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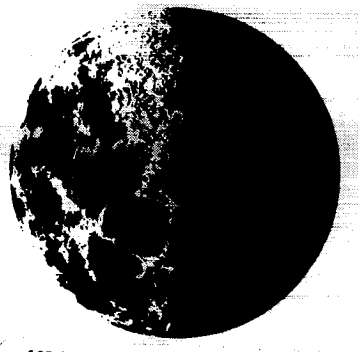

Apollo

(NASA-CR-116763) DATA REPORT FOR TESTS OF A 0.105 SCALE APOLLO /FS-2/ STATIC FORCE MODEL TO EVALUATE VARIOUS POST-ABORT CONFIGURATIONS AT MACH NUMBERS 0.4 TO 3.5 IN THE NAA TRISONIC WIND TUNNEL /TWT-90/ (North 00/02

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DATA REPORT FOR TESTS OF A 0.105-SCALE APOLLO (FS-2) STATIC FORCE MODEL TO EVALUATE VARIOUS POST-ABORT CONFIGURATIONS AT MACH NUMBERS 0.4 TO 3.5 IN THE NAA TRISONIC WIND TUNNEL (TWT-90) (U)

NAS9-150

October 1963

CLASSIFICATION CHANGE
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FOREWORD

The tests described in this report were conducted under NASA Apollo Contract NAS9-150. This report was prepared in accordance with Paragraph 5.5, Exhibit I of NASA Apollo Contract NAS9-150.

The report was prepared by D.G. Cummings and C. Mitchell of the Wind Tunnel Projects Group, Los Angeles Division, North American Aviation, Inc.

ABSTRACT

Tabulated and plotted results from force tests of the 0.105-scale Apollo FS-2 static force model in the North American Aviation Trisonic Wind Tunnel (TWT-90) at Mach numbers 0.4, 0.7, 1.2, and 3.5 are presented. The test data consists of both stability and body axis coefficients for the command module with various apex-mounted strakes and escape tower configurations.

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INTRODUCTION

Wind tunnel tests of the 0.105-scale FS-2 Apollo force model were conducted at Mach numbers 0.4, 0.7, 1.2, and 3.5 to obtain aerodynamic static stability characteristics of the command module with various strakes and escape tower configurations.

The command module with strakes was tested at angles of attack from -15 to +177 degrees. Supplementary data were also obtained with escape tower configurations on the command module in angle-of-attack regions from -5 to +95 and +130 to +160 degrees.

This report presents basic wind tunnel test data only, for the purpose of providing test results at the earliest possible date. Analysis and summary of results will be reported later under separate cover.

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I. DISCUSSION

The primary objective of these tests was to determine Apollo post-abort (before chute deployment) configurations which would eliminate the command module (C/M) apex forward trim point ($\alpha \approx 60$ degrees). The C/M was tested in this trim range at Mach number 0.4 with three strake configurations to determine which one produced the desired positive pitching moment increment about the center of gravity. Upon determining the most desirable strake configuration ($C_{39}L_{37}$), a more extensive investigation through a greater angle-of-attack range (-15 to +177 degrees) at Mach numbers 0.4, 0.7, 1.2, and 3.5 was conducted.

In addition, supplementary C/M data were obtained with full length "hourglass" tower configurations, used as an alternative to strakes. To provide additional positive pitching moment in the apex forward trim region, four of the upper tower bays were filled with flat plates (Figure 7). This configuration eliminated the original apex forward trim point ($\alpha \approx 60$ degrees), but at M = 3.5 it produced an area of marginal instability at $\alpha \approx 10$ degrees. To reduce the tendency to trim at $\alpha \approx 10$ degrees the two lower tower plates, which were producing negative pitching moment at low angles of attack, were removed, yielding a positive pitching moment increment of 0.009 in this region (Figure 8).

Data were computed using two center-of-gravity locations. The primary location (presented as $C_{m_{cg1}}$ data; $\bar{X}/D = -0.686$, $\bar{Z}/D = 0.059$) was defined as the reference center of gravity used for Apollo wind tunnel testing. The second location (presented as $C_{m_{cg2}}$ data; $\bar{X}/D = -0.638$, $\bar{Z}/D = 0.0545$) was at the command module center of gravity per the July weight statement.

The entire test program was run at an angle of attack (α) sweep rate of 4 degrees per second with the exception of one run which was made at a sweep rate of 3 degrees per second for a check on sweep rate effects. No effects were observed. The high sweep rate was necessary to complete the full 32 degree sector angle-of-attack range in the allotted run time (maximum Reynolds number runs).

At Mach number 0.4 a run was made at a minimum Reynolds number of 5.0×10^6 for comparison with the maximum Re at 11.3×10^6. This run was made in the angle-of-attack range α = +65 to +97 degrees.

Many of the plots at the low Mach numbers indicate that discontinuities exist in the data between the θ = 60 degrees and 80 degrees models. It is

considered that the θ = 80 degrees data are correct in this α range since the sting passes through the conical portion of the C/M rather than the heat shield as it does at θ = 60 degrees. Previous flow visualization studies of Reference 1 indicate that when a sting mounts through the heat shield (θ = 60 degrees) it could produce large force and moment effects in this angle-of-attack range.

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II. MODEL DESCRIPTION

GENERAL

The 0.105-scale Apollo FS-2 model was modified to provide for the addition of aerodynamic strakes to the command module, C_2. These strakes were mounted on the command module apex and forward conical surface via a "cap-like" structure which was contoured to fit over the apex. The present escape tower ("hourglass" design) was also modified by the addition of flat plates to fill the small triangular open areas at the top of the tower. With these tower configurations installed, the command module was designated C_{39} because of the exposed tower leg wells (Figure 2).

The three basic FS-2 command modules were used to provide model axis of symmetry to balance center-line angles (θ) of 0, 20, 40, 60, 80, 100, 120, 140, and 160 degrees.

Structural integrity of the basic model is investigated in the structural analysis report of Reference 3.

INSTRUMENTATION

Six-component force and moment data were measured with the revised 2-3/4 inch Task Mark I-A internal balance which was mounted on the sting assembly.

Base pressure was measured by a ±5 psia Statham differential pressure transducer, type PM6±5-700. Mercury manometers were used for preselected reference pressures.

MODEL NOMENCLATURE

The following nomenclature was used for model components in this test:

Symbol	Description	Drawing No.	Figure No.
C_2	Command Module	7121-01077 -3, -4, -5, -19, -20, and -21	1
C_{39}	Command Module (with tower leg attachment cavities exposed)	7121-01091 Rework from -4, -7, and -14	2
L_{36}	Strake		3
L_{37}	Strake		4
L_{38}	Strake		5
T_{26}	Tower Structure	7121-0171-2	6
T_{30}	Tower Structure		7
T_{31}	Tower Structure		8

FULL-SCALE DIMENSIONS

The full-scale dimensions of the components are presented in the following listing:

Command Module, C_2

Maximum diameter = 154 inches, radius of spherical heat shield = 184.8 inches, corner radius = 7.7 inches, afterbody semivertex angle = 33.0 degrees, afterbody vertex radius = 9.15 inches.

Command Module, C_{39}

Same as C_2 except tower leg attachment cavities are left exposed.

Strake, L_{36}

Apex mounted with supporting cap. The supporting cap, whose base is located 47.57 inches aft of the command module apex, consisted of ablation material with a 1.43 inch uniform thickness, 9.152 inch inner apex radius, and a 33.0 degree vertex semiangle.

The strake is paddle shaped, symmetrical about the module centerline, and mounted to the supporting cap in the yaw plane.

Dimensions of strake located radially at ϕ = 90 degrees. Forward end is located 21.50 inches forward of module apex. Length (measured along module centerline) = 69.07 inches and thickness = 1.81 inches. The strake is double tapered with the first taper beginning 21.50 inches forward of module apex and 10.62 inches from module centerline; the second taper begins 23.75 inches aft of module apex and 20.95 inches from module centerline. Forward face and first tapered surface are joined by an arc of 4.00 inches radius; aft end of the second tapered surface and base of supporting cap are joined by an arc of 1.00 inch radius.

Strake, L_{37}

Same as L_{36}, except there is an additional fairing added to the back of the second tapered surface. Forward face of fairing is perpendicular to module centerline and located 27.57 inches aft of module apex. Length (measured parallel to module surface) = 38.81 inches and height above module surface = 12.00 inches. Forward face and back (also aft face and back) are joined by an arc of 4.00 inches radius.

Strake, L_{38}

Similar to L_{36}, except strake is single tapered; taper begins 21.50 inches forward of module apex and 14.00 inches from module centerline, and ends 47.57 inches aft of module apex and 34.00 inches from module centerline.

Tower Structure, T_{26}

Length = 113.14 inches. Diameter of longitudinal members = 3.57 inches (4 members) and diameter of cross braces = 2.38 inches. Distance between attach points at command module = 46.76 inches and at escape motor = 36.07 inches.

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Tower Structure, T_{30}

Same as T_{26} with the four small triangular open areas (each bounded by the ring and two cross braces) at top of tower filled.

Tower Structure, T_{31}

Same as T_{30} with the two small areas below tower centerline left open.

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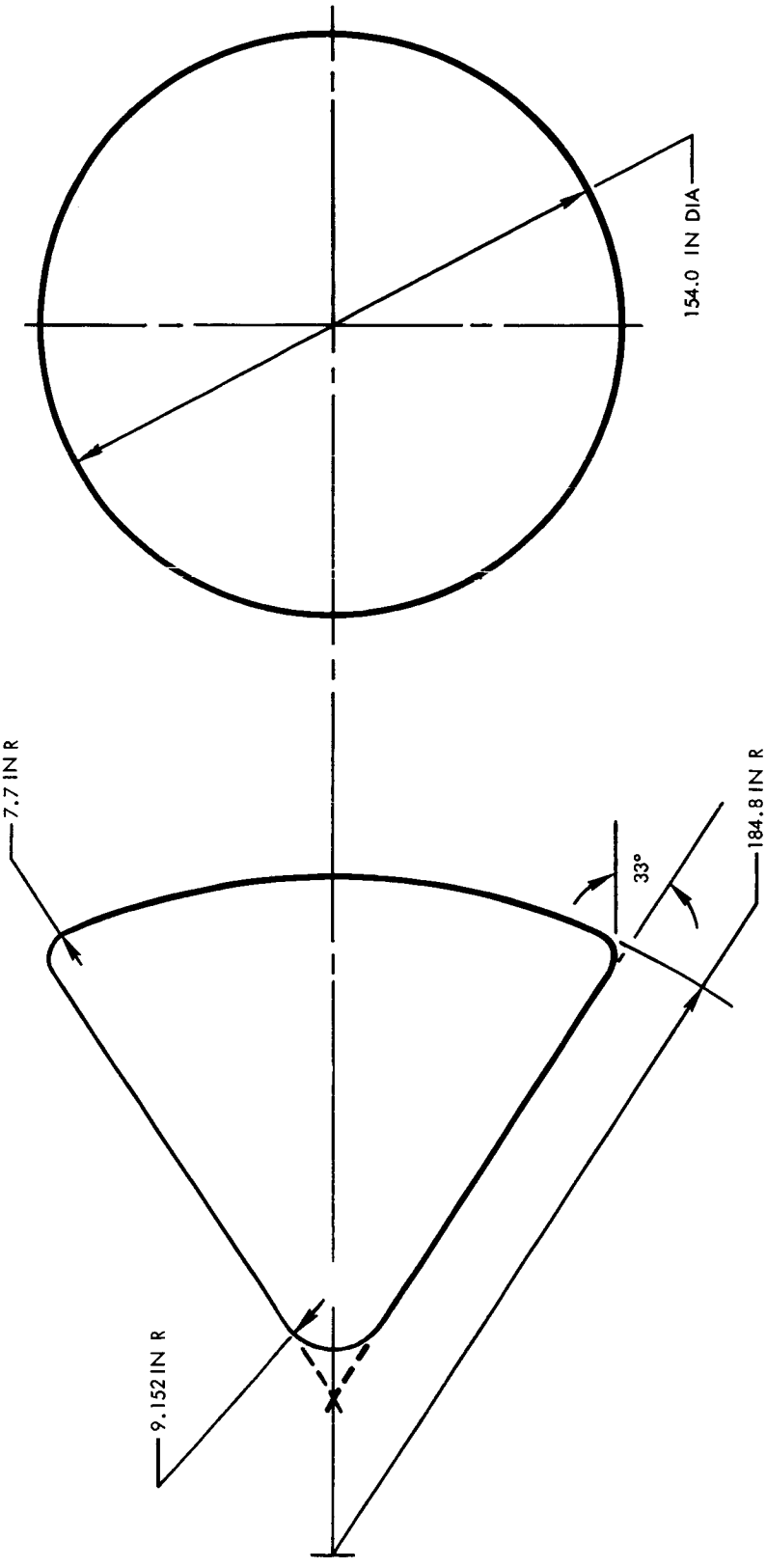

Figure 1. Command Module, C_2

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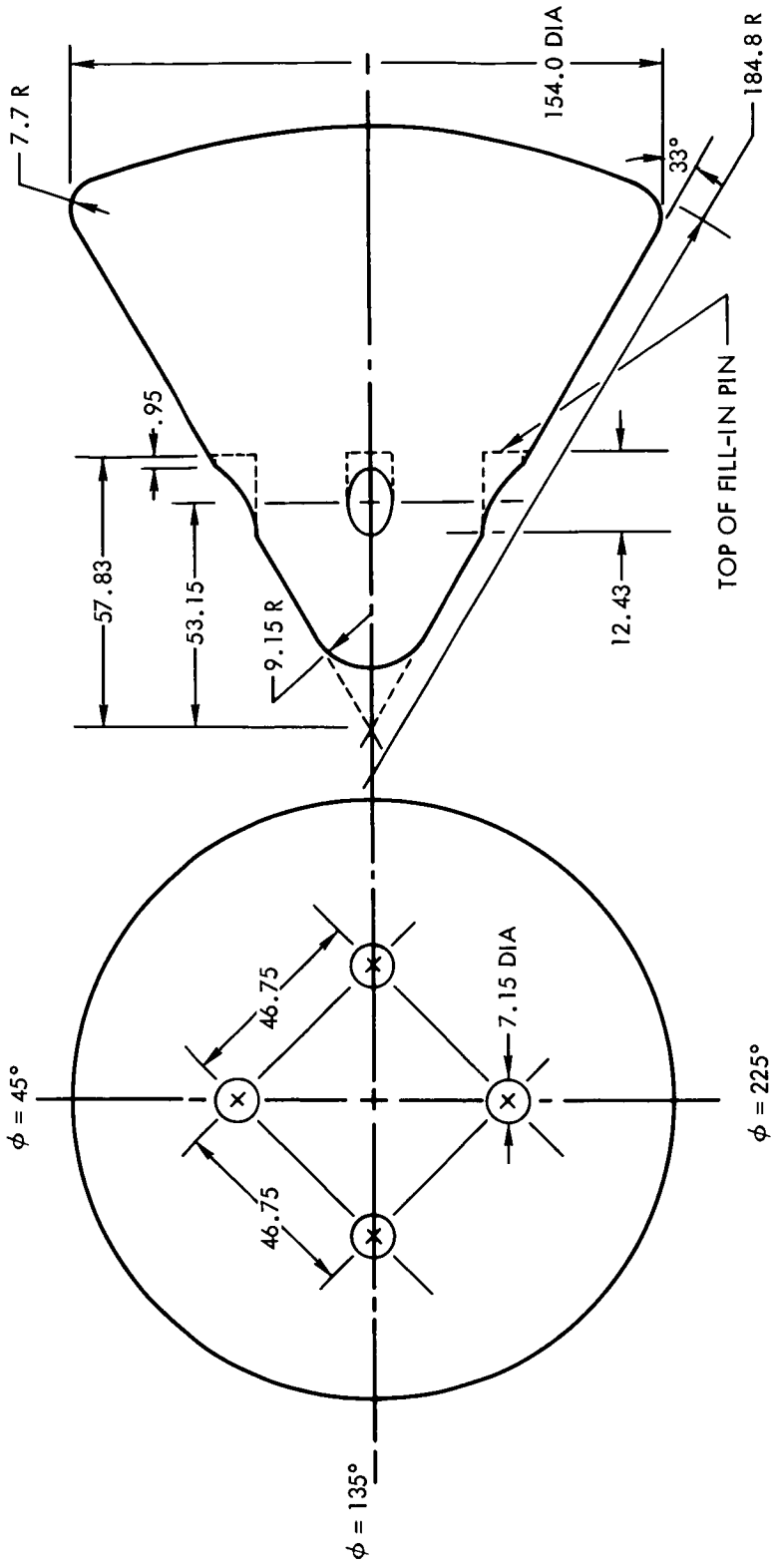

DRAWING NOT TO SCALE

FULL-SCALE DIMENSIONS IN INCHES

Figure 2. Command Module, C39

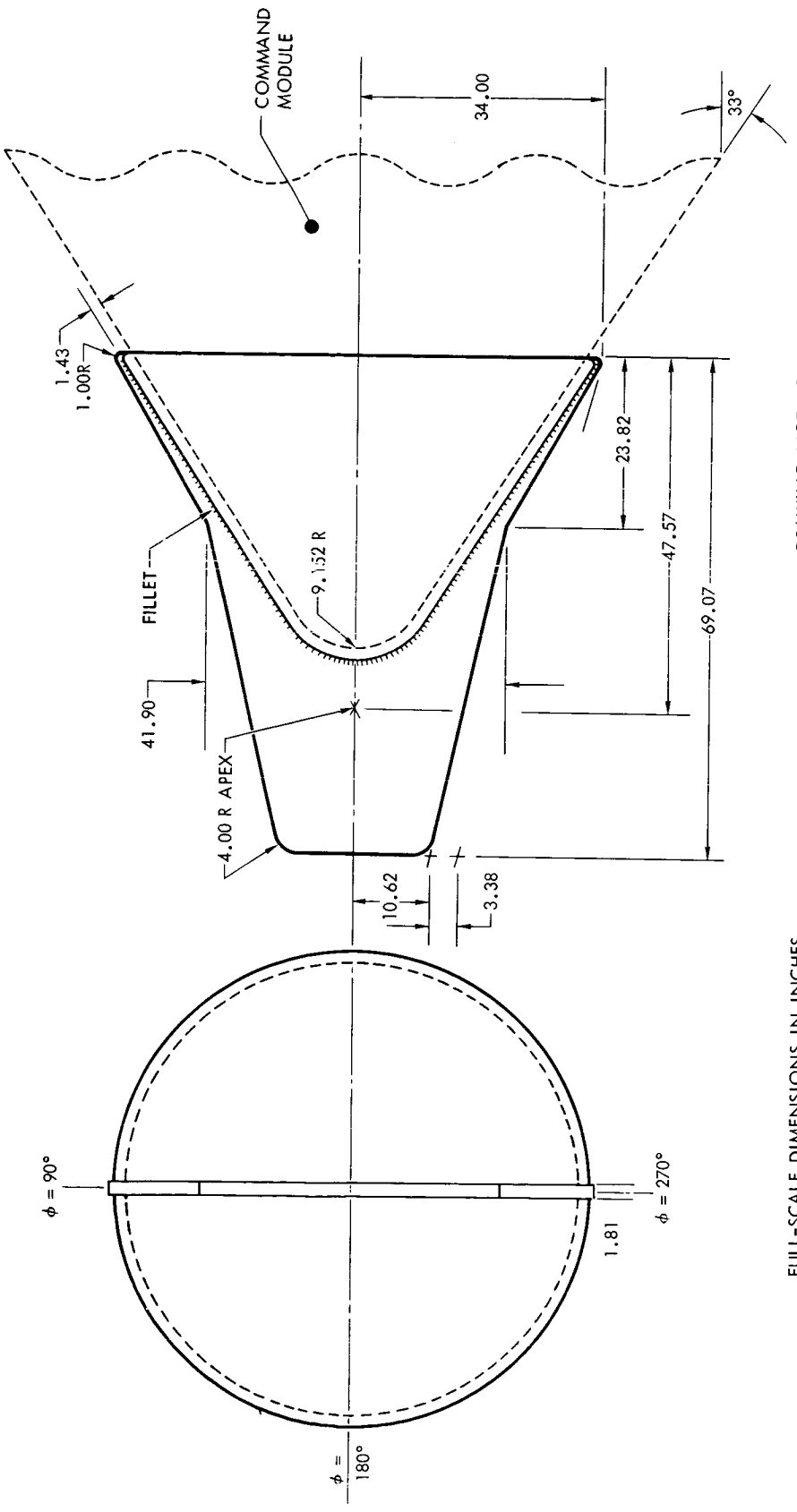

Figure 3. Strake, L_{36}

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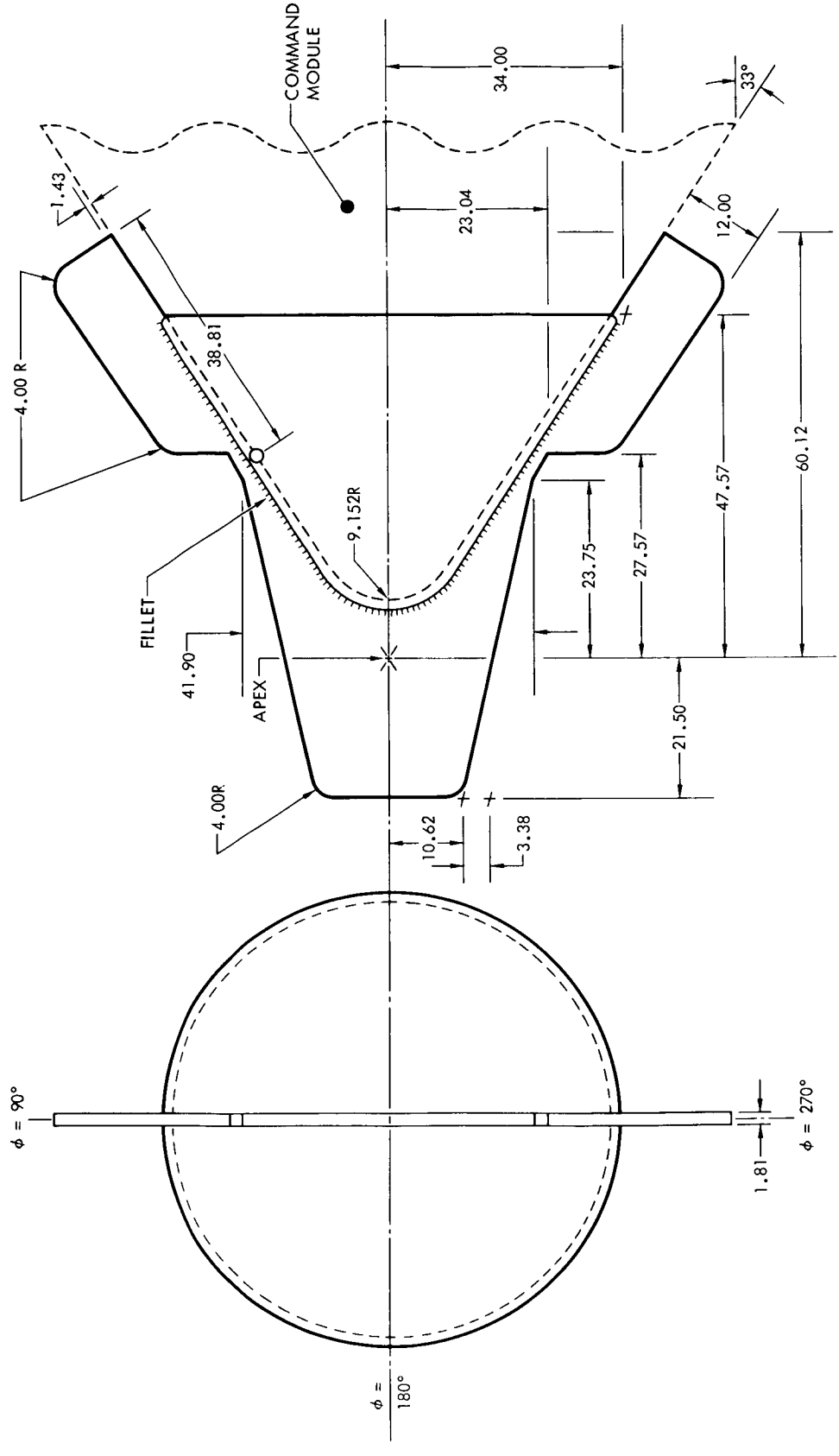

DRAWING NOT TO SCALE

FULL-SCALE DIMENSIONS IN INCHES

Figure 4. Strake, L37

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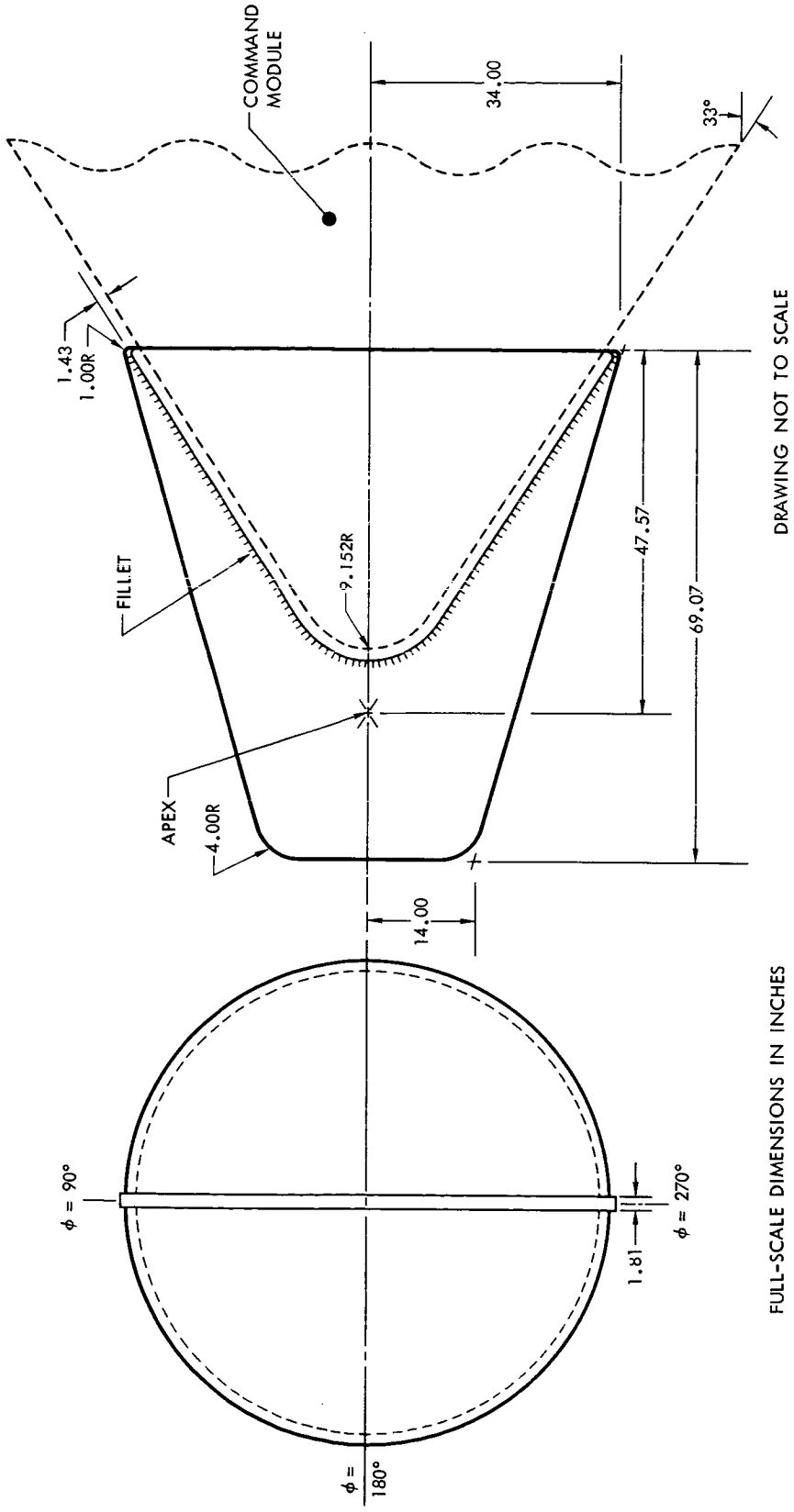

Figure 5. Strake, L_{38}

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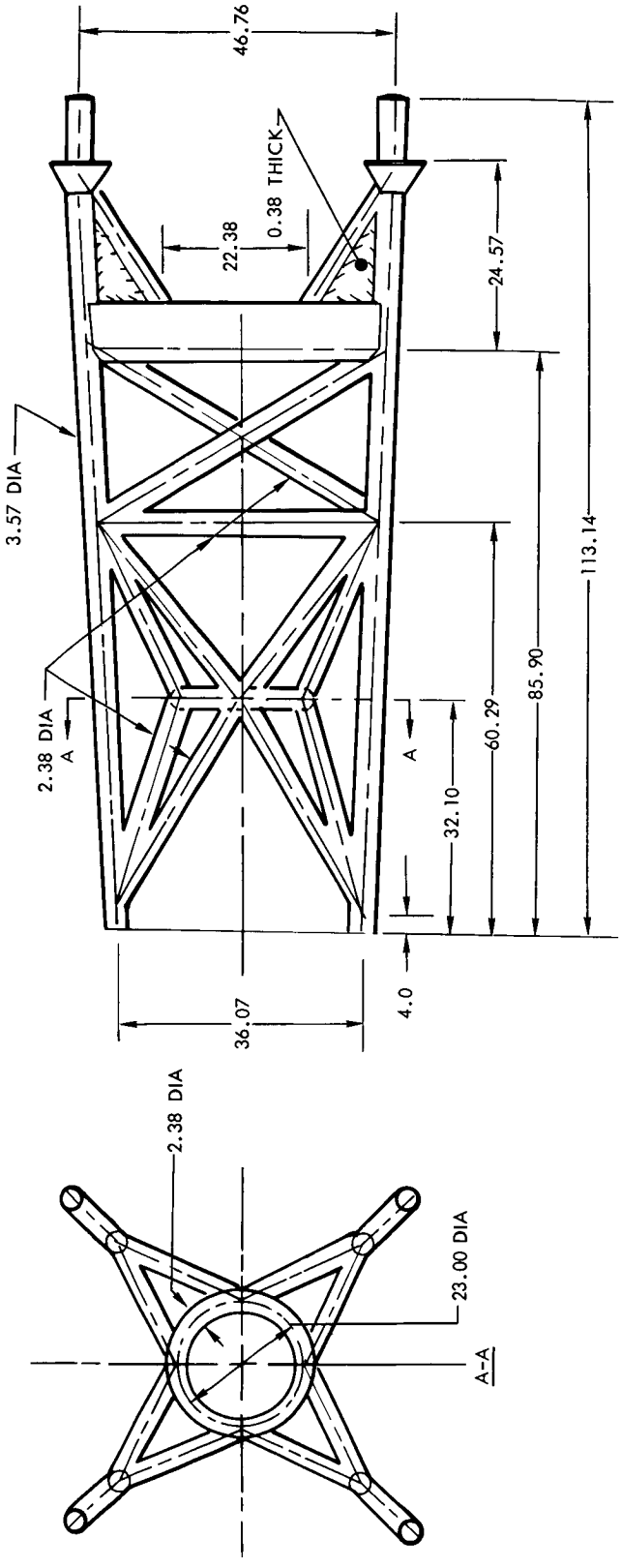

Figure 6. Escape Tower Structure, T_{26}

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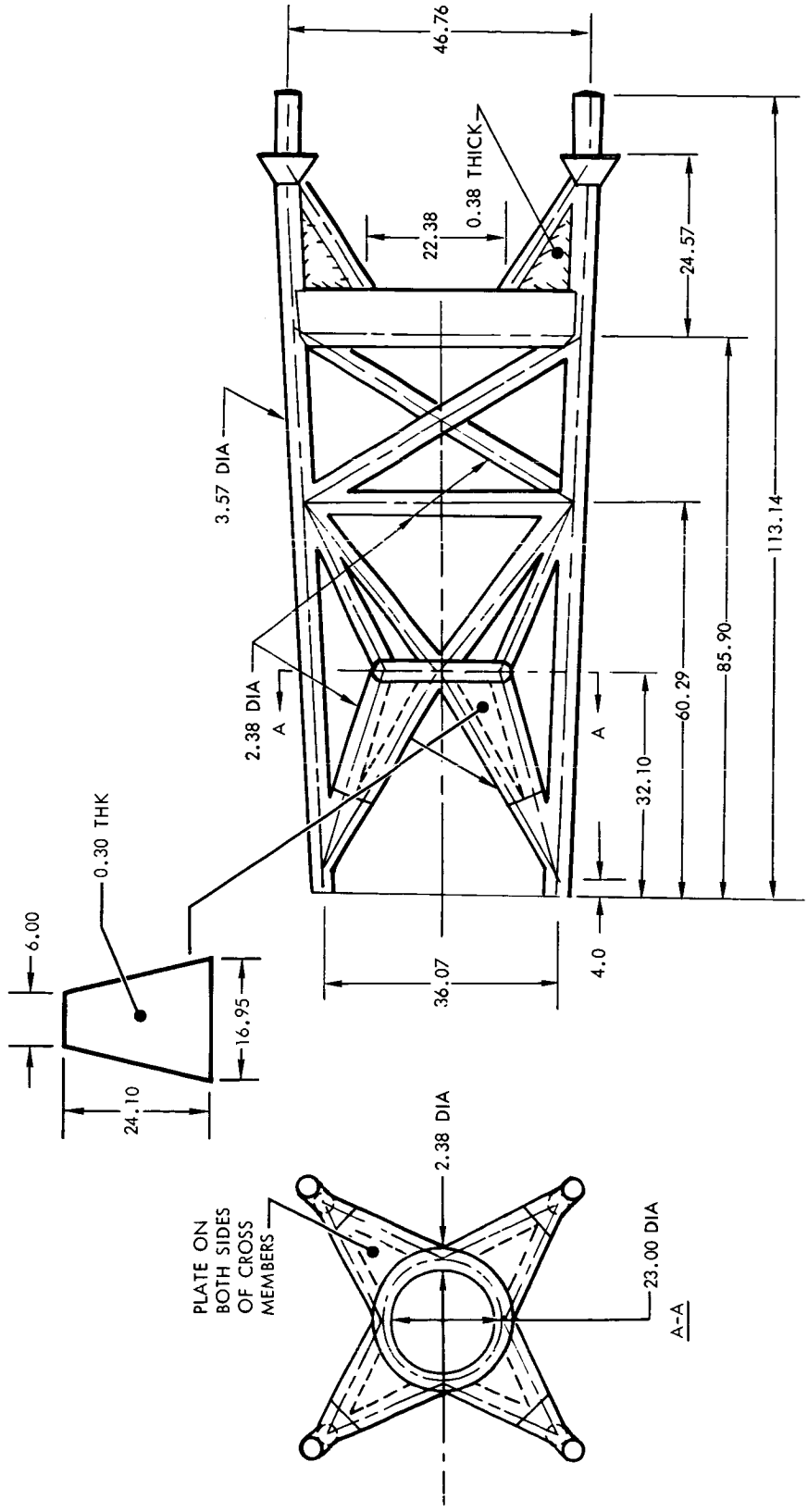

Figure 7. Escape Tower Structure, T_{30}

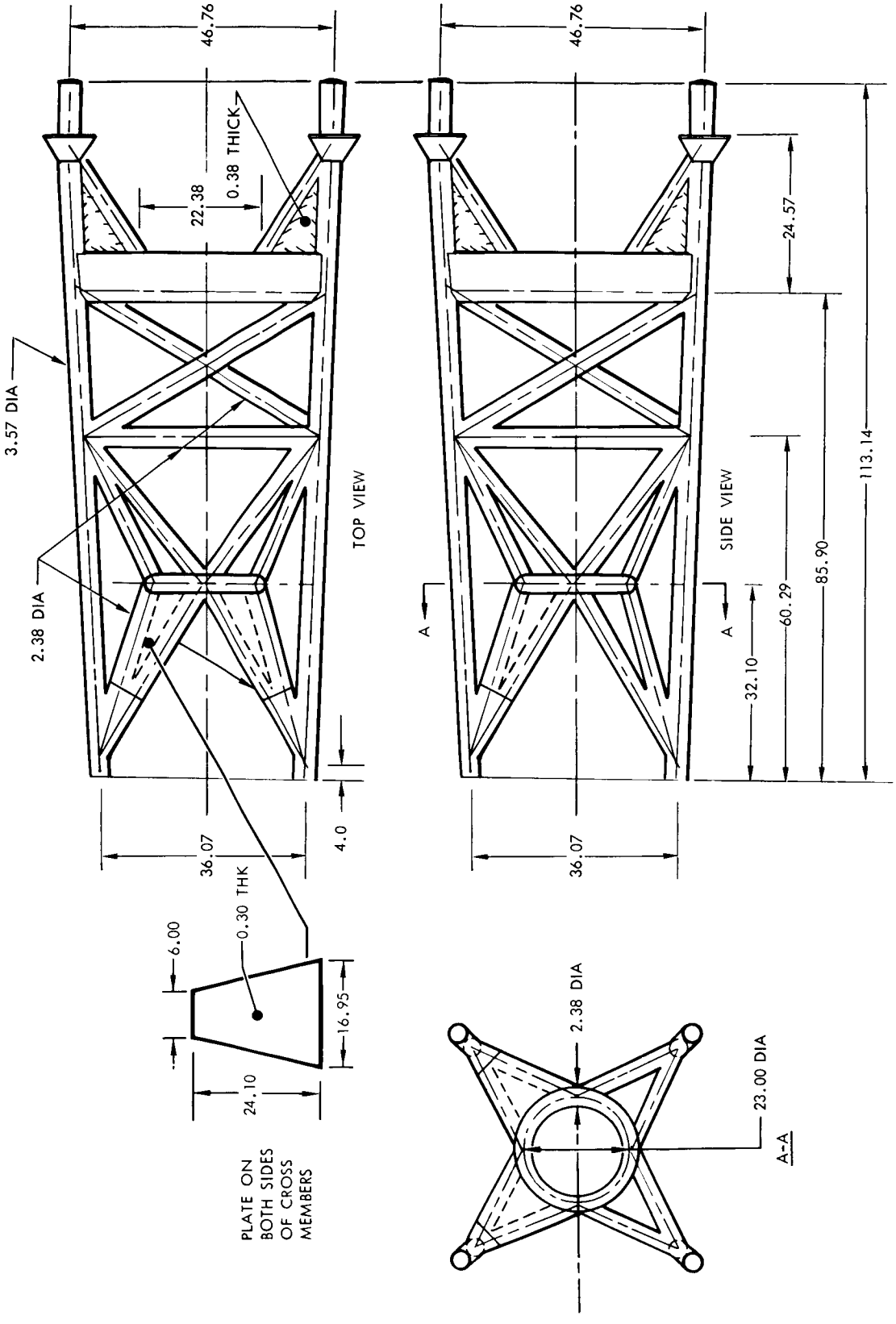

Figure 8. Escape Tower Structure, T_{31}

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III. TEST PROCEDURE

TEST NOMENCLATURE

M_o	Test section free-stream Mach number
P_o	Test section free-stream static pressure, lb/ft^2
H_o	Test section total pressure, lb/ft^2
TT_o	Test section free-stream total temperature, deg
$q = Q$	Test section free-stream dynamic pressure, lb/ft^2
P_b	Base pressure coefficient, $P_b - P_o/Q$
RN	Reynolds number x 10^{-6} based on reference diameter
α	Angle of attack of model axis of symmetry (zero for apex forward), deg
ψ	Angle of yaw of model, deg
θ	Angle between balance axis and model axis of symmetry, deg
A	Model reference area, 1.4261 ft^2 (maximum cross-sectional area of command module)
d = D	Model reference diameter, 1.3475 ft (maximum diameter of command module)
$\bar{x}$	Distance along model ℄ from command module apex to center of gravity, inches; negative when aft of apex
$\bar{z}$	Perpendicular distance from model ℄ to center of gravity, in., positive when below model ℄.

Stability System of Axes With Origin at Center of Gravity

C_D	Drag coefficient, drag/qA
C_L	Lift coefficient, lift/qA

[redacted]

$C_{mS} = C_{m_{cg}}$	Pitching moment coefficient, pitching moment/qAd
C_Y	Side force coefficient, side-force/qA
C_{nS}	Yawing moment coefficient, yawing moment/qAd
$C_{\ell S}$	Rolling moment coefficient, rolling moment/qAd
L/D	Lift-to-drag ratio, C_L/C_D

Body System of Axes With Origin at Center of Gravity

C_A	Axial-force coefficient, axial force/qA
C_N	Normal force coefficient, normal force/qA
C_{nB}	Yawing moment coefficient, yawing moment/qAd
$C_{\ell B}$	Rolling moment coefficient, rolling moment/qAd

Body System of Axes With Origin at Command Module Projected Cone Apex

C_{m_A}	Pitching moment coefficient about the apex, pitching moment/qAd
$X_{cp}(N)/D$	Center of pressure location in the normal force direction measured in C/M diameters from cone apex (C_{m_A}/C_N), negative when aft of apex
$X_{cp}(Y)/D$	Center of pressure location in the side force direction measured in C/M diameters from cone apex (C_{n_A}/C_Y), negative when aft of apex
	Note: C_{n_A}, yawing moment coefficient about the apex is not printed out

Subscripts

S	Referenced to the stability axes system
B	Referenced to the body axes system
1	Referenced to Apollo standard reference center of gravity
2	Referenced to current command module center of gravity

MODEL INSTALLATION

The FS-2 Apollo model was mounted on the Task 2-3/4-inch Mark I-A internal balance (supported by the 7121-01082 sting). The sting was mounted on the H-998 fixed sting support on the H-822-3 sector head. The sector was located so that the center of rotation was at tunnel station 3735 for subsonic and transonic testing and at tunnel station 3563 for supersonic testing.

During the operation of this test in Trisonic Wind Tunnel, sector angle-of-attack ranges of -5 to +27, -10 to +22, and -15 to +17 degrees were used. These ranges, combined with the offset angles (θ = 0, 20, 40, 60, 80, 100, 120, 140, and 160 degrees) of the three command modules, provided angle-of-attack coverage on the command module from -15 to +177 degrees.

A typical tunnel installation is shown in Figure 9.

INSTRUMENTATION

The electrical output of each force element passed through an analog-digital converter and was recorded on magnetic tape. An ALWAC III-E digital computer was used for data reduction.

Schlieren still photographs were taken at M_o = 3.5 and installation photographs were taken of all configurations. These pictures are presented in Figures 10 through 14 of this report.

DATA REDUCTION

Data were reduced from the data master tapes on the TWT ALWAC III-E digital computer. ALWAC program A033, which incorporates force and moment equations (outlined in Reference 2), was used.

All angle-of-attack data were corrected for sting and balance deflection. Although base pressure was measured, no corrections were applied to the data for base drag.

Force and moment coefficients were computed, based on the following geometric constants.(See sketch on following page.)

