAROMETRIC PRESSURE 29.93 IN. HG
 TUNNEL TEMPERATURE 01.1 DEG F
 REYNOLDS NO./FT 1.5720 X 1,000,000

 ROW 120
 11 71 11 041
 041 011
 04/05/64-1
 42600Y AXES#4

PT	ALPHA	PSA	CN	CA	CPM	CL	CLP	CLM
01	-00.45	0.0	02.2227	02.5471	00.3155	-00.1127	-00.1124	0.11245
02	-04.44	0.0	00.9780	02.0929	0.2119	-00.2385	-00.0000	0.1744
03	-02.44	0.0	01.5490	02.2550	00.1550	-00.1827	-00.0000	0.10377
04	-01.40	0.0	01.3480	02.1552	00.3300	-00.1340	00.0000	00.0487
05	-00.45	0.0	02.3050	02.0135	00.3120	-00.1104	-00.0100	0.10472
06	00.57	0.0	02.5434	02.1780	00.3190	-00.1104	-00.0110	0.10437
07	01.52	0.0	02.8537	02.7324	00.0752	-00.0472	-00.0201	00.0473
08	03.57	0.0	03.4300	02.9349	00.4124	-00.0471	-00.0244	00.0401
09	05.56	0.0	03.981	03.0781	00.4072	-00.0205	-00.0410	0.10070
10	07.45	0.0	04.5430	03.1007	00.4452	00.2550	-00.0000	-0.10778
11	11.55	0.0	05.4314	03.0405	00.4077	00.2257	00.0000	-0.10021
12	15.55	0.0	07.0790	03.3047	00.4125	00.2755	00.0034	-0.10583
13	19.55	0.0	08.4111	03.0270	00.3005	00.5071	-00.0142	-00.1207
14	-00.45	0.0	02.2200	02.5463	00.3100	-00.1029	-00.0075	0.11301

UNCLASSIFIED

REPORT NO. LSWT 167
PAGE NO. A-215

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 135.5 PSF .
TUNNEL VELOCITY 210.3 KNOTS
BAROMETRIC PRESSURE 29.55 IN. HG
TUNNEL TEMPERATURE 107 DEG F
REYNOLDS NO./FT 1.9101 X 1,000,000

RUN 127
B1 F1 W1 CA10
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.45	0.0	04.5736	02.9444	00.4369	00.1473	-00.0277	00.0006
02	07.45	-4.0	04.6640	02.9391	00.4374	-01.2127	-00.3851	00.3830
03	07.45	-3.0	04.5591	02.8746	00.4133	-00.4379	-00.0610	00.0789
04	07.45	-2.0	04.4895	02.8348	00.4081	-00.0432	00.0167	00.0566
05	07.45	-1.0	04.5046	02.8747	00.4184	-00.1521	-00.0453	-00.0200
06	07.46	-0.0	04.5178	02.9422	00.4212	00.1063	-00.0252	-00.0463
07	07.46	1.0	04.4418	02.9725	00.4089	00.2321	-00.0104	00.0062
08	07.46	2.0	04.4429	03.1572	00.4248	00.2289	-00.0274	-00.0307
09	07.46	3.0	04.4064	03.1822	00.4350	00.4332	-00.0056	-00.0553
10	07.46	4.0	04.4108	03.1445	00.4636	00.5073	00.0242	-00.1223
11	07.46	3.0	04.4747	03.2130	00.4504	00.4432	00.0063	-00.0834
12	07.46	2.0	04.5503	03.1162	00.4457	00.3071	-00.0027	-00.0177
13	07.46	1.0	04.4508	03.0413	00.4106	00.3445	00.0149	-00.0181
14	07.46	-0.0	04.5542	02.9133	00.4296	00.1382	-00.0131	-00.0294
15	07.46	-1.0	04.5463	02.8806	00.4104	00.0868	00.0139	-00.0289
16	07.46	-2.0	04.5713	02.7781	00.4077	00.0460	00.0127	-00.0511
17	07.46	-3.0	04.6675	02.8987	00.4296	-00.4497	-00.1882	00.1542
18	07.46	-4.0	08.1132	00.6036	07.0359	05.3706	-07.0061	00.7368

UNCLASSIFIED

REPORT NO. 147
PAGE NO. A-216

LOW SPEED WIND TUNNEL TEST 147

DYNAMIC PRESSURE 155.5 PSI
TUNNEL VELOCITY 211.2 KNOTS
BAROMETRIC PRESSURE 29.87 IN. HG
TUNNEL TEMPERATURE 112 DEG F
DENSITY NO./FT 1.8254 X 1,000,000

CON 12-
SI PL 11 CALN
PREF 100
10/1/84-1
Y 22.5%

PT	ALPHA	PC1	CA	CA	CPM	CV	CRS	CAN
01	15.50	-0.0	07.0934	03.4027	00.4737	00.3575	00.0001	-00.0040
02	15.50	-4.0	07.0543	03.4122	00.3627	-00.5134	-00.5040	-00.0000
03	15.50	-3.0	07.0117	03.4170	00.4210	00.3068	-00.0070	-00.1155
04	15.52	-2.0	07.0594	03.4602	00.4540	00.3255	-00.0261	-00.0370
05	15.52	-1.0	07.1000	03.4441	00.4381	00.3092	00.0040	-00.0011
06	15.52	-0.0	07.1542	03.4631	03.4782	00.3210	00.0107	-00.0104
07	15.52	1.0	07.1119	03.3019	00.4120	00.3068	00.0124	-00.0000
08	15.52	2.0	07.2007	03.3575	00.4711	00.3090	00.0120	-00.1170
09	15.52	3.0	07.1201	03.2444	00.4030	00.3000	-00.0120	-00.0000
10	15.52	4.0	07.0702	03.2544	00.4001	00.3000	-00.0310	-00.0000
11	15.52	5.0	07.1101	03.4041	00.4507	00.3110	00.0000	-00.0000
12	15.52	-0.0	07.1110	03.4120	00.4700	00.3077	00.0142	00.0000

UNCLASSIFIED

REPORT NO. LSWT 167

PAGE NO. A-217

LVT LOW SPEED WIND TUNNEL TEST 167

DYNAMIC PRESSURE 076.2 PSF
TUNNEL VELOCITY 157.4 KNOTS
BARGMETRIC PRESSURE 29.57 IN. HG
TUNNEL TEMPERATURE 105 DEG F
RENOLDS NO./FT 1.4394 X 1,000,000

RUN 129
81 F1 W1
PHI 0 DEG
09/03/64-1
BODY AXES

PT	ALPHA	PSI	CN	CA	CPM	CY	CRM	CYM
01	07.41	-0.0	04.4343	01.7218	00.4280	00.1997	-00.0524	-00.0415
02	07.41	-4.0	04.5131	01.8301	00.3974	-00.4106	-00.1249	00.1802
03	07.41	-3.0	04.3656	01.6855	00.4017	-00.2908	-00.0731	00.0358
04	07.41	-2.0	04.3595	01.7487	00.3897	-00.0275	00.0074	-00.0919
05	07.41	-1.0	04.2766	01.6968	00.3860	00.1513	00.0035	-00.0892
06	07.41	-0.0	04.3342	01.7206	00.4189	00.1578	00.0093	-00.0714
07	07.41	1.0	04.2657	01.7393	00.4055	00.0887	-00.0238	-00.0455
08	07.41	2.0	04.2938	01.6756	00.4114	00.0317	-00.0402	00.0185
09	07.42	3.0	04.3075	01.6840	00.4215	00.1200	-00.0136	-00.0185
10	07.43	4.0	04.3078	01.7151	00.4558	00.1956	00.0145	-00.0165
11	07.44	-3.0	04.4570	01.7176	00.4024	-00.2349	-00.1084	00.0659
12	07.46	-0.0	04.3356	01.6015	00.4004	00.1292	-00.0371	-00.0655