A = Model reference area, 1.4261 ft^2 (maximum cross-sectional area)

D = Model reference diameter, 16.17 in. (maximum diameter of command module)

The two reference center of gravity locations for the command module are as follows:

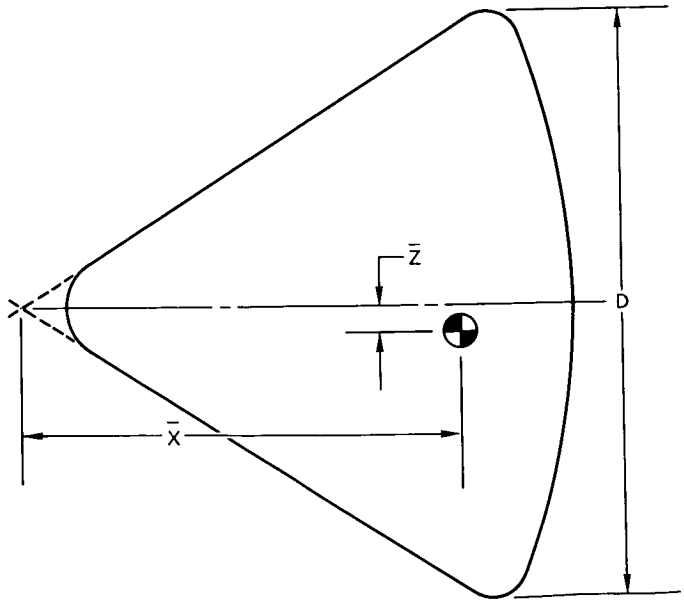
$(\bar{x}/D)_1$ = -0.686 and $(\bar{z}/D)_1$ = 0.0590 (Apollo standard reference center of gravity)

$(\bar{x}/D)_2$ = -0.638 and $(\bar{z}/D)_2$ = 0.0545 (Current command module center of gravity)

DATA ACCURACY

The balance and recording instrumentation were set to provide maximum possible sensitivity within the capabilities of the amplifying instrumentation. The probable coefficient errors at each test condition are shown below:

Mach	RN x 10^{-6}	$\pm C_N$	$\pm C_A$	$\pm C_{m_{cg_1}}$	$\pm C_{m_{cg_2}}$	$\pm C_{m_A}$	$\pm C_L$	$\pm C_D$
0.4	5.0	0.0037	0.0054	0.0021	0.0021	0.0033	0.0054	0.0041
0.4	11.3	0.0025	0.0029	0.0011	0.0011	0.0020	0.0027	0.0029
0.7	13.0	0.0019	0.0022	0.0007	0.0007	0.0015	0.0019	0.0022
1.2	14.2	0.0014	0.0016	0.0005	0.0005	0.0011	0.0017	0.0017
3.5	17.0	0.0017	0.0025	0.0007	0.0007	0.0013	0.0018	0.0024



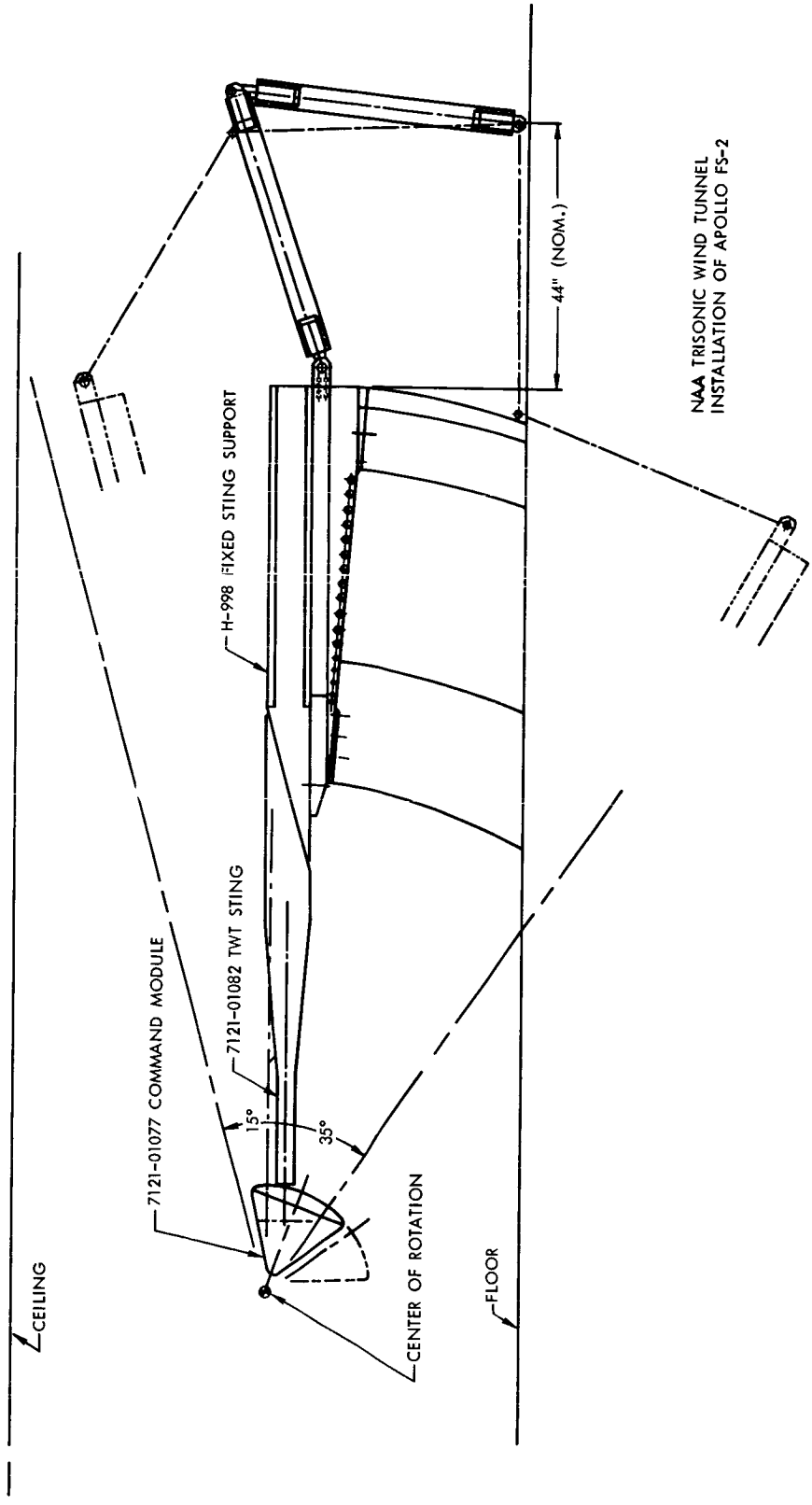


Figure 9. NAA Trisonic Wind Tunnel Installation of Apollo FS-2

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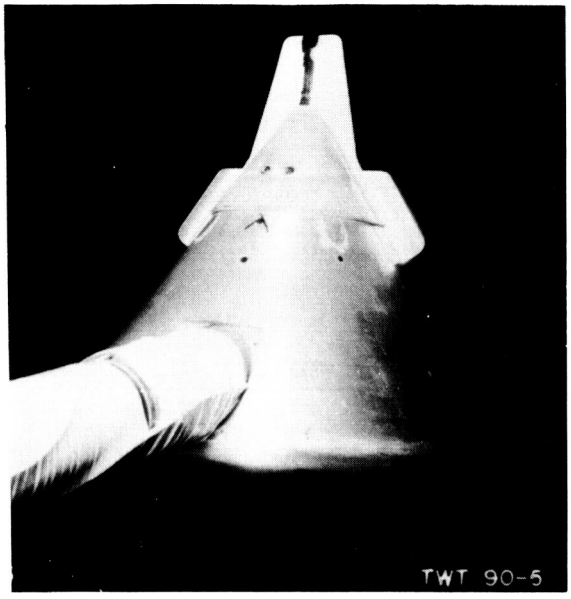
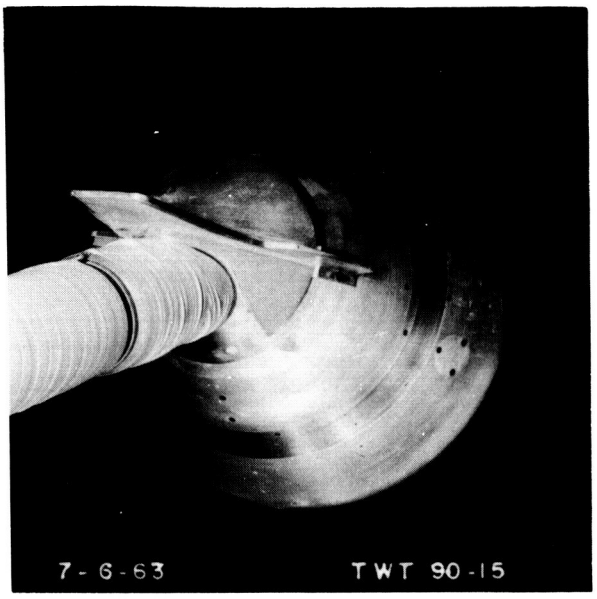
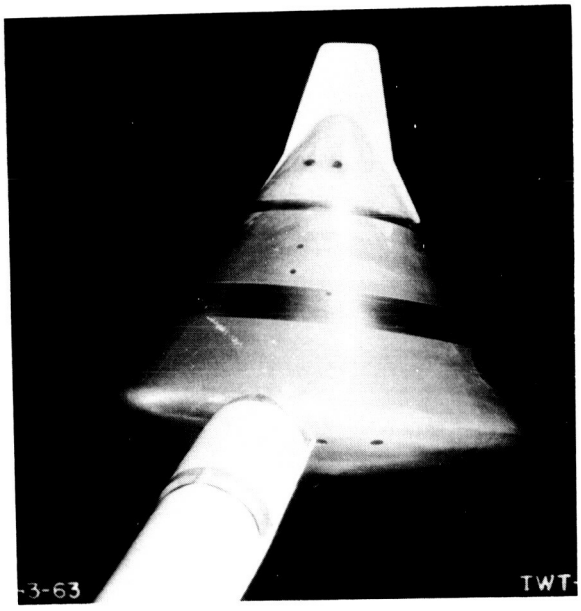


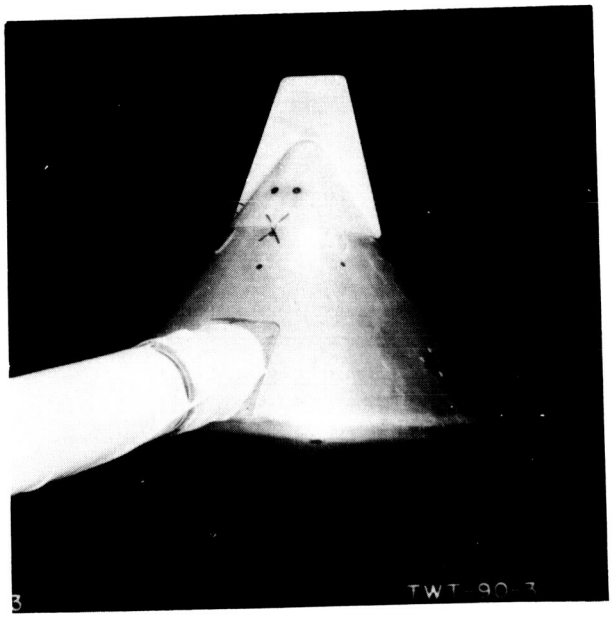
$C_2 L_{37}$ ($\theta = 80°$)



$C_2 L_{37}$ ($\theta = 160°$)

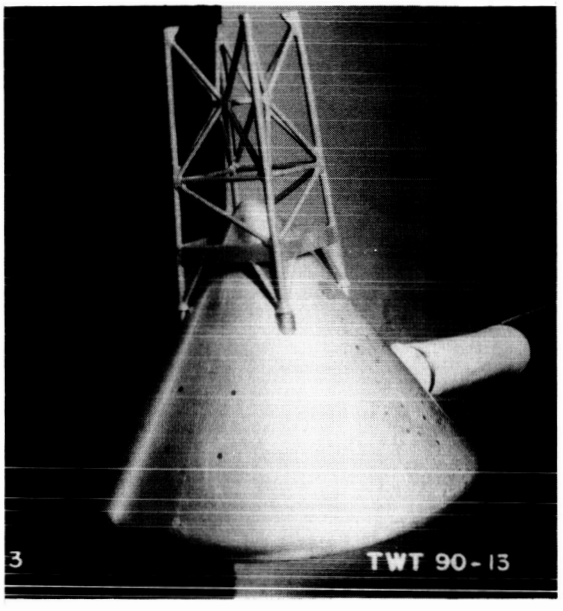


$C_2 L_{36}$ ($\theta = 60°$)

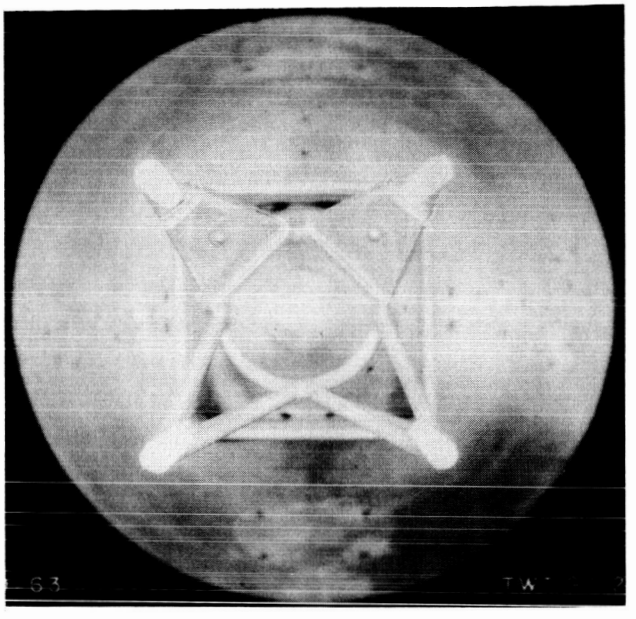


$C_2 L_{38}$ ($\theta = 80°$)

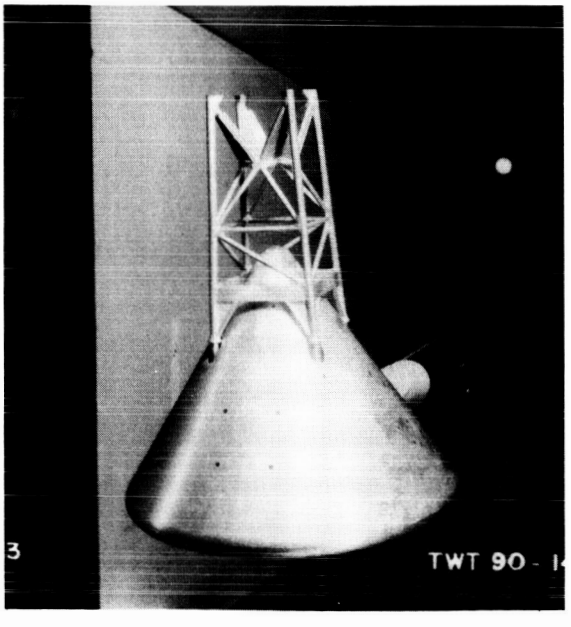
Figure 10. Command Module With Strake Configurations



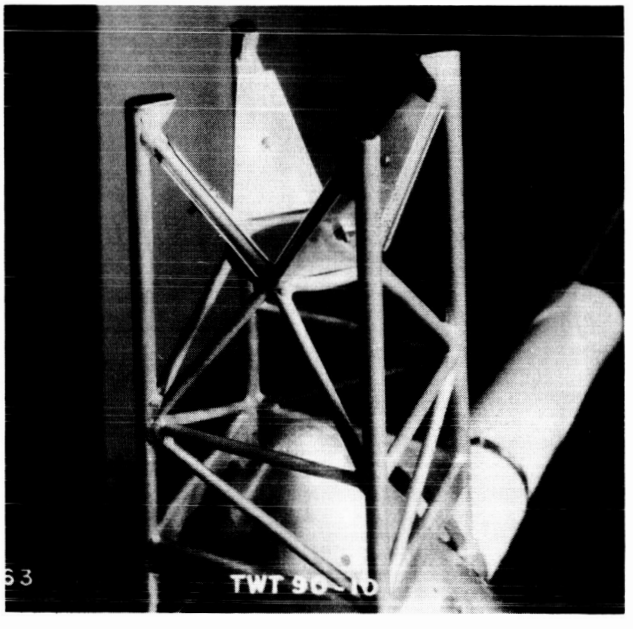
C_{39} T_{26} (θ = 80°)



C_{39} T_{31} (θ = 0°)



C_{39} T_{30} (θ = 80°)



C_{39} T_{30} (CLOSE-UP)

Figure 11. Command Module With Tower Configurations

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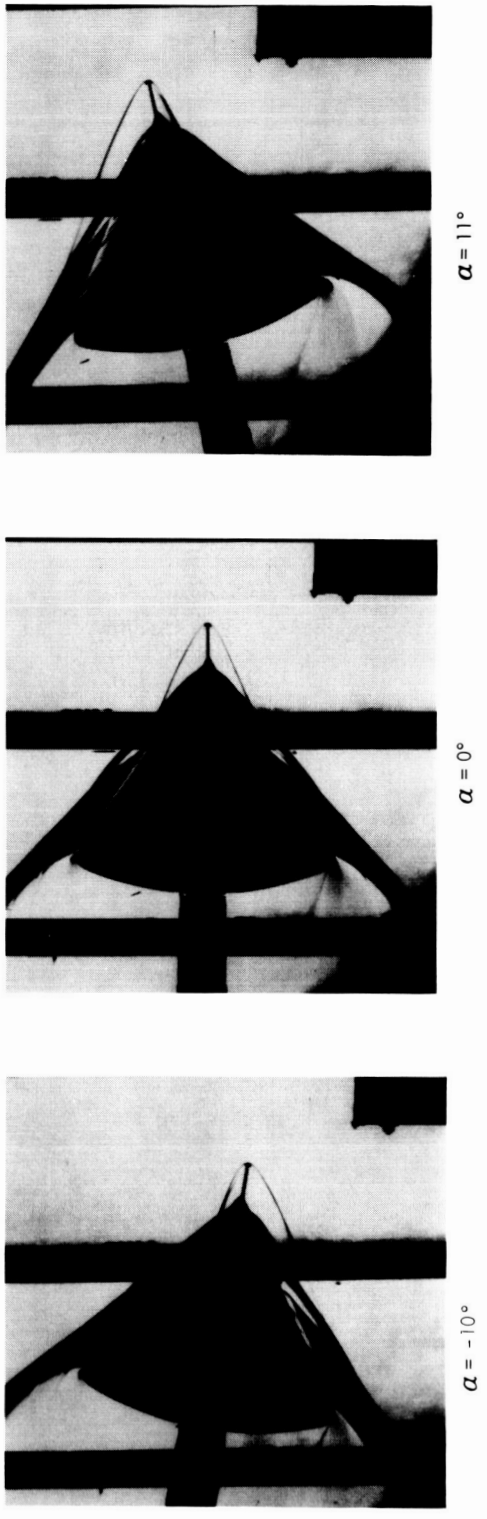

Figure 12. Typical Schlieren Photographs of C_2L_{37} at M_o = 3.49

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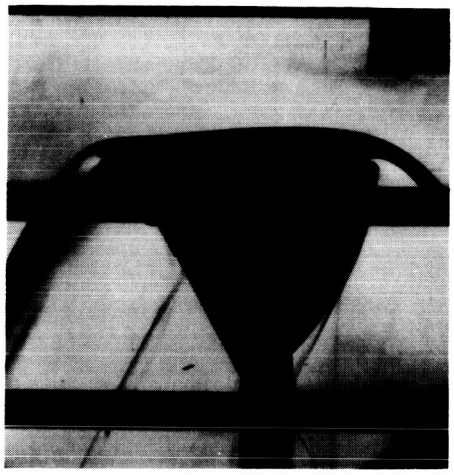
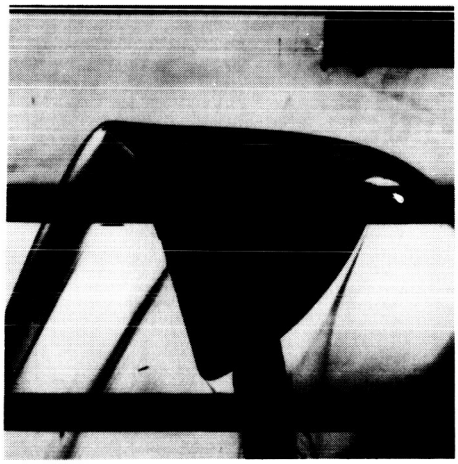
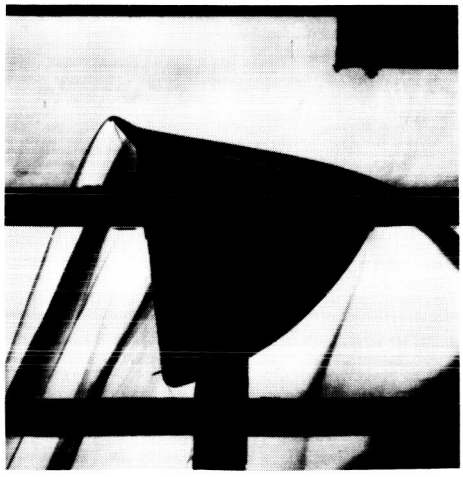


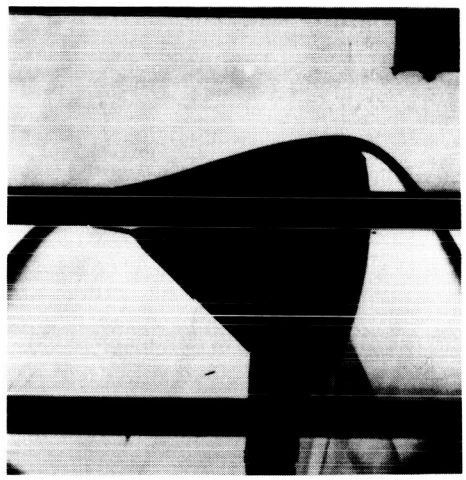
$\alpha = 61°$



$\alpha = 50°$



$\alpha = 39°$



$\alpha = 79°$

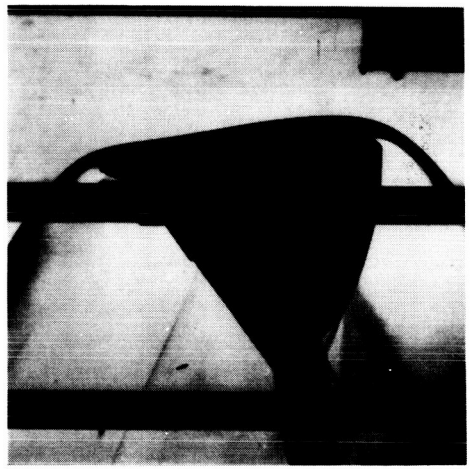


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Figure 12. Typical Schlieren Photographs of C_2L_{37} at $M_o = 3.49$ (Sheet 2 of 4)

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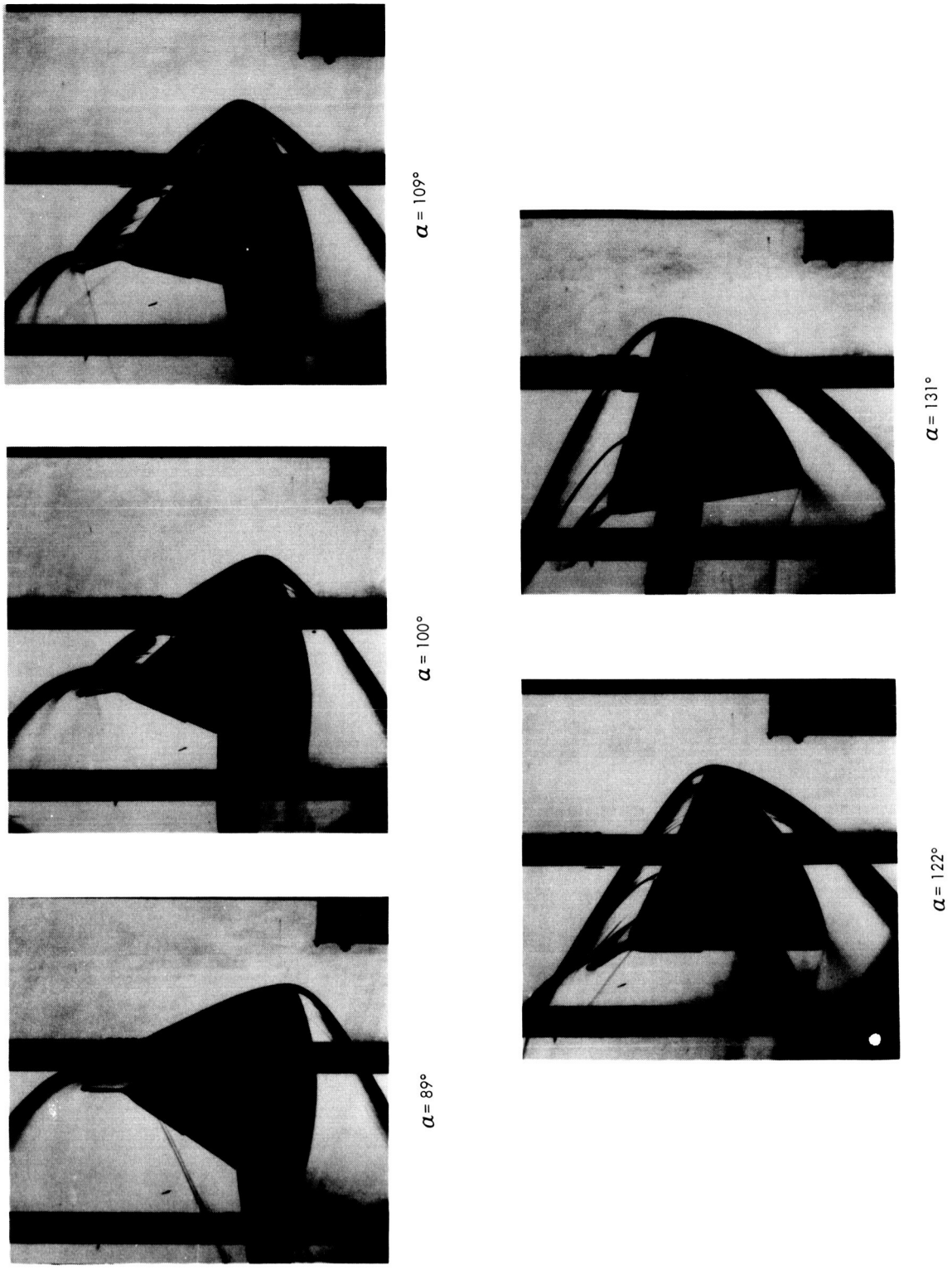

Figure 12. Typical Schlieren Photographs of C_2L_{37} at M_o = 3.49 (Sheet 3 of 4)

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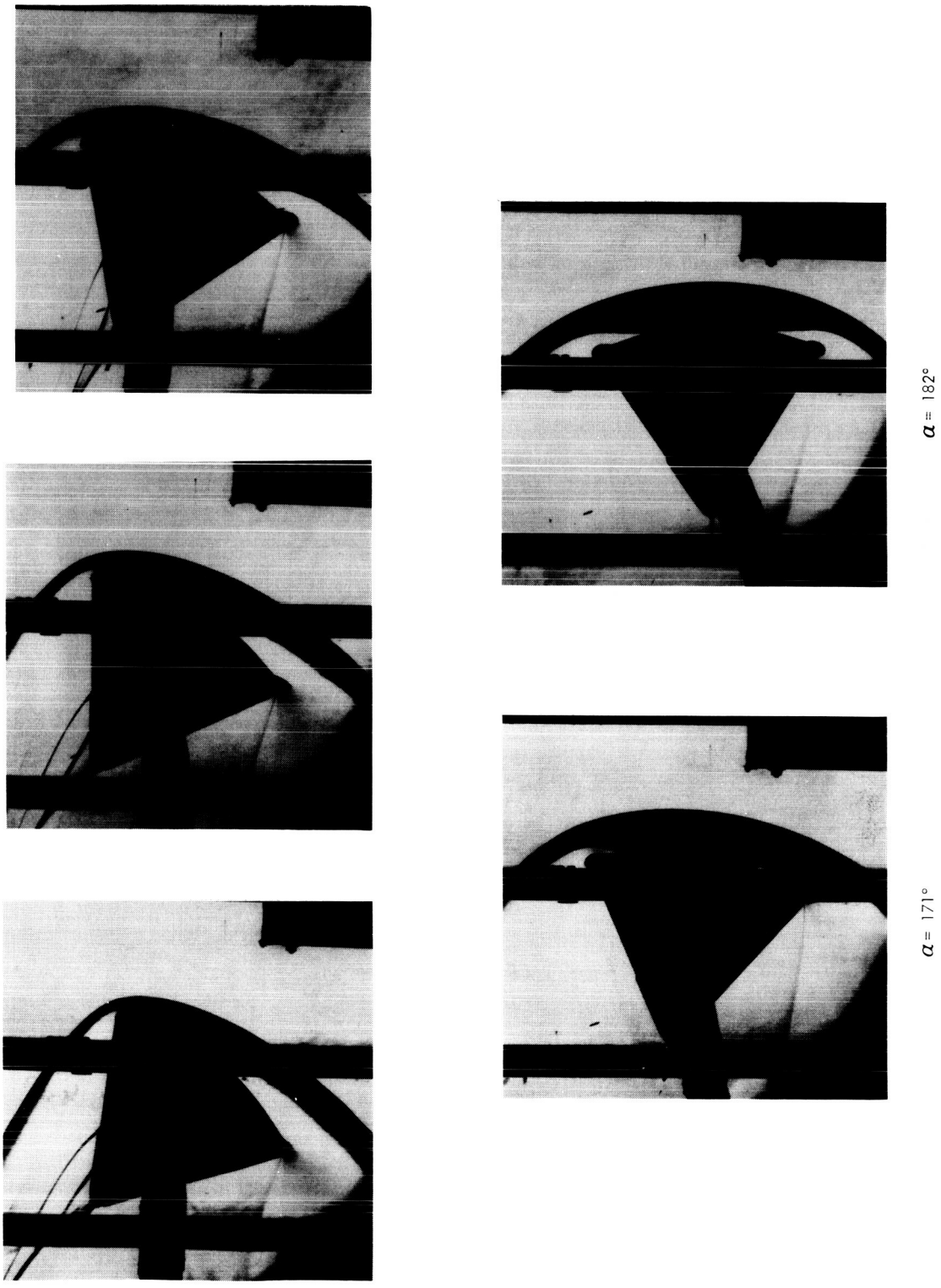

Figure 12. Typical Schlieren Photographs of C_2L_{37} at $M_o = 3.49$ (Sheet 4 of 4)

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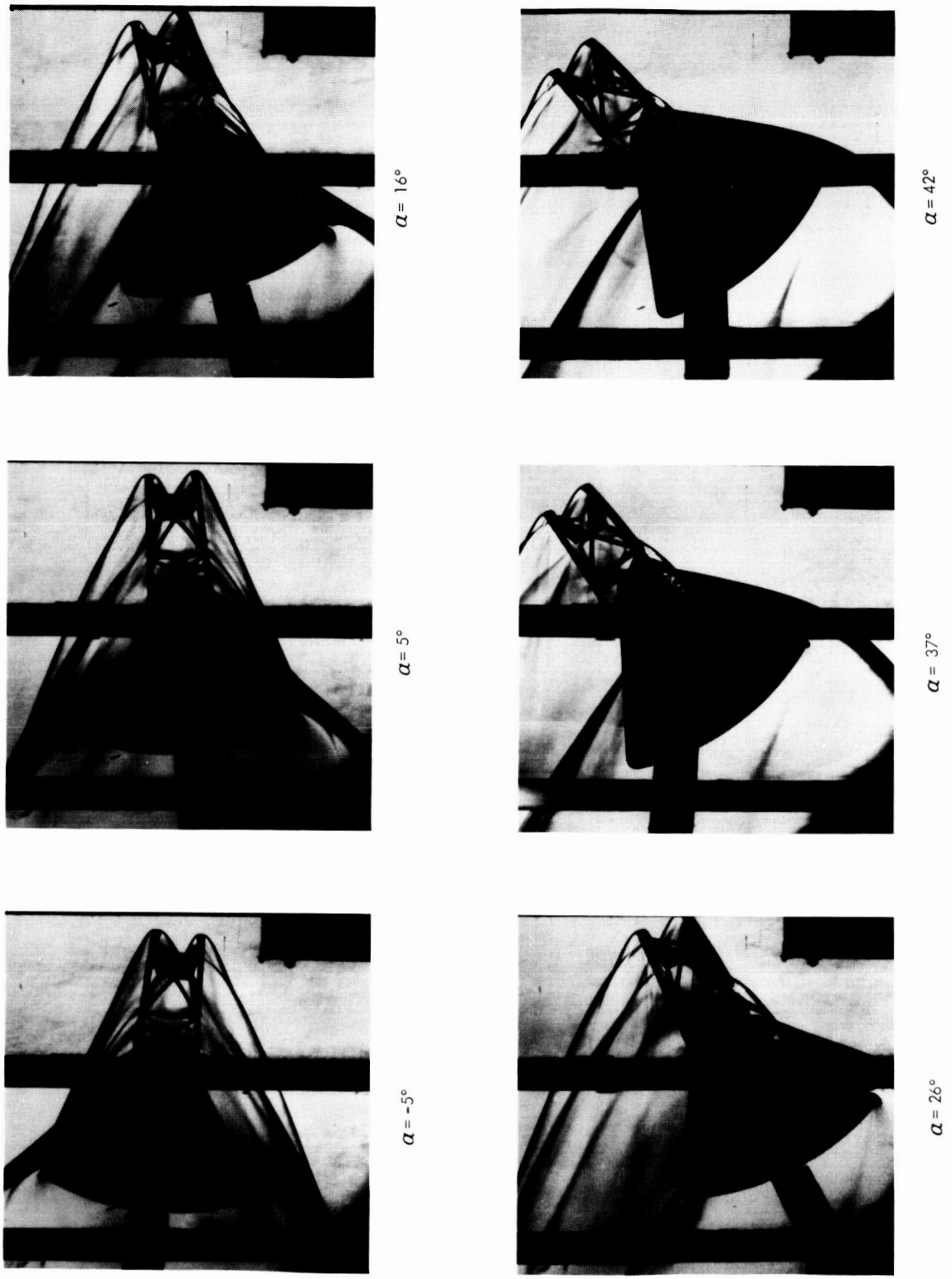
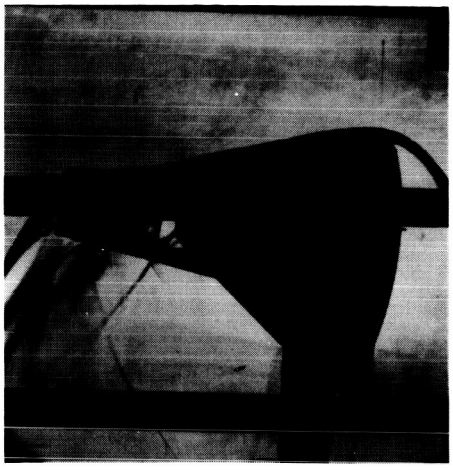


Figure 13. Typical Schlieren Photographs of $C_{39}T_{30}$ at M_o = 3.49



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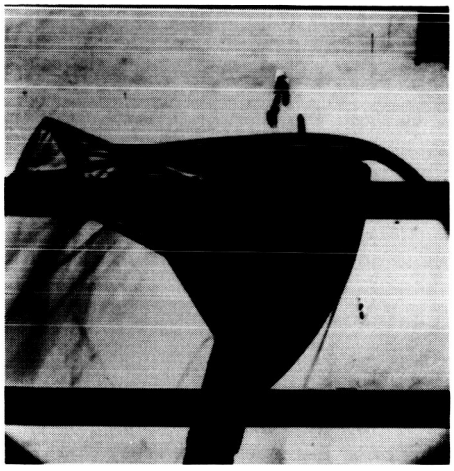

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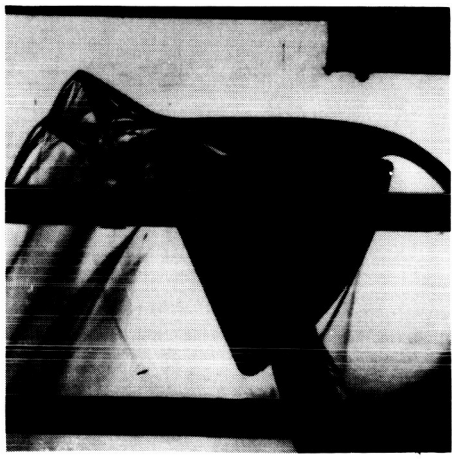
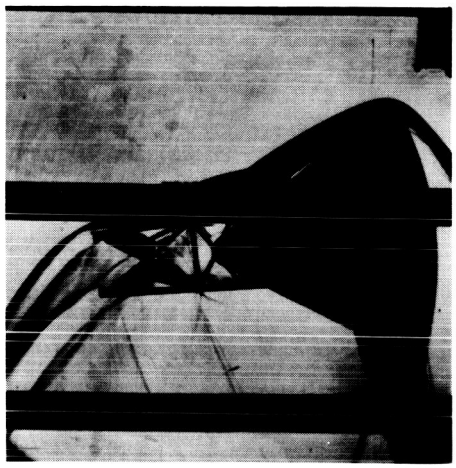


$\alpha = 57°$



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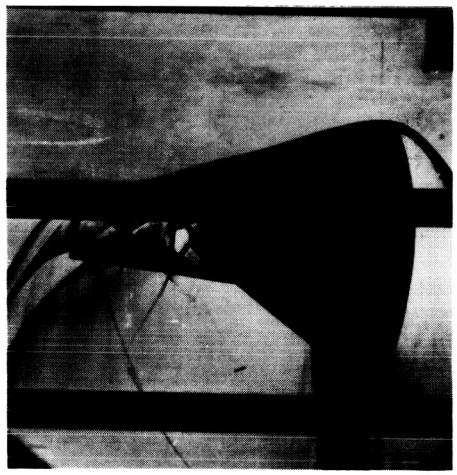

$\alpha = 86°$

Figure 13. Typical Schlieren Photographs of $C_{39}T_{30}$ at $M_o = 3.49$ (Sheet 2 of 2)

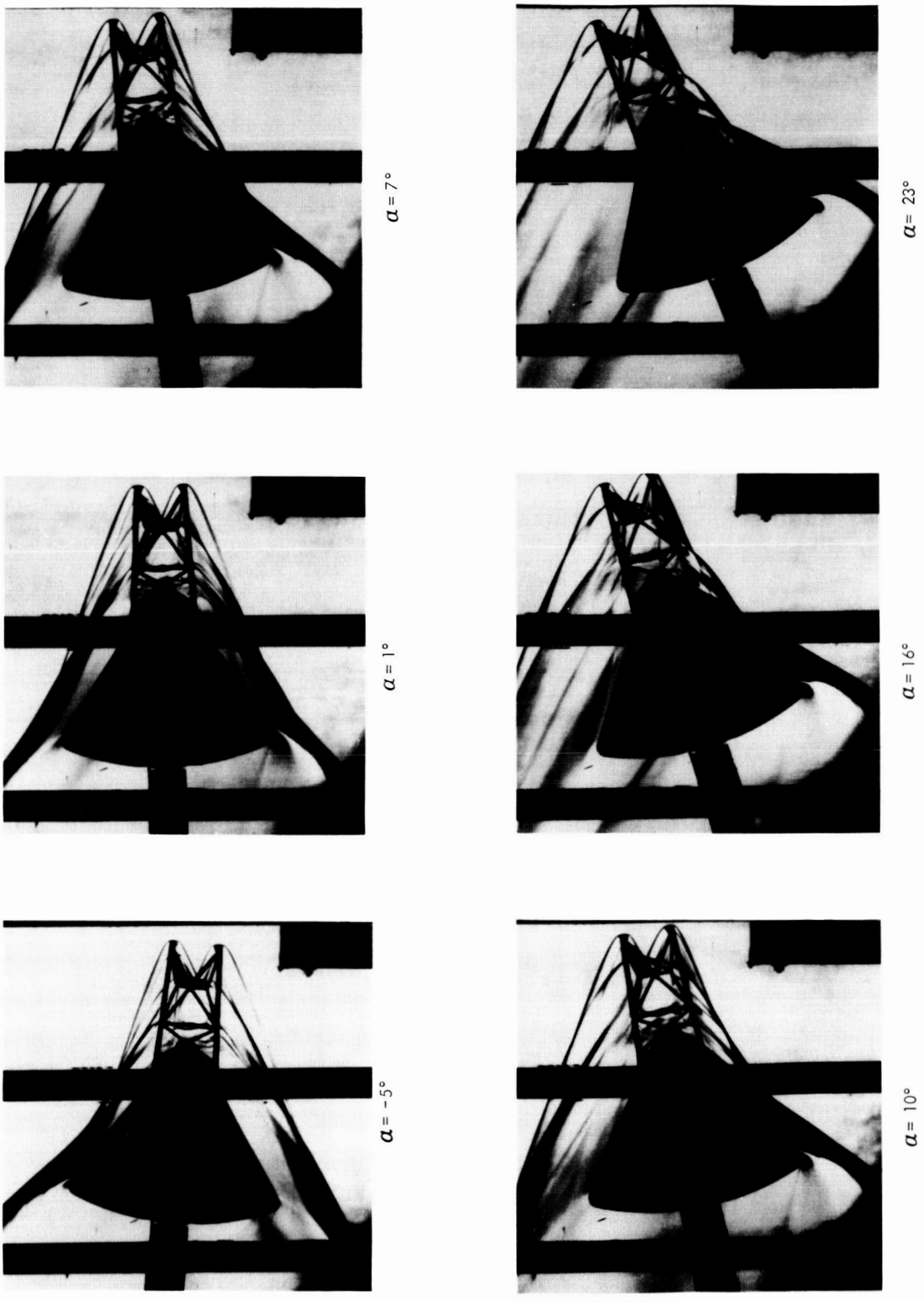

Figure 14. Typical Schlieren Photographs of $C_{39}T_{31}$ at $M_o = 3.49$

REFERENCES

1. Cummings, D.G. Data Report of the Apollo FS-2 Model in the NAAL Wind Tunnel (NAAL 485). NAA S&ID, SID 62-1128 (10 December 1962).

2. Cummings, D.G. Pretest Report for the 0.105-scale Apollo Force Model (FS-2) in NAAL Wind Tunnel. NAA S&ID, SID 62-738 (25 June 1962).

3. McClain, C.B. Structural Analysis of the 0.105-scale Apollo Wind Tunnel Model FS-2. NAA S&ID, SID 62-104 (12 March 1962).

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APPENDIX A

PLOTTED DATA

[redacted]

PLOTTED DATA INDEX

Command Module Characteristics—C_N, C_A, C_{m_A}, $(X_{cp})_{N/D}$, C_L, C_D, L/D, $C_{m_{cg_1}}$, $C_{m_{cg_2}}$

Configuration C_2L_{36}:
Mo = 0.4 (Effect of α sweep rate) . . . . . A-3 to A-11
Configuration C_2L_{36}:
Mo = 0.4 . . . . . A-12
Configuration C_2L_{37}:
Mo = 0.4 . . . . . A-21
Configuration C_2L_{37}:
Mo = 0.4 (Effect of Reynolds No.) A-30
Configuration C_2L_{38}:
Mo = 0.4 . . . . . A-39
Configuration $C_{39}T_{26}$:
Mo = 0.4 . . . . . A-48
Configuration $C_{39}T_{30}$:
Mo = 0.4 . . . . . A-57
Configuration C_2L_{37}:
Mo = 0.7 . . . . . A-66
Configuration C_2L_{37}:
Mo = 1.2 . . . . . A-75
Configuration C_2L_{37}:
Mo = 3.49 . . . . . A-84
Configuration $C_{39}T_{30}$:
Mo = 3.49 . . . . . A-93
Configuration $C_{39}T_{31}$:
Mo = 3.49 . . . . . A-102 to A-110

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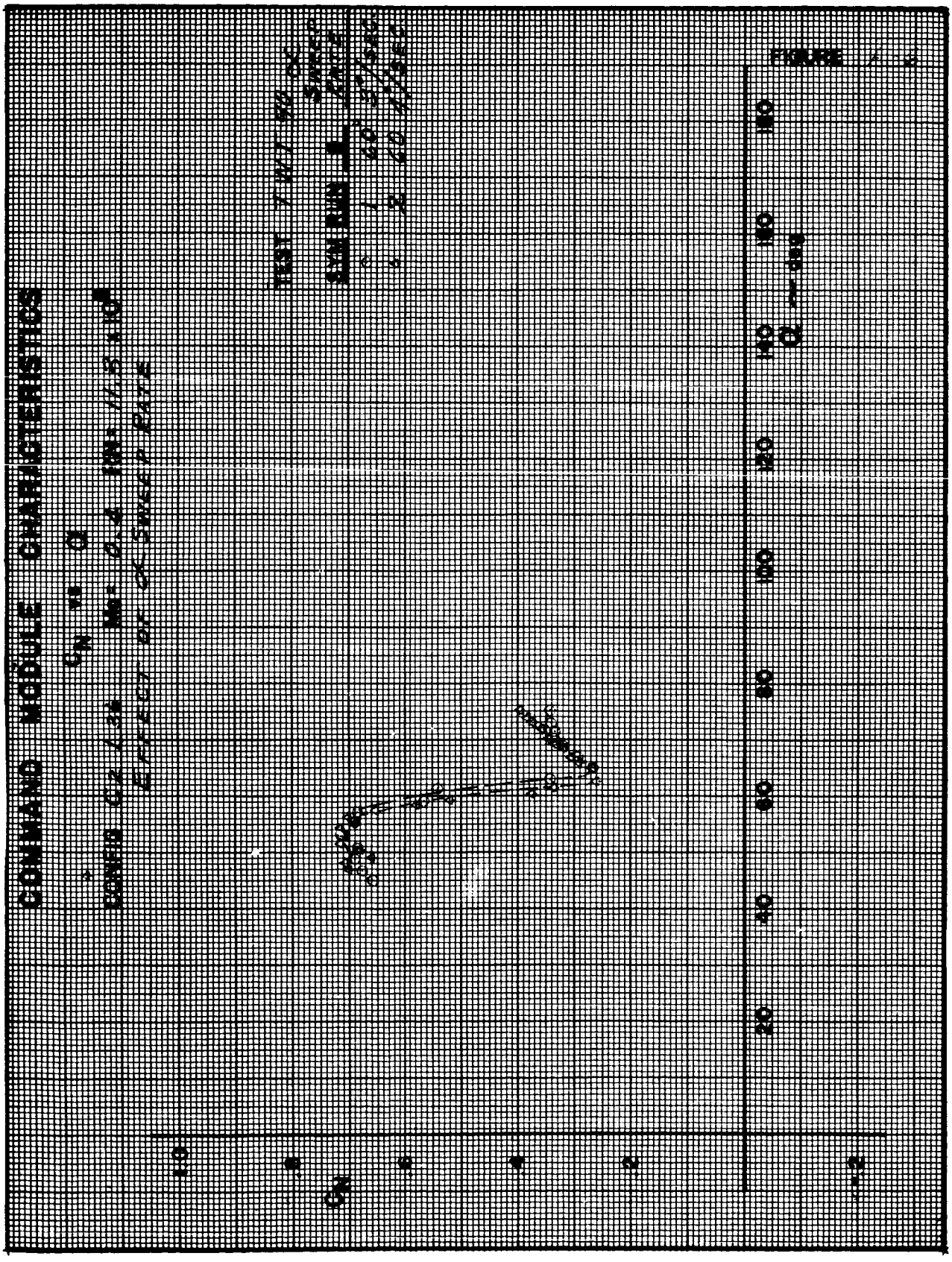

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FIGURE A-6
COMMAND MODULE CHARACTERISTICS
CA vs α
CONFIG C2 L36 Mo: 0.4 RN: 11.3 x10⁶
EFFECT OF α SWEEP RATE
TEST TWT 90 α SWEEP
SYM RUN θ RATE
○ 1 60° 3°/SEC.
△ 2 60 4°/SEC.
20
40
60
80
100
120
140
160
180
α ~ deg
.8
CA
.4
-.4
-.8
-1.2
-1.6

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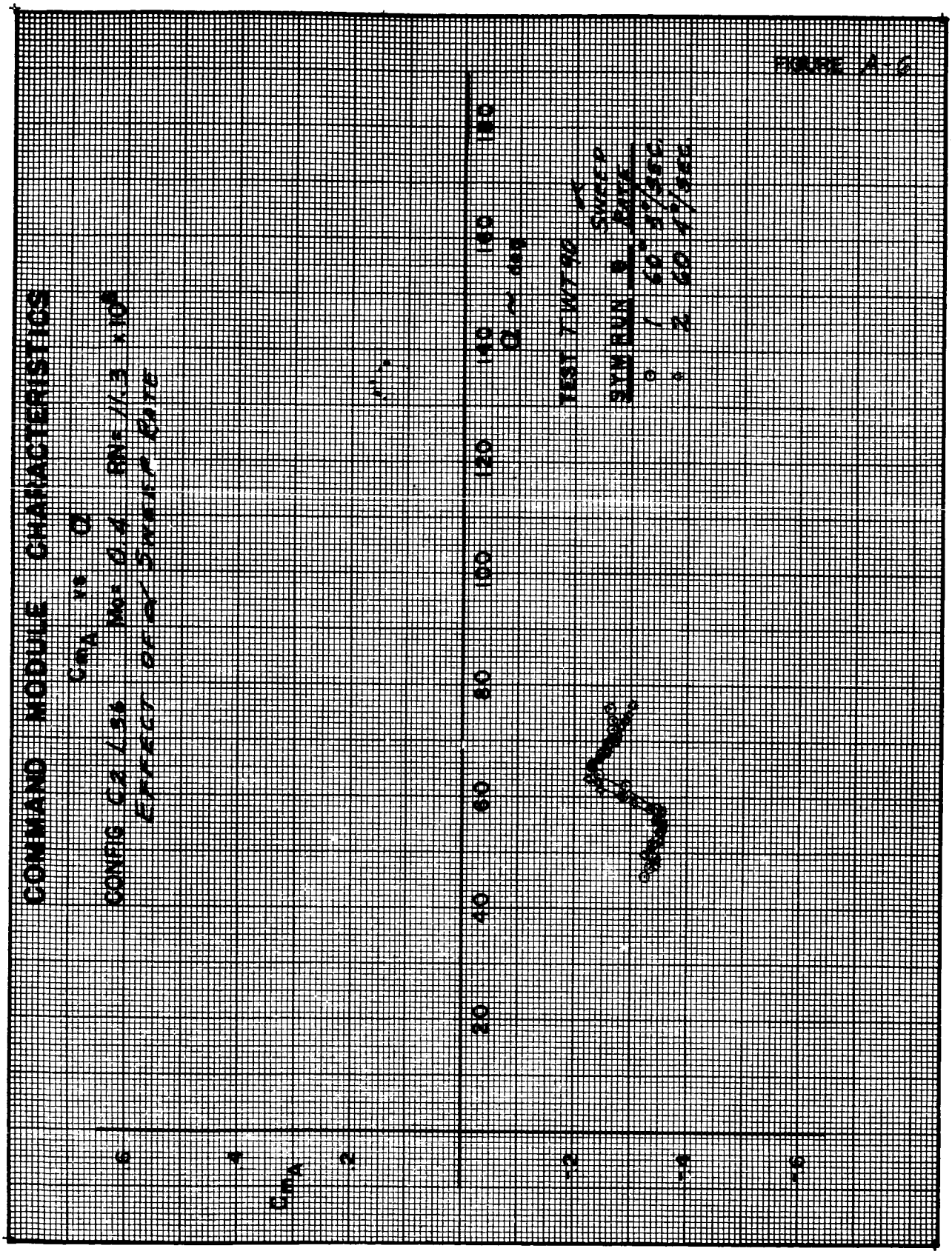

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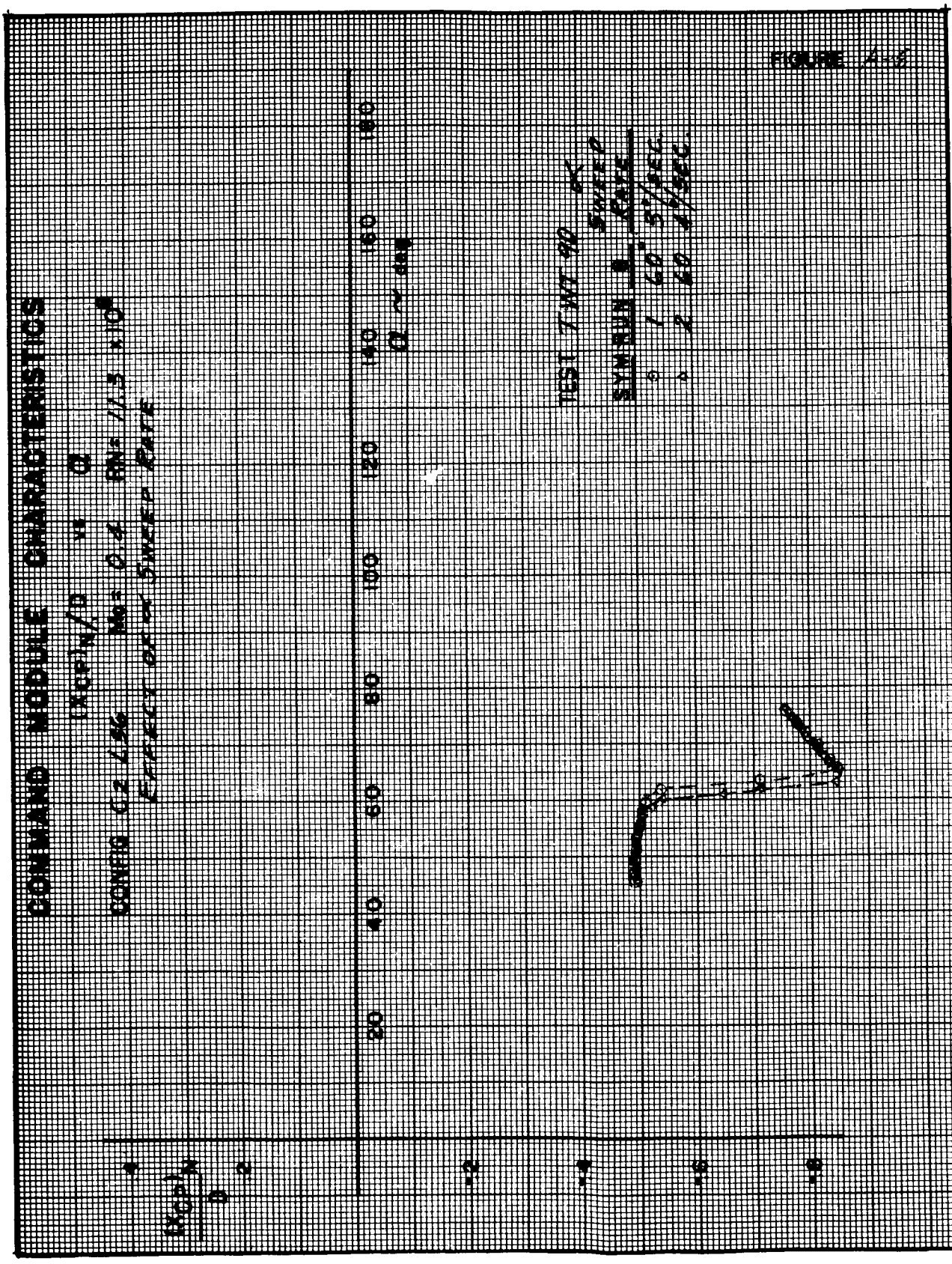

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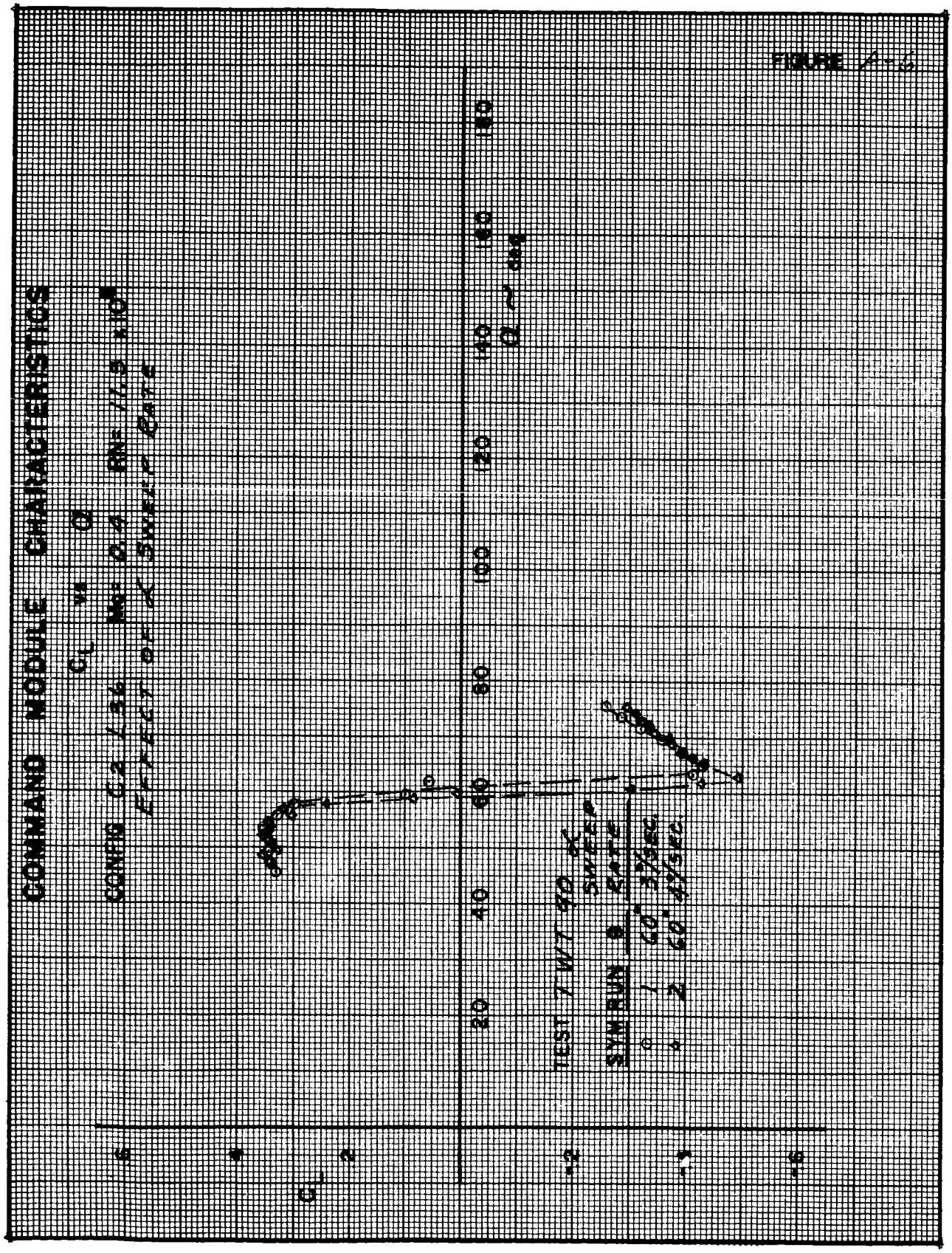

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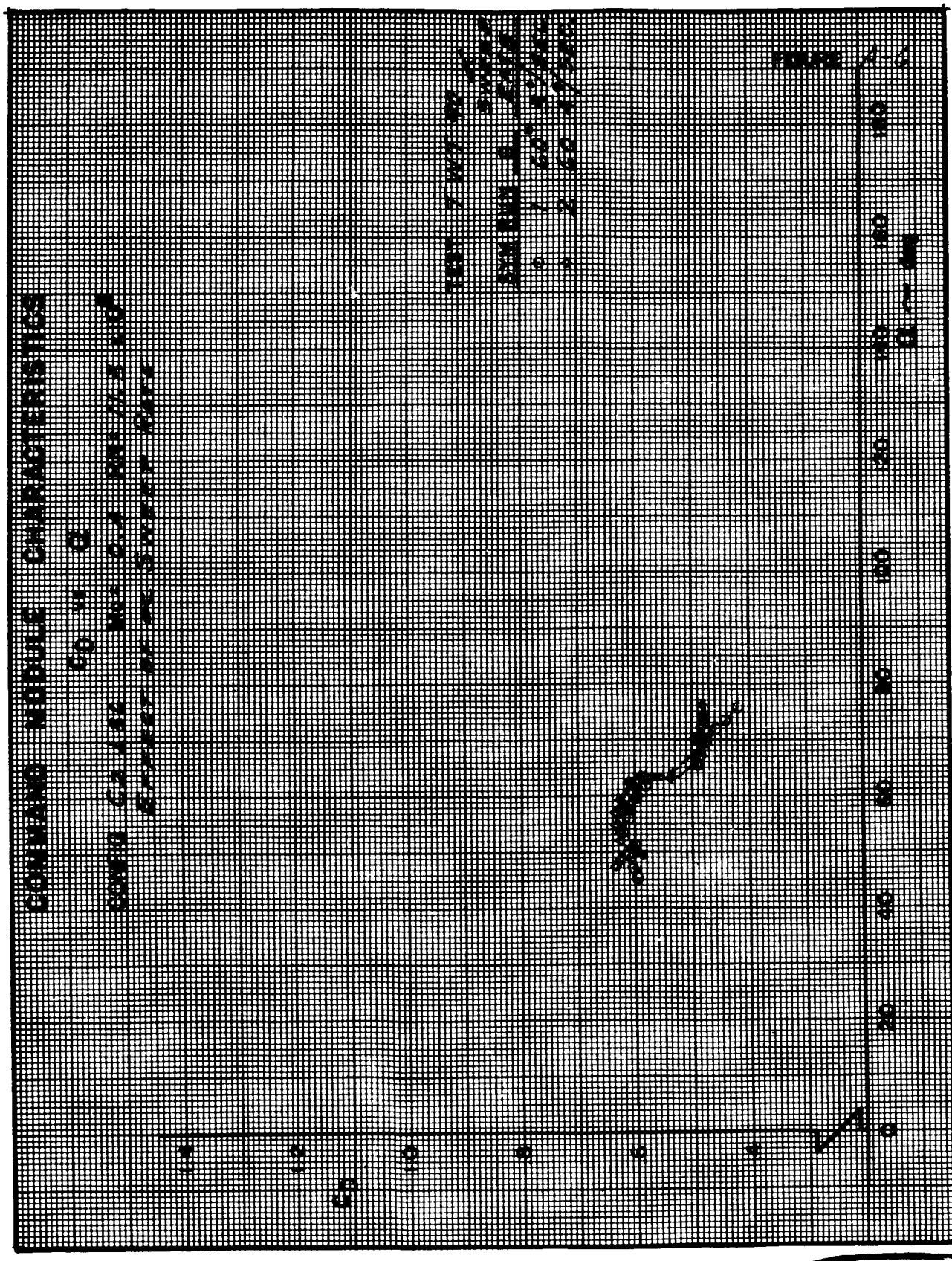

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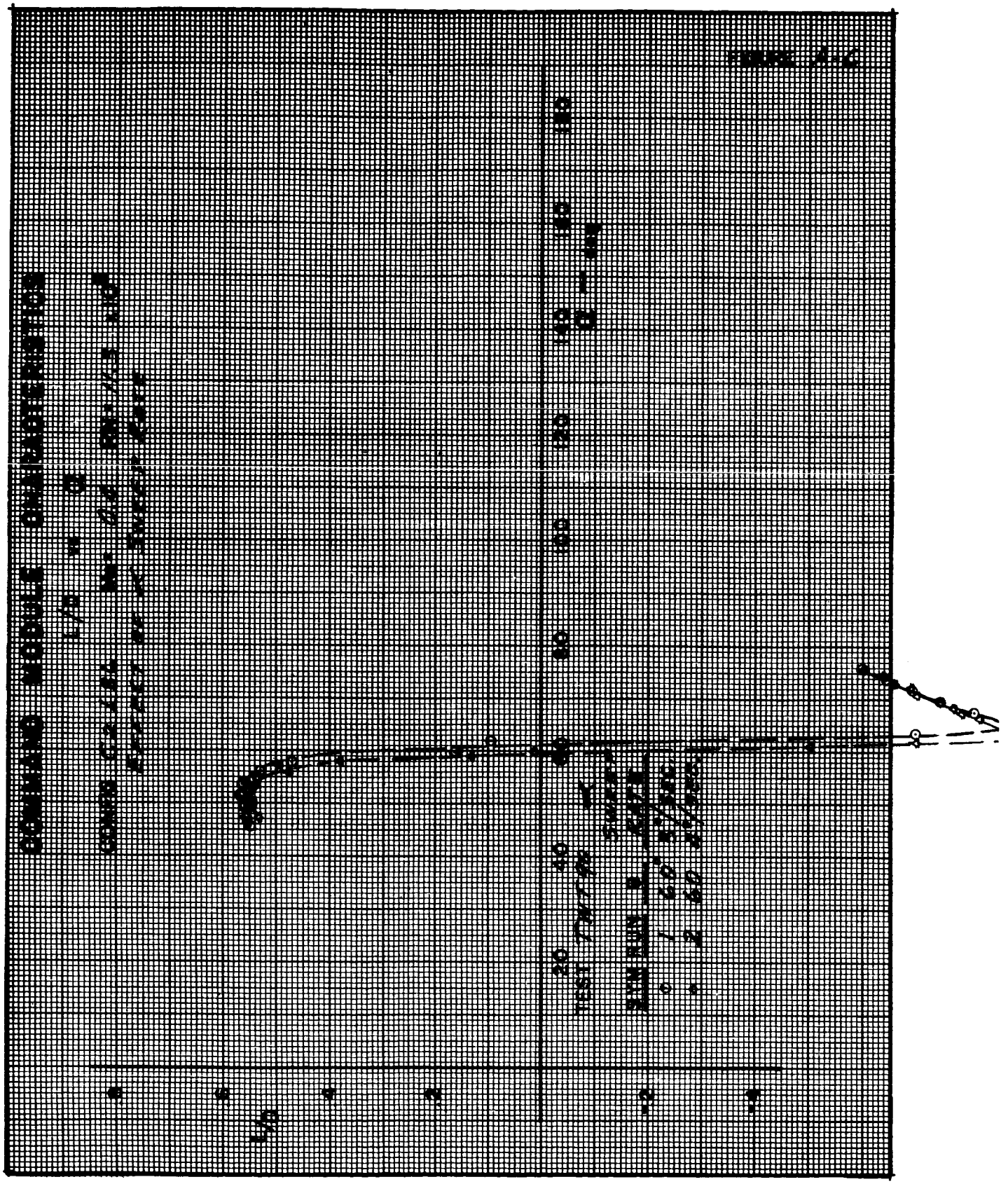

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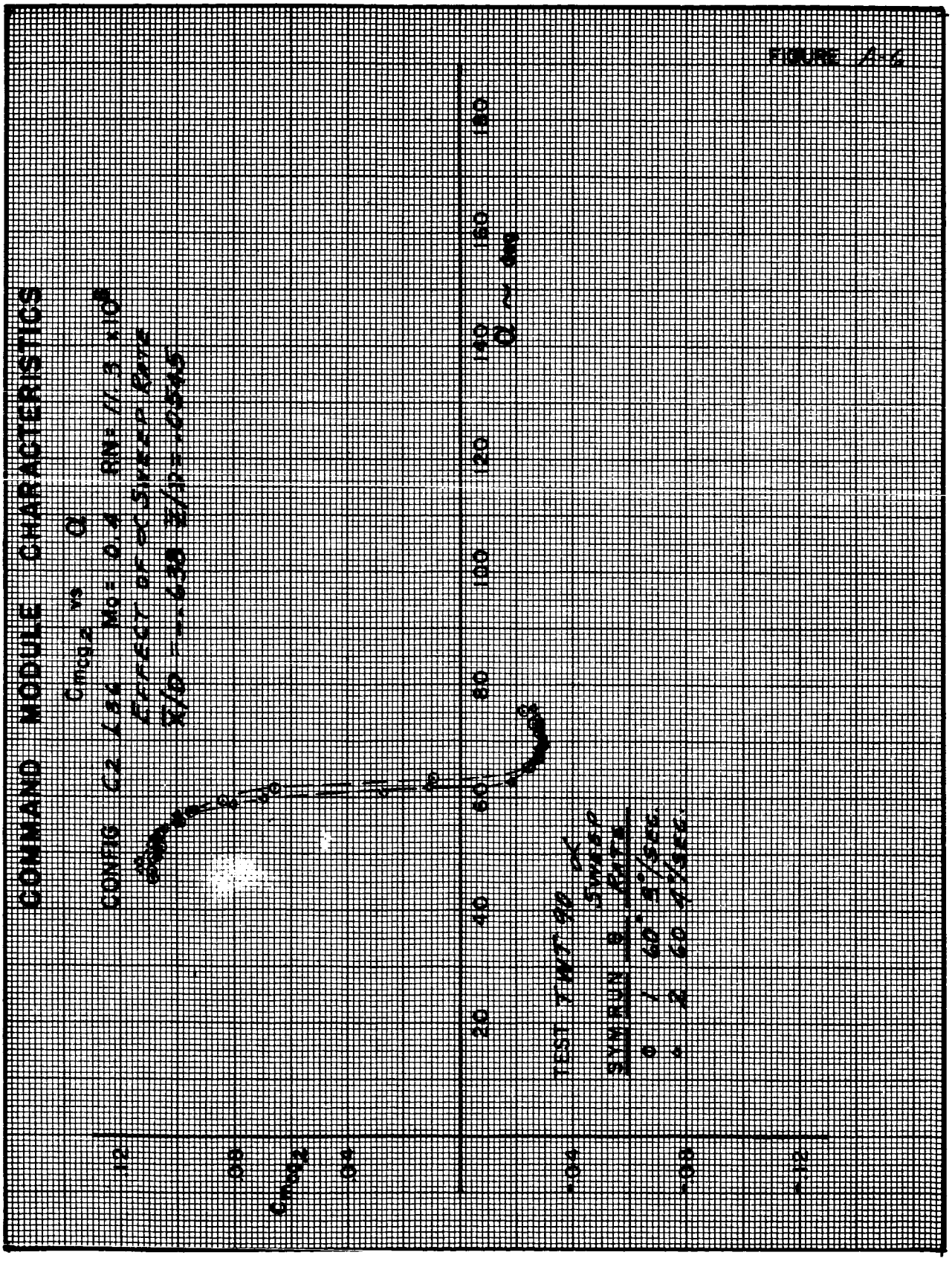

FIGURE A-6

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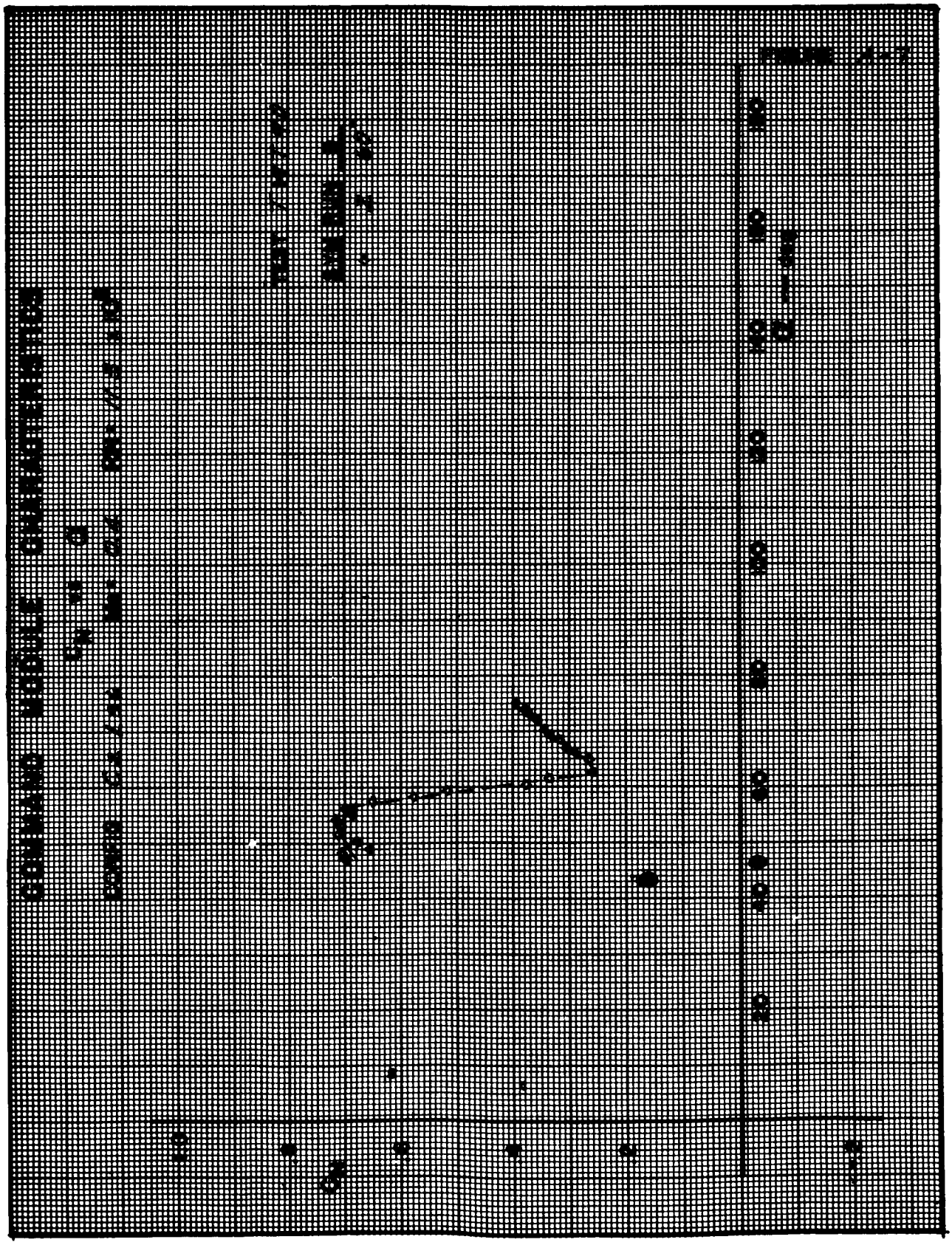

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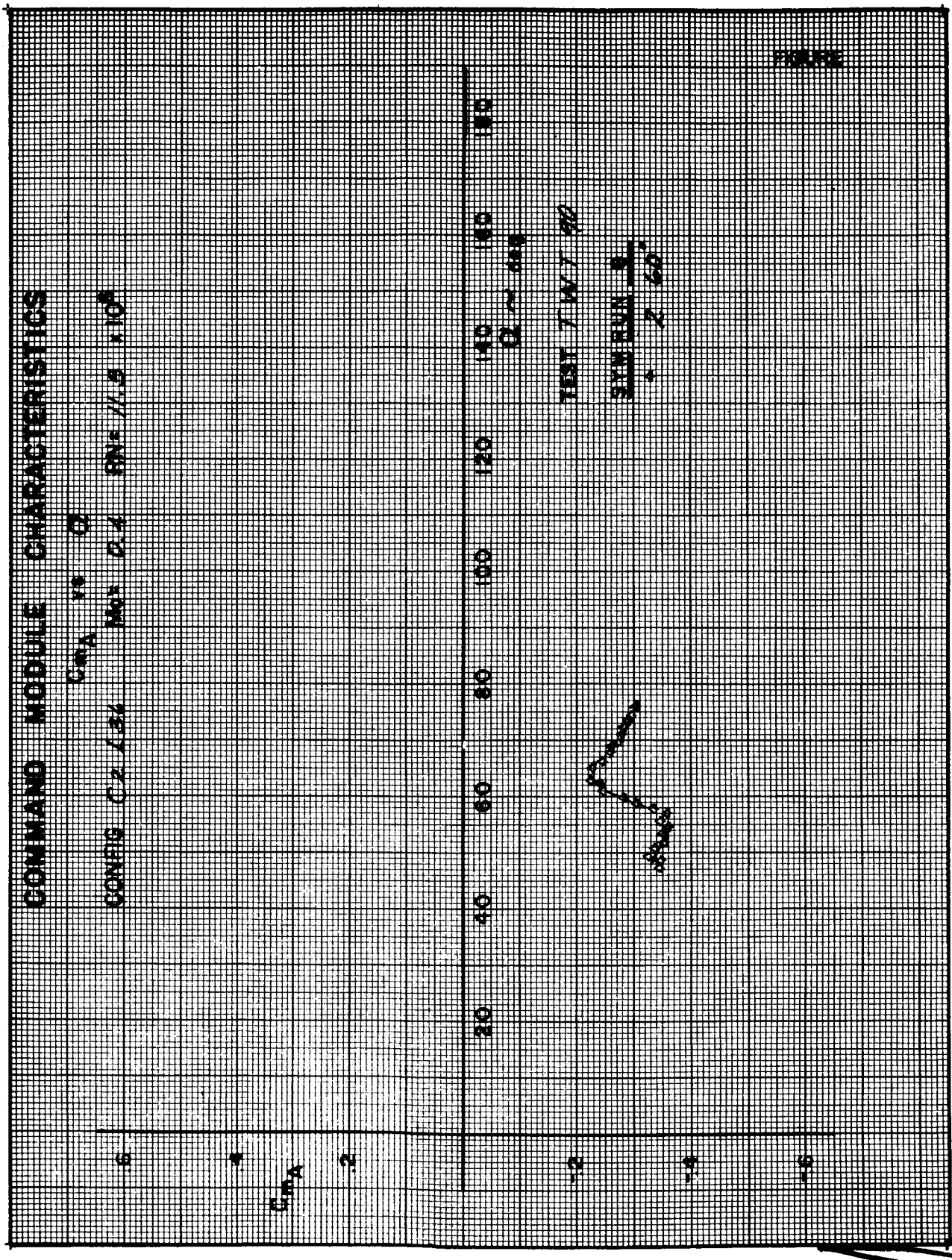

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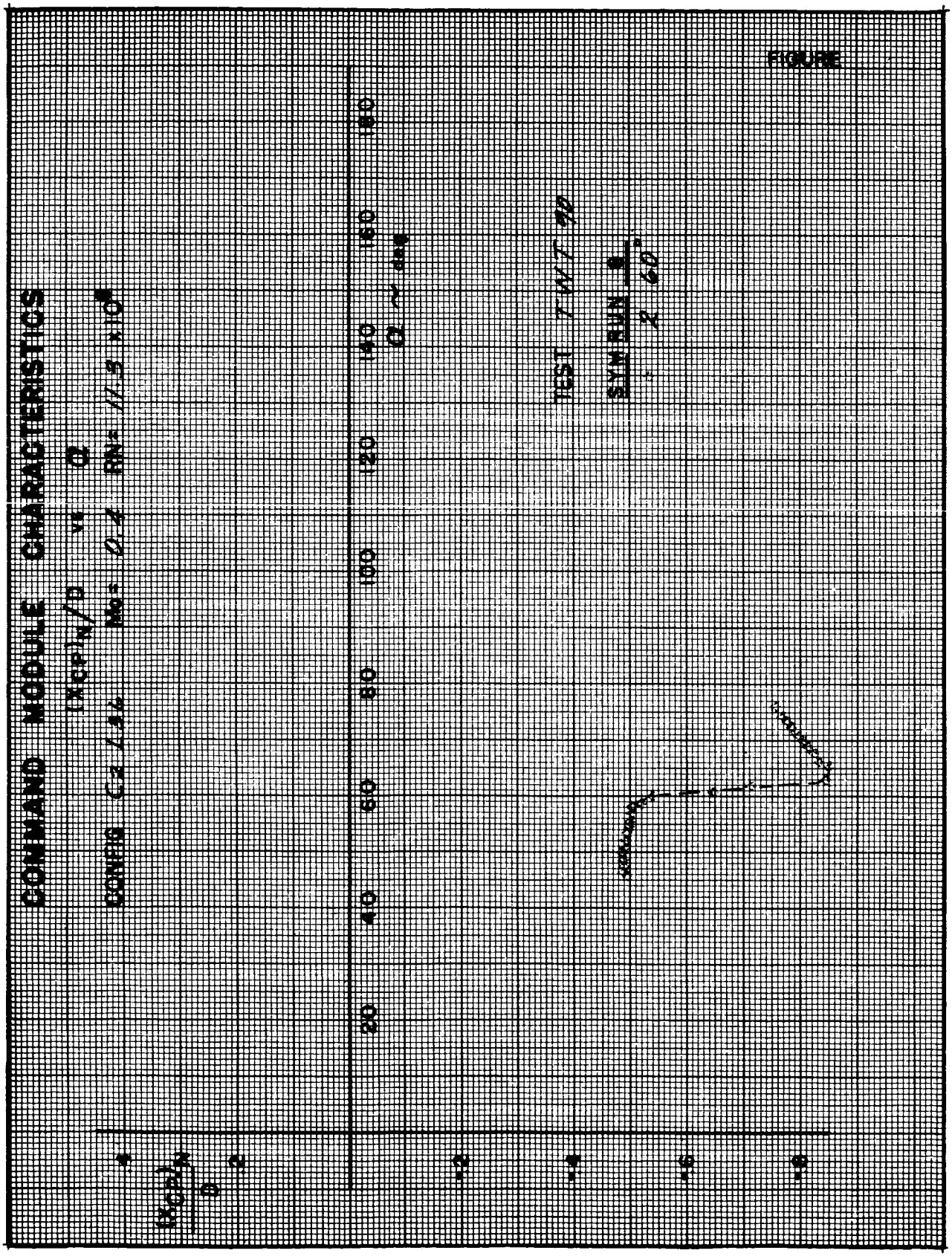

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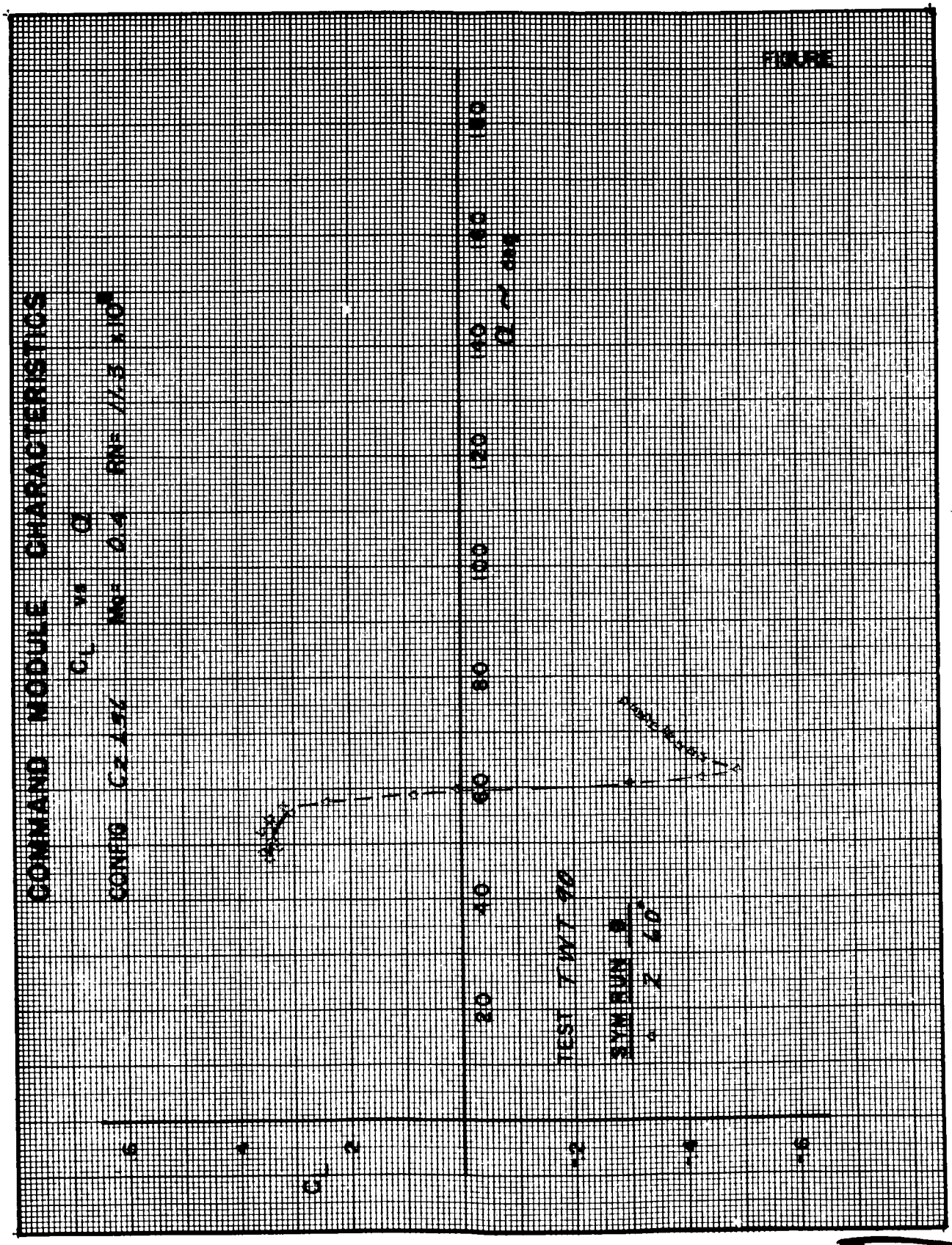

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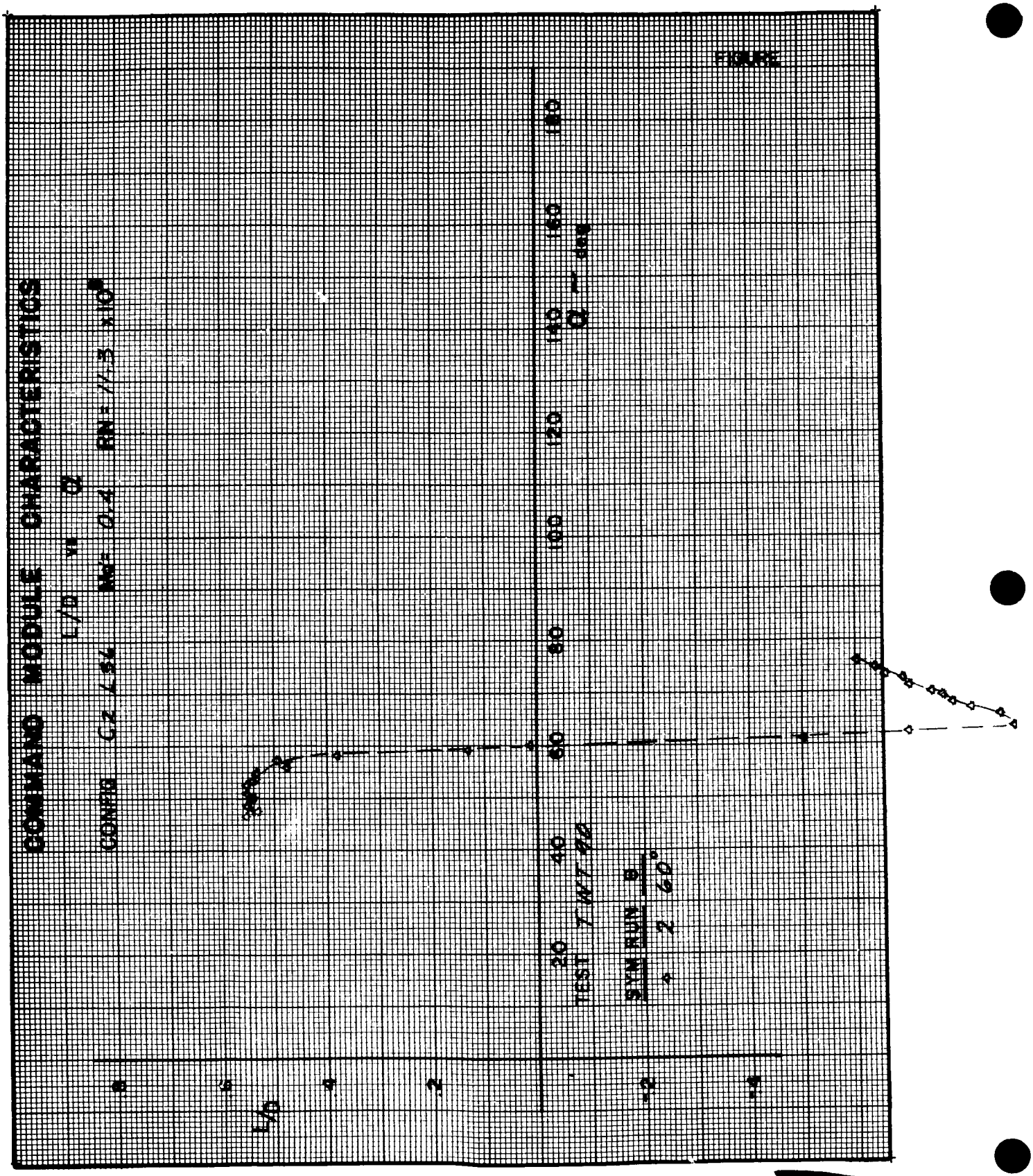

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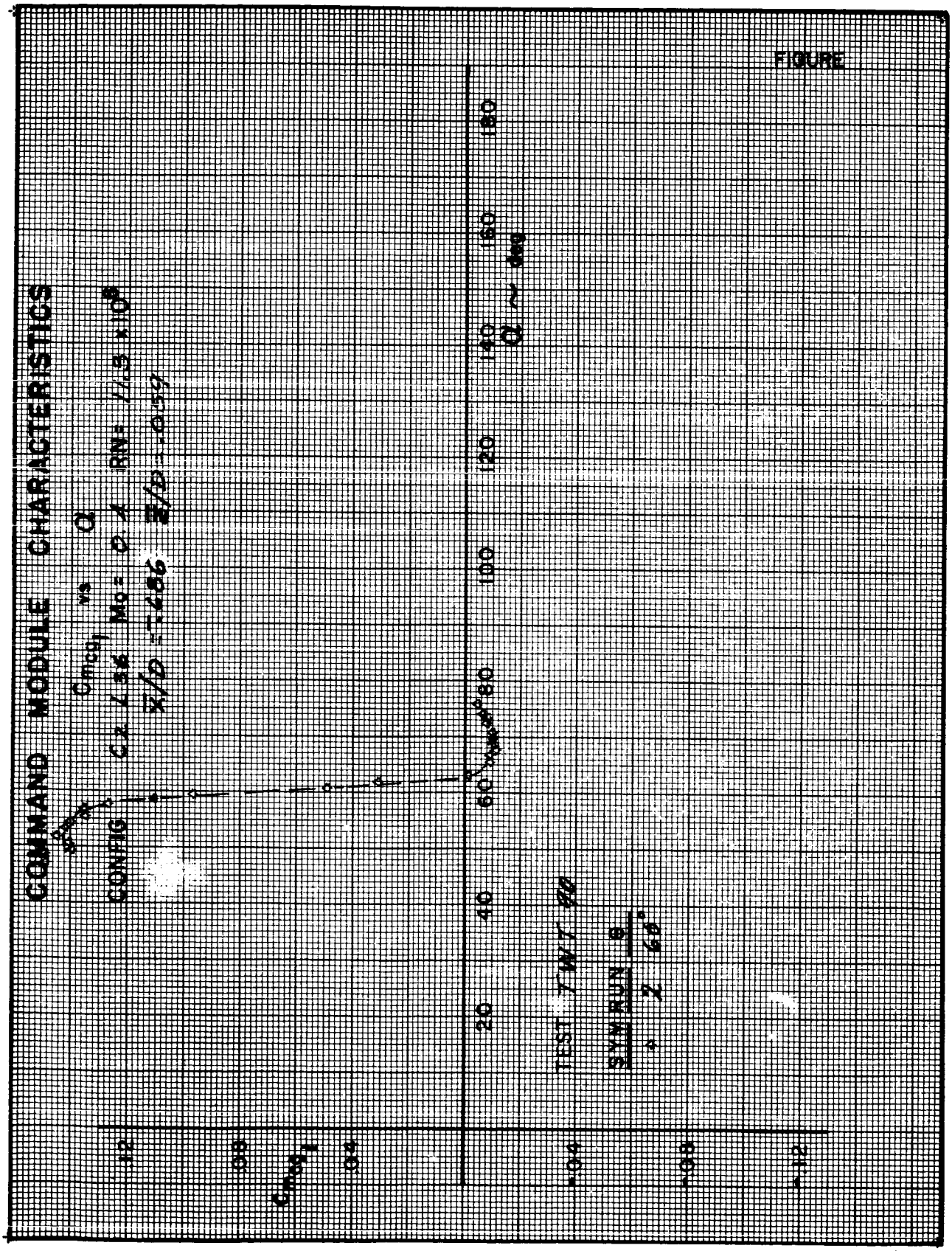

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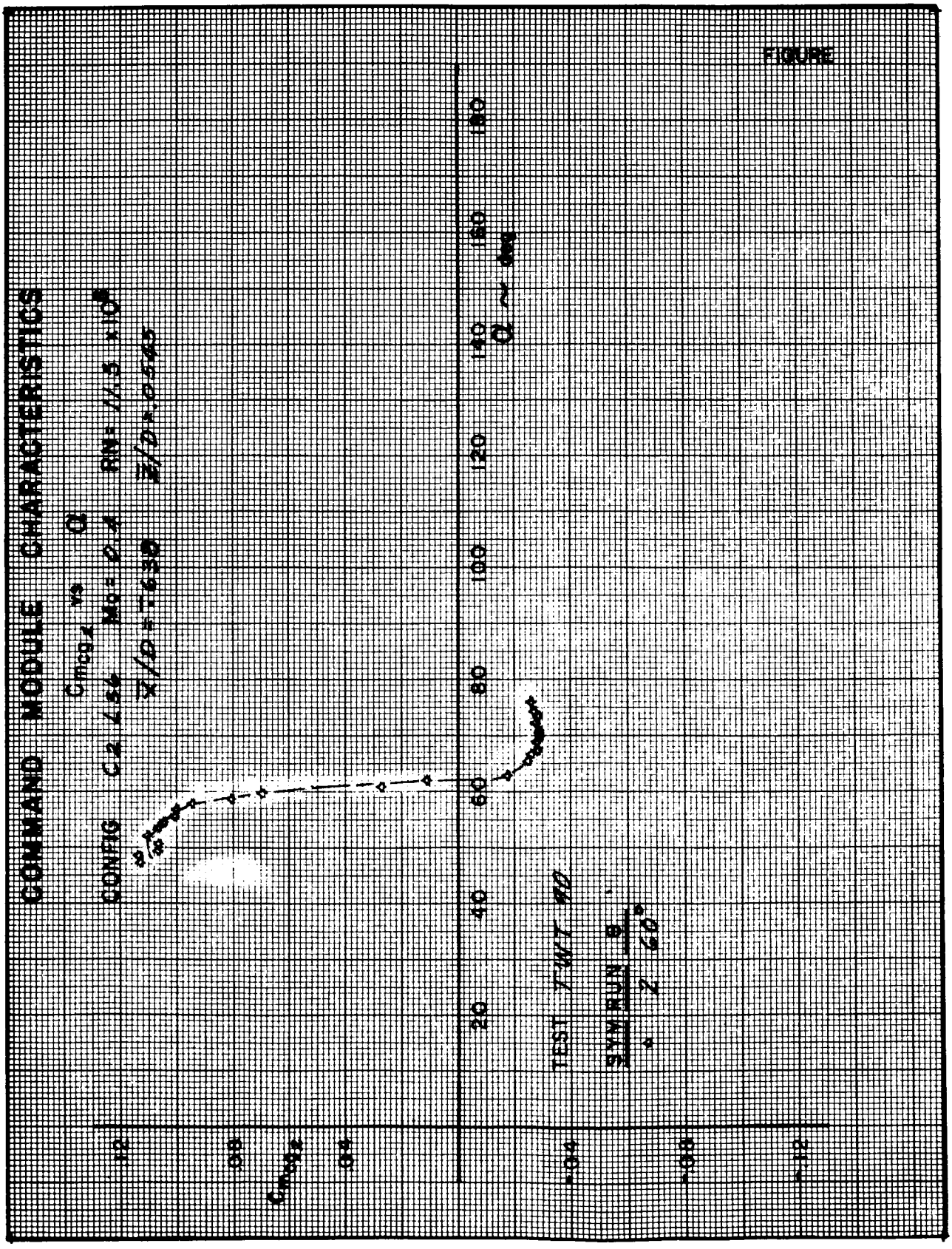

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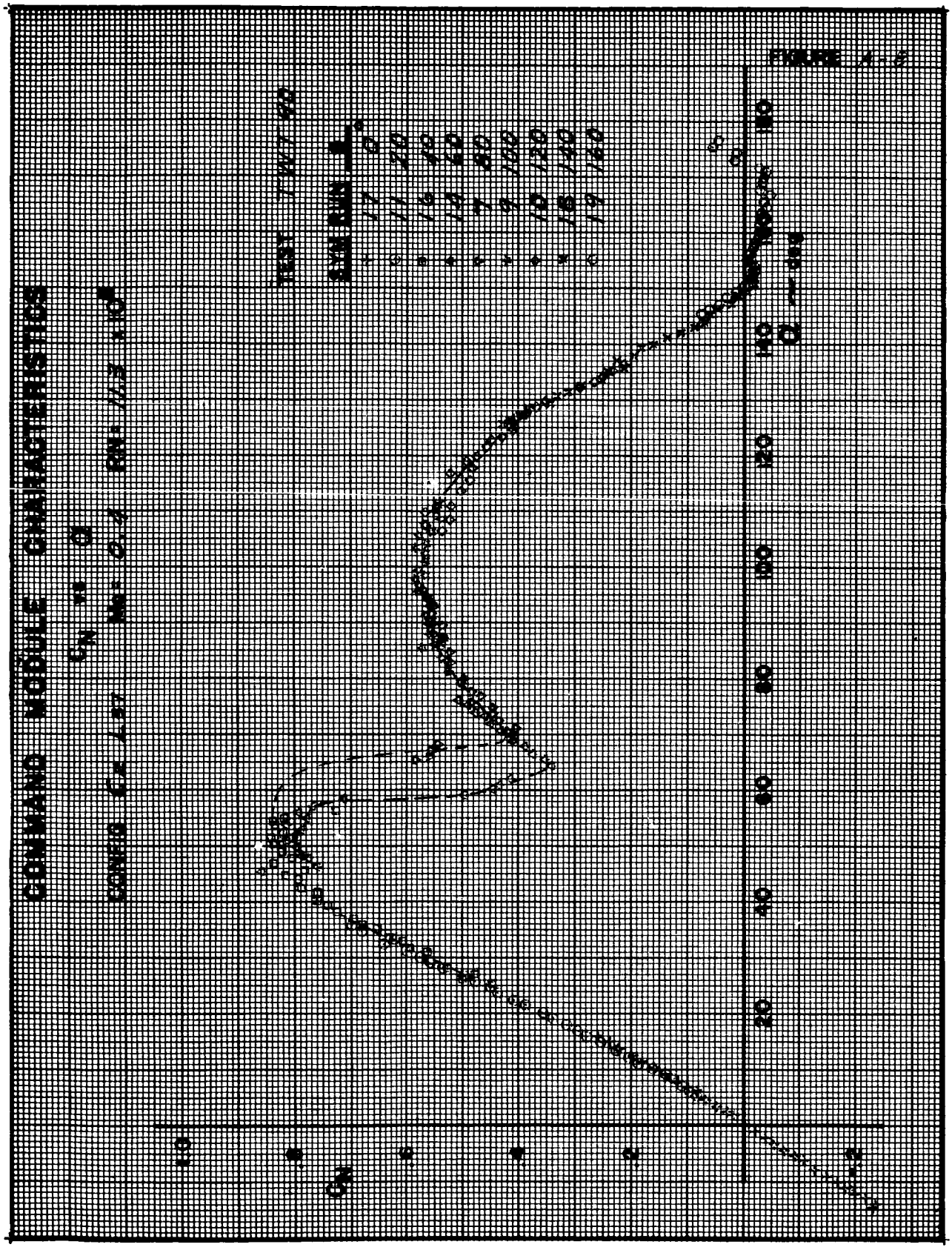

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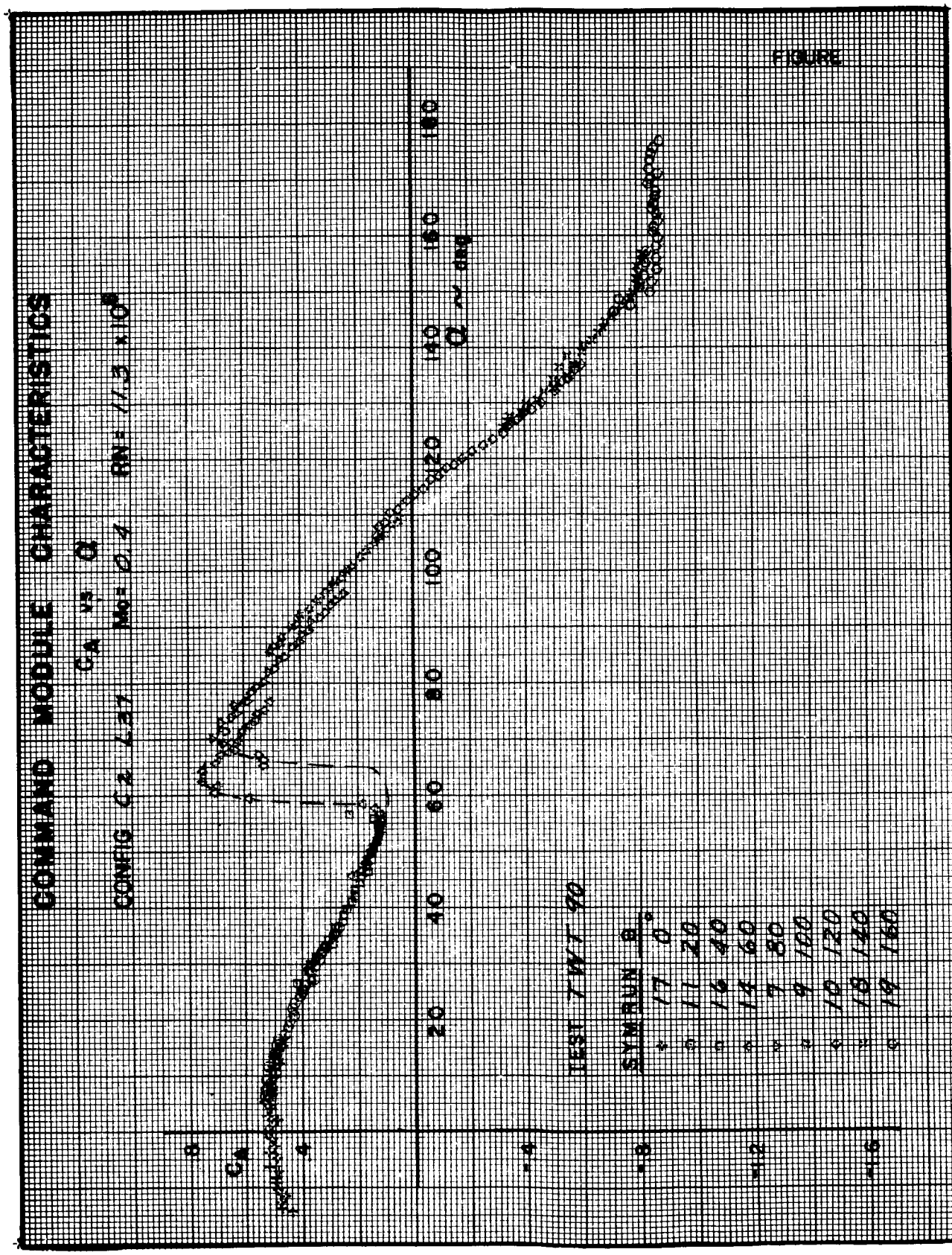

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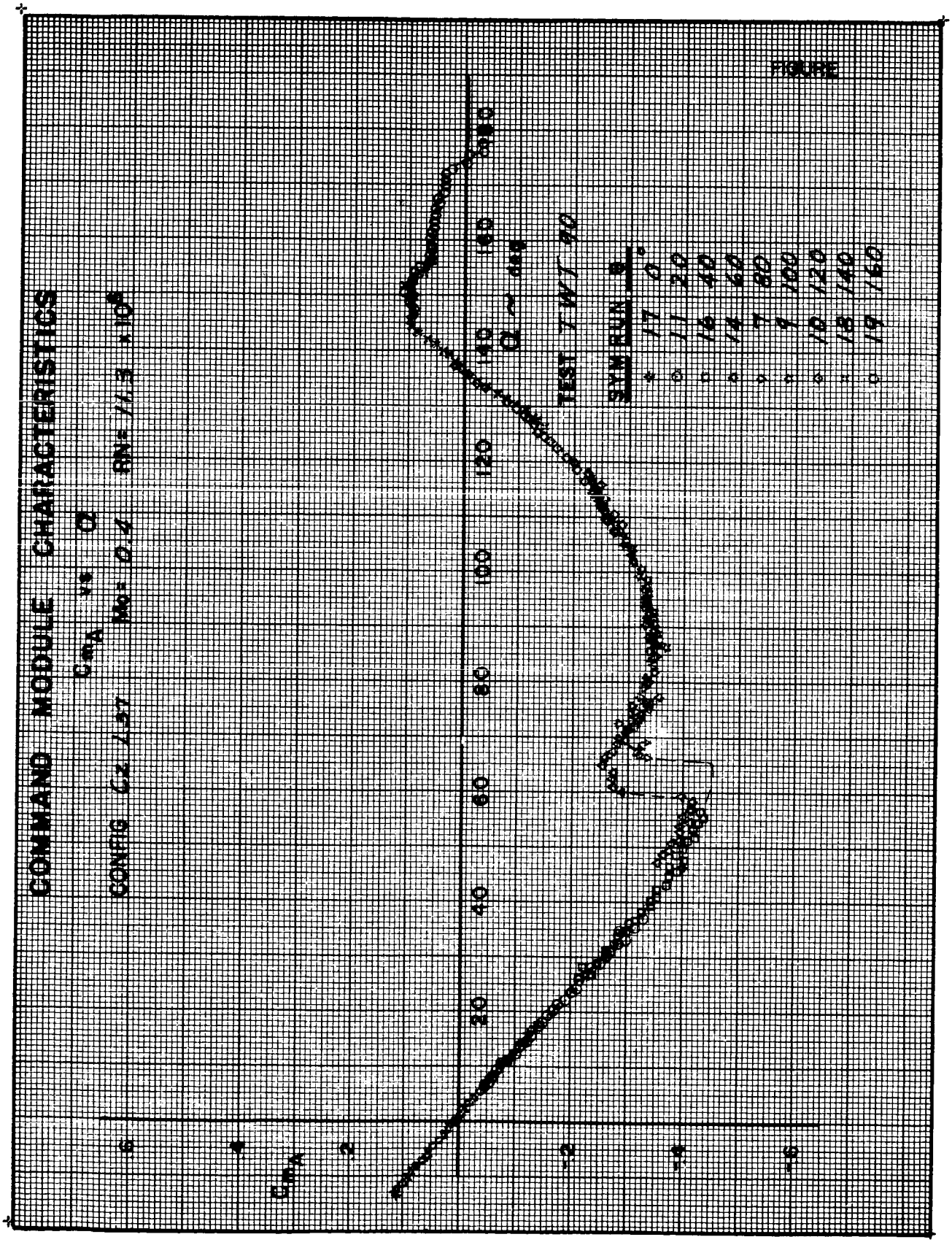