UNCLASSIFIED

REPORT NO LSWT 167

CLASSIFICATION: Unclassified
 LTV VOUGHT AERONAUTICS DIVISION Ling Temco Vought Inc
 TITLE: A Low Speed Wind Tunnel Force Test of the Sandia
Sauterne Model With Drogue Chute DATE 12-18-64
 J. W. Holbrook REPORT NO LSWT 167
 MODEL NO Sauterne I NO PAGES 272
 CLASSIFICATION OF REPORT Unclassified

The purpose of this test was to study the effect of certain drogue chute configurations on the stability and drag of the Sauterne configuration.

CONTRACTING AGENCY Sandia Corp. CONTRACT P.O. Number
 CLASSIFICATION Unclassified NUMBER 4803/004
 ABSTRACT CARD 2-52821
 CLASSIFICATION Unclassified
 LTV VOUGHT AERONAUTICS DIVISION Ling Temco Vought Inc
 TITLE: A Low Speed Wind Tunnel Force Test of the Sandia
Sauterne Model With Drogue Chute DATE 12-18-64
 J. W. Holbrook REPORT NO LSWT 167
 MODEL NO Sauterne I NO PAGES 272
 CLASSIFICATION OF REPORT Unclassified

The purpose of this test was to study the effect of certain drogue chute configurations on the stability and drag of the Sauterne configuration.

CONTRACTING AGENCY Sandia Corp. CONTRACT P.O. Number
 CLASSIFICATION Unclassified NUMBER 4803/004
 ABSTRACT CARD 2-52821

UNCLASSIFIED

CLASSIFICATION Unclassified
ABSTRACT (CONT'D.)

CLASSIFICATION Unclassified
ABSTRACT CARD CV ENG 282-1
CLASSIFICATION Unclassified
ABSTRACT (CONT'D.)

CLASSIFICATION Unclassified
ABSTRACT CARD CV ENG 282-1

UNCLASSIFIED

REPORT NO LSWT 167

CLASSIFICATION Unclassified

LTV VOUGHT AERONAUTICS DIVISION Ling Temco Vought Inc

TITLE A Low Speed Wind Tunnel Force Test of the Sandia
Sauterne Model With Droque Chute

DATE 12-18-64

BY J. W. Holbrook

REPORT NO LSWT 167

MODEL NO Sauterne I

NO PAGES 272

CLASSIFICATION OF REPORT Unclassified

ABSTRACT

The purpose of this test was to study the effect of certain drogue chute configurations on the stability and drag of the Sauterne configuration.

CONTRACTING AGENCY Sandia Corp.

CONTRACT F.O. Number

CLASSIFICATION Unclassified

NUMBER 4803/004

ABSTRACT CARD 2-52821

CLASSIFICATION Unclassified

LTV VOUGHT AERONAUTICS DIVISION Ling Temco Vought Inc

TITLE A Low Speed Wind Tunnel Force Test of the Sandia
Sauterne Model With Droque Chute

DATE 12-18-64

BY J. W. Holbrook

REPORT NO LSWT 167

MODEL NO Sauterne I

NO PAGES 272

CLASSIFICATION OF REPORT Unclassified

ABSTRACT

The purpose of this test was to study the effect of certain drogue chute configurations on the stability and drag of the Sauterne configuration.

CONTRACTING AGENCY Sandia Corp.

CONTRACT F.O. Number

CLASSIFICATION Unclassified

NUMBER 4803/004

ABSTRACT CARD 2-52821

UNCLASSIFIED

CLASSIFICATION Unclassified
ABSTRACT (CONT'D.)

CLASSIFICATION Unclassified
ABSTRACT CARD CV ENG 282-1
CLASSIFICATION Unclassified
ABSTRACT (CONT'D.)

CLASSIFICATION Unclassified
ABSTRACT CARD CV ENG 282-1