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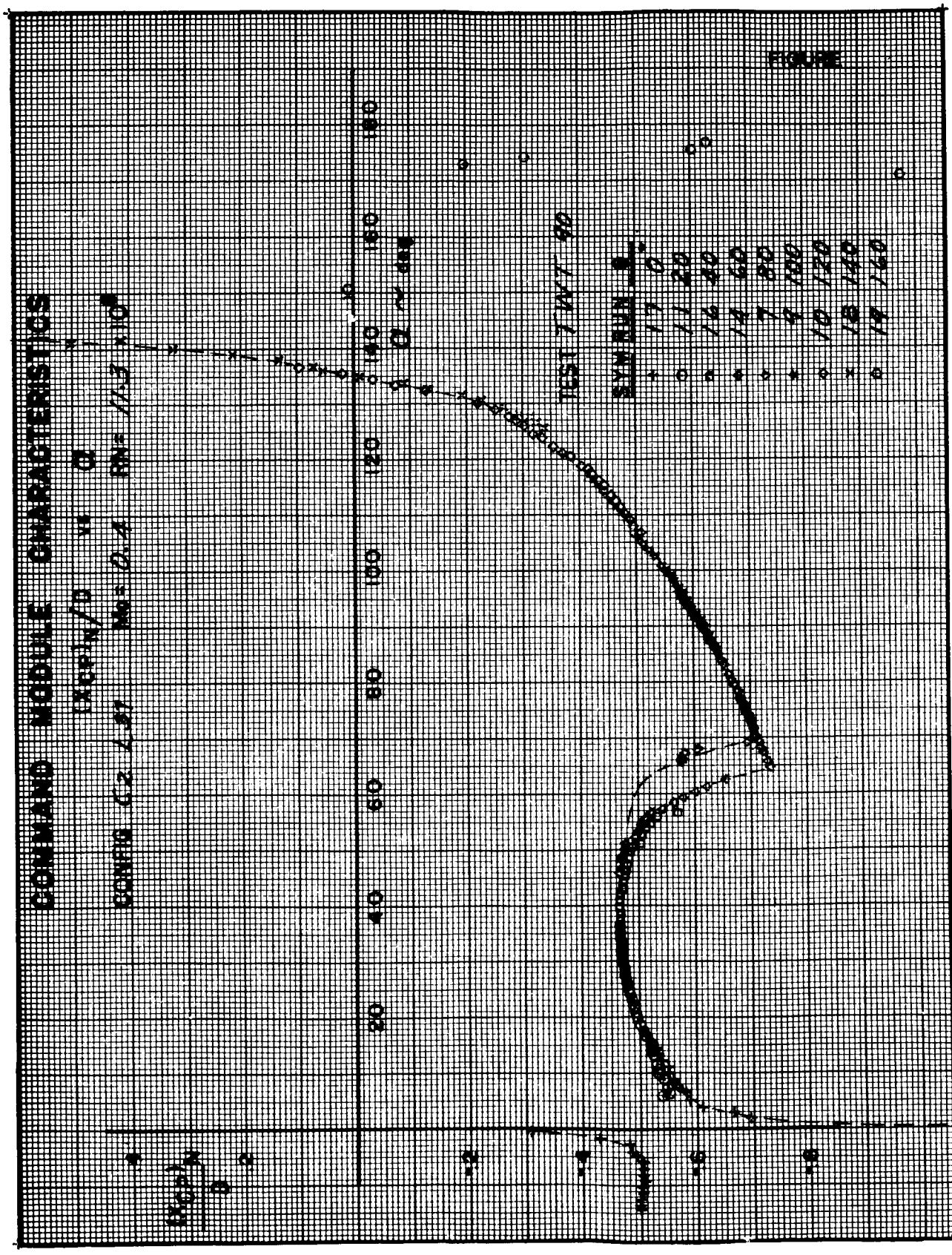

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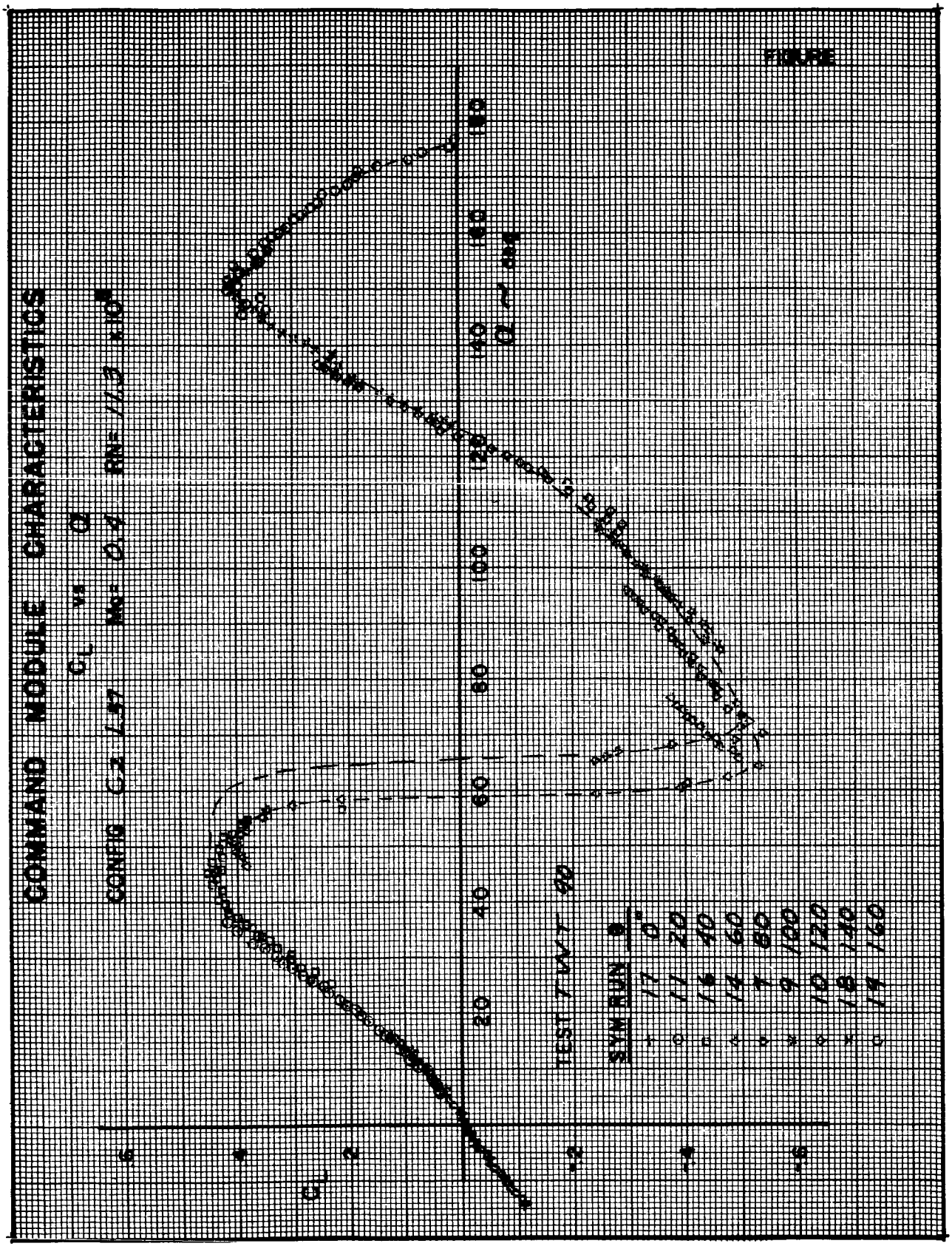

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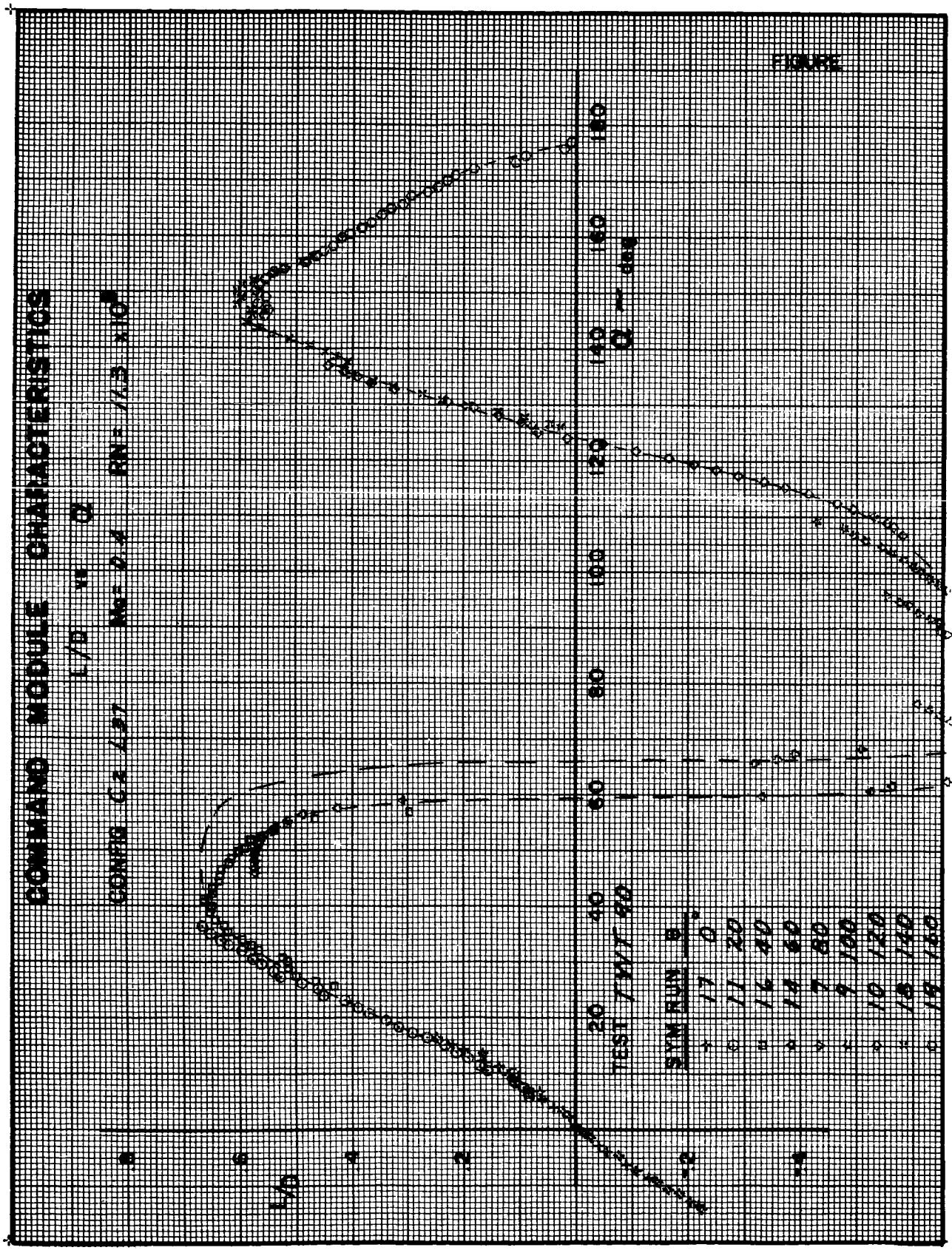

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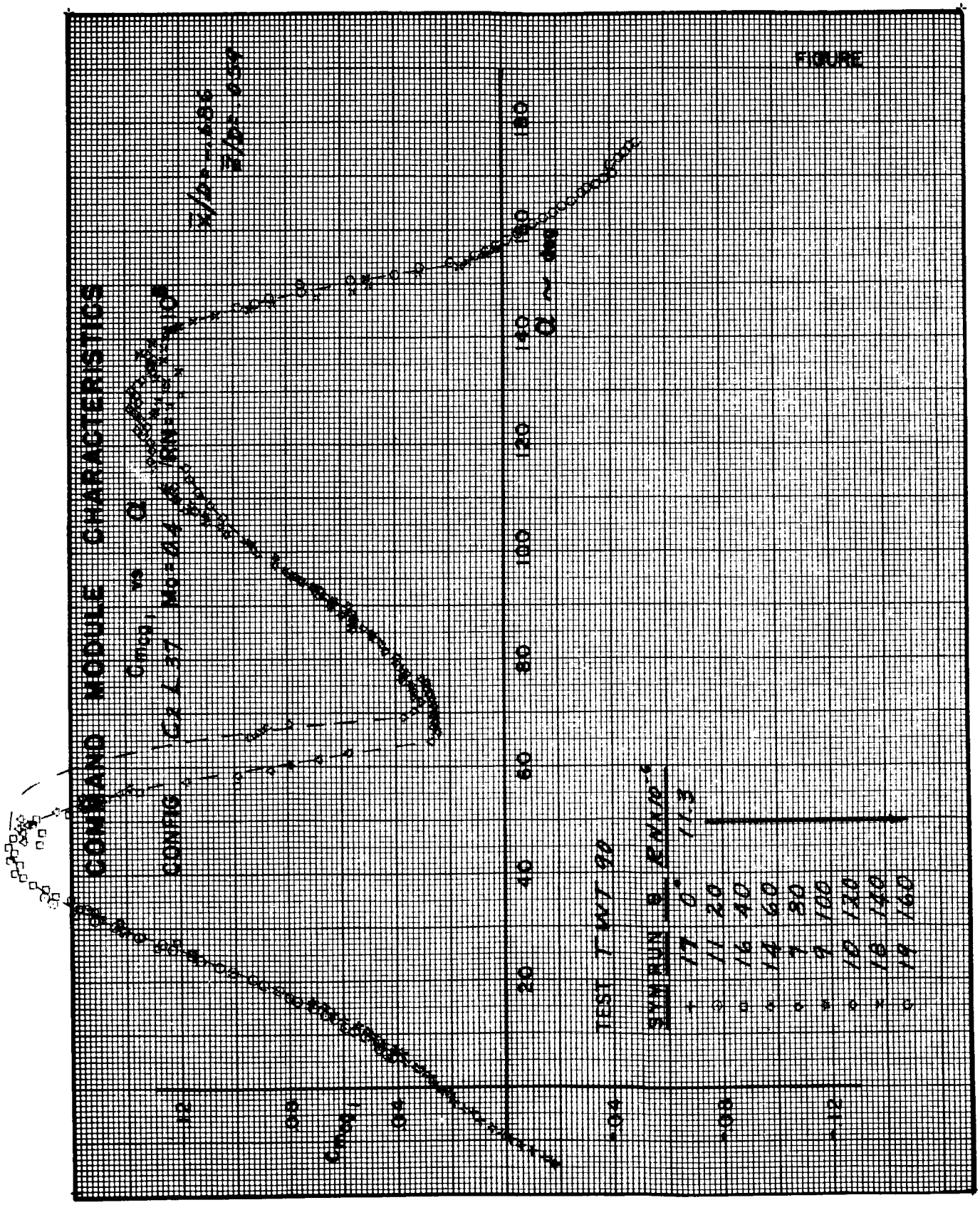

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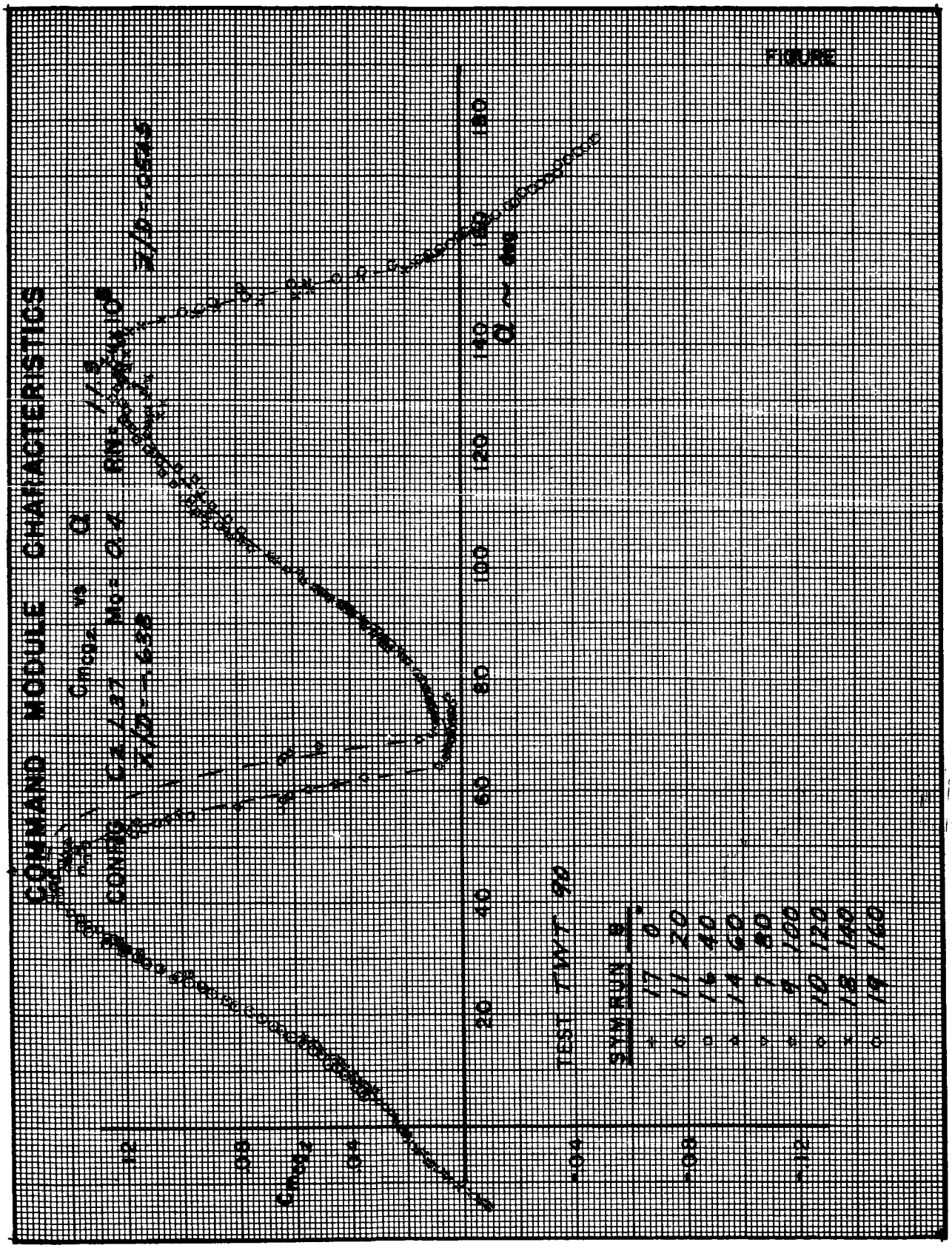

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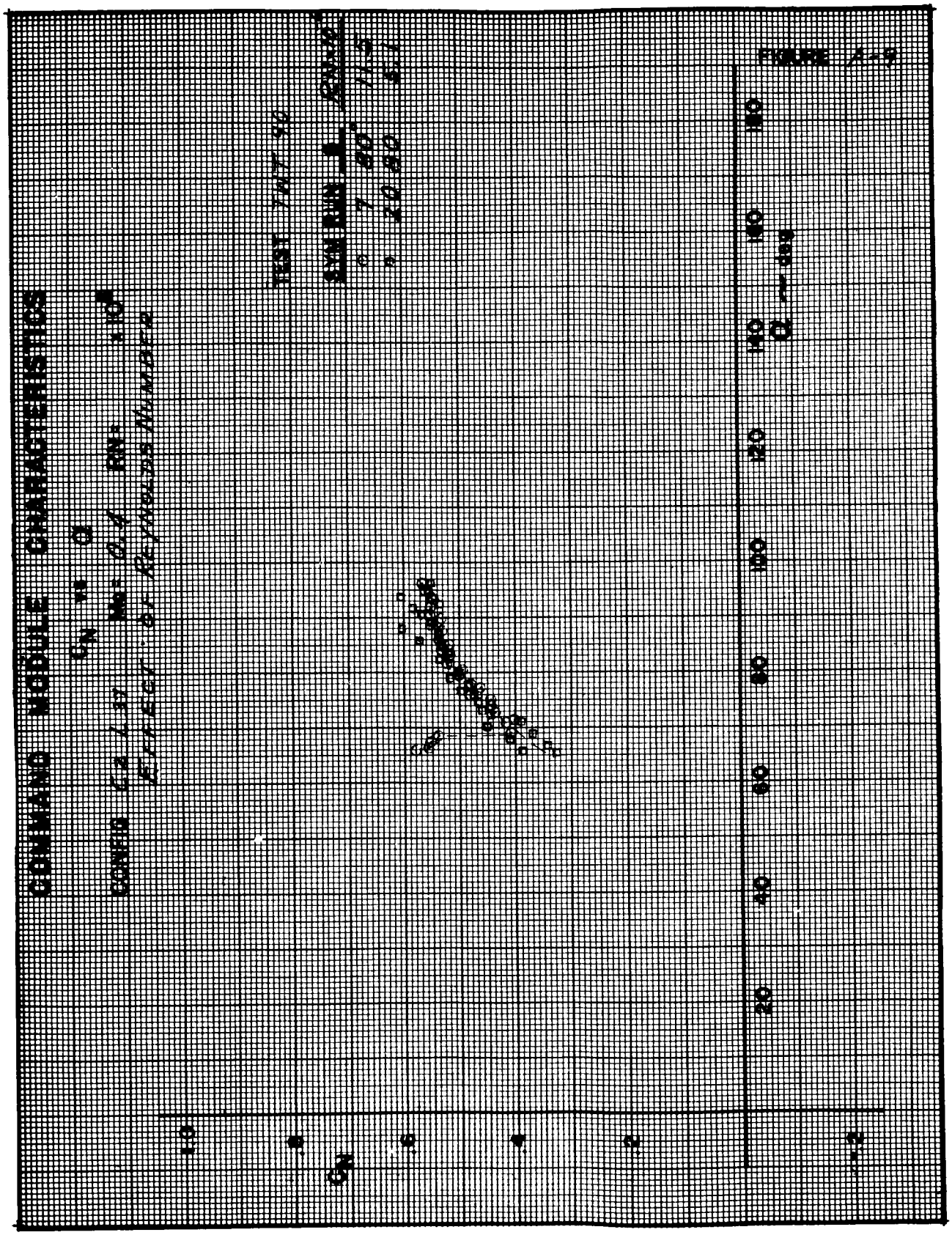

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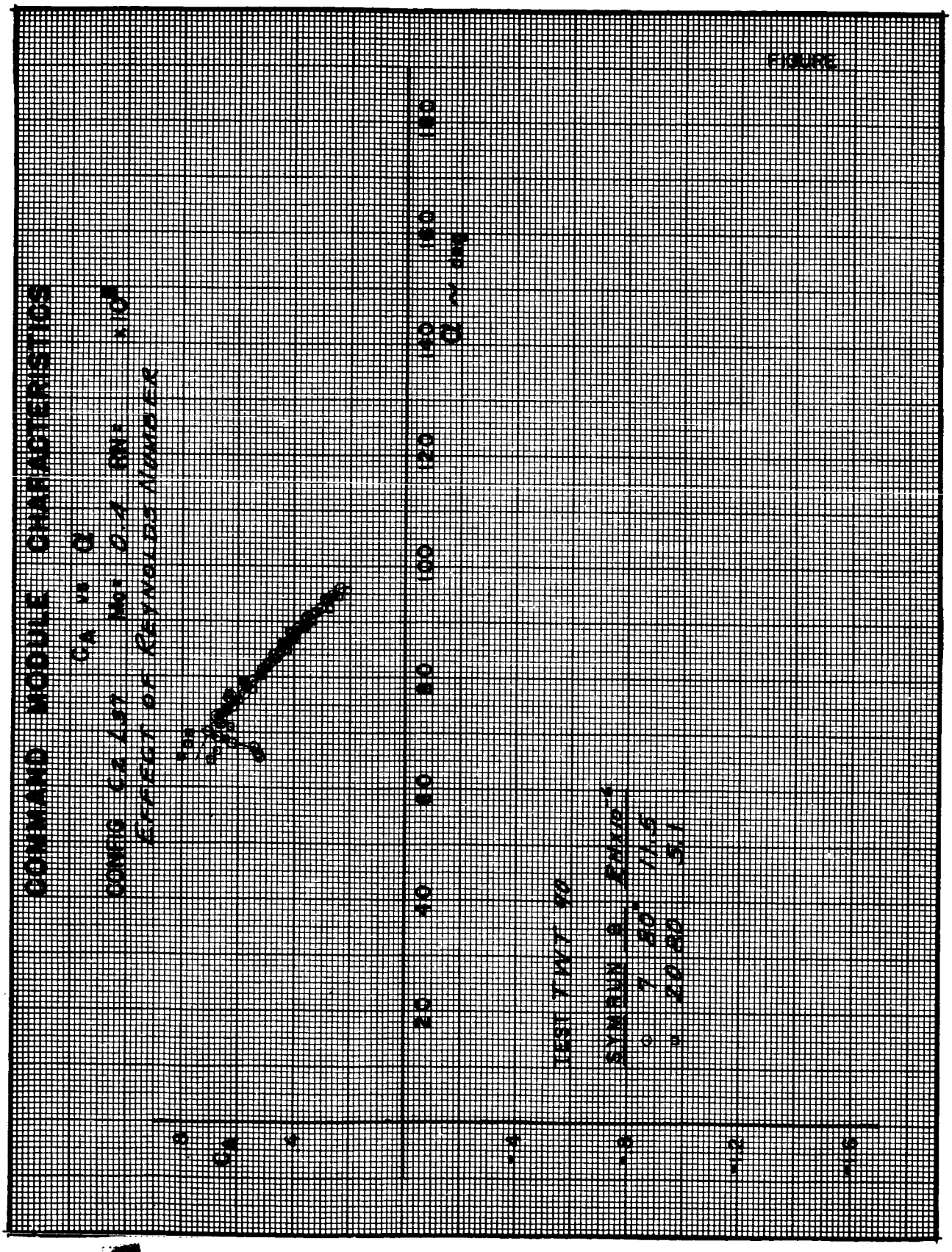

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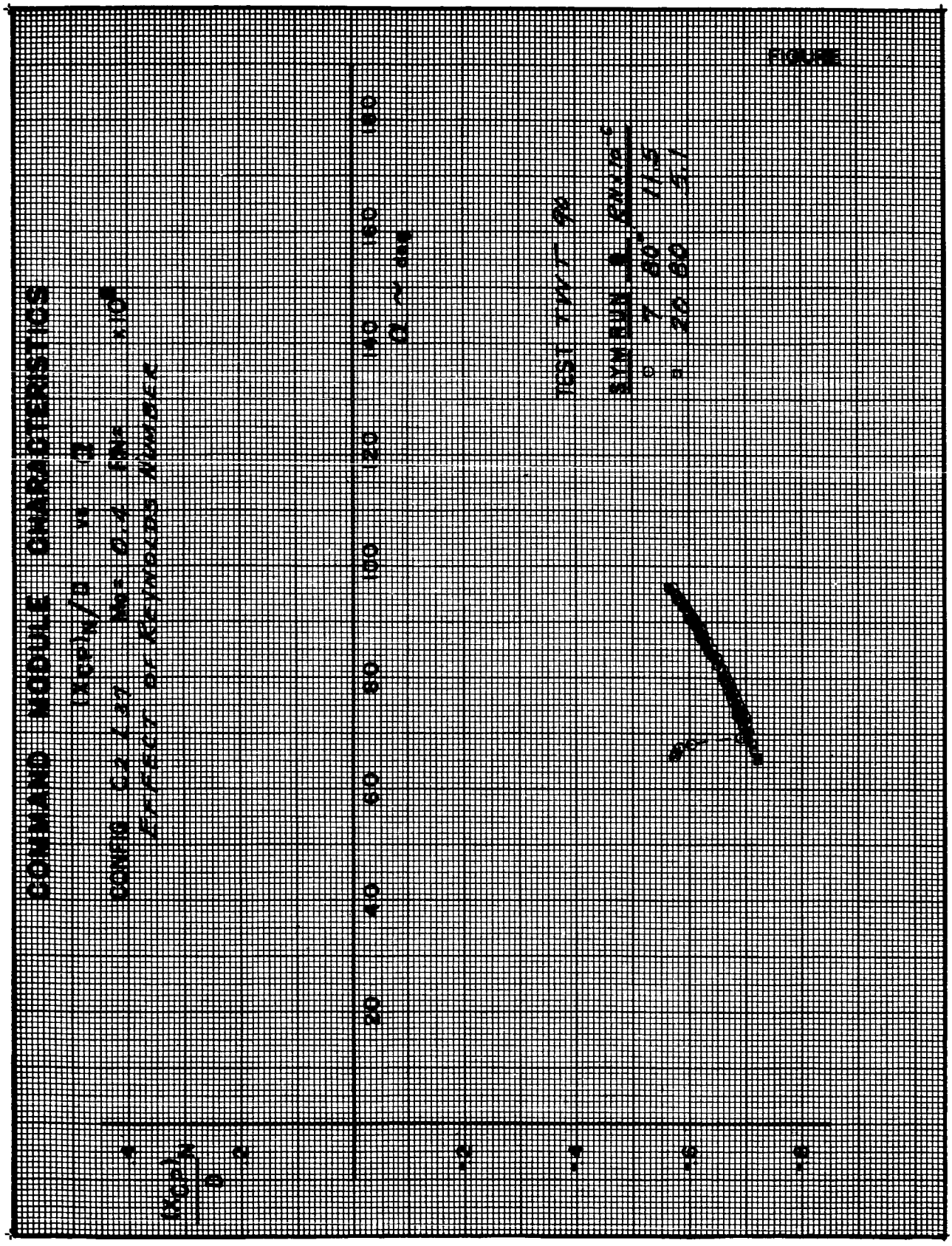

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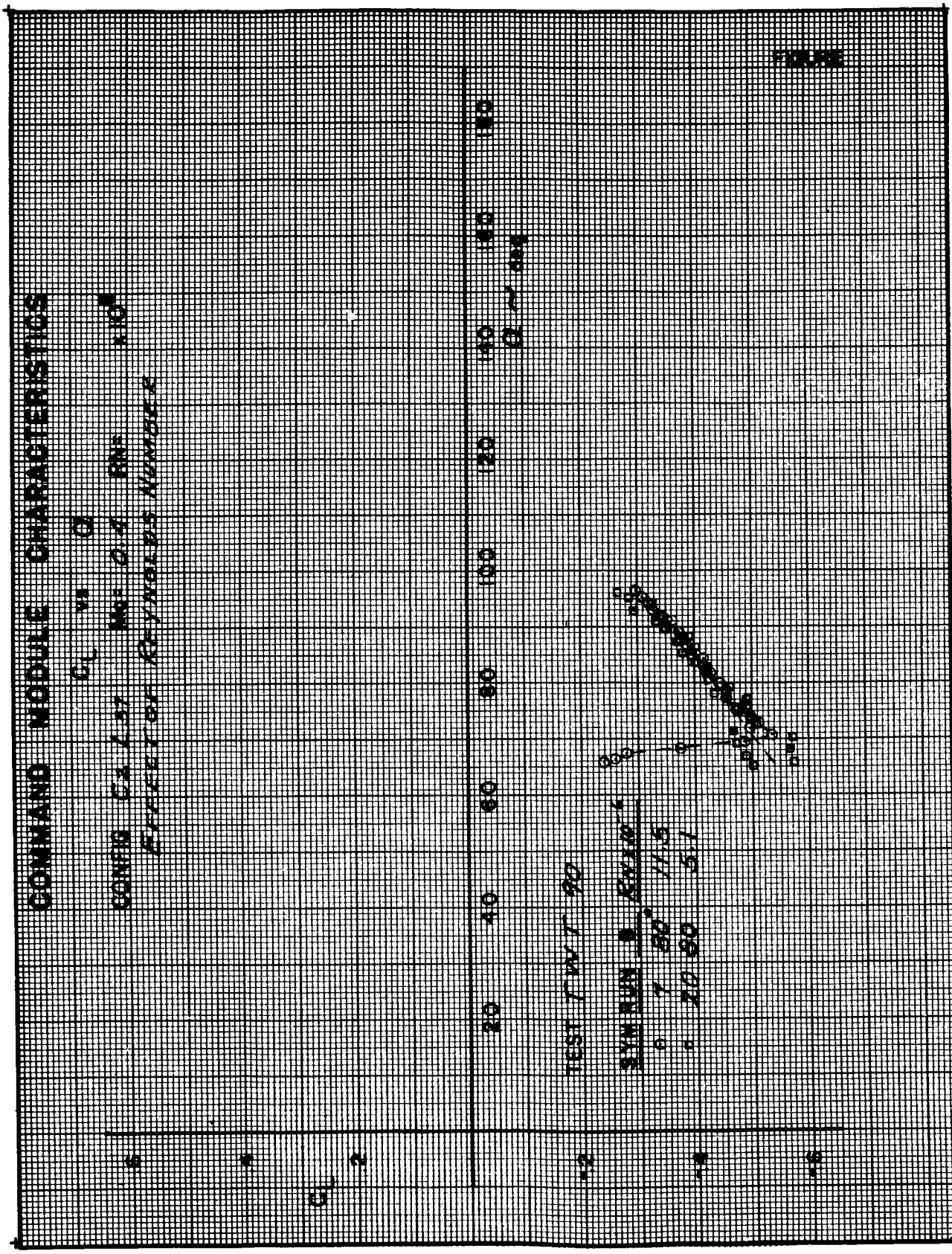

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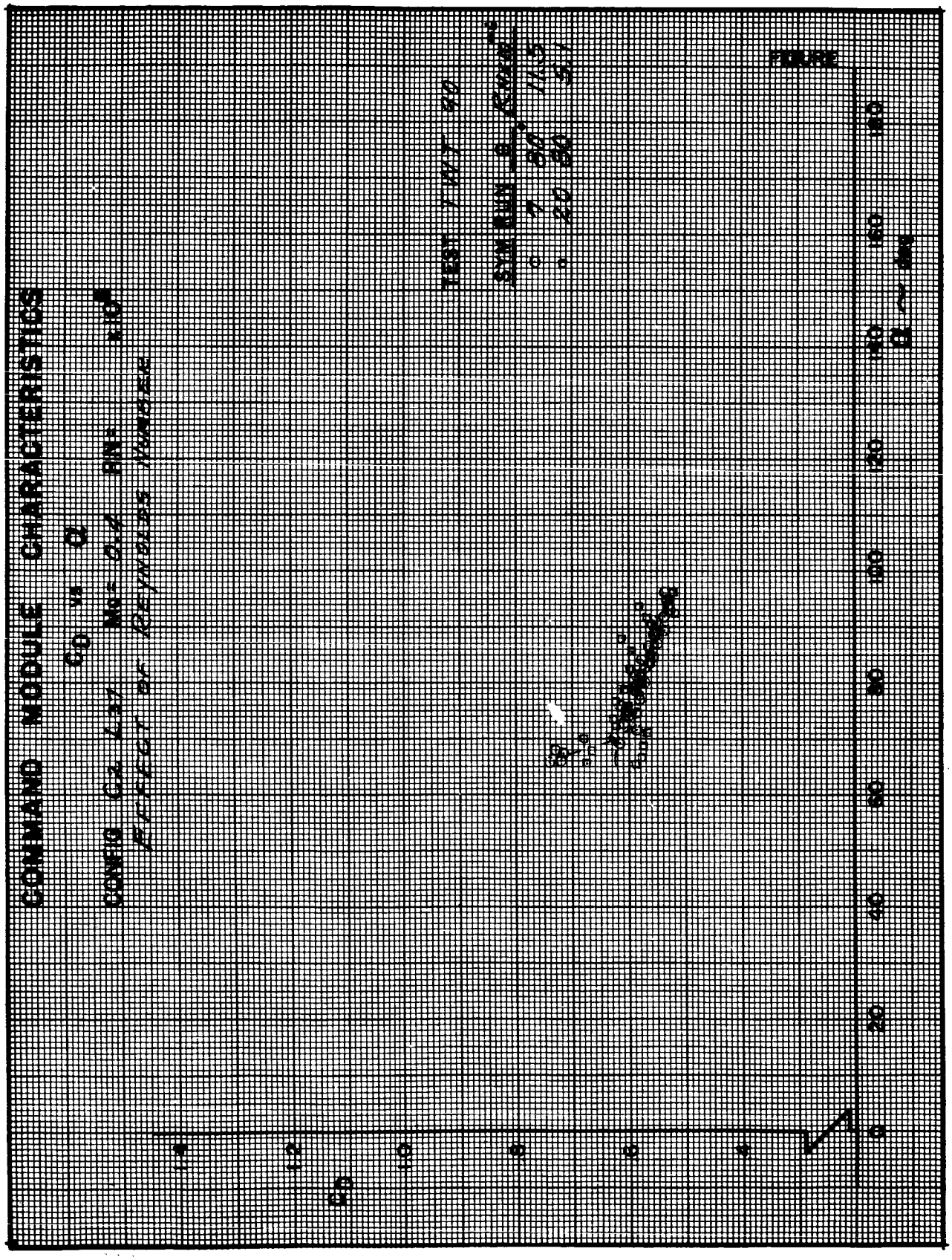
COMMAND MODULE CHARACTERISTICS
FIGURE

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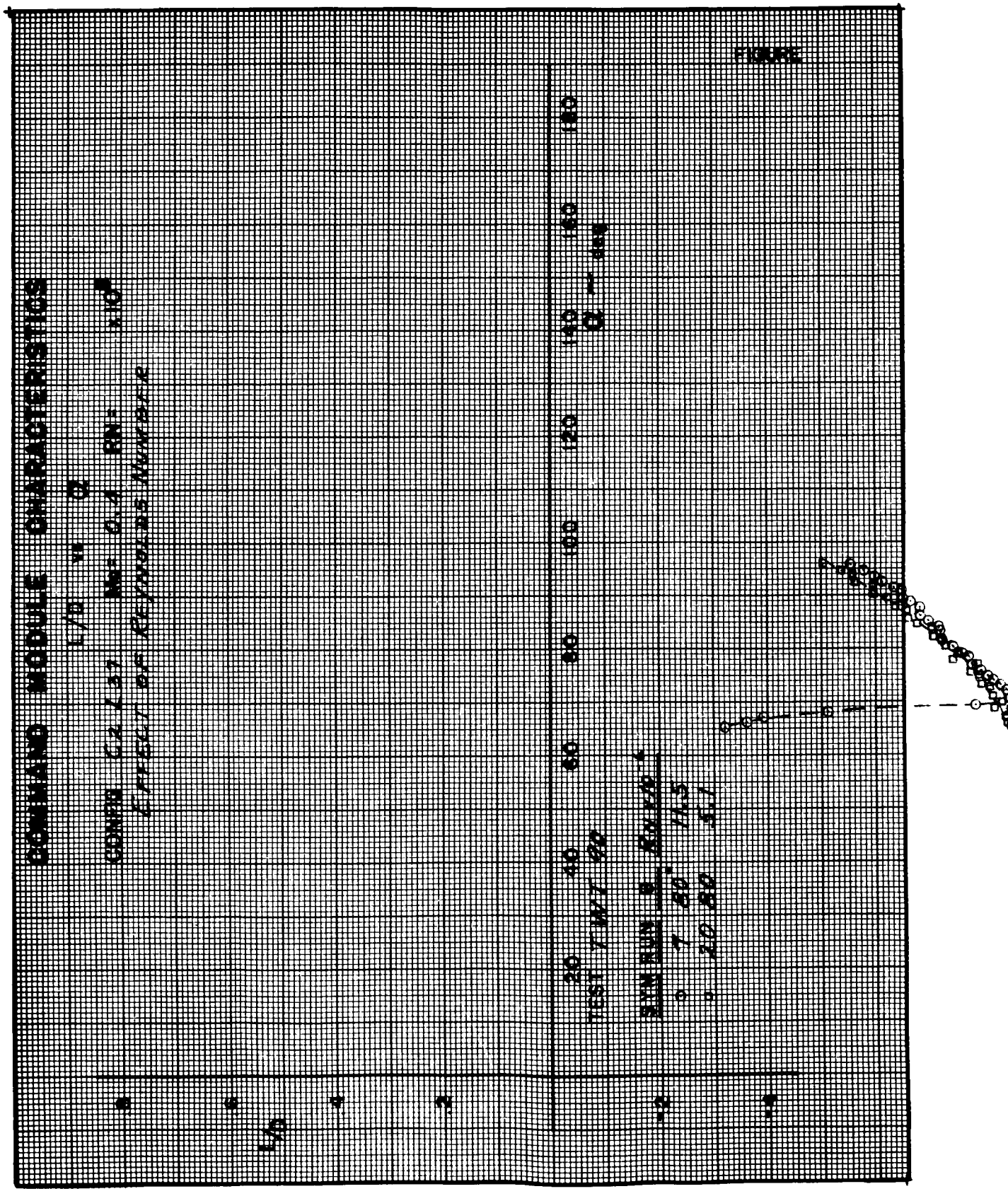

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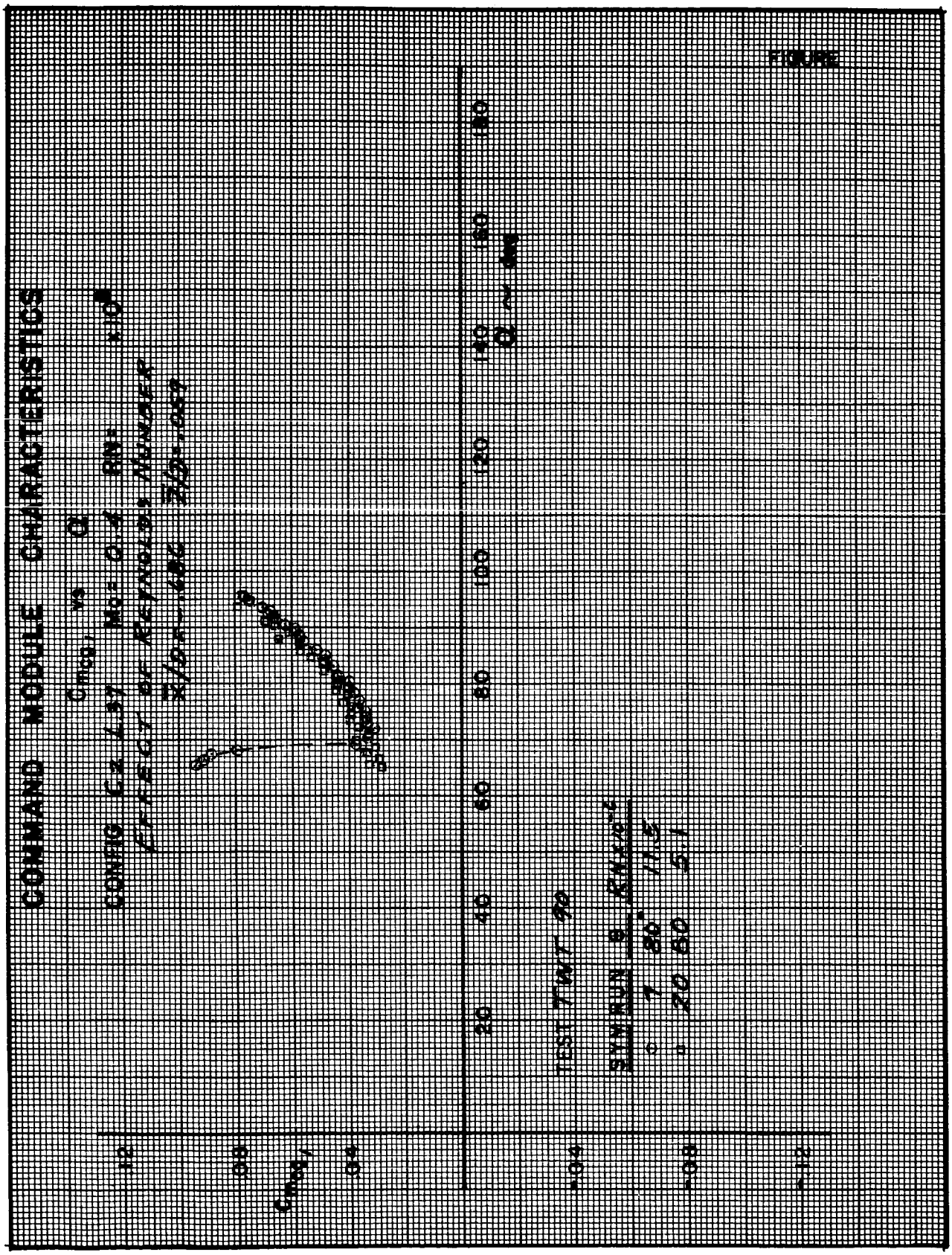
COMMAND MODULE CHARACTERISTICS
FIGURE

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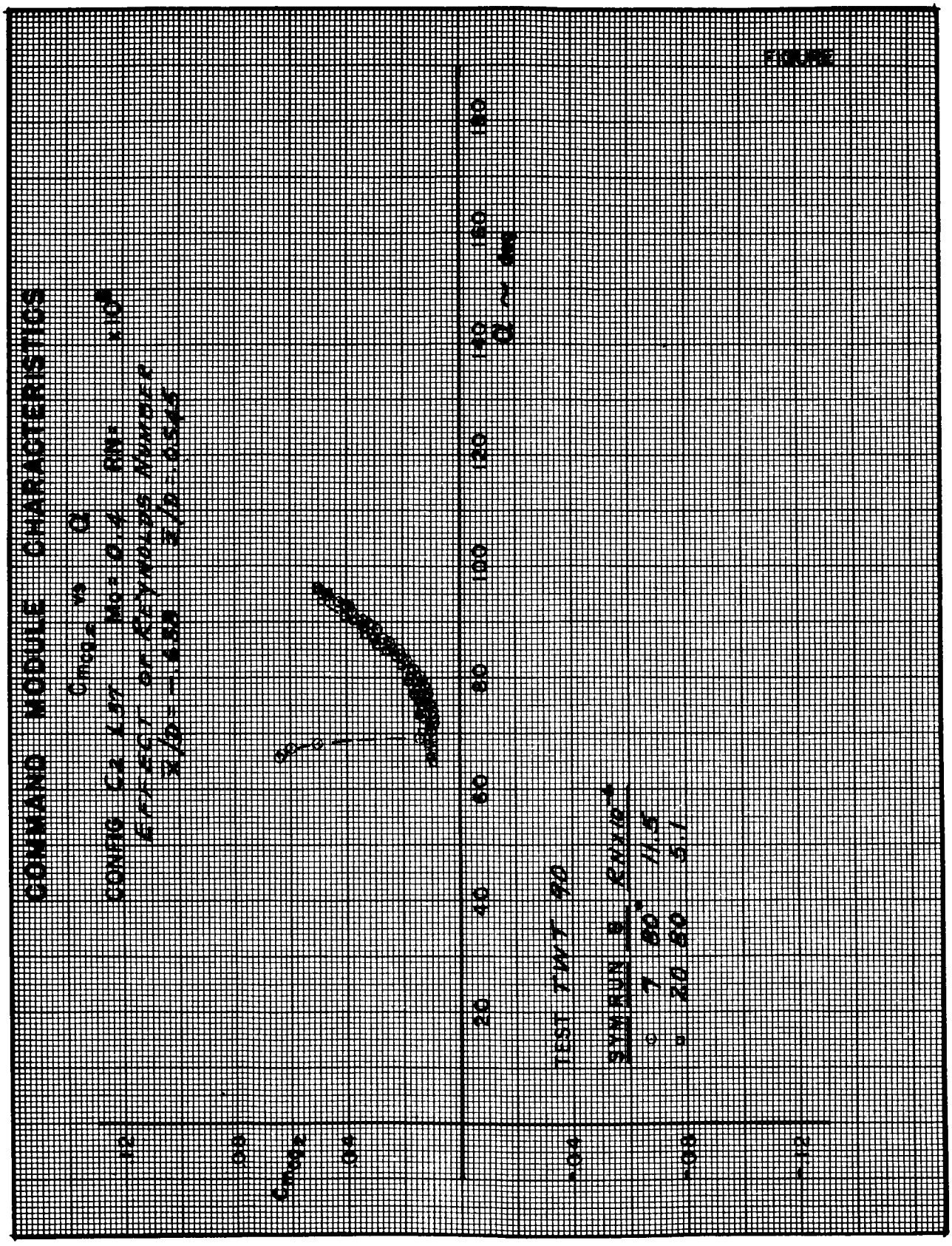

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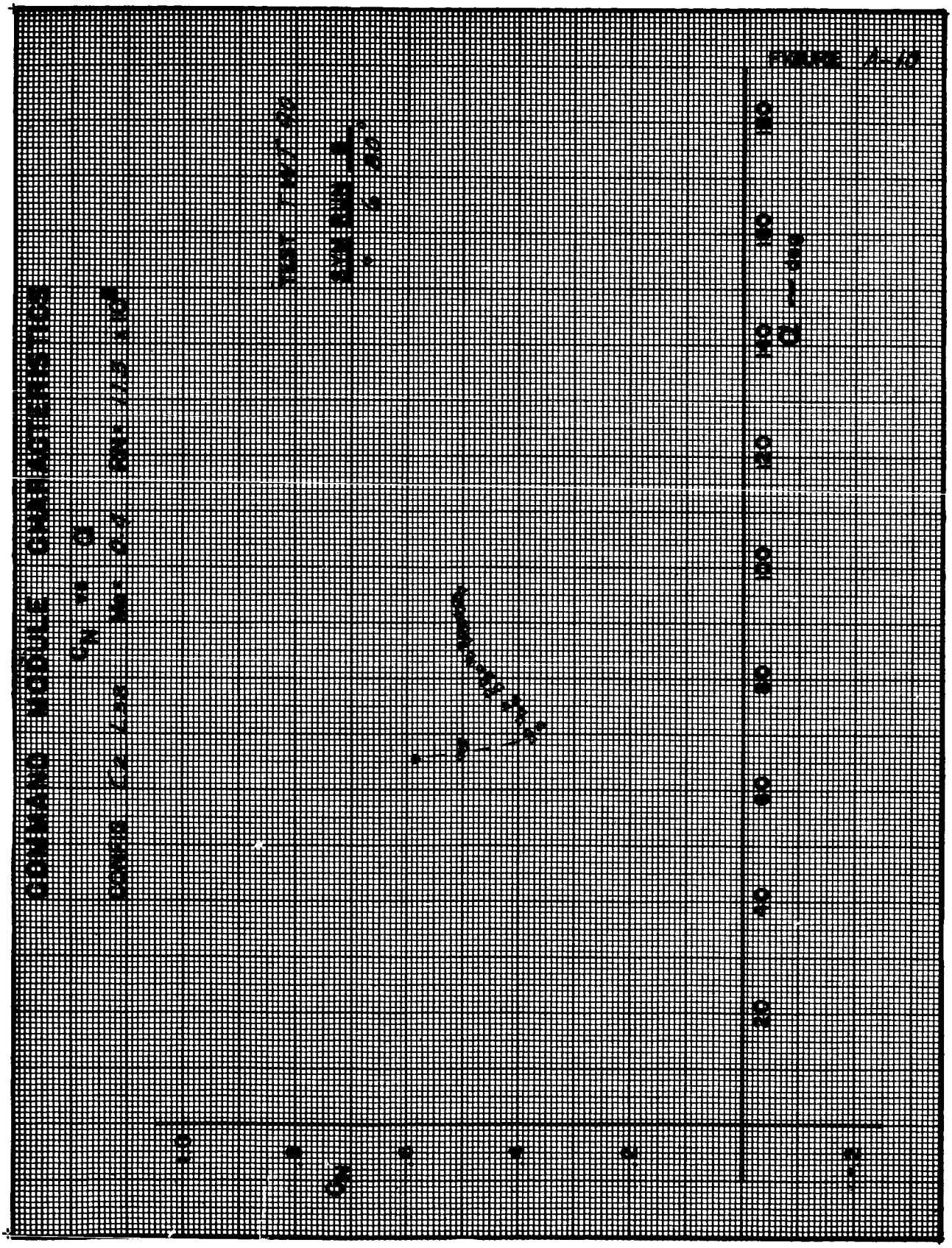

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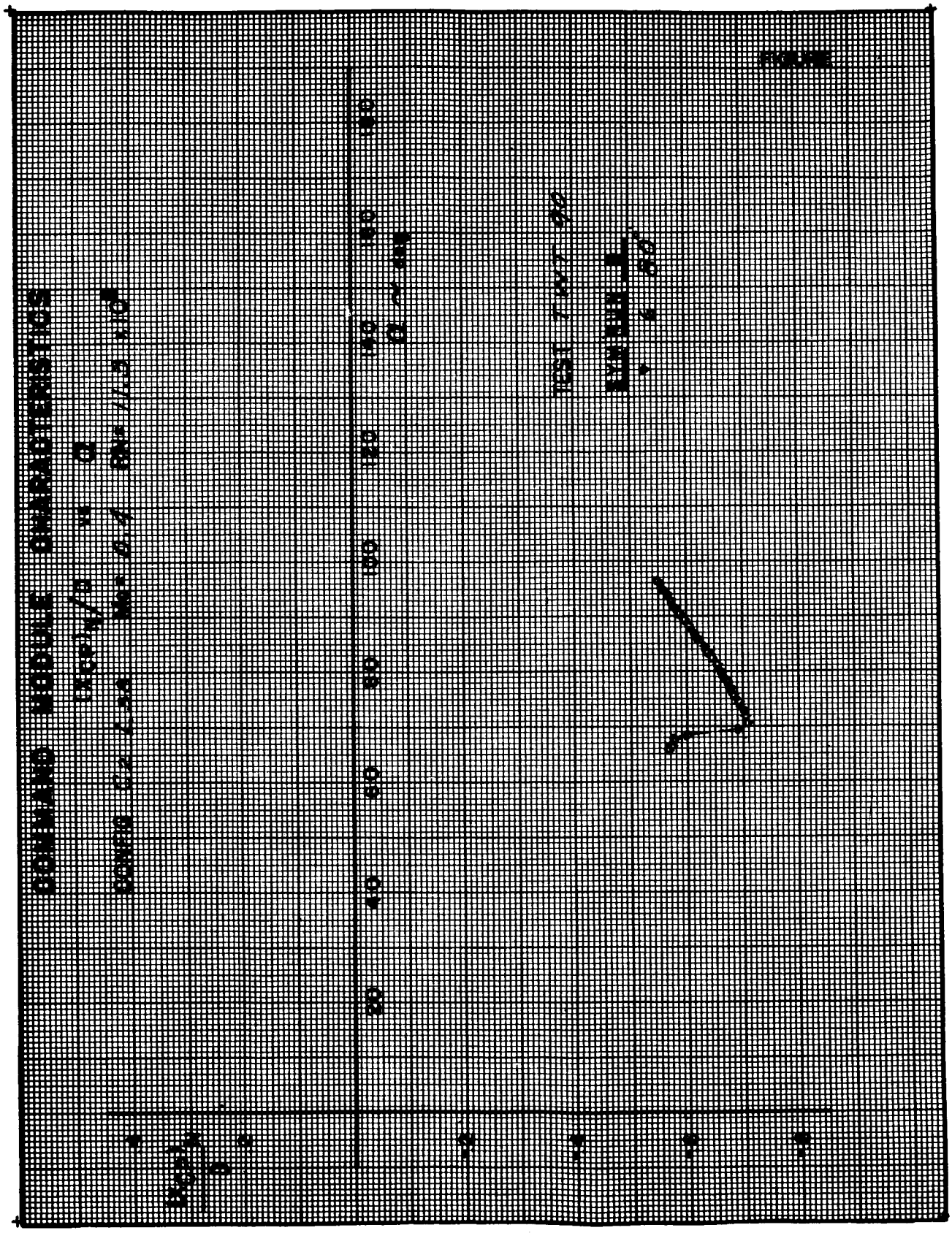

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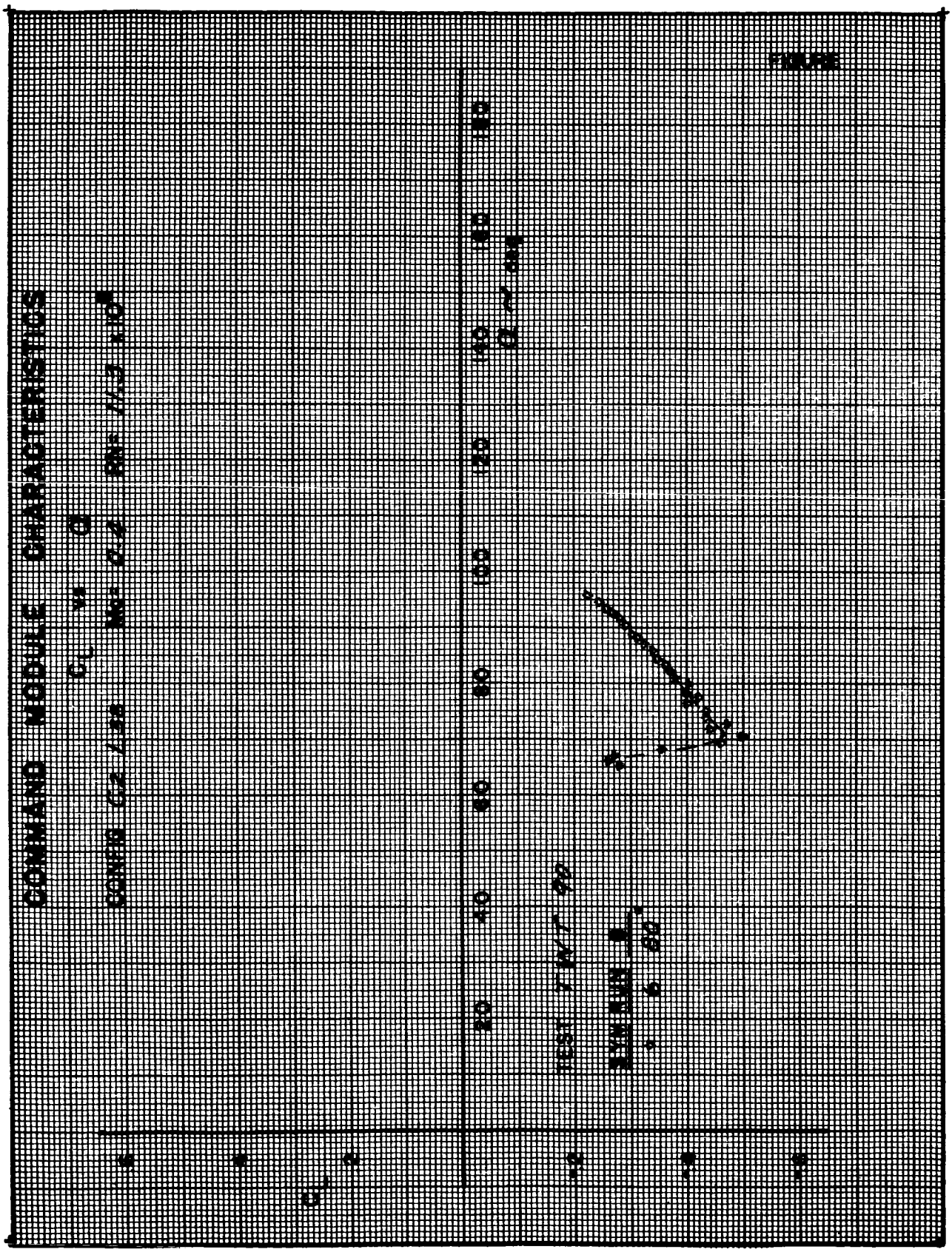

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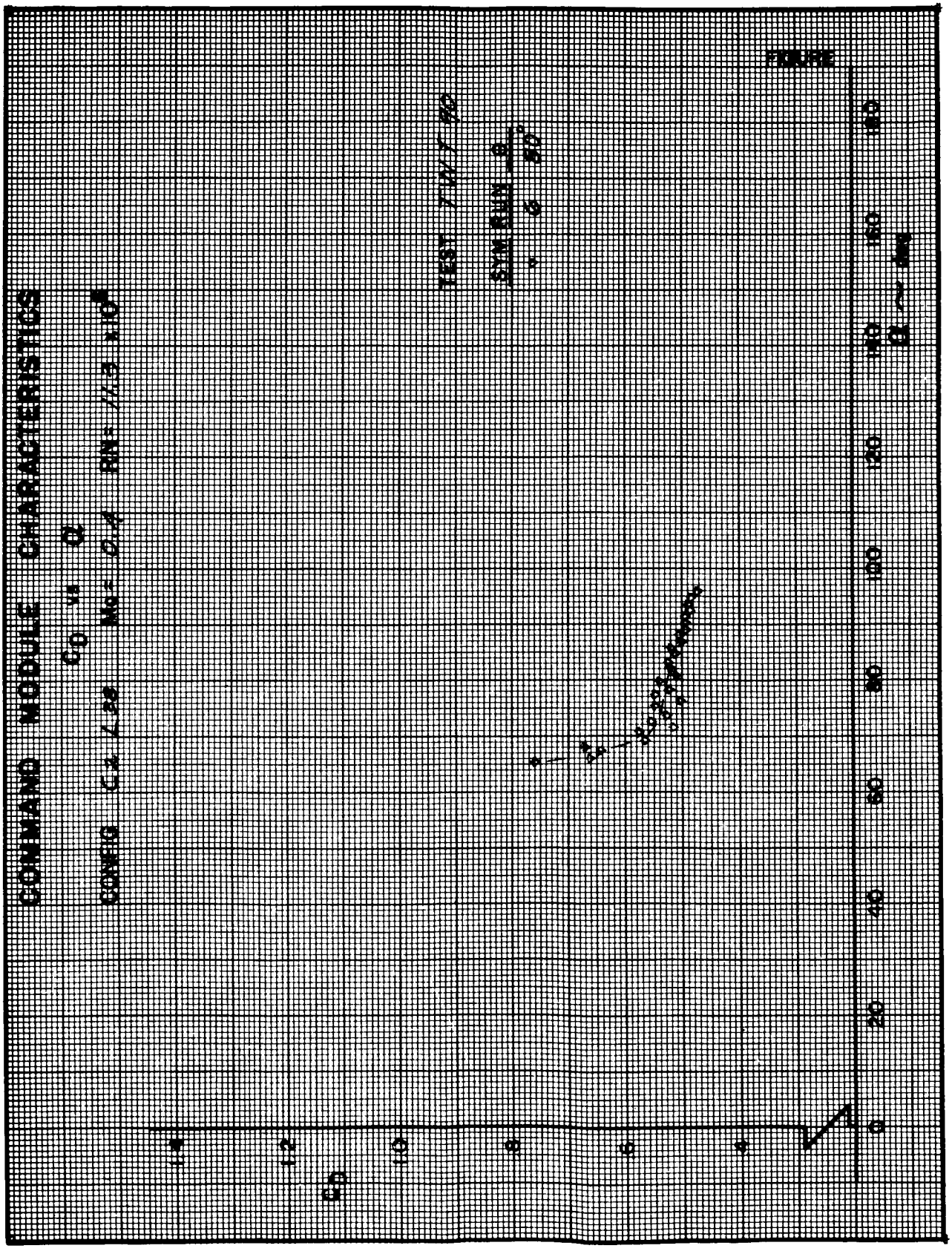

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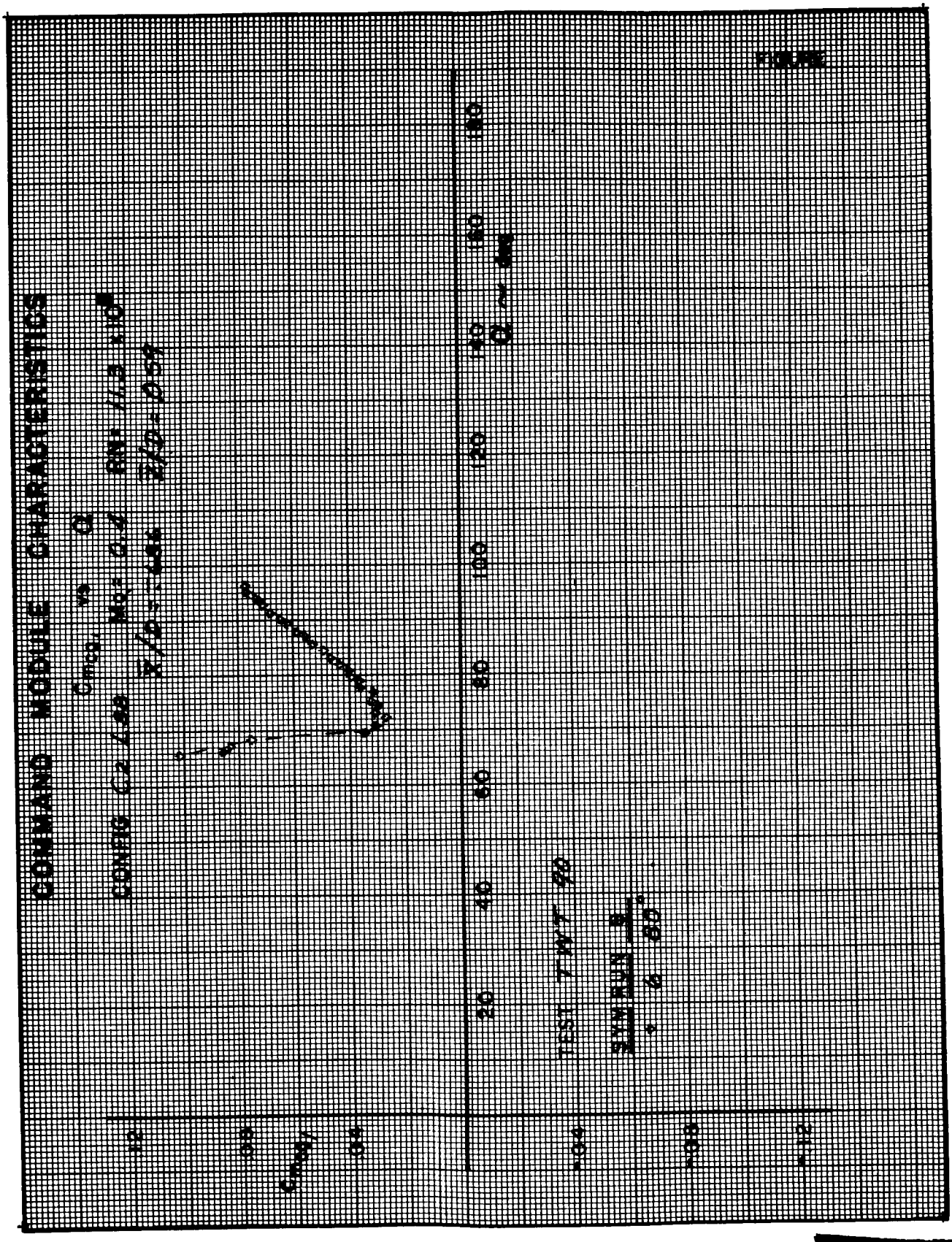

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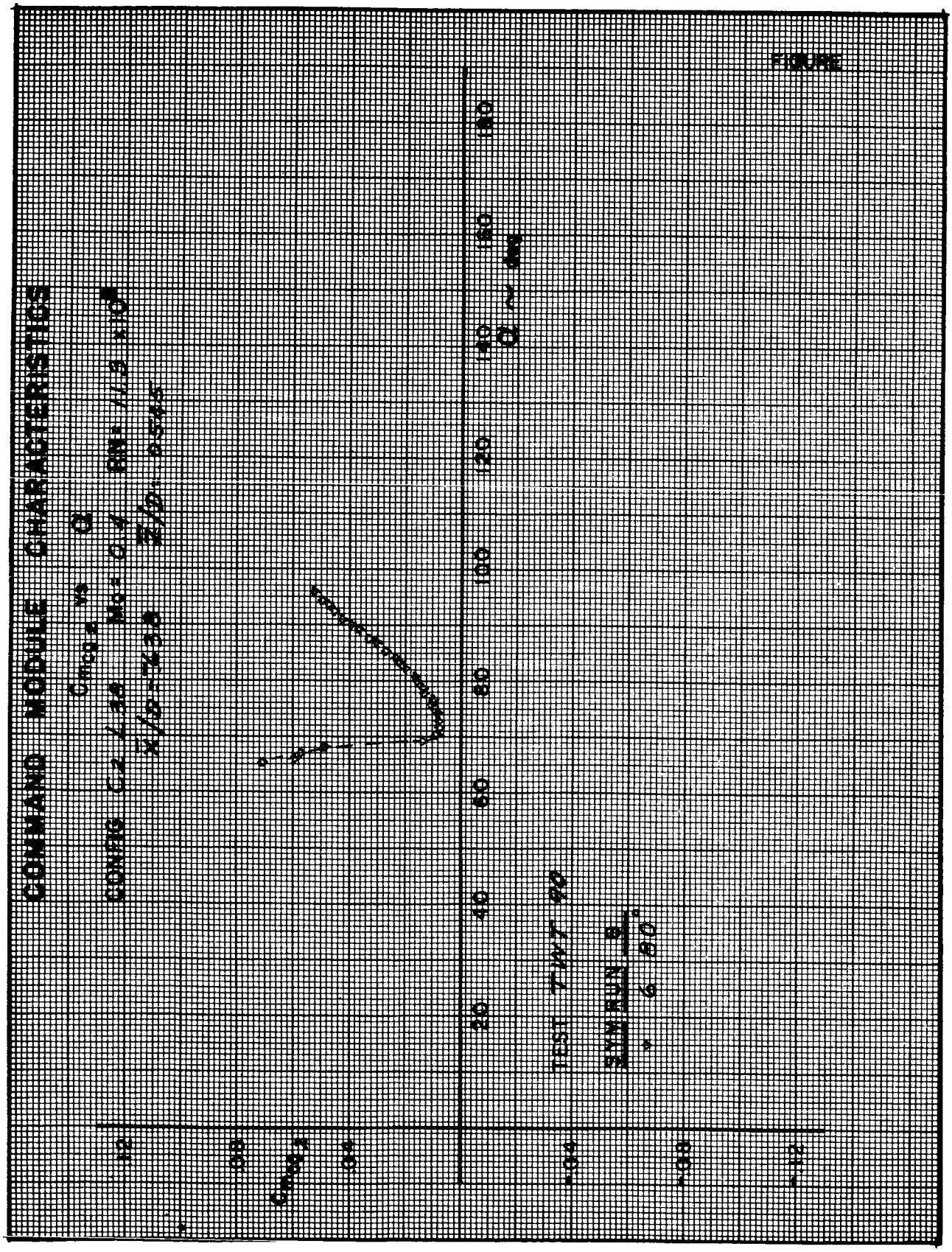

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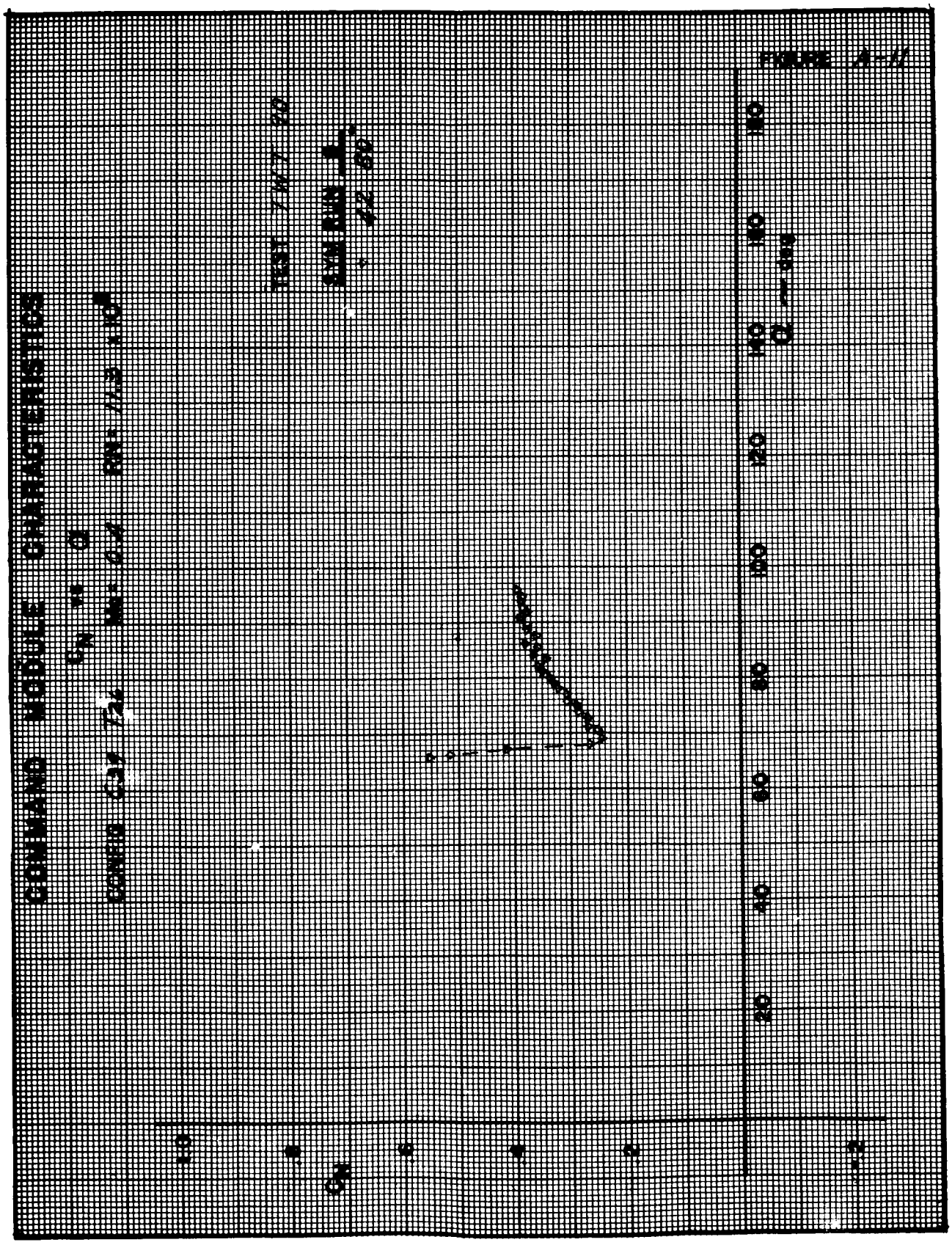

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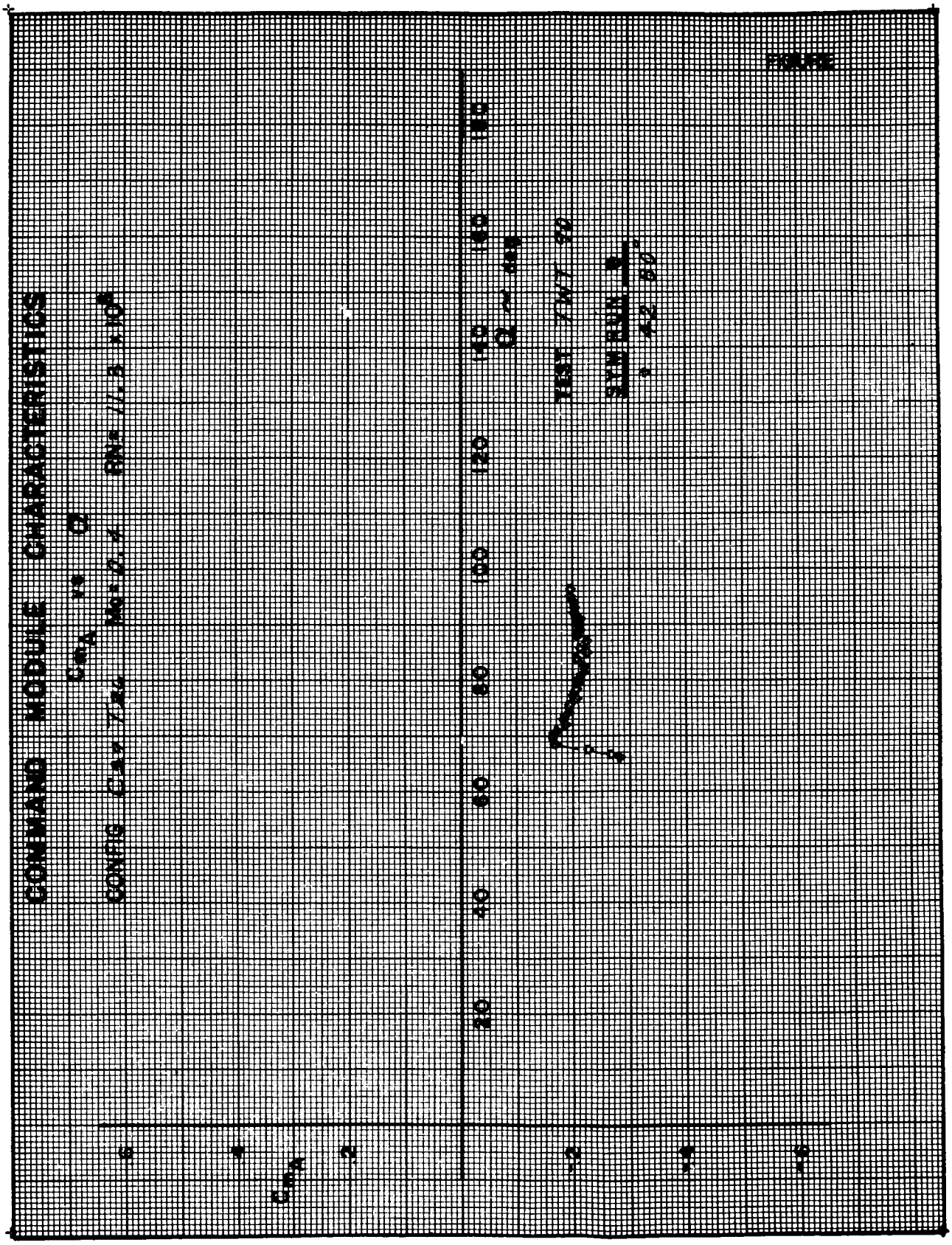

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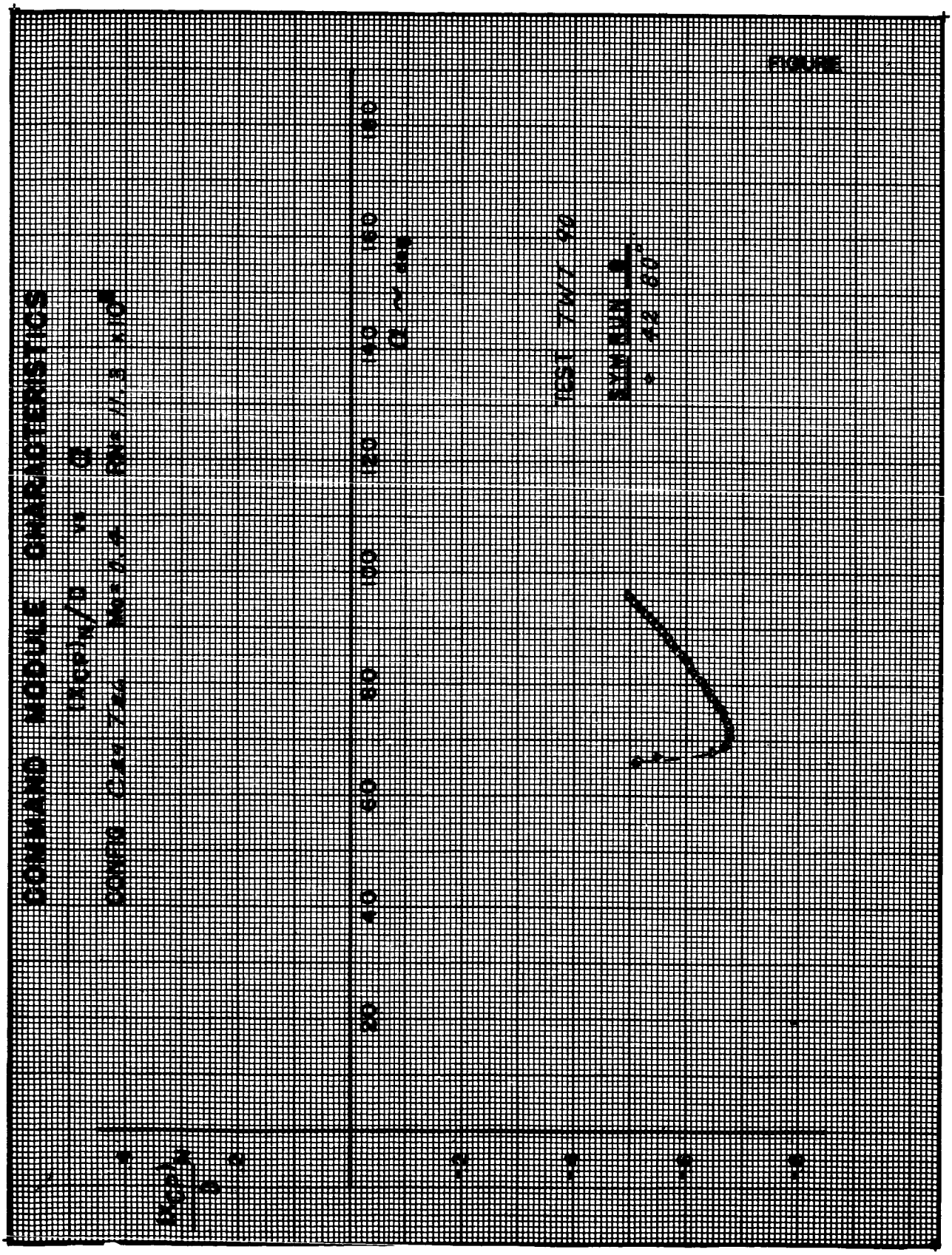

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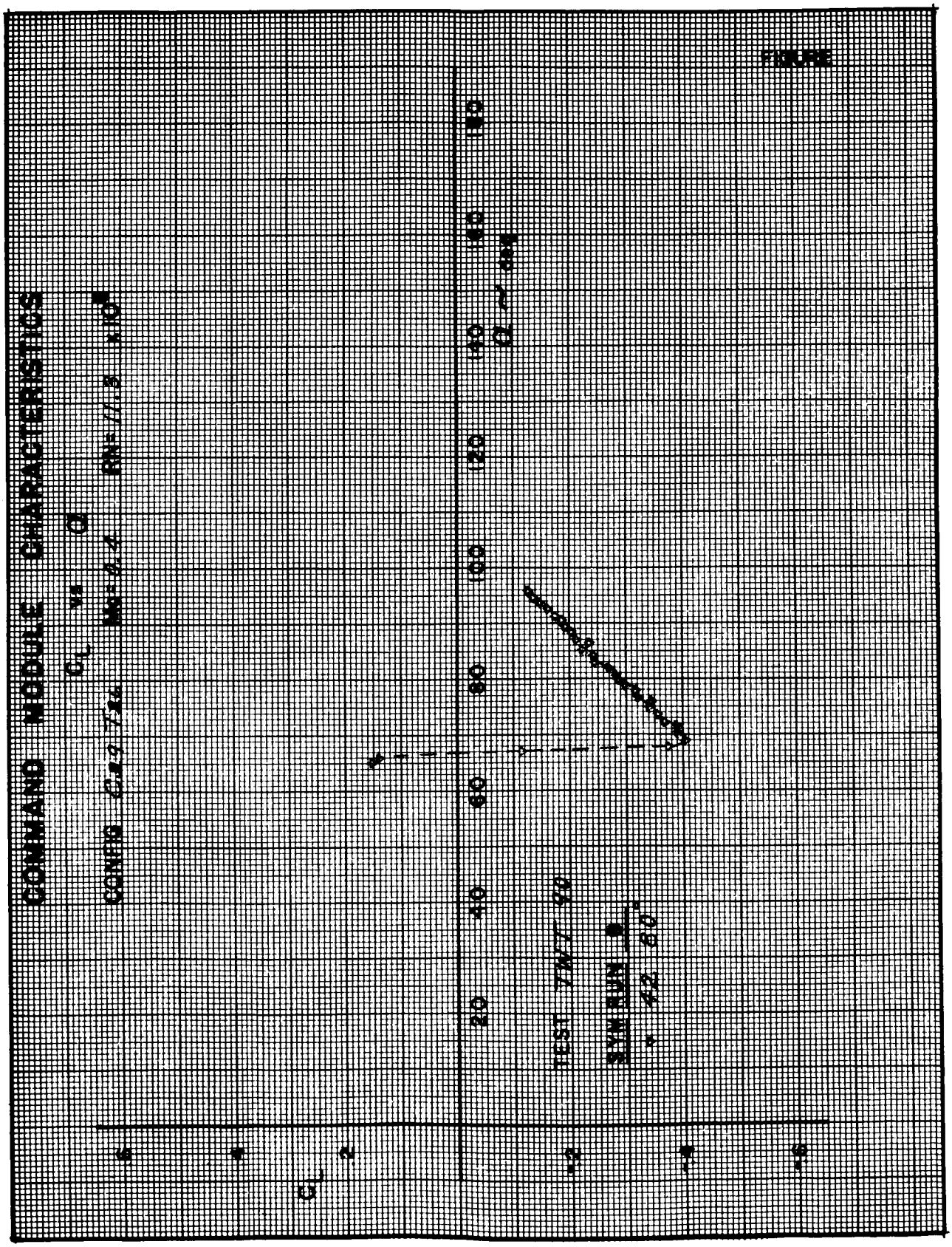

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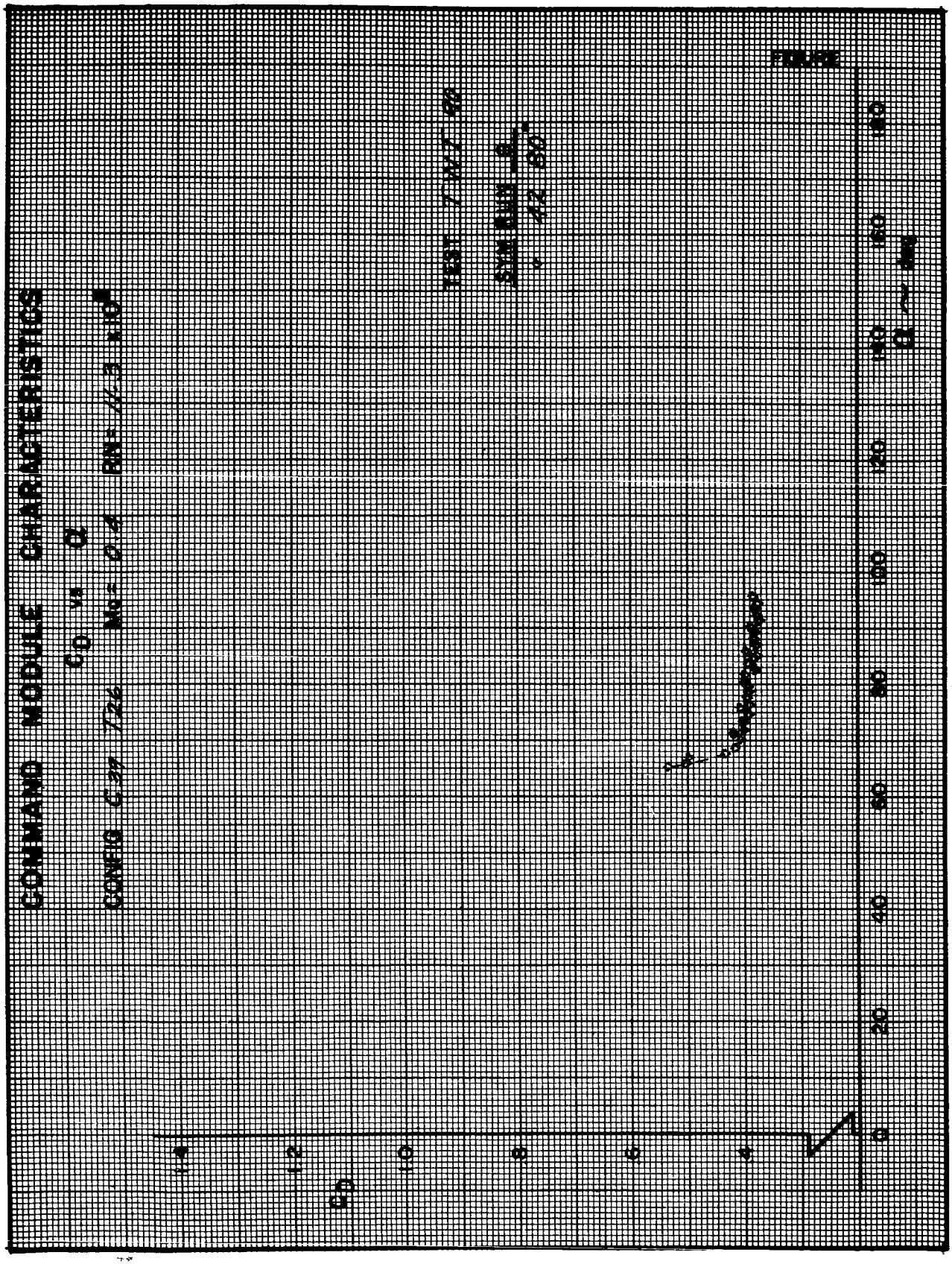

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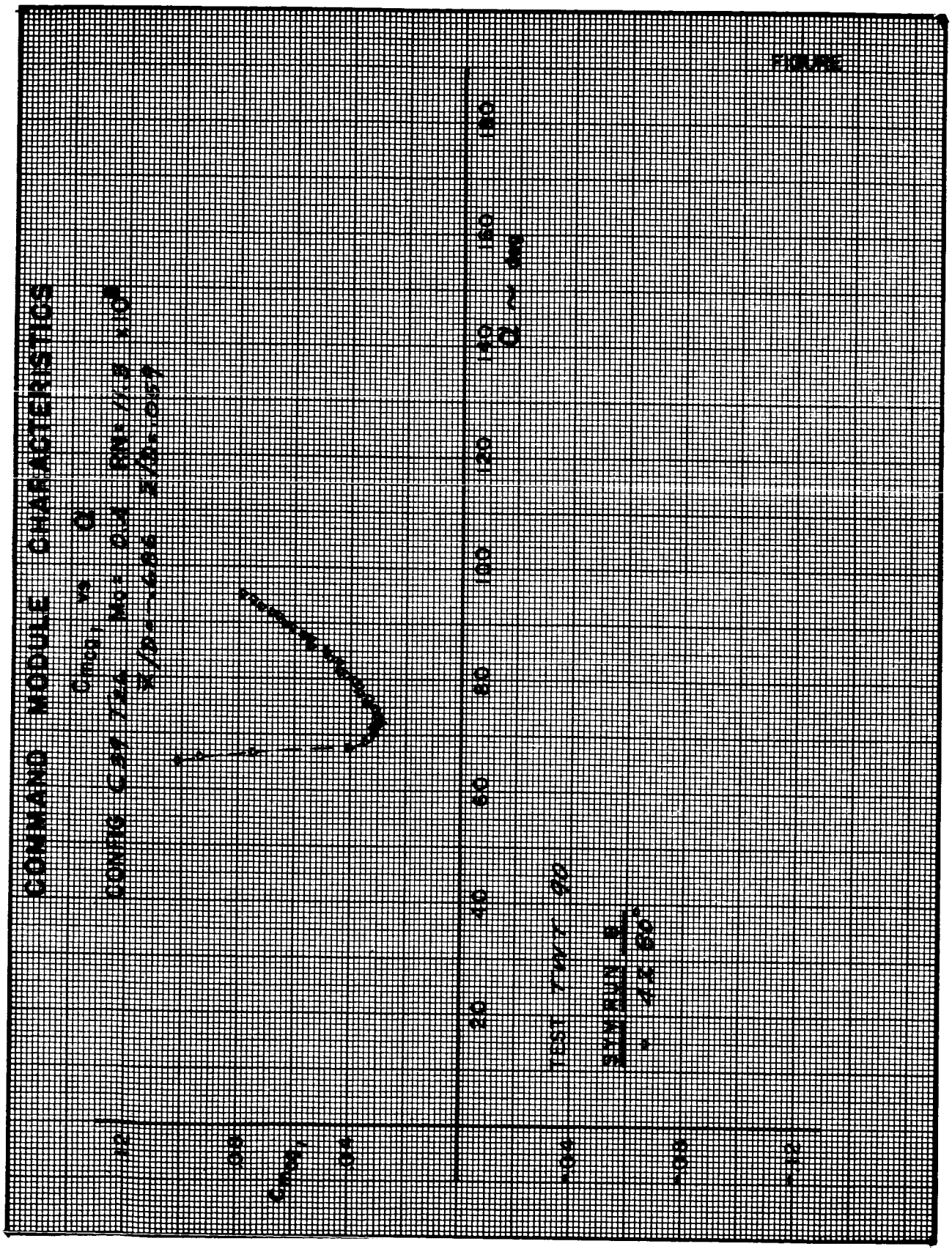

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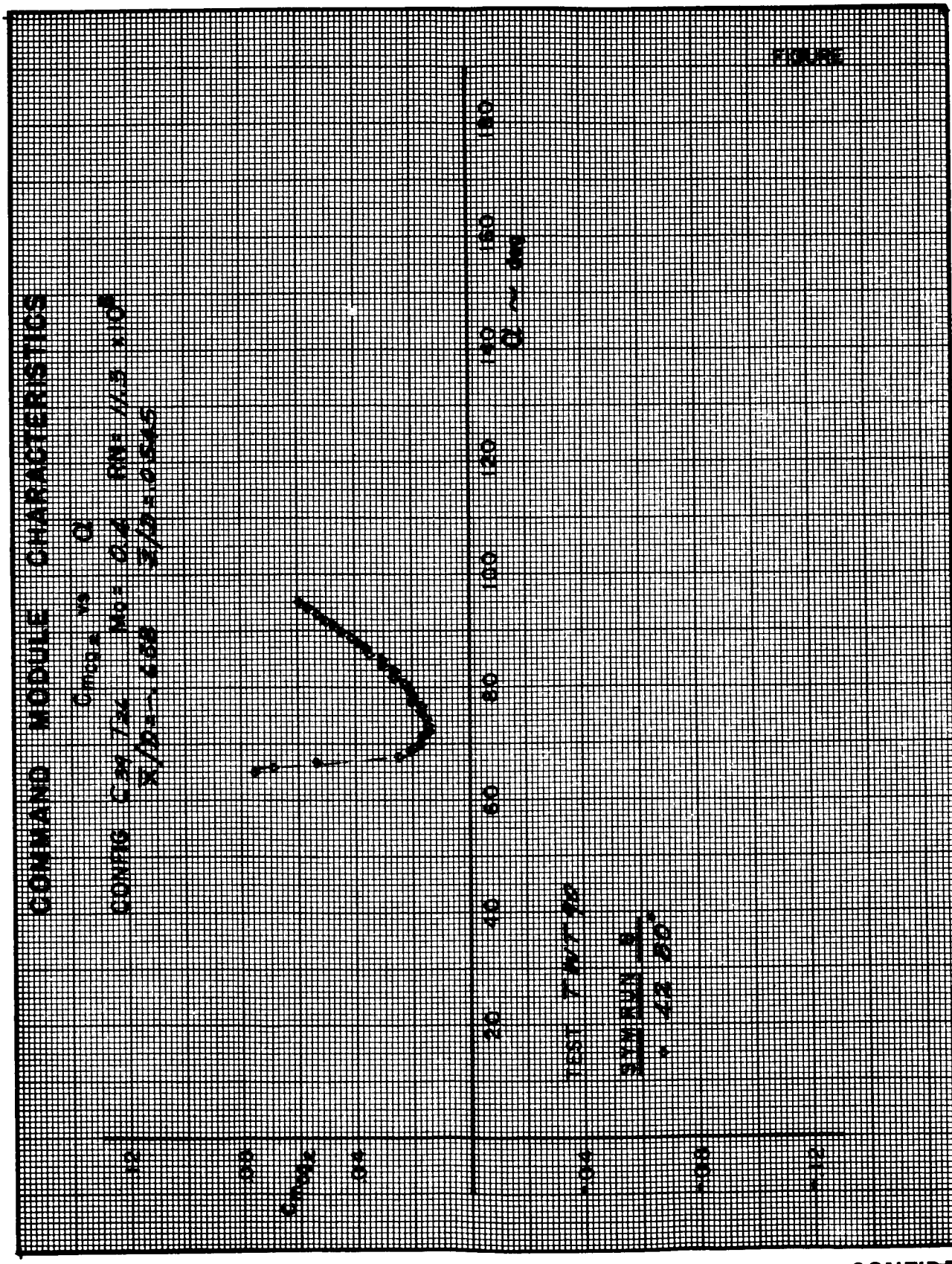

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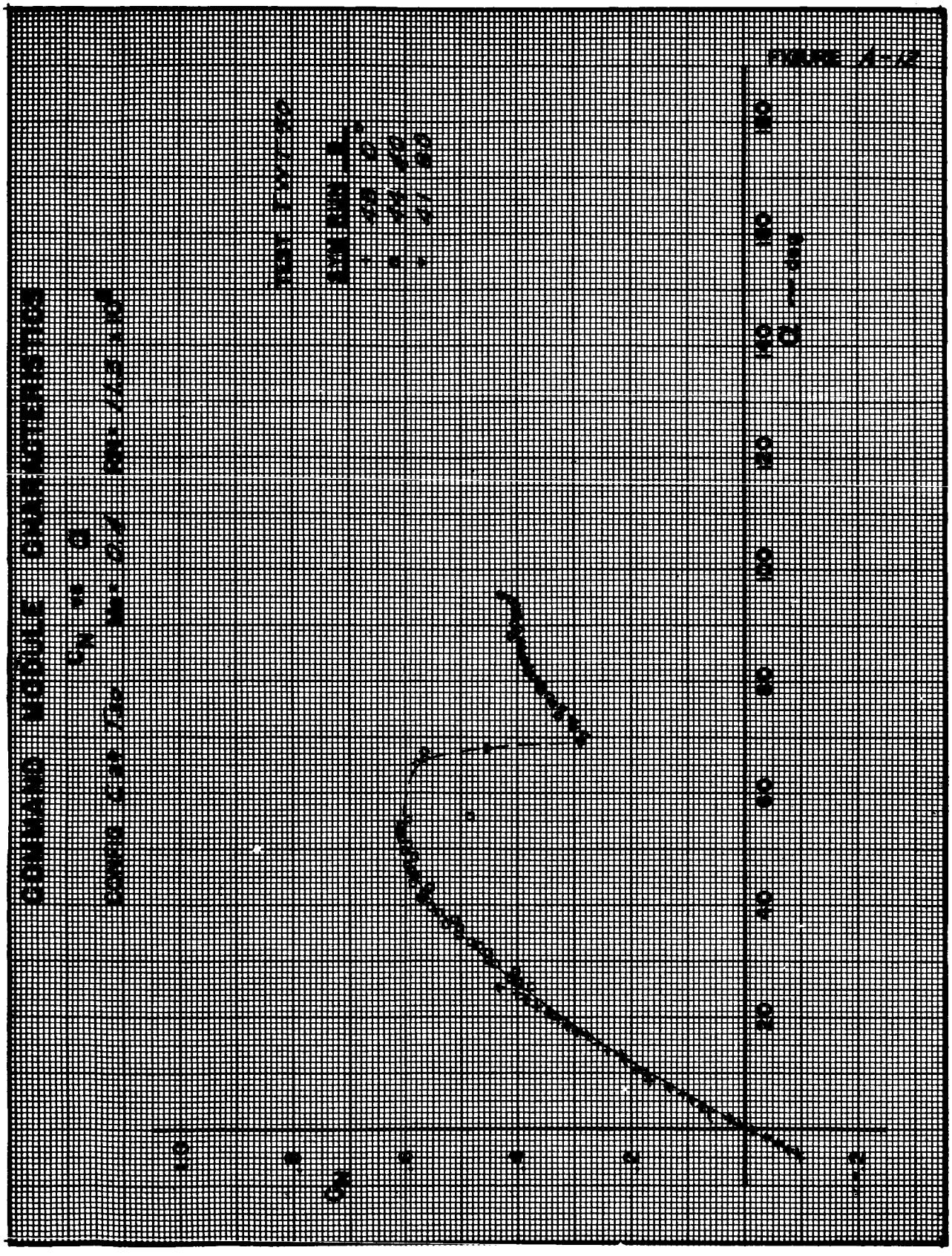

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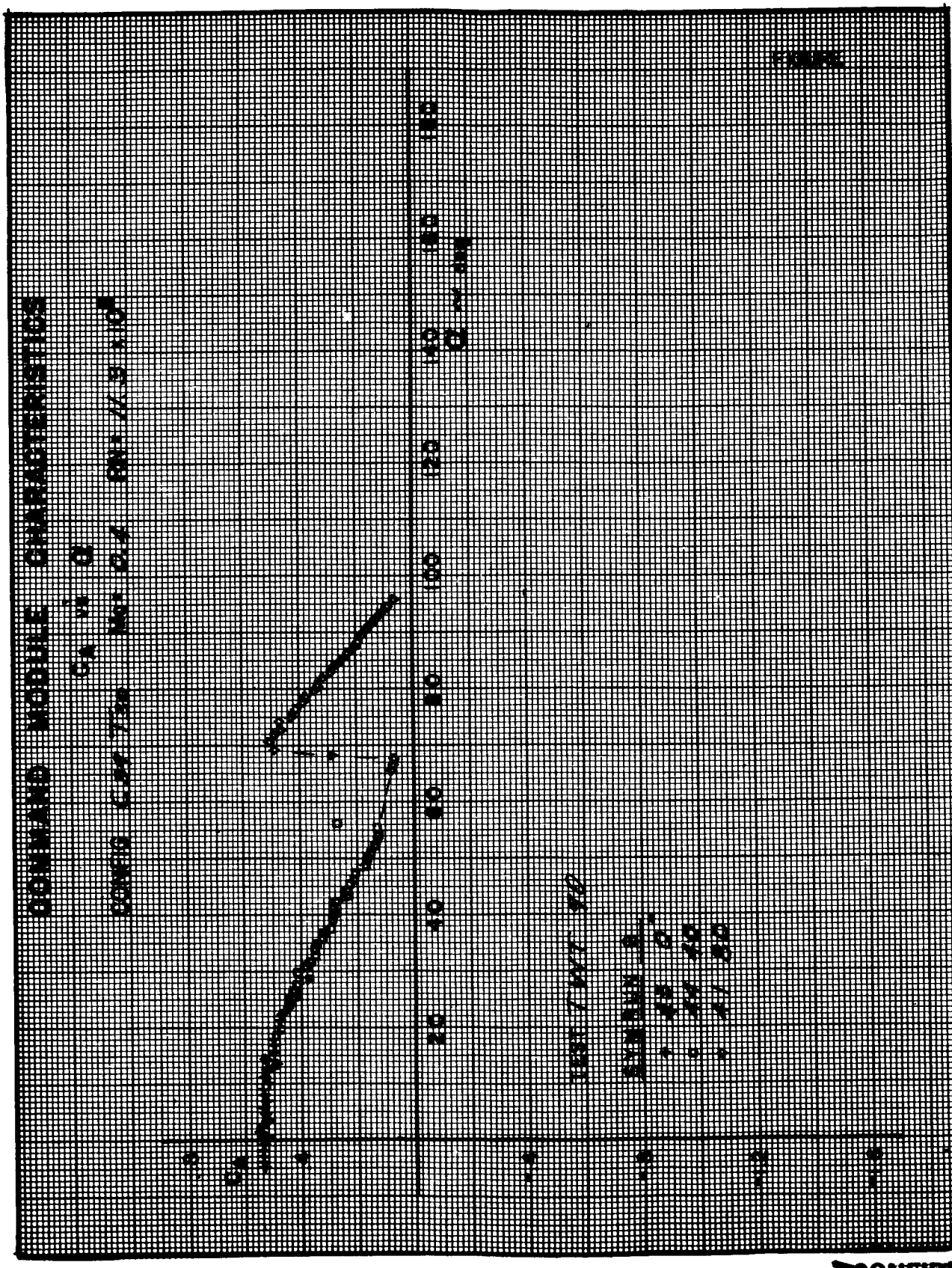

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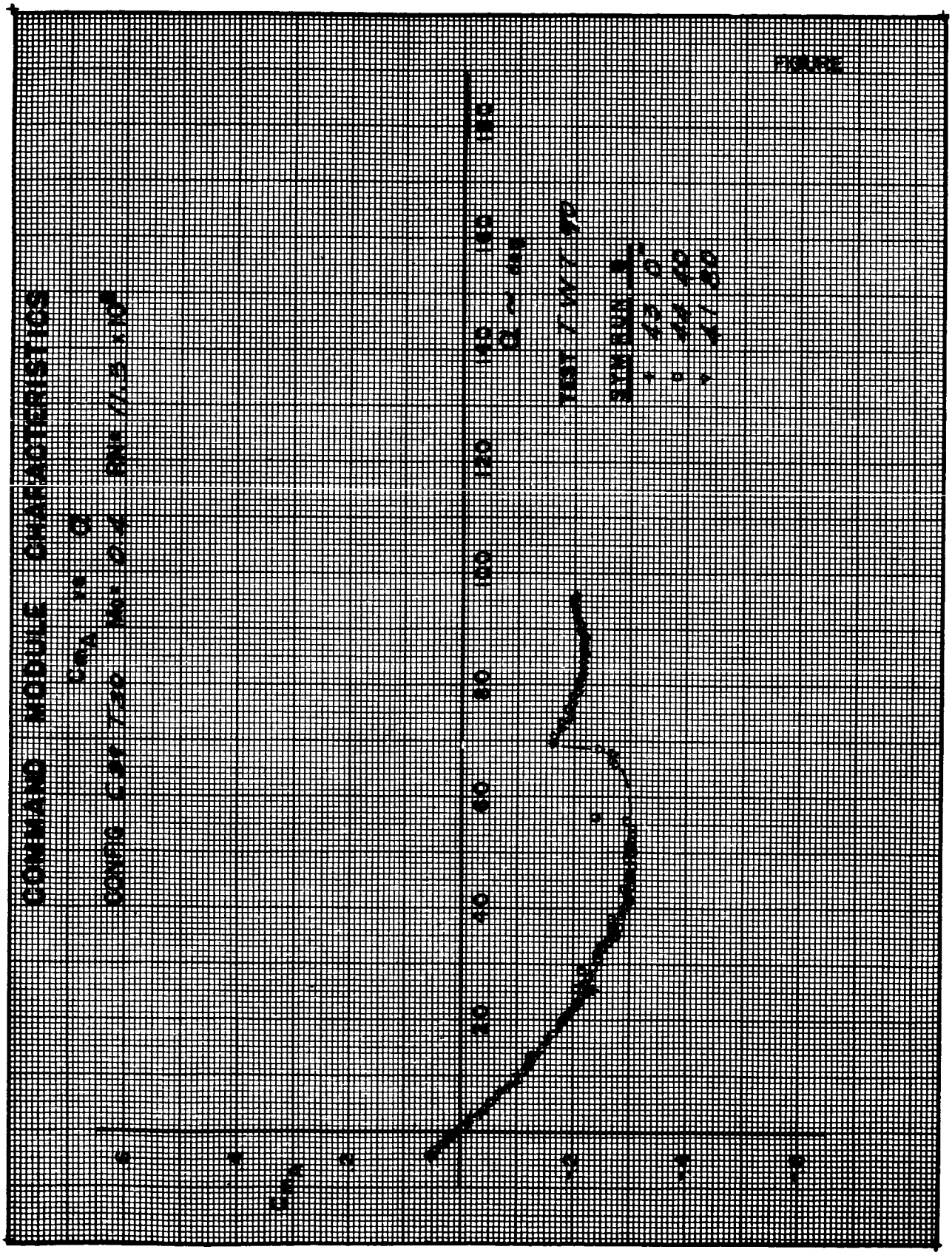

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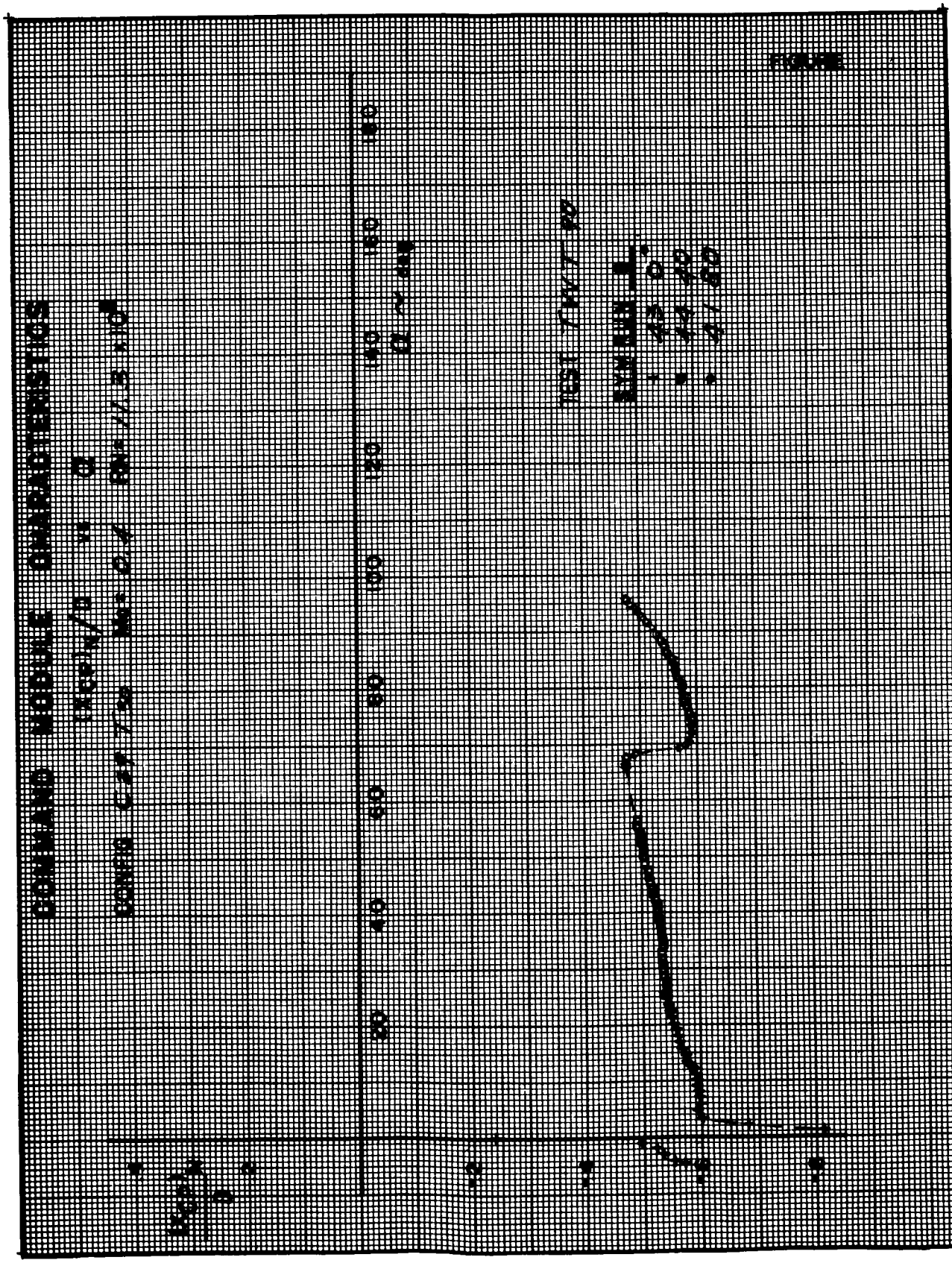

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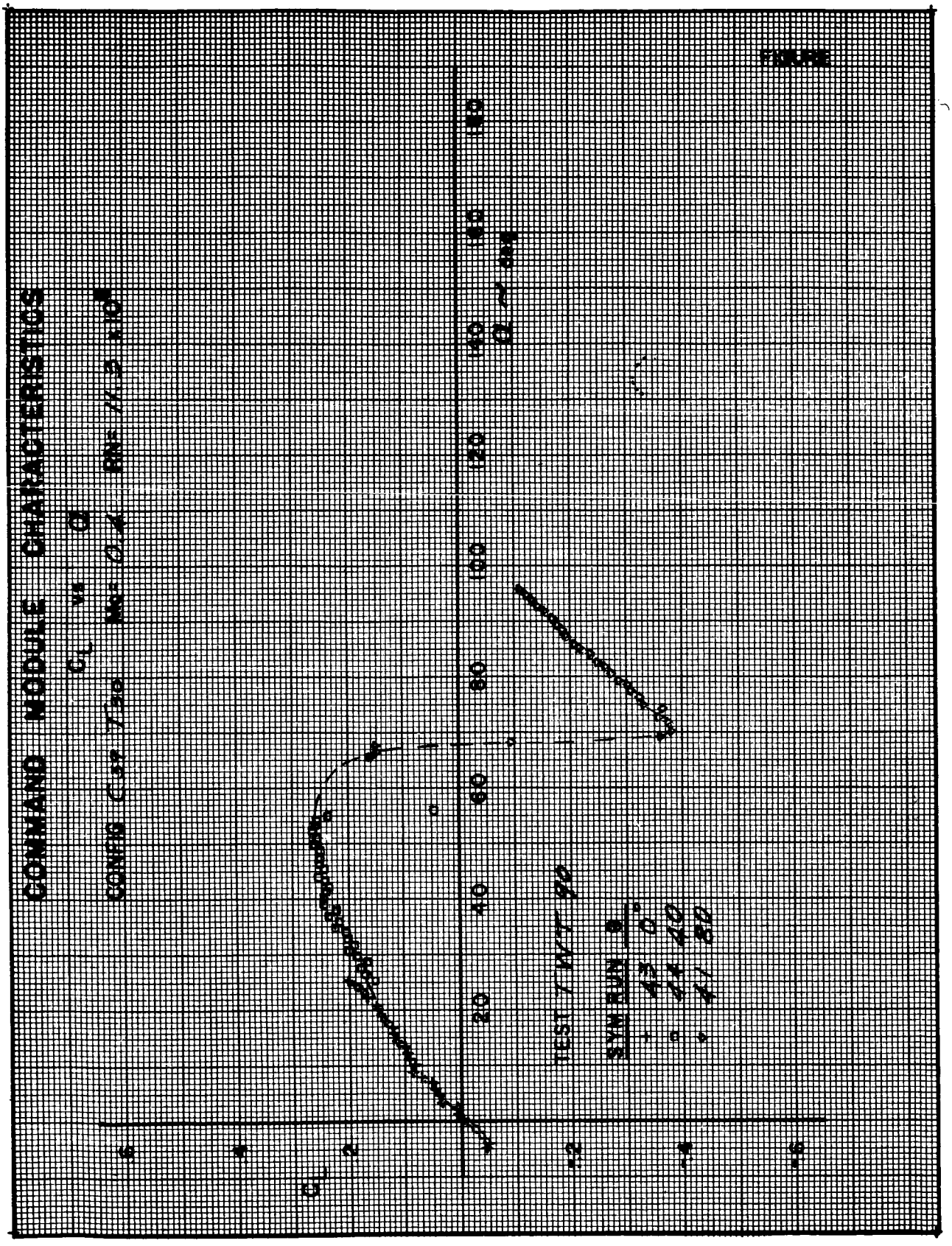

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SID 63-1035

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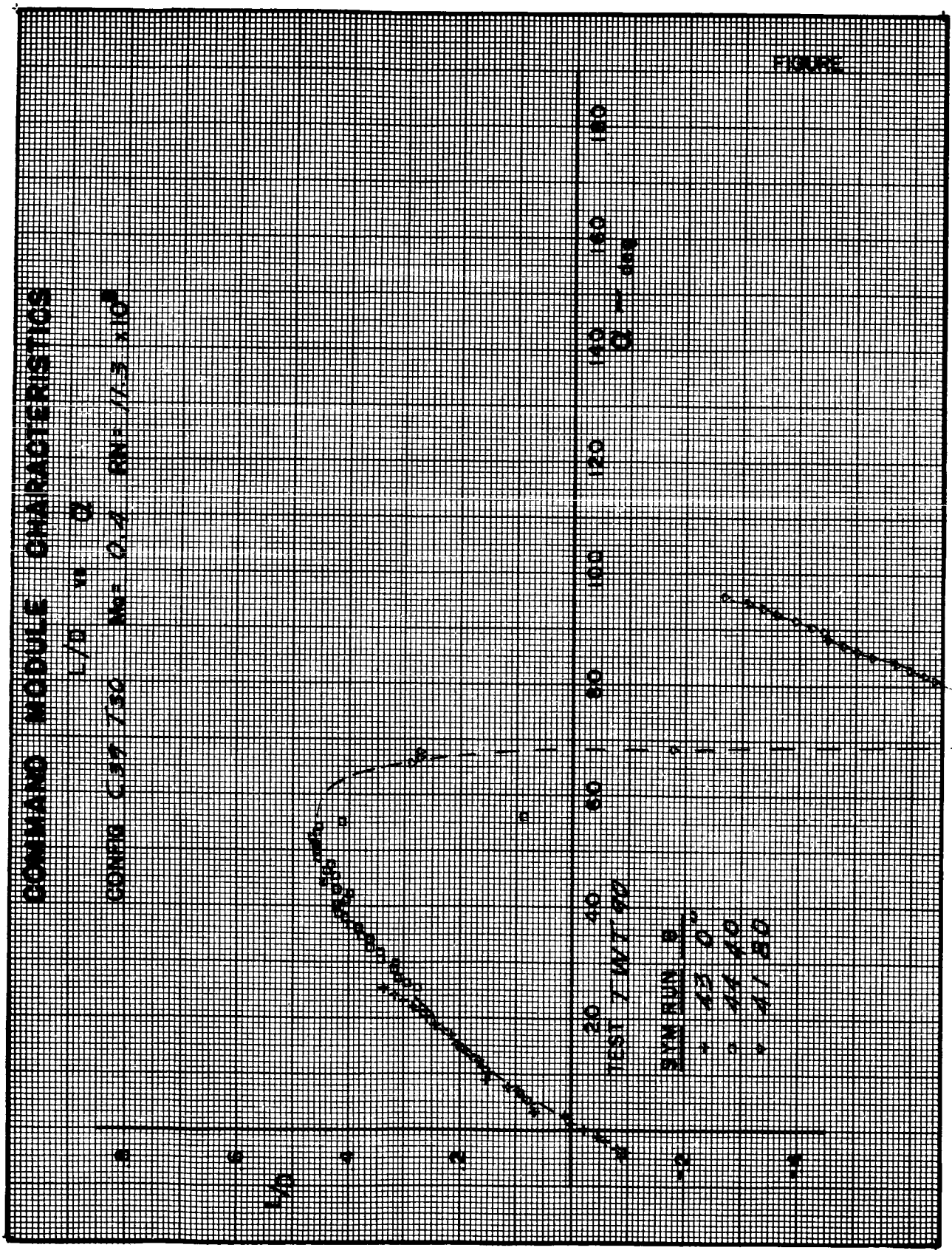

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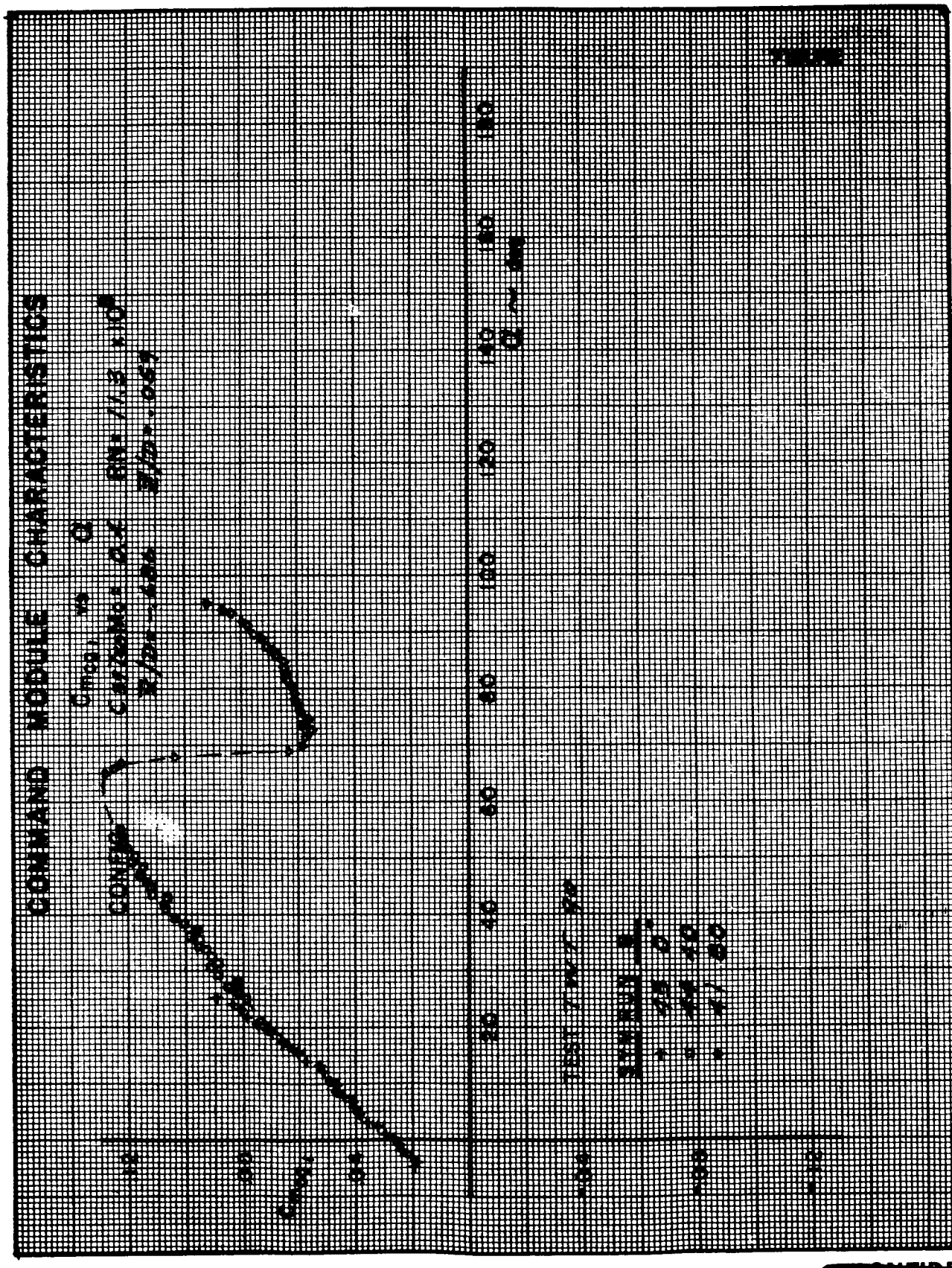

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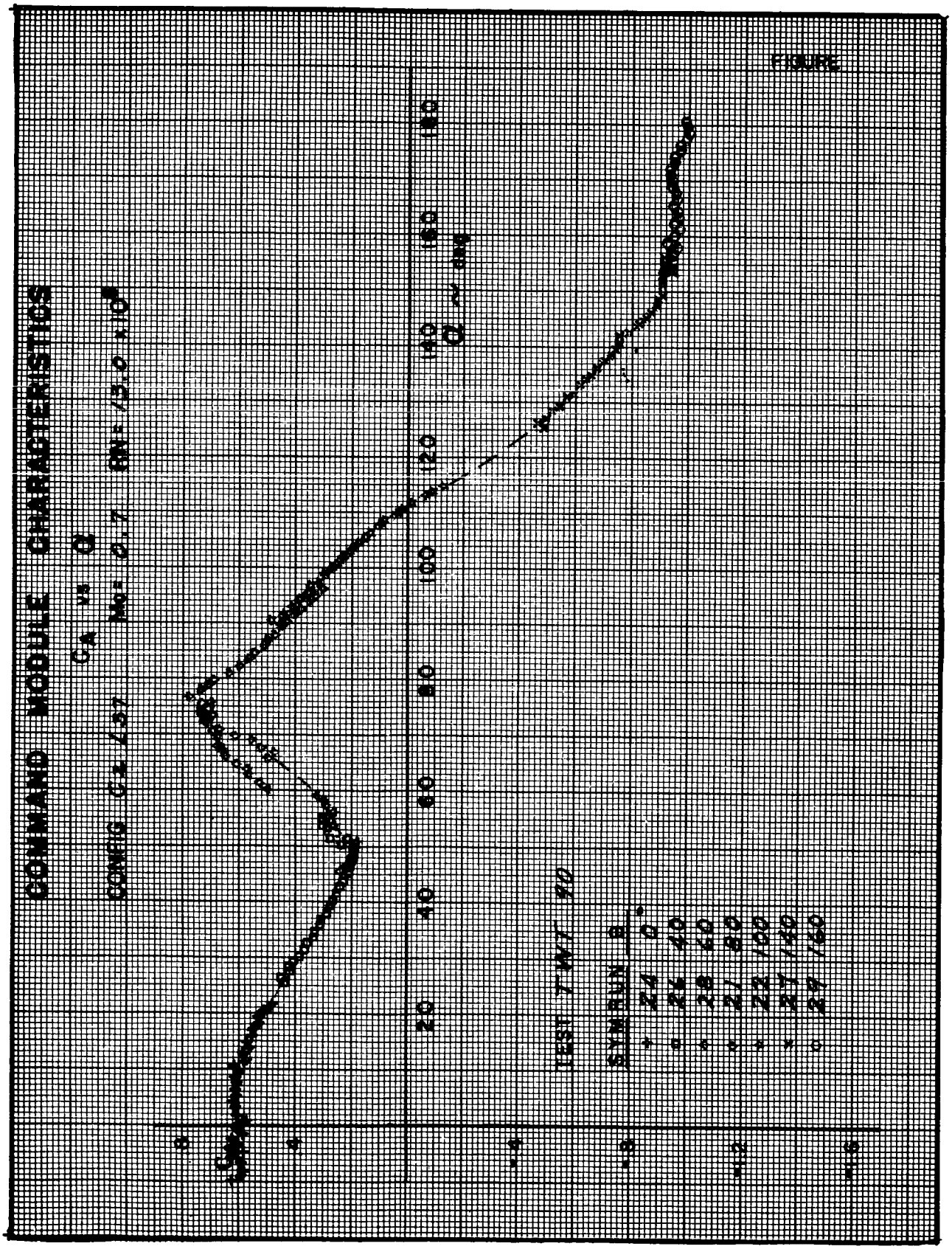

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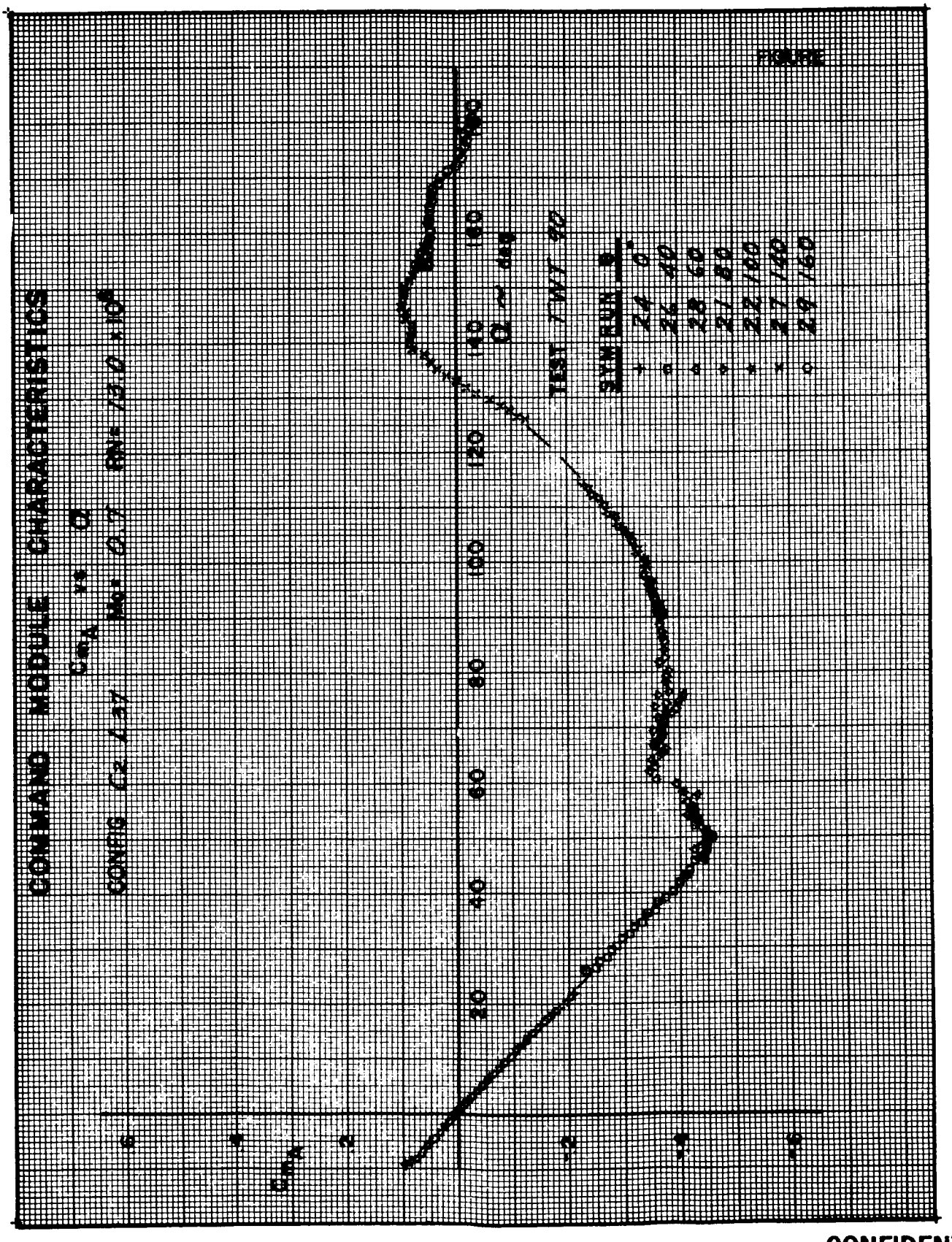

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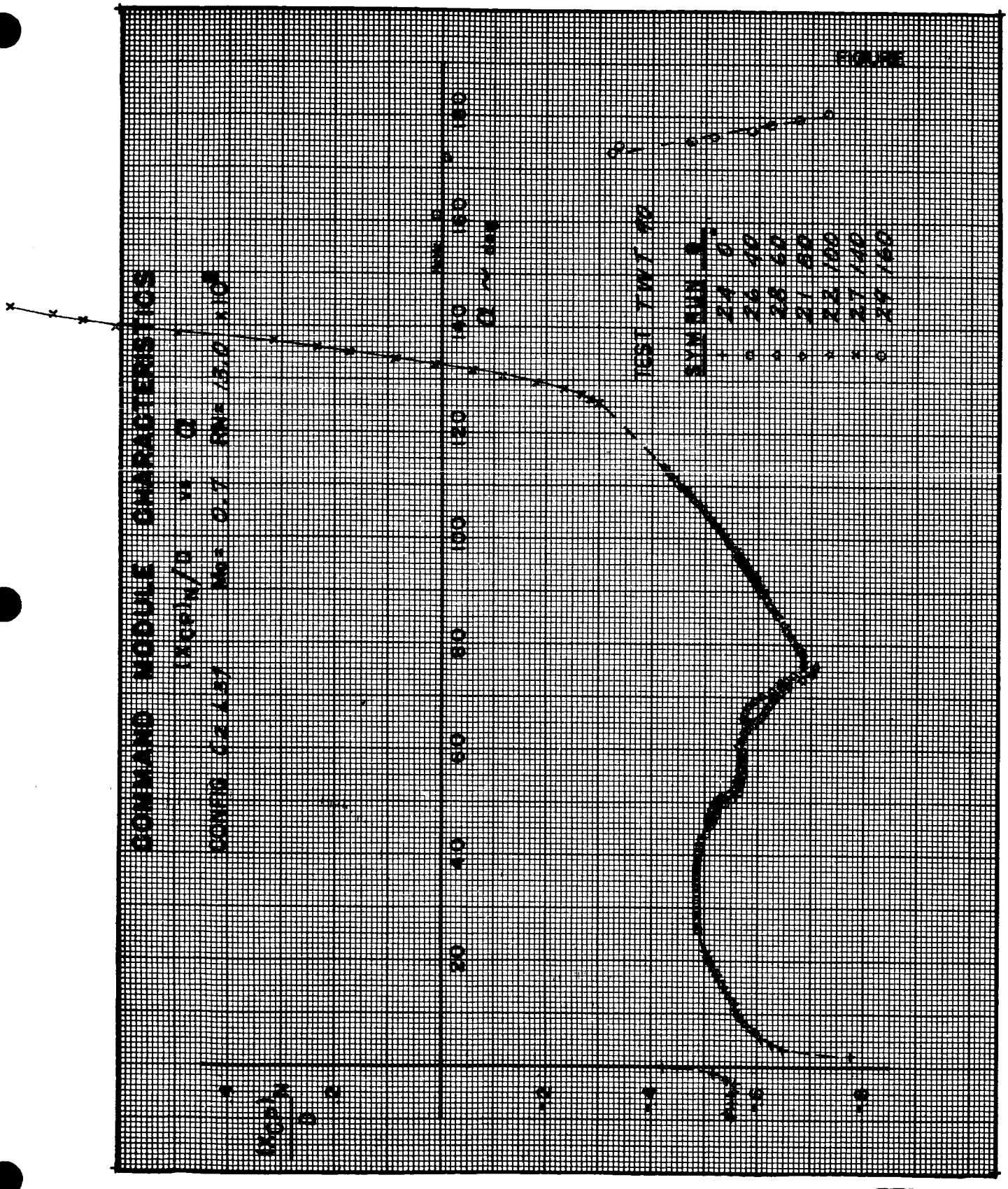

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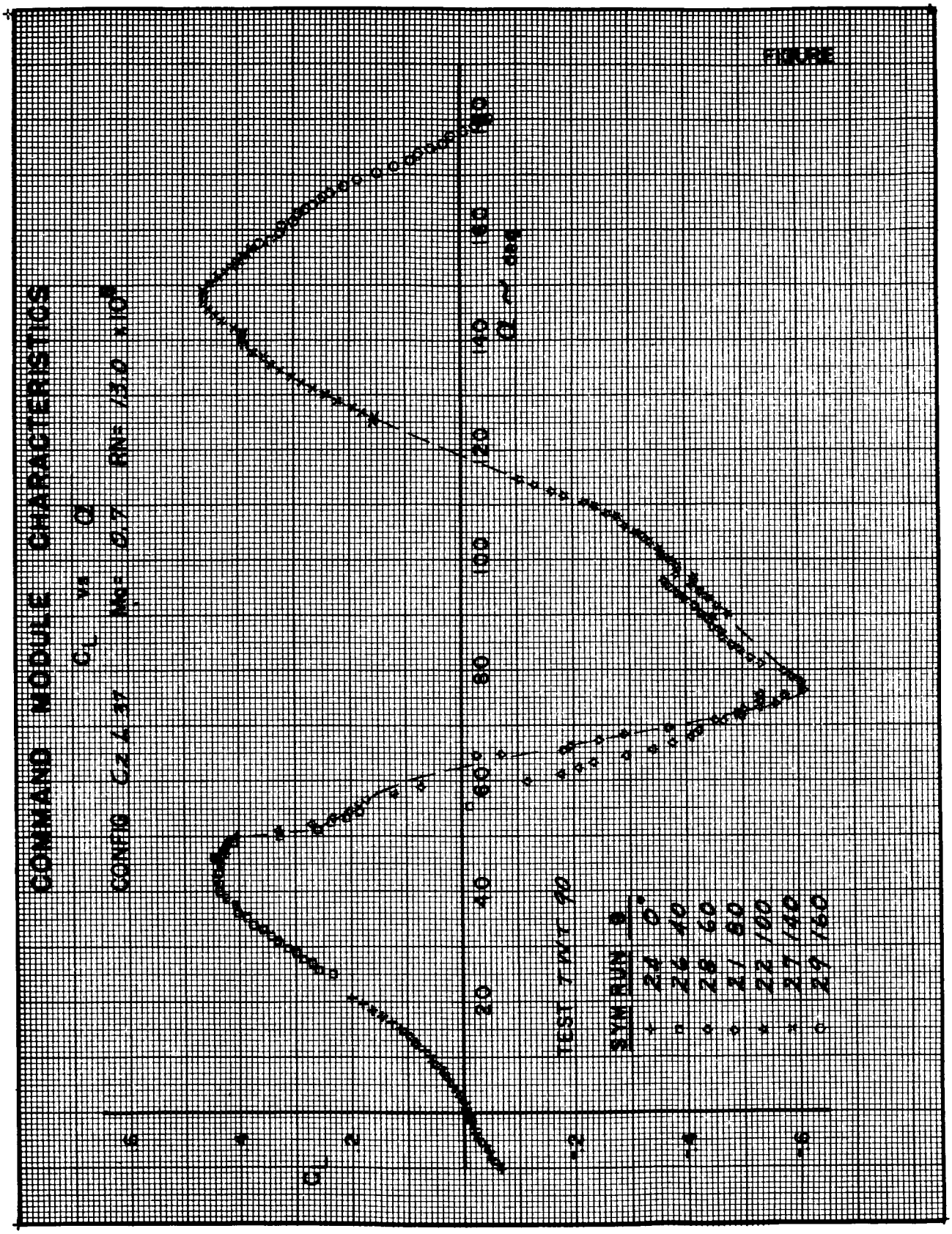

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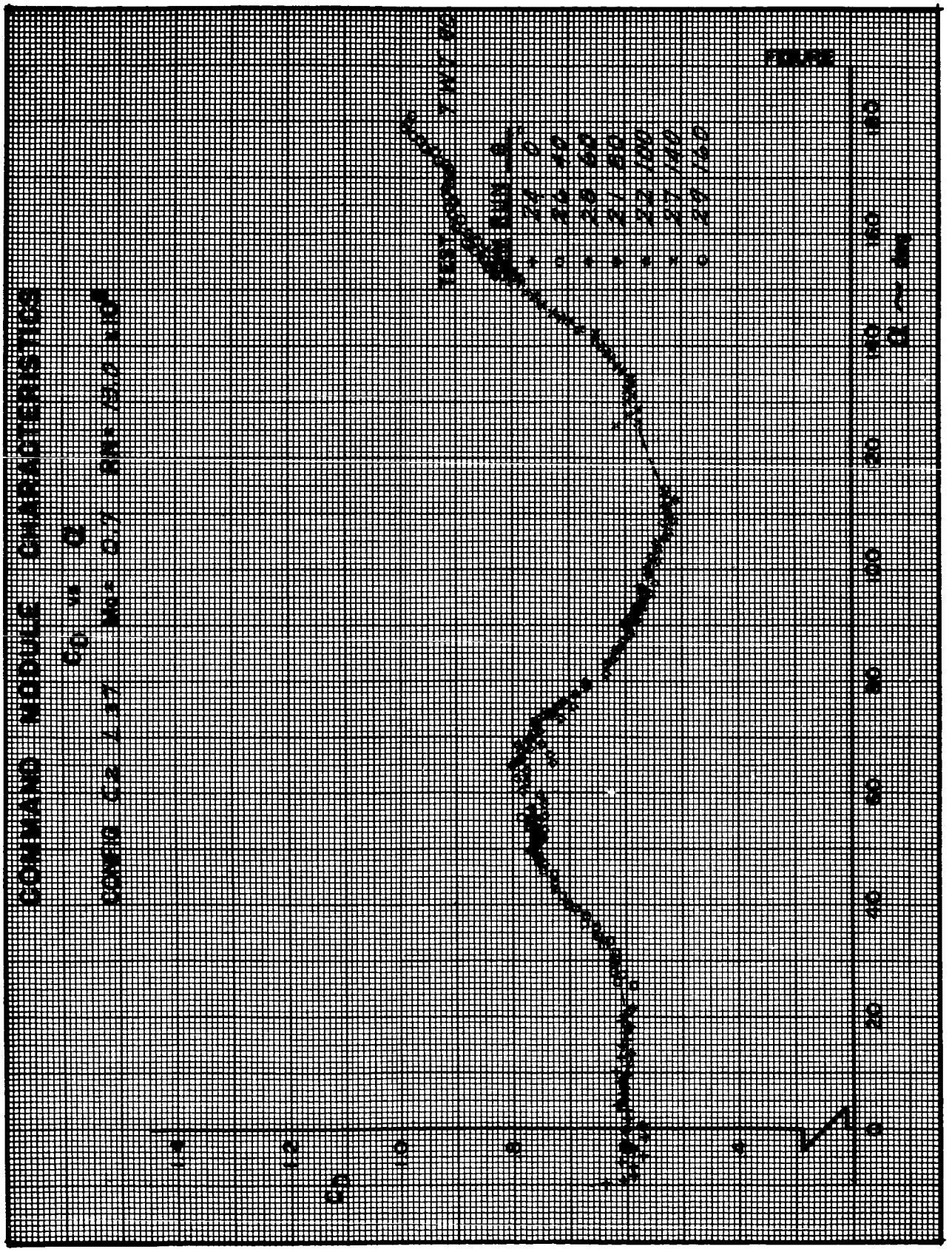

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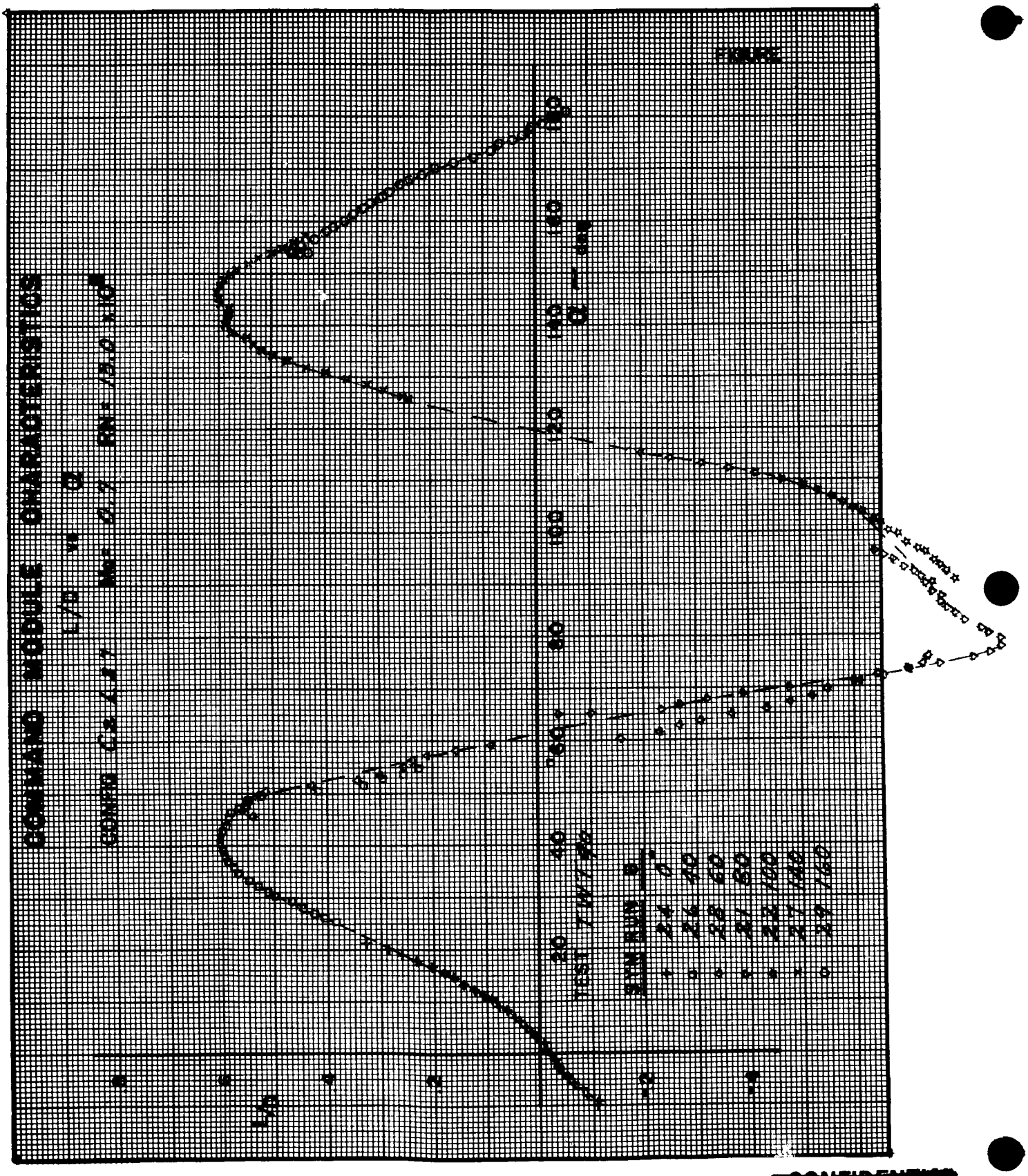

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SID 63-1035

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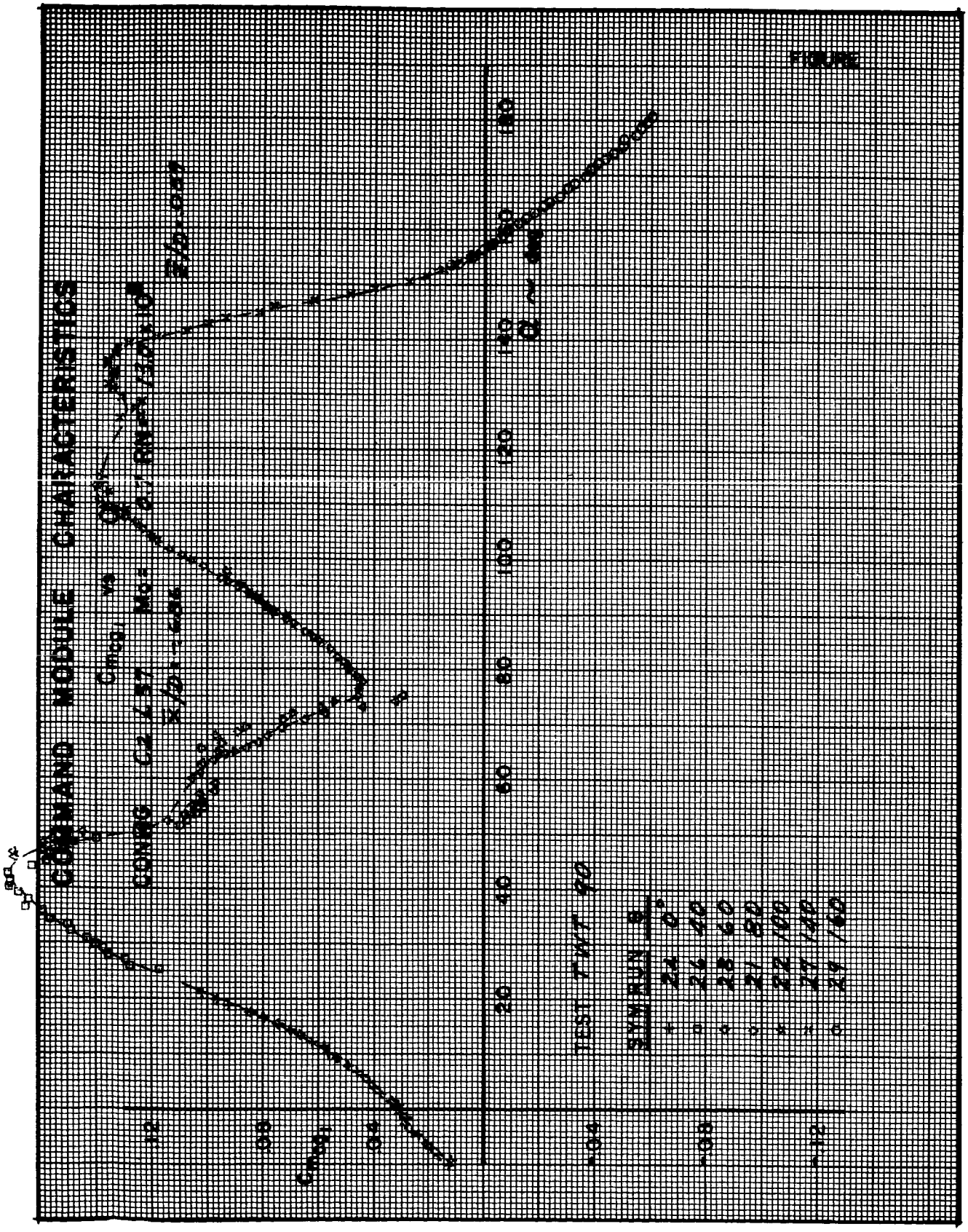

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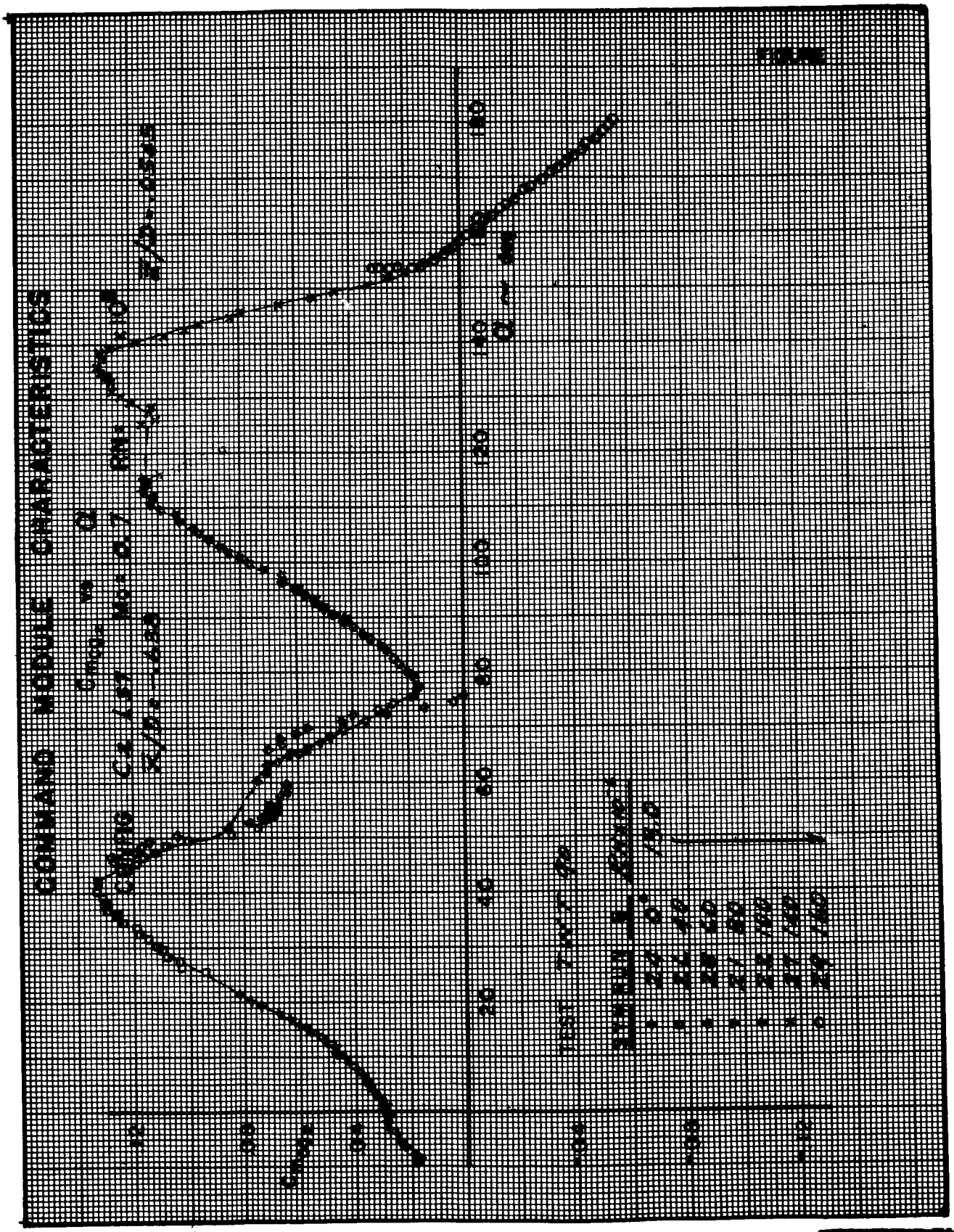

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SID 63-1035

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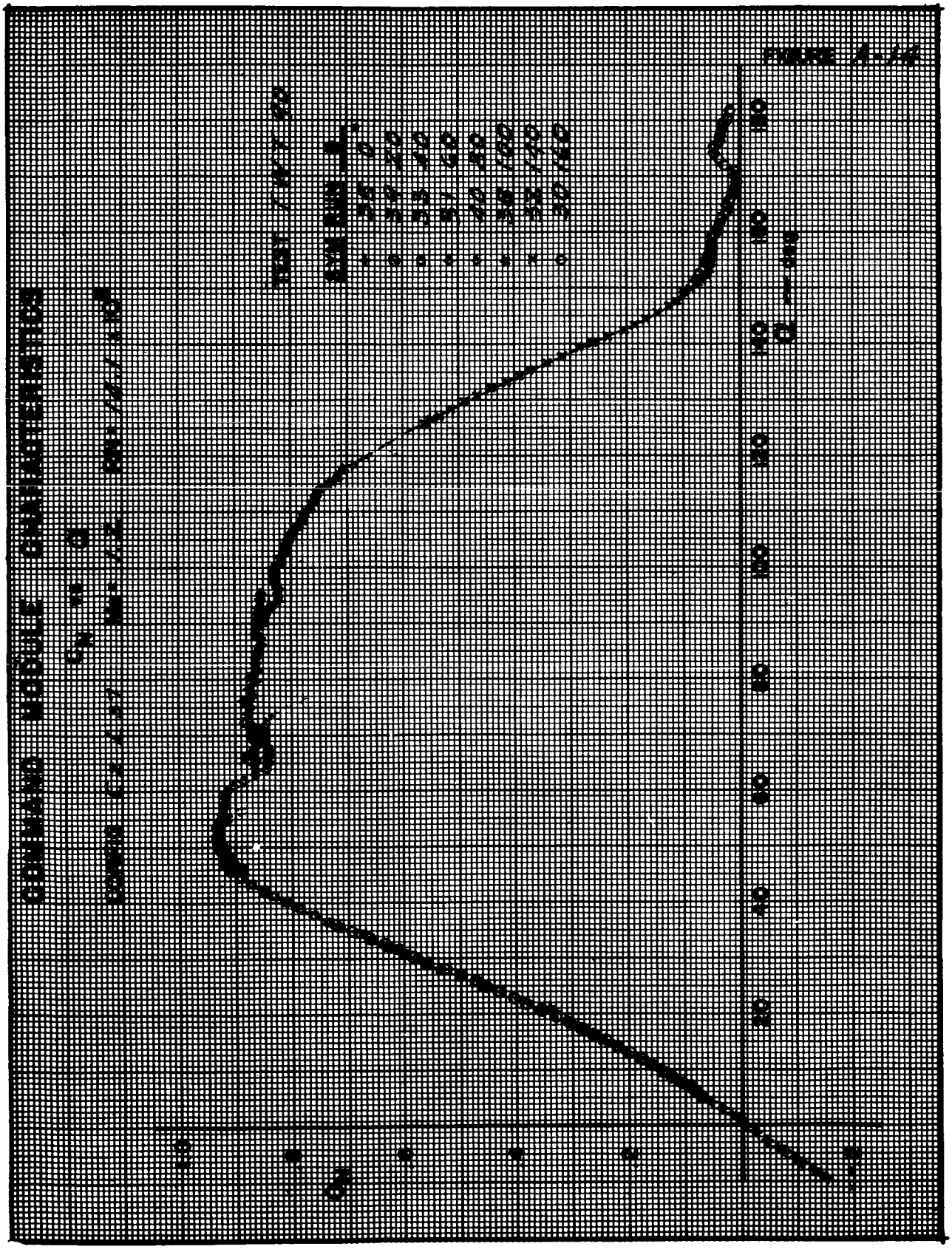

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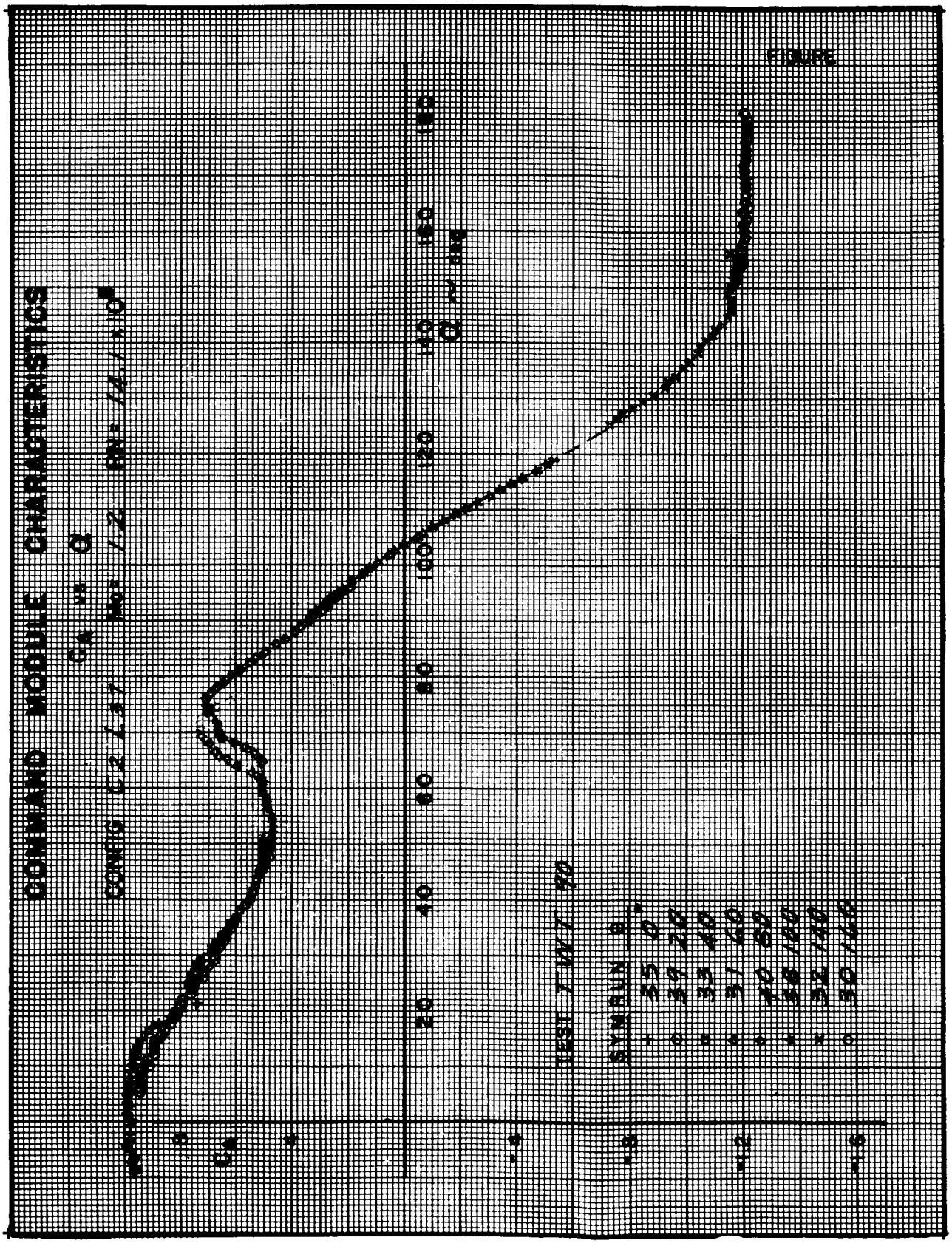

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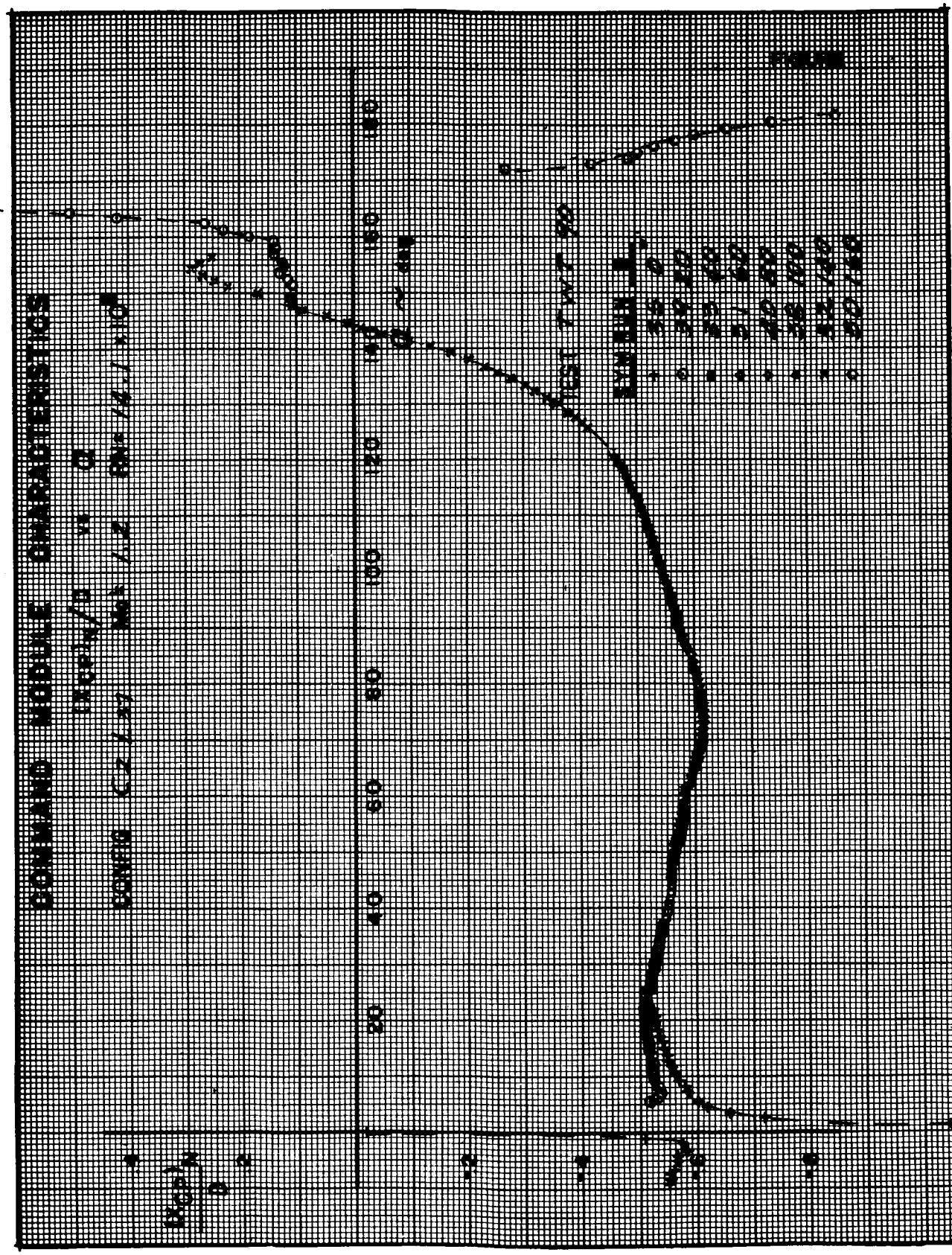

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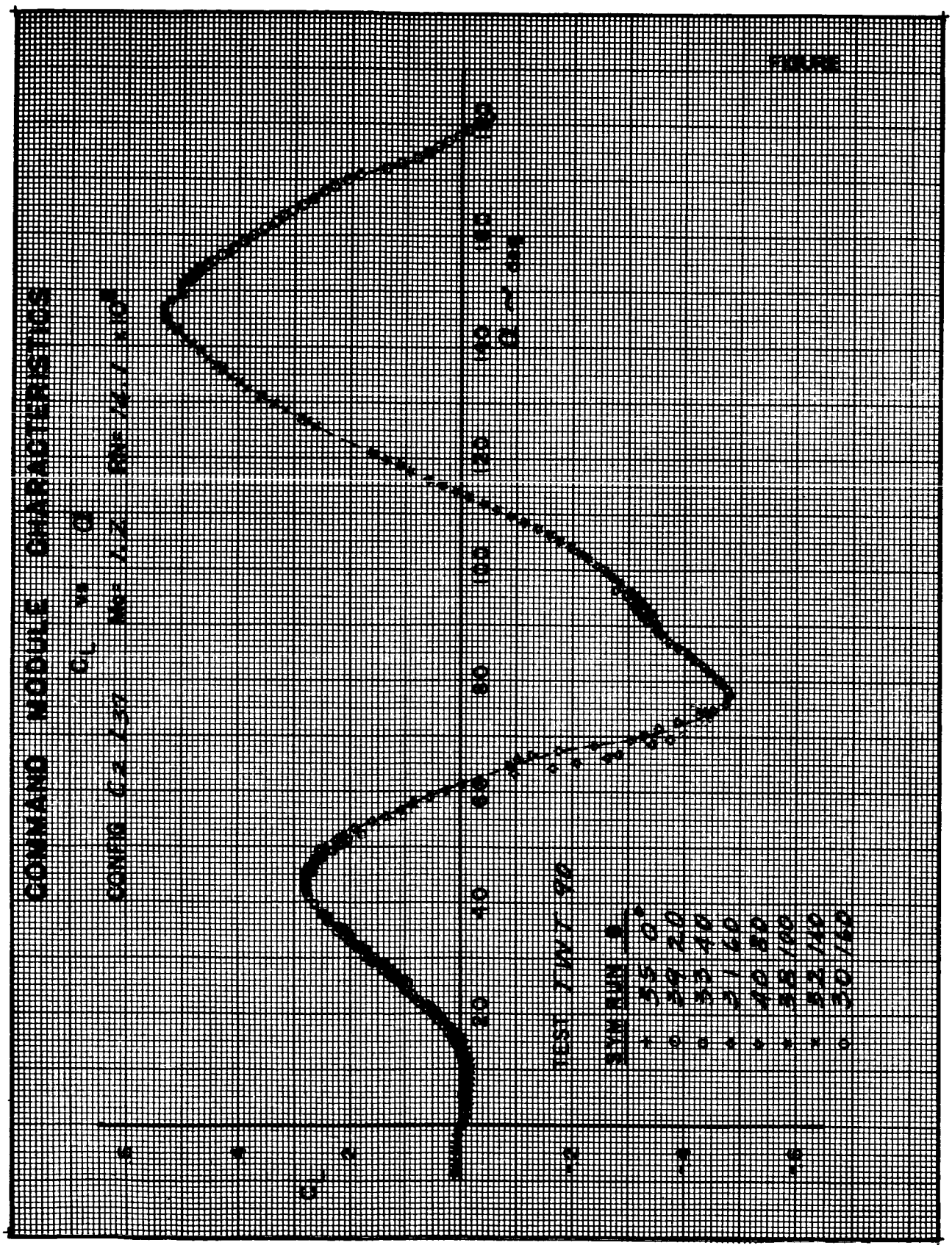

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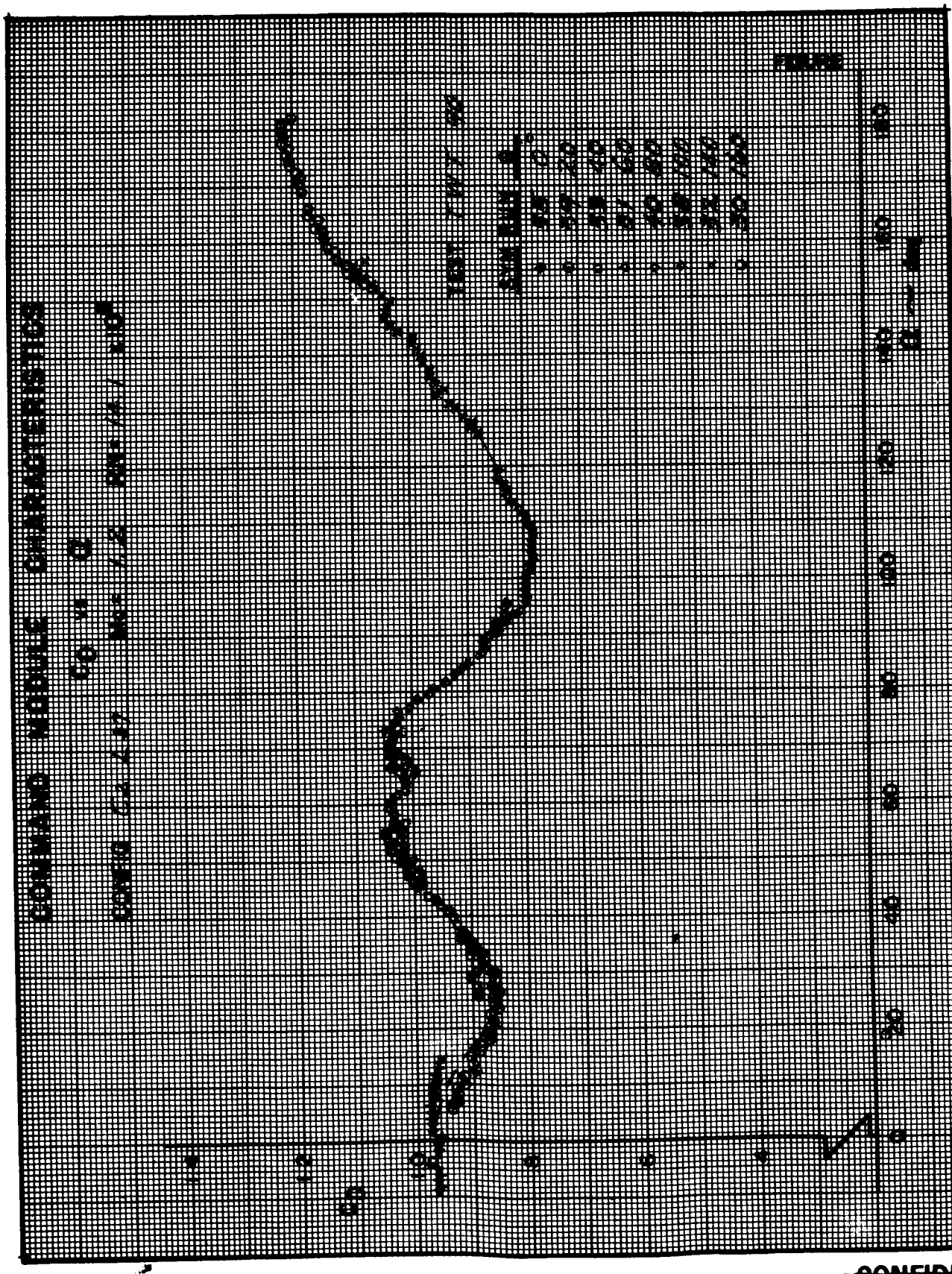

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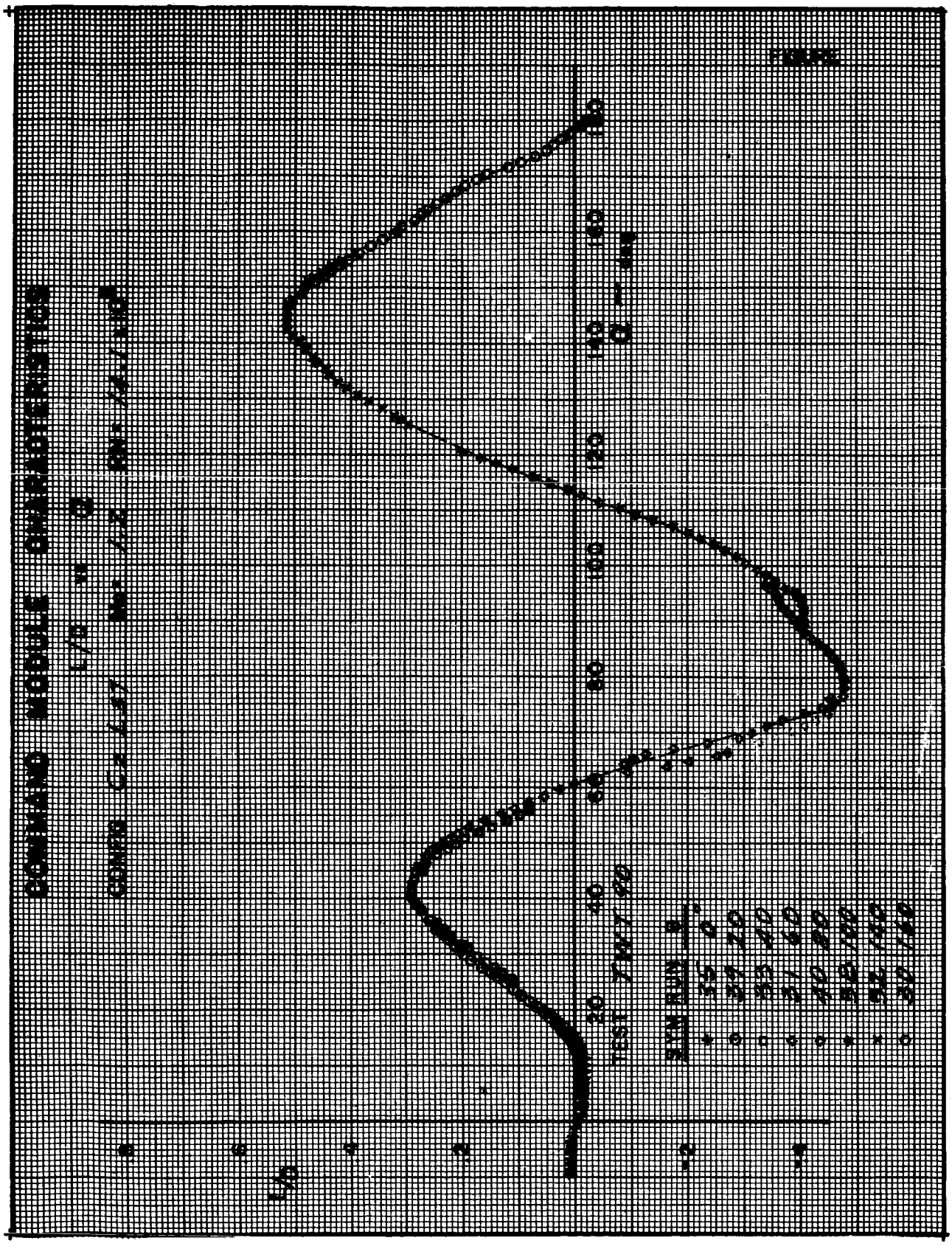

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SID 63-1035

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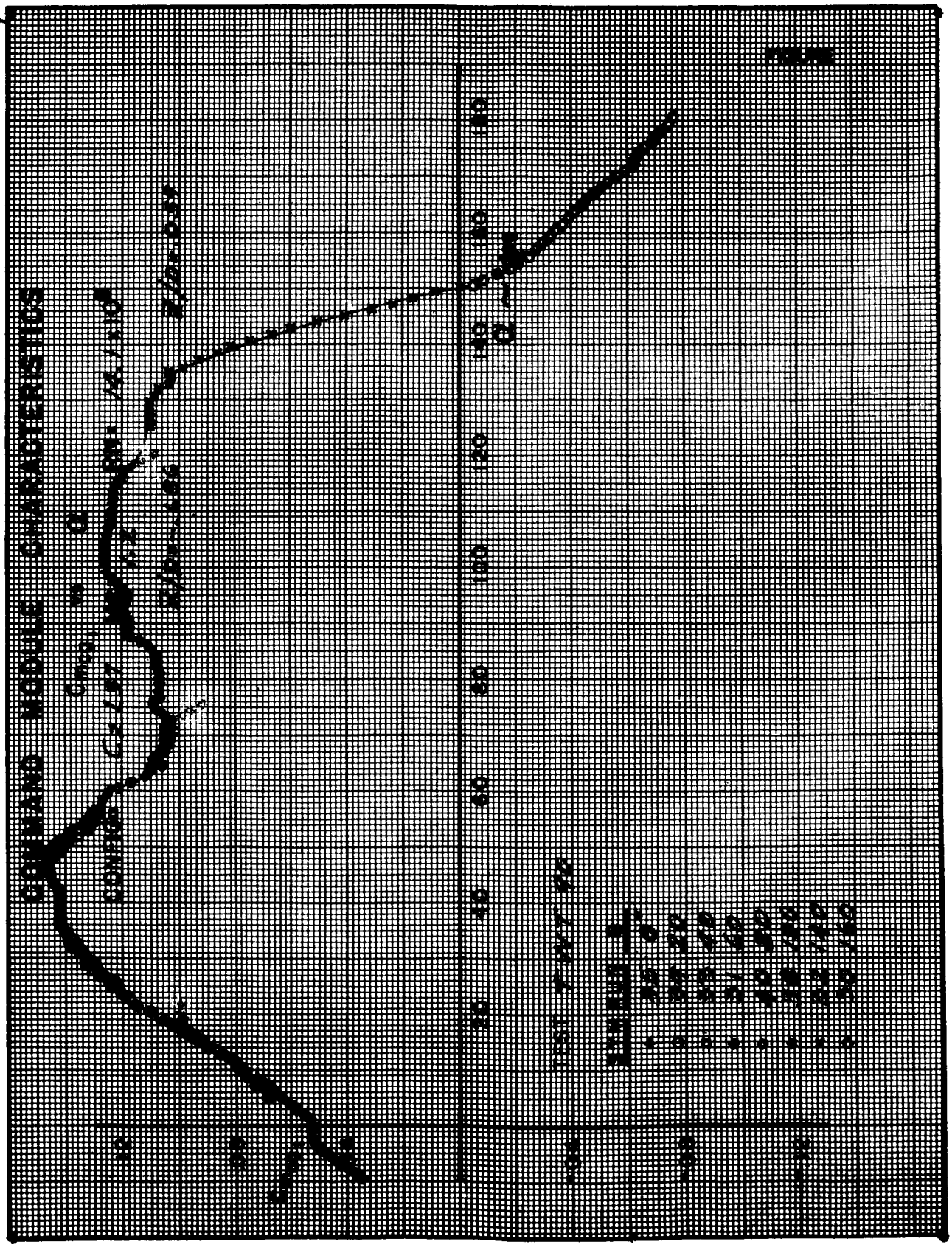

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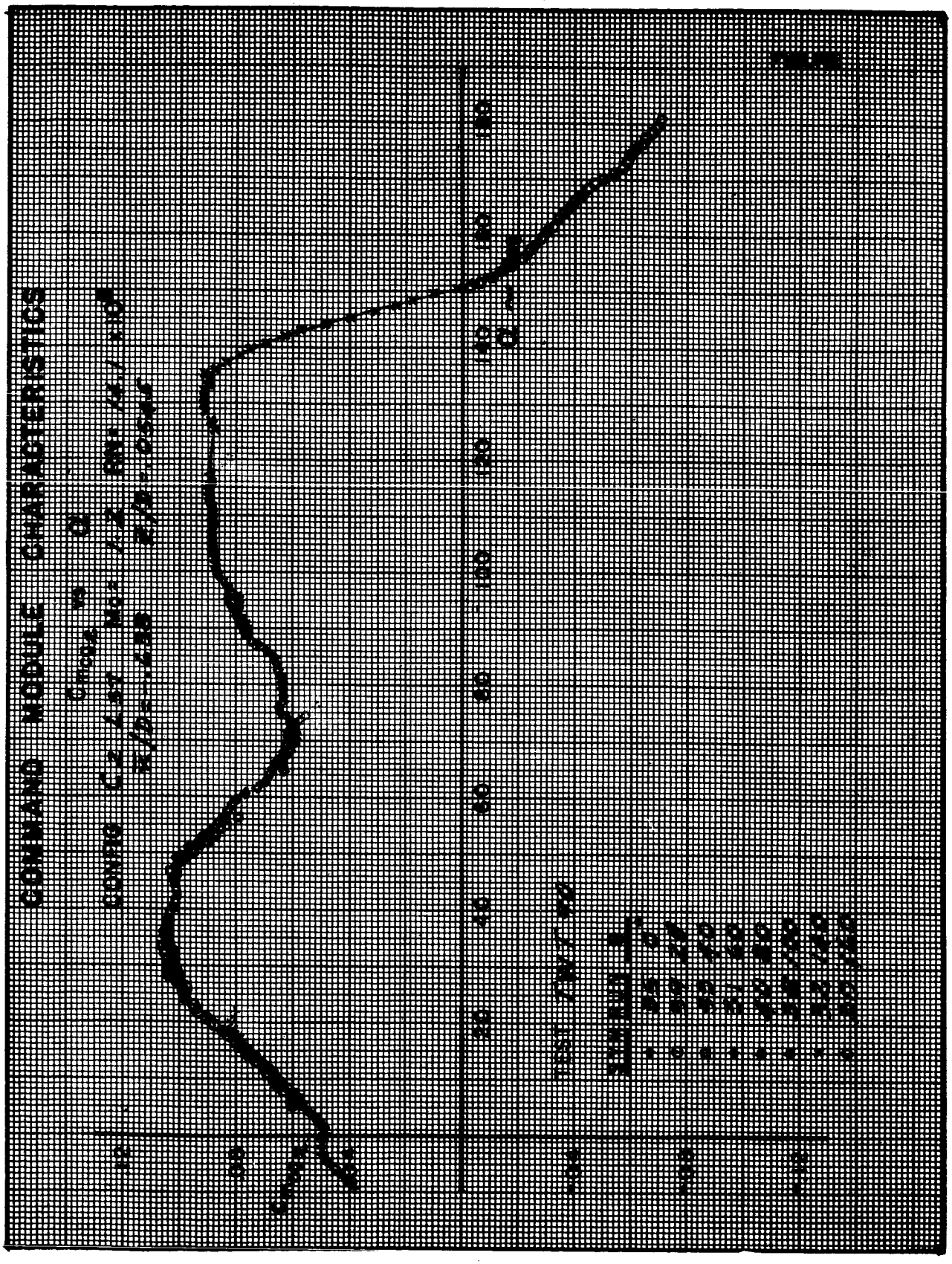
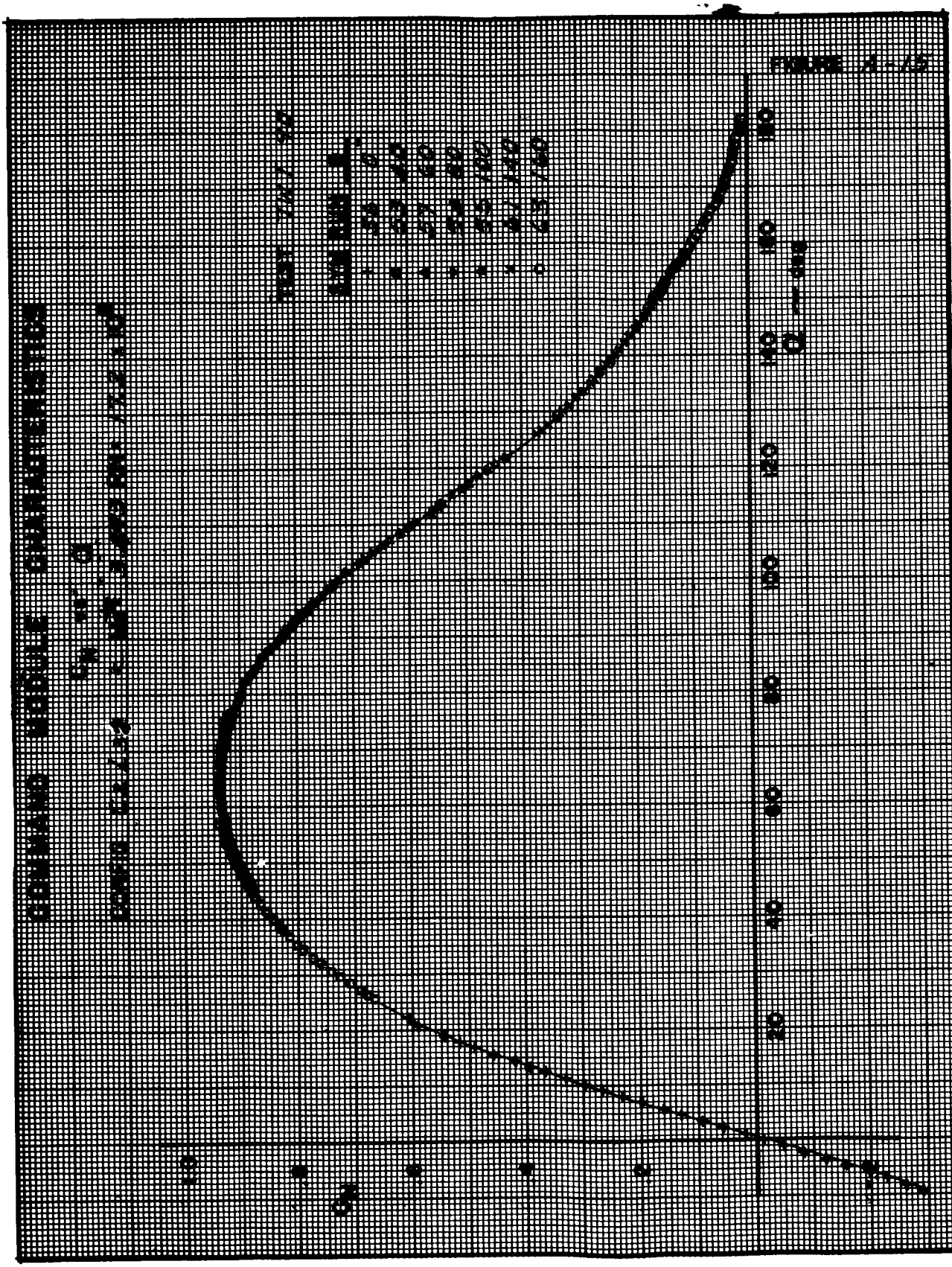

COMMAND MODULE CHARACTERISTICS
COMMAND MODULE WEIGHT (LB)
COMMAND MODULE CENTER OF GRAVITY (IN.)
COMMAND MODULE MOMENTS OF INERTIA (SLUG-FT²)
COMMAND MODULE PRODUCTS OF INERTIA (SLUG-FT²)
COMMAND MODULE CENTER OF PRESSURE (IN.)
COMMAND MODULE AERODYNAMIC COEFFICIENTS
COMMAND MODULE AERODYNAMIC DAMPING COEFFICIENTS

CONFIDENTIAL



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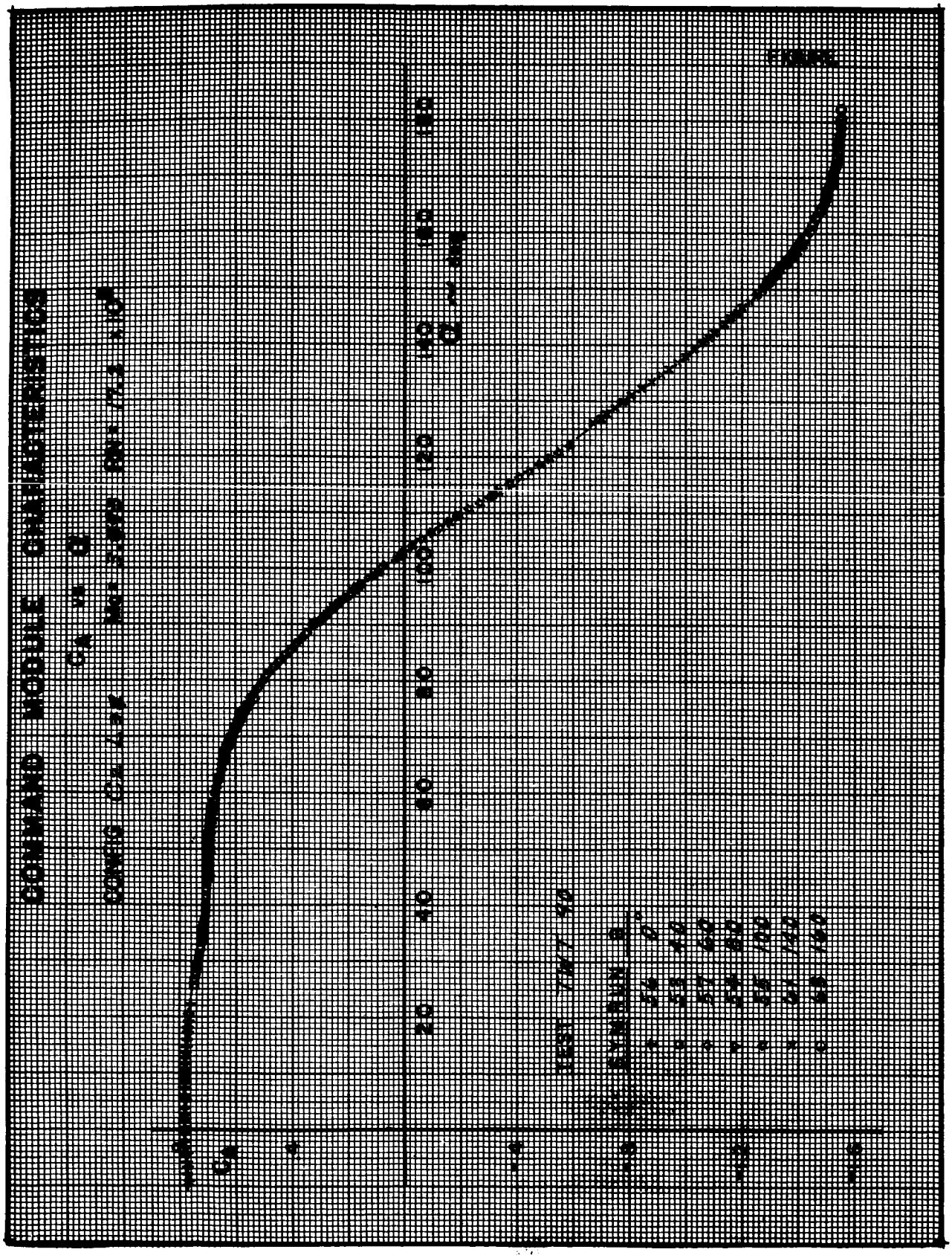

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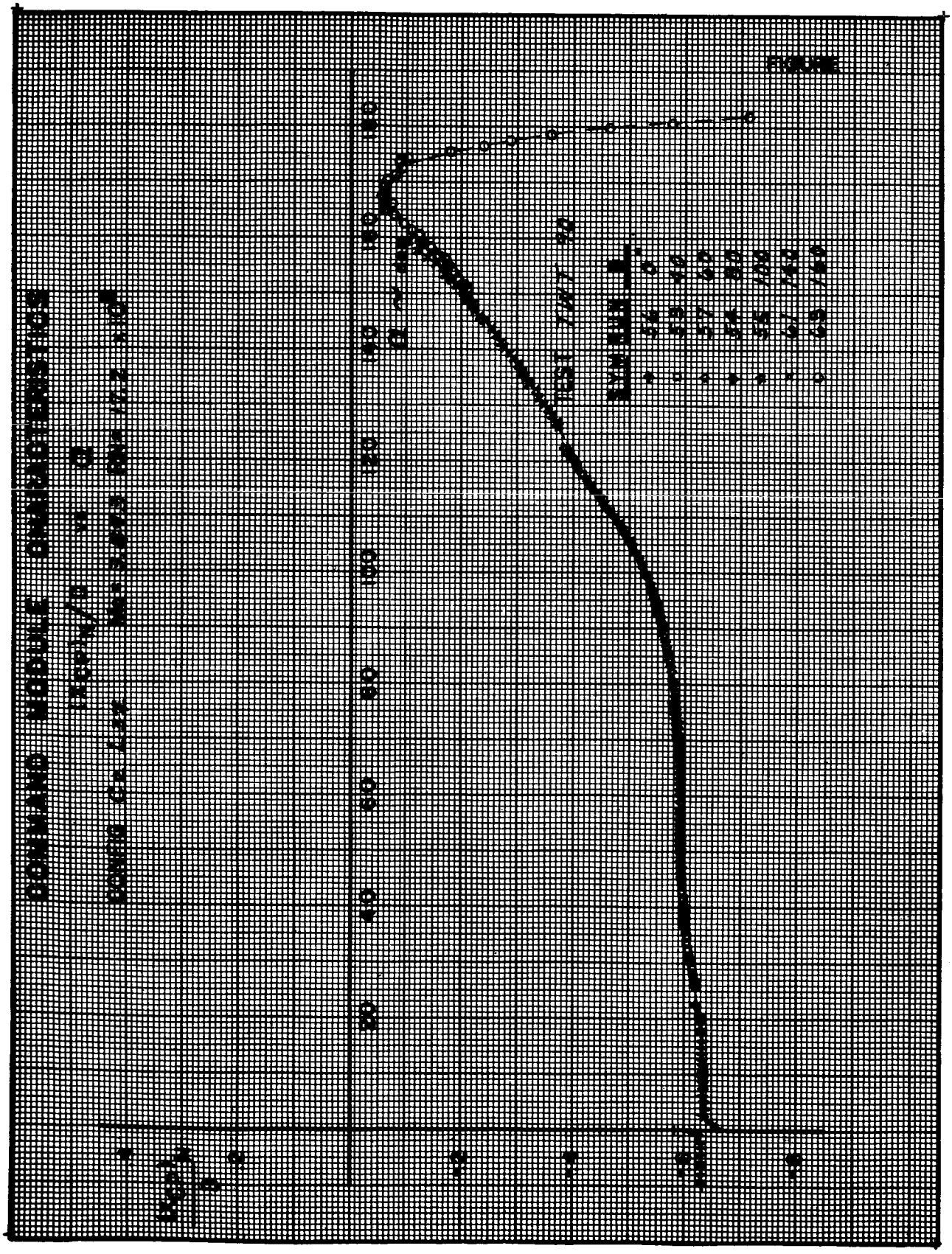

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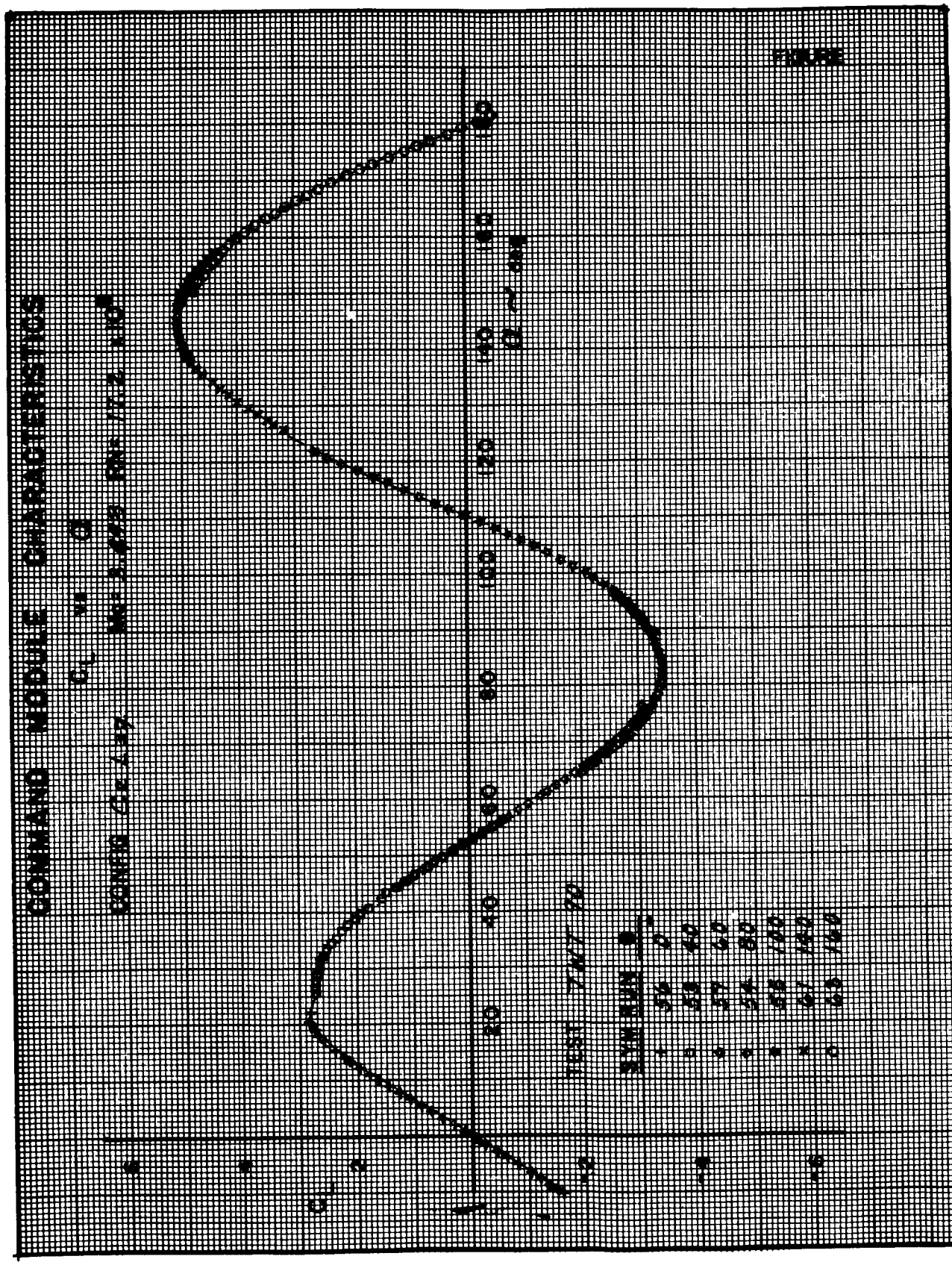

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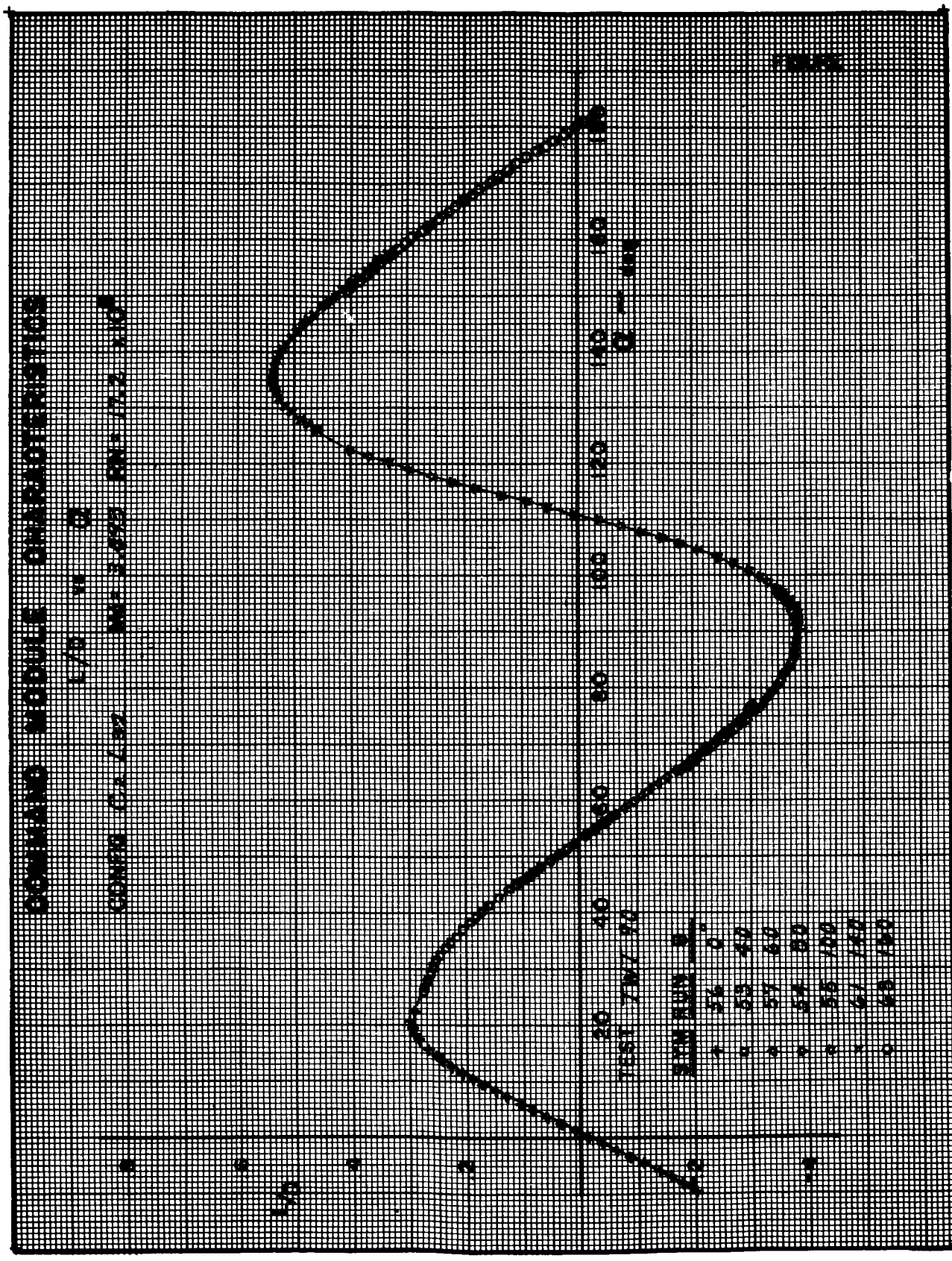

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SID 63-1035

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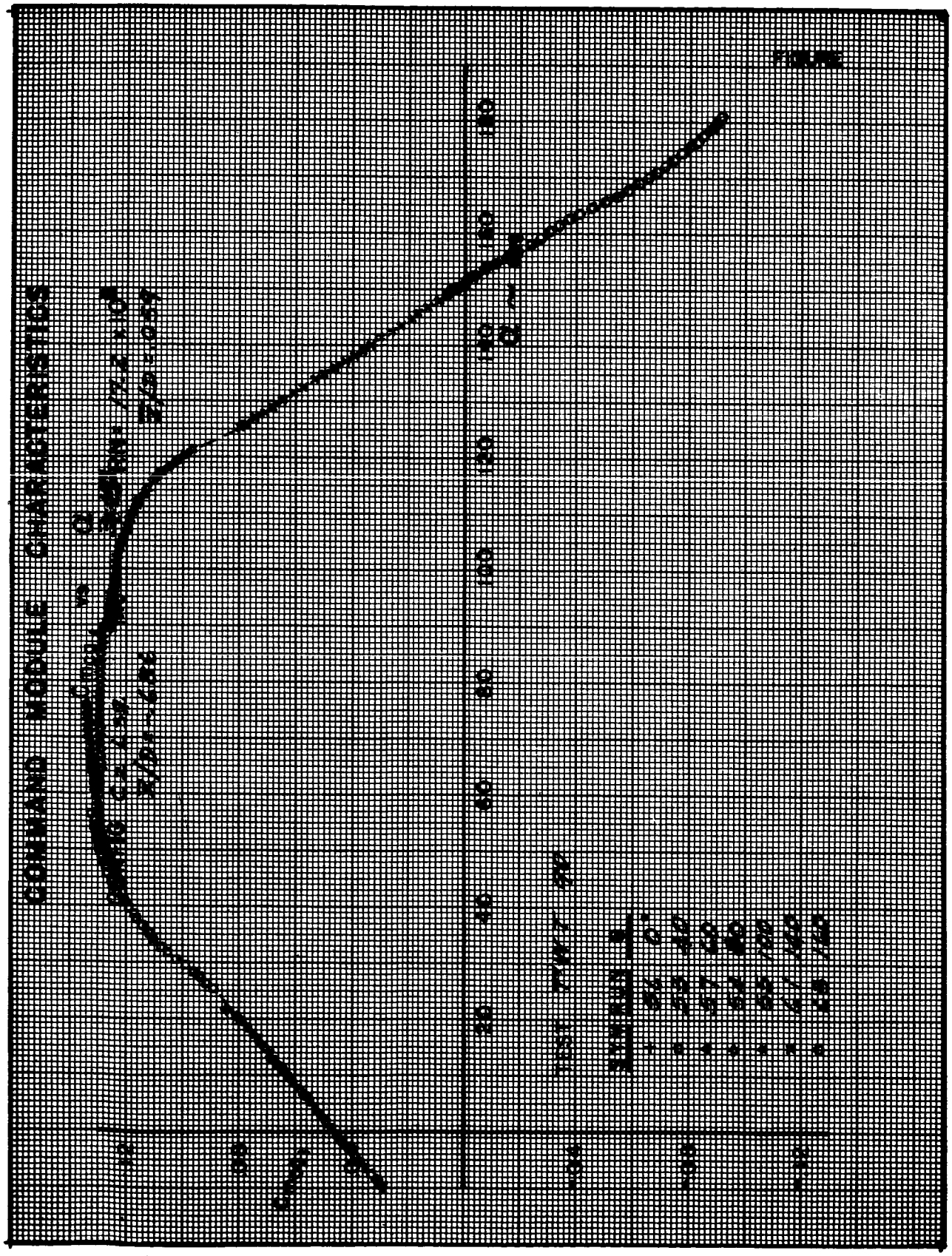

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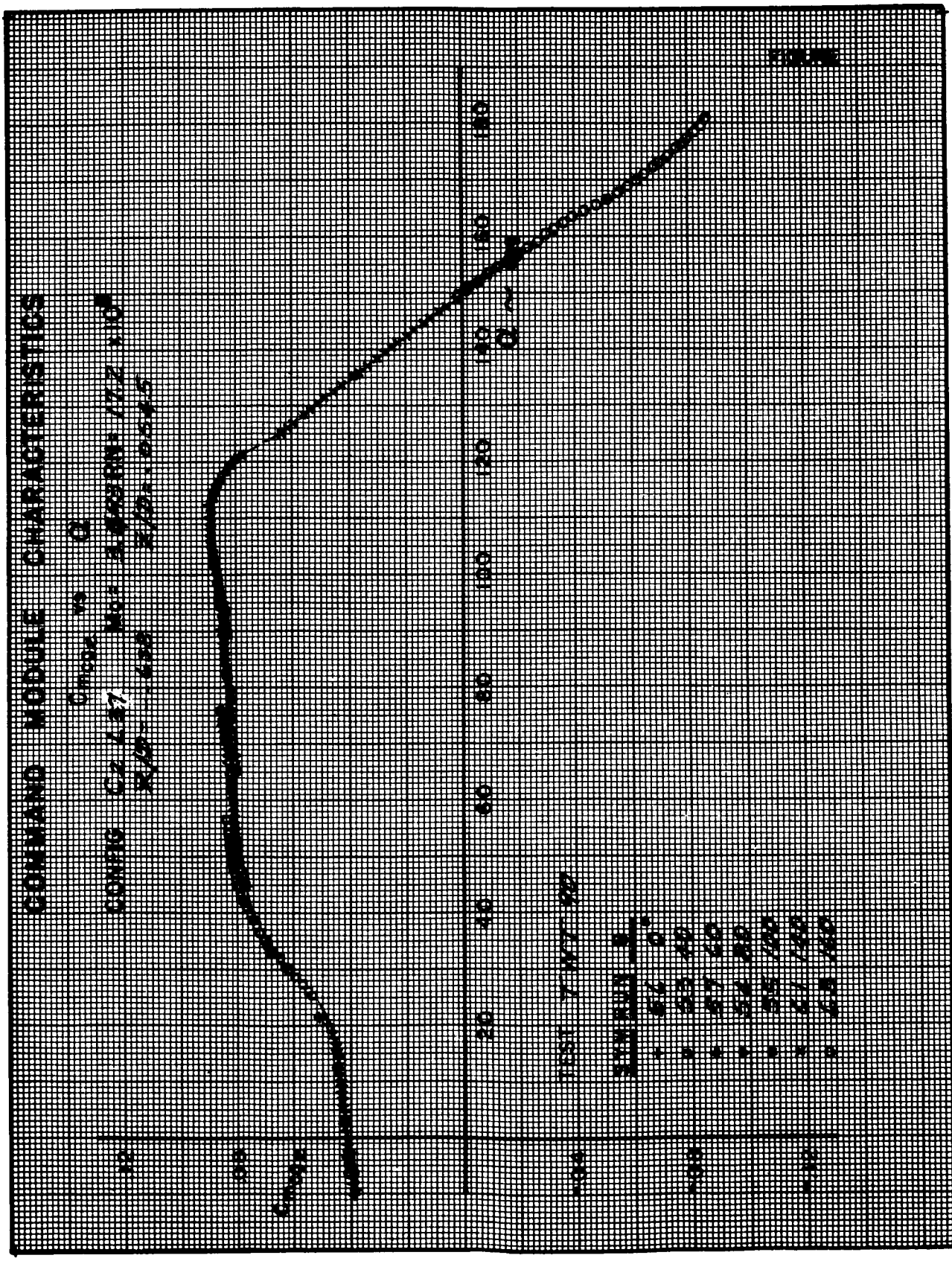

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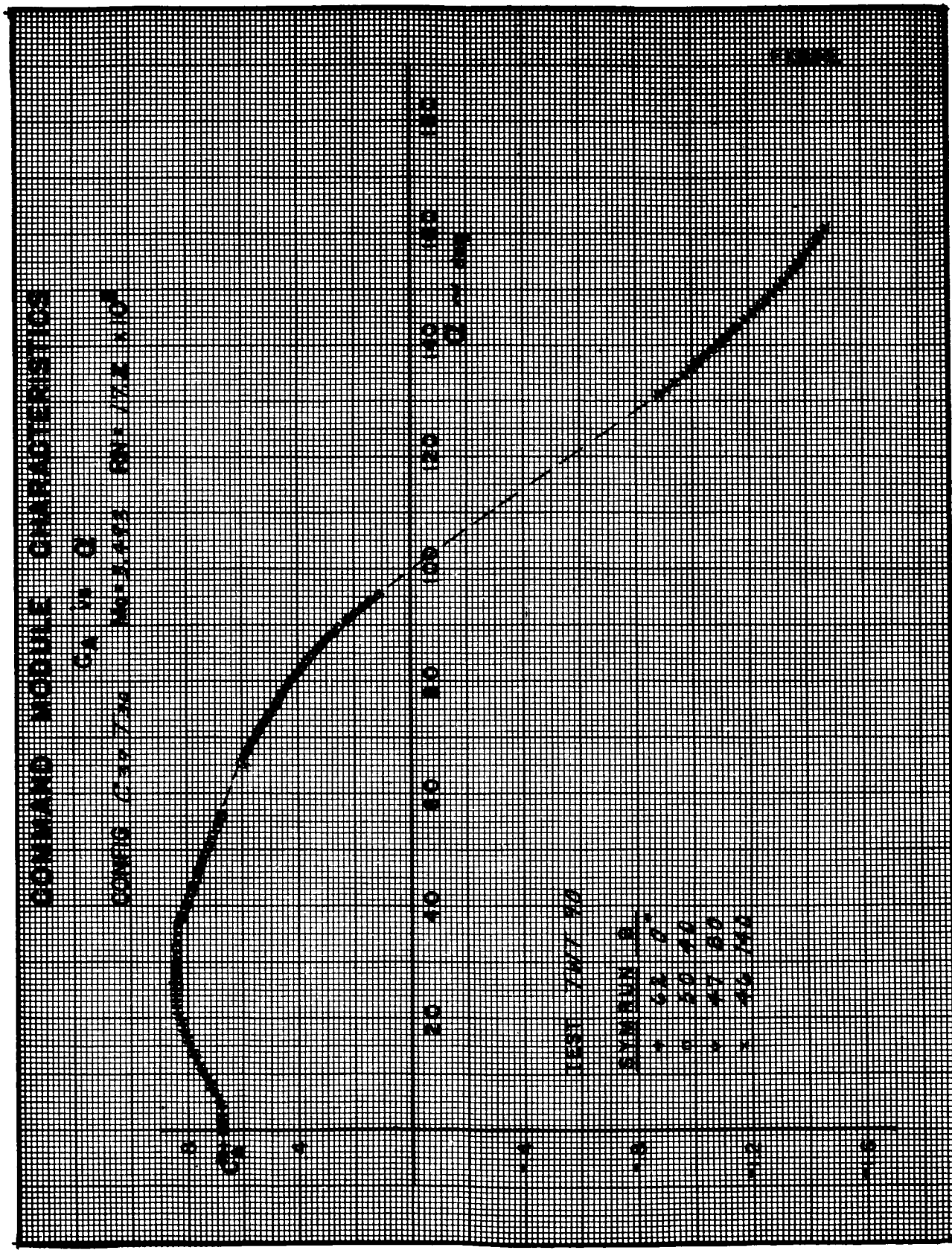

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SID 63-1035

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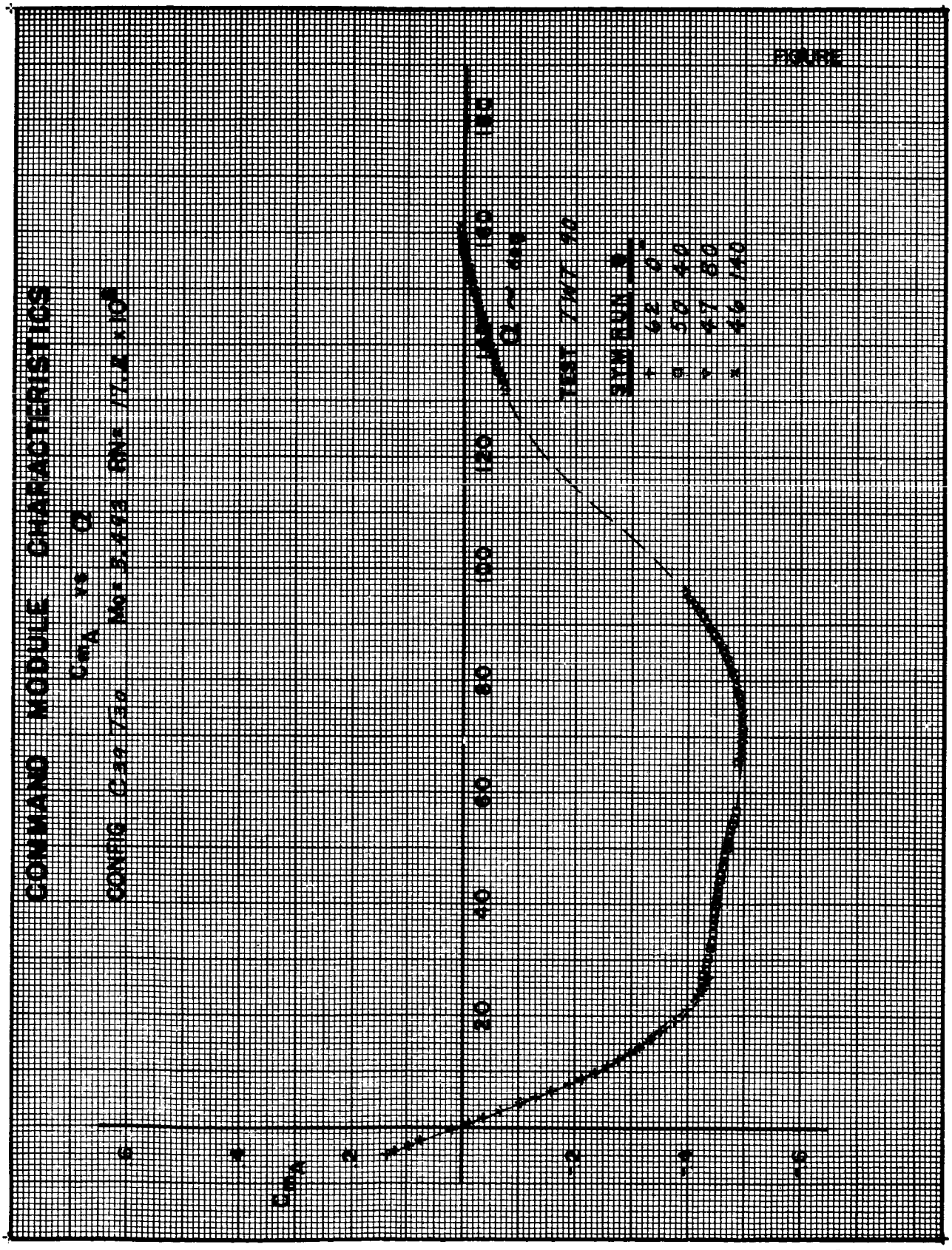

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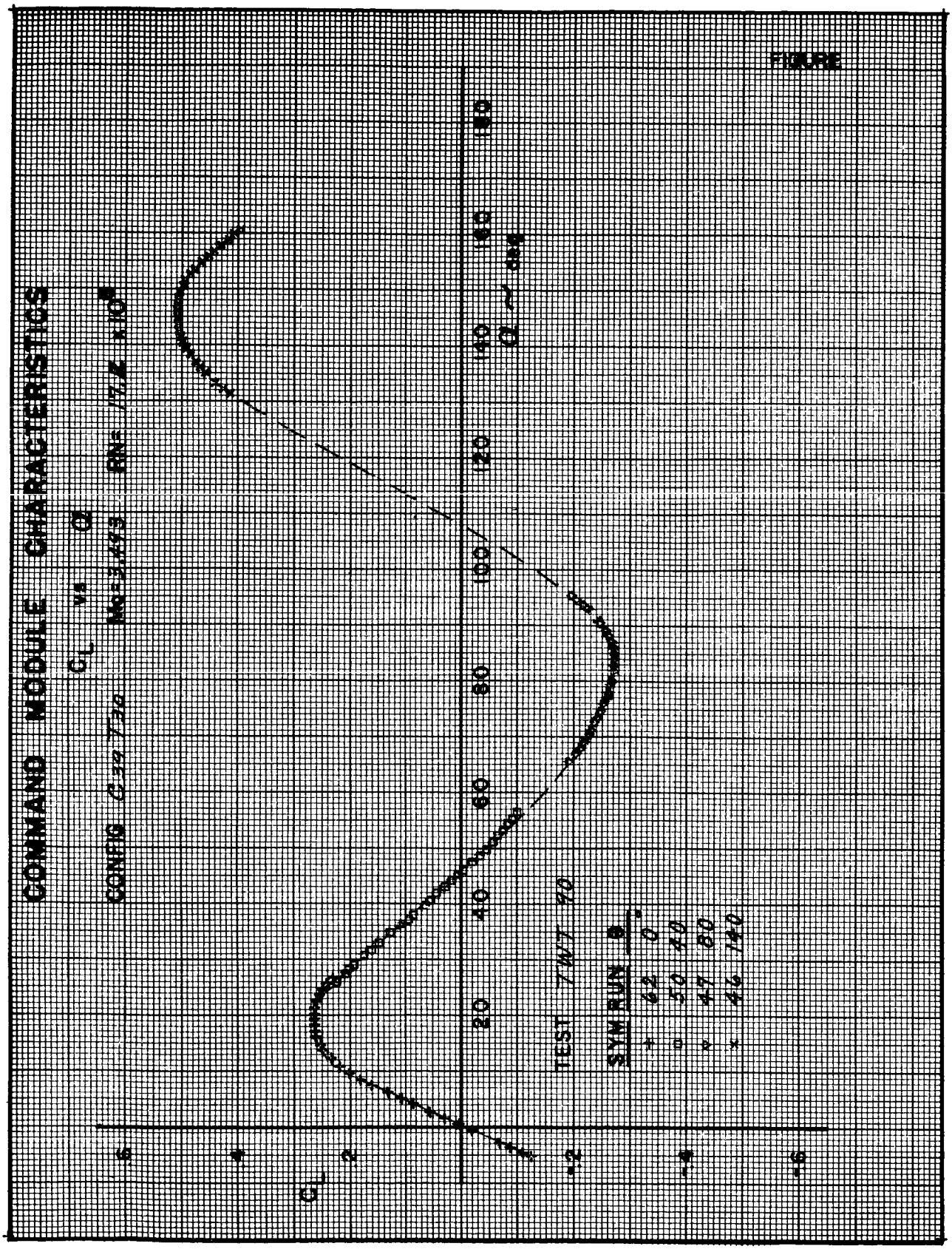

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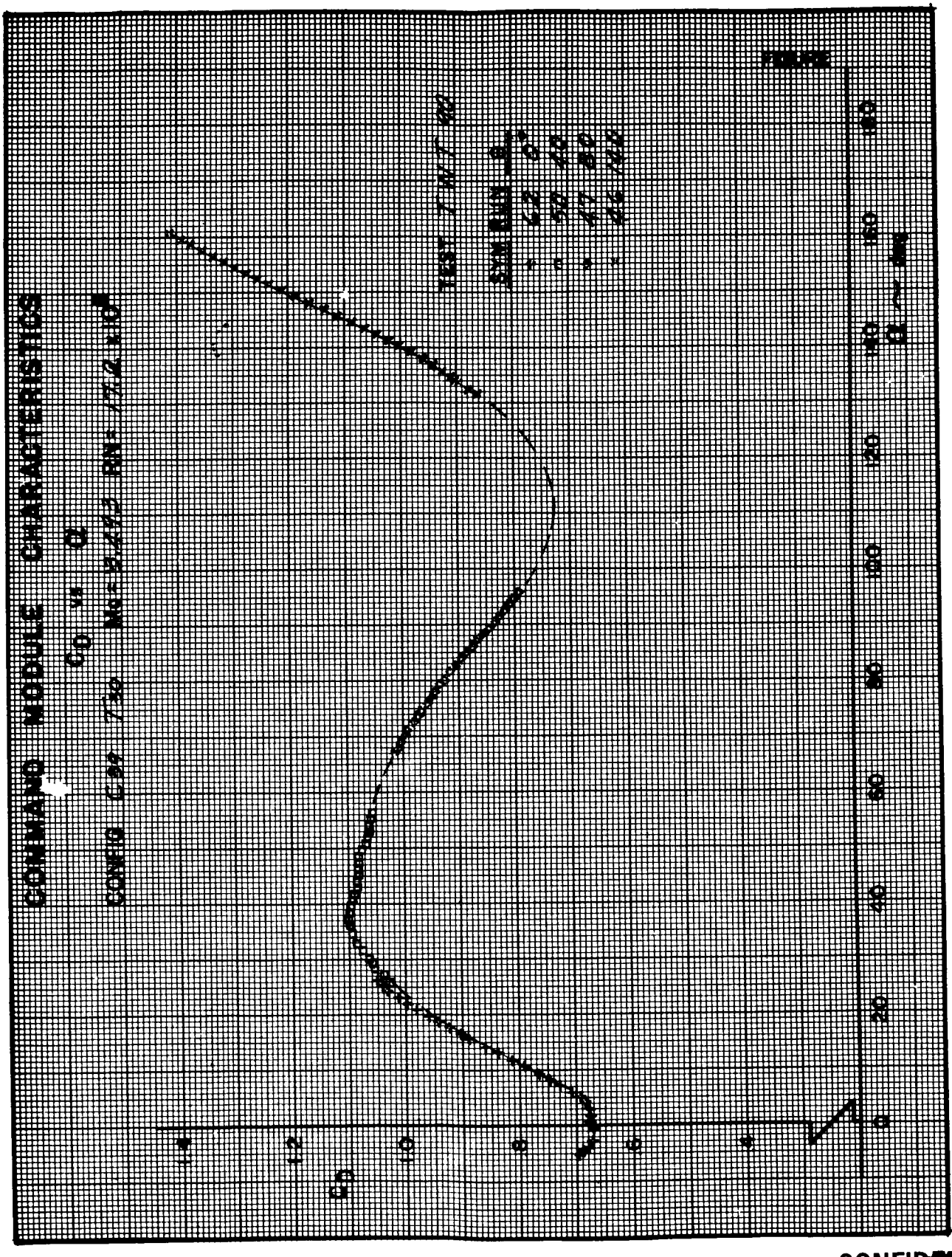

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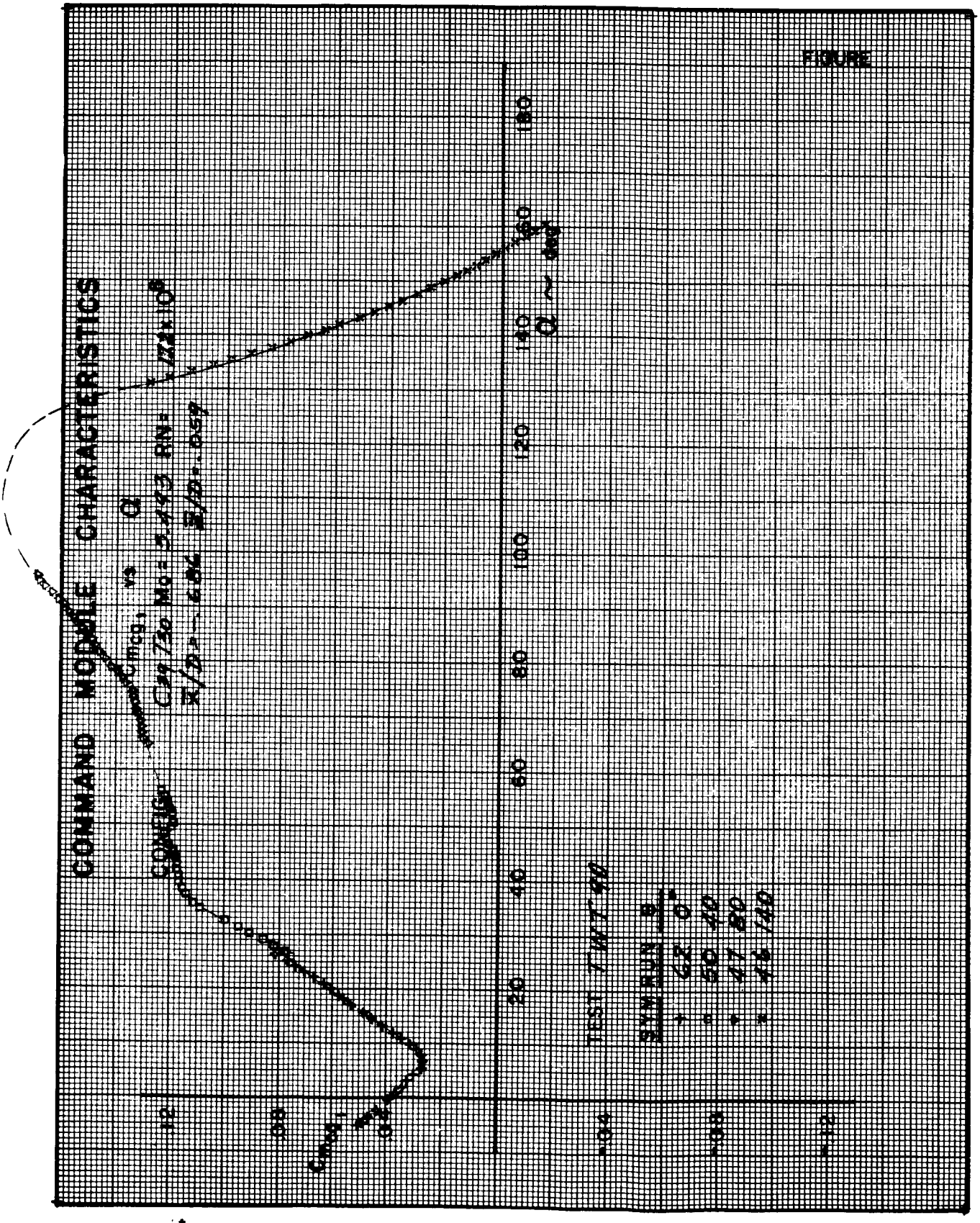
FIGURE
COMMAND MODULE CHARACTERISTICS
CONFIGURATION
Cm/Cmcg, M3
Cz/Cmcg, M3
Cx/Cmcg, M3
Cm/Cmcg, RN=
Cz/Cmcg, RN=
Cx/Cmcg, RN=
1.60
1.40
1.20
1.00
.80
.60
.40
.20
.00
-.20
-.40
-.60
-.80
-1.00
-1.20
-1.40
-1.60
-1.80
-2.00
-2.20
-2.40
-2.60
-2.80
-3.00
-3.20
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-8.40
-8.60
-8.80

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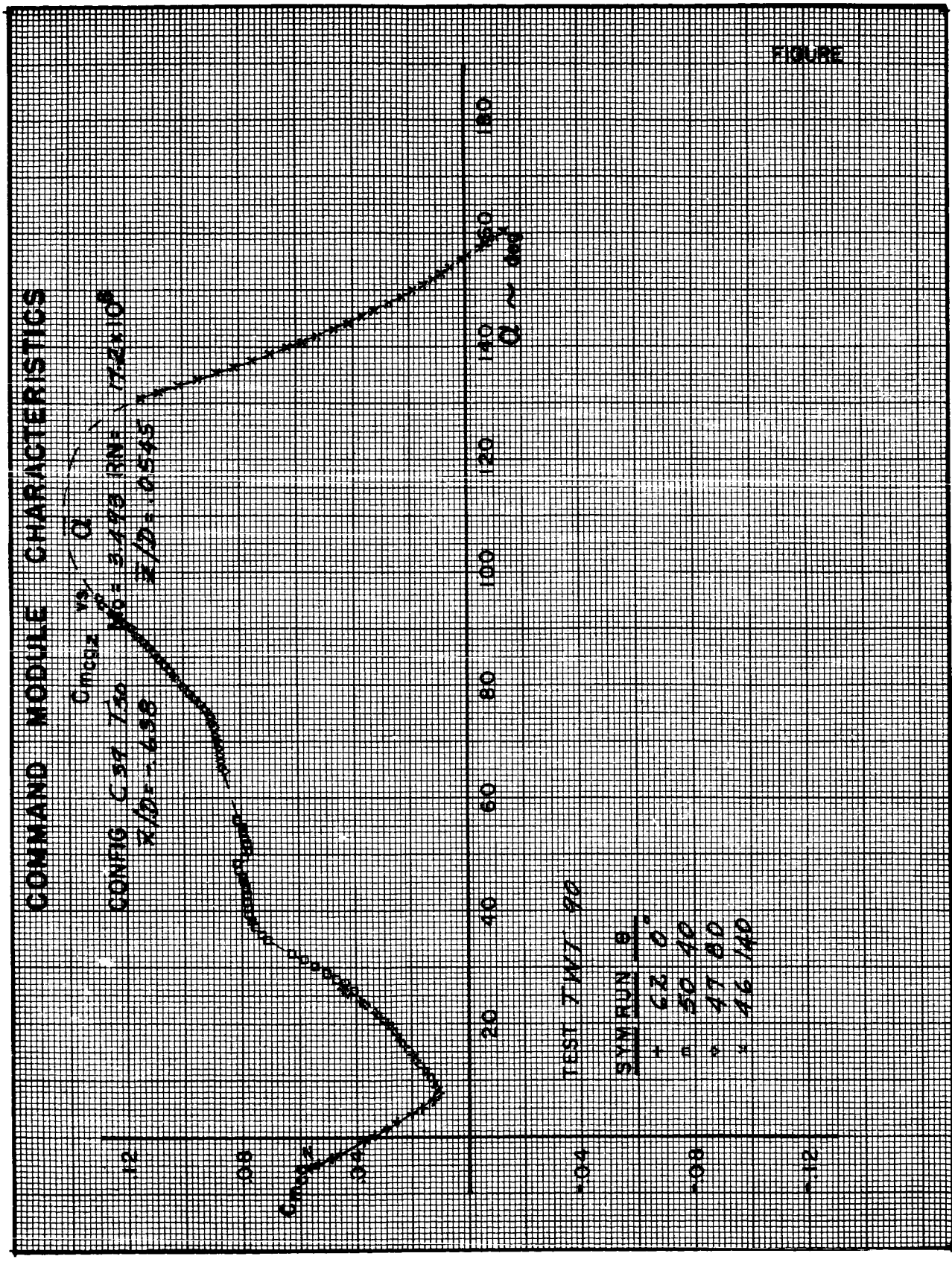

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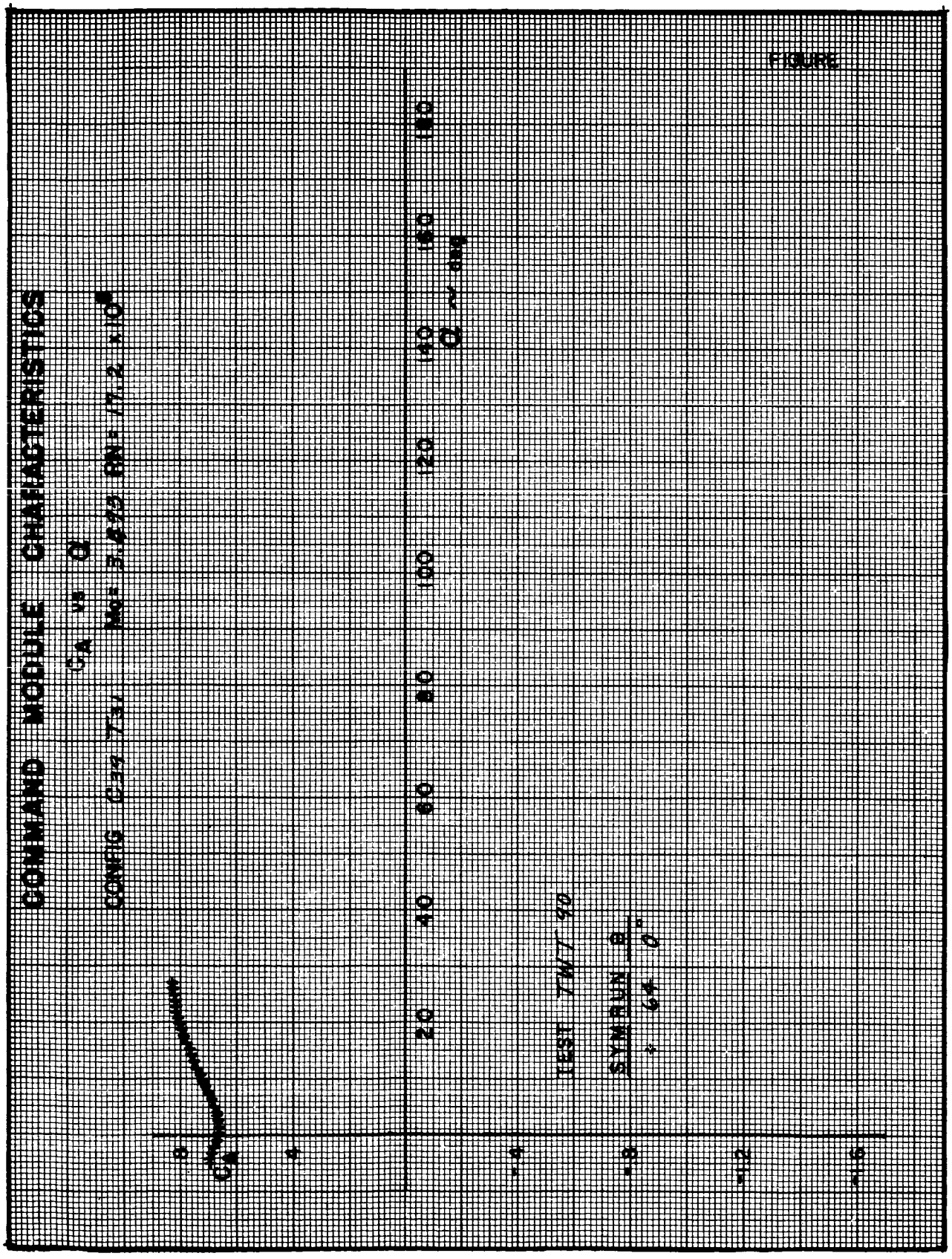

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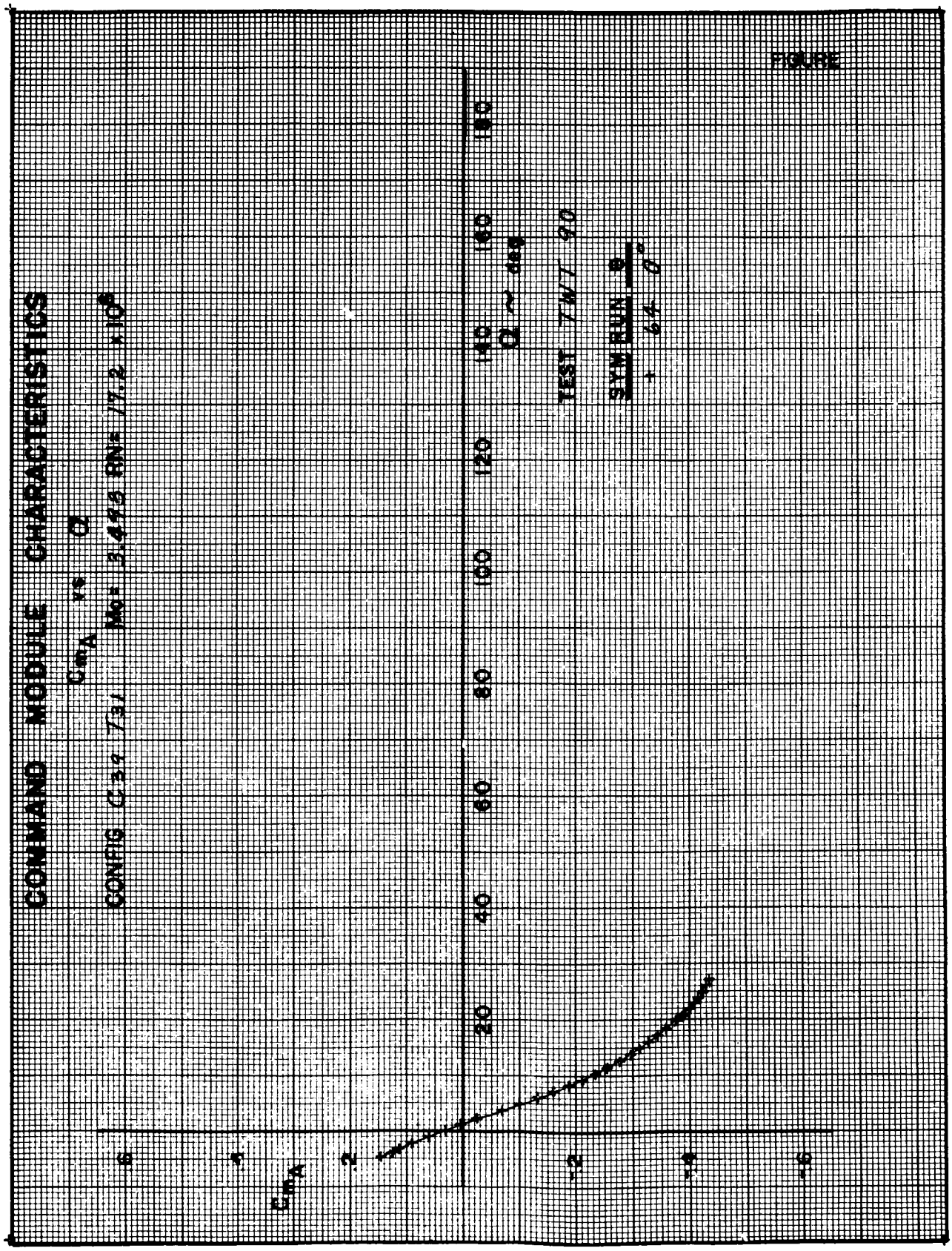
FIGURE



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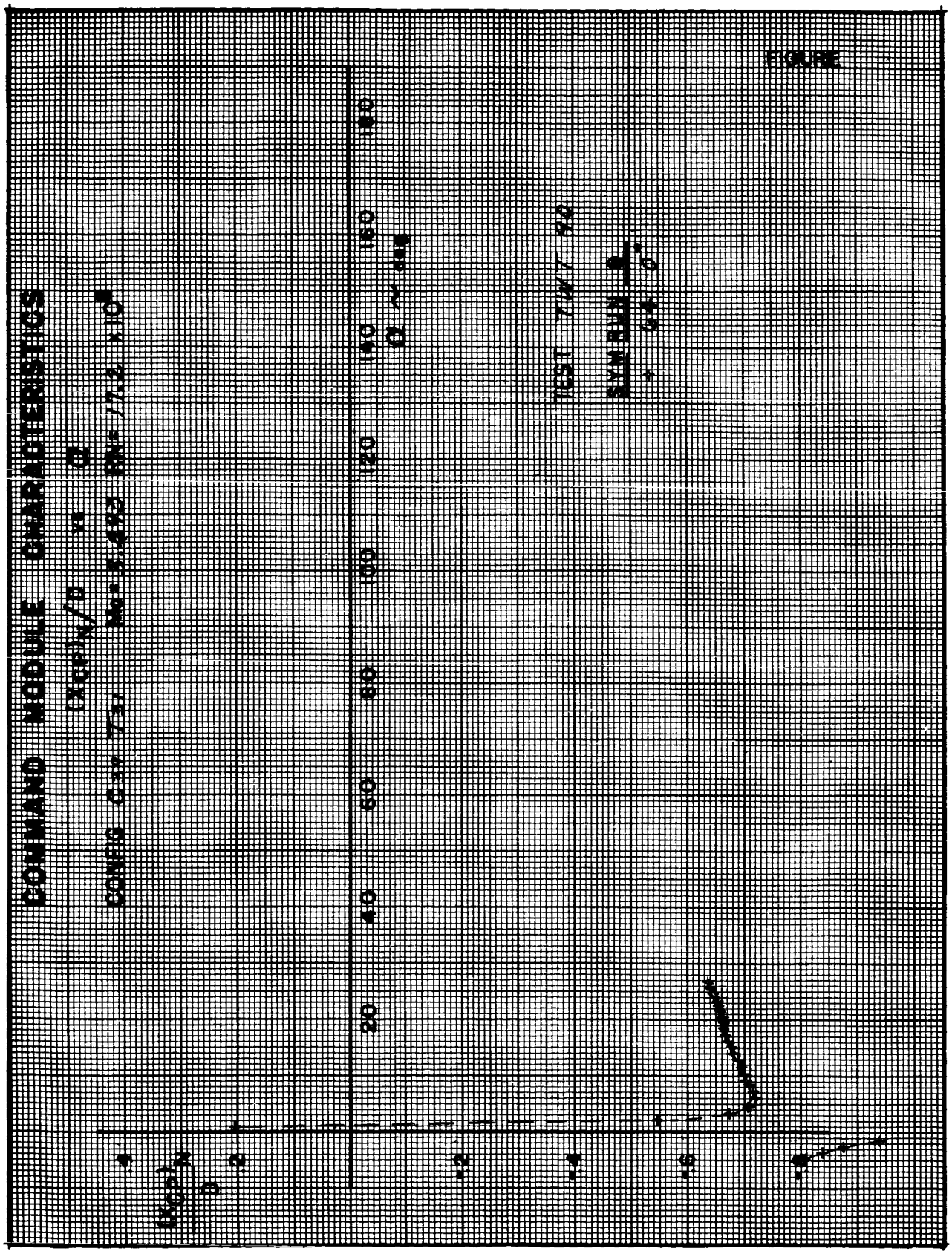

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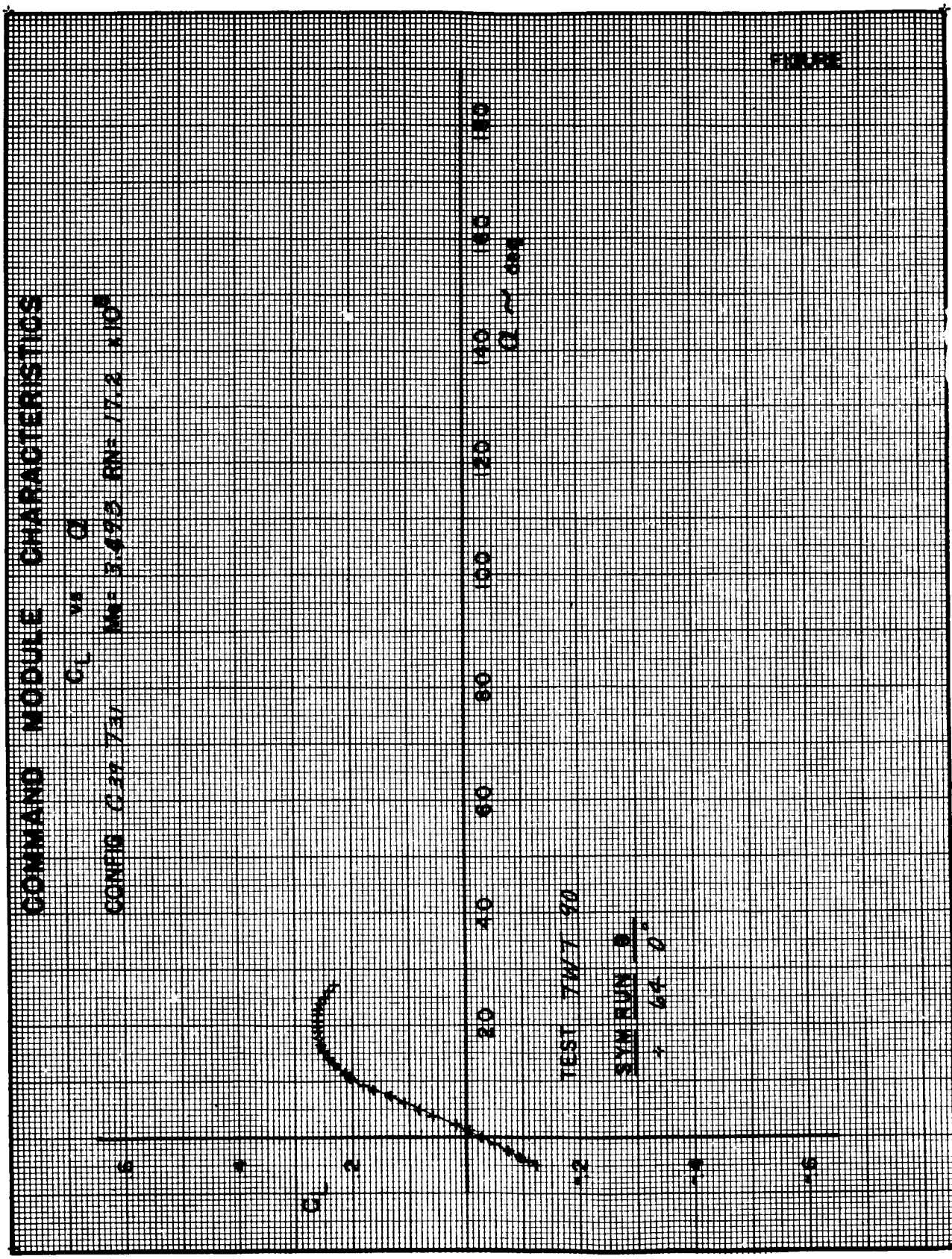
FIGURE
COMMAND MODULE CHARACTERISTICS
CONFIG
TEST
SYMBOL
C_L
C_D
C_m
C_{L_α}
C_{m_α}
C_{m_q}
$C_{m_{\dot{\alpha}}}$
C_{l_p}
C_{n_r}
C_{n_β}
C_{l_β}
C_{n_p}
C_{l_r}
C_{Y_β}
C_{Y_p}
C_{Y_r}
$C_{n_{\dot{\beta}}}$
$C_{Y_{\dot{\beta}}}$
$C_{l_{\dot{\beta}}}$
$C_{D_{\dot{\alpha}}}$
$C_{L_{\dot{\alpha}}}$
C_{D_q}
C_{L_q}
$C_{D_{\dot{\beta}}}$
C_{D_p}
C_{D_r}
C_{D_β}
C_{L_β}
C_{D_α}
C_{L_α}
$C_{D_{\alpha^2}}$
$C_{D_{\alpha^3}}$
$C_{D_{\alpha^4}}$
$C_{D_{\alpha^5}}$
$C_{D_{\alpha^6}}$
$C_{D_{\alpha^7}}$
$C_{D_{\alpha^8}}$
$C_{D_{\alpha^9}}$
$C_{D_{\alpha^{10}}}$
$C_{D_{\alpha^{11}}}$
$C_{D_{\alpha^{12}}}$
$C_{D_{\alpha^{13}}}$
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$C_{D_{\alpha^{16}}}$
$C_{D_{\alpha^{17}}}$
$C_{D_{\alpha^{18}}}$
$C_{D_{\alpha^{19}}}$
$C_{D_{\alpha^{20}}}$
$C_{D_{\alpha^{21}}}$
$C_{D_{\alpha^{22}}}$
$C_{D_{\alpha^{23}}}$
$C_{D_{\alpha^{24}}}$
$C_{D_{\alpha^{25}}}$
$C_{D_{\alpha^{26}}}$
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$C_{D_{\alpha^{36}}}$
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$C_{D_{\alpha^{44}}}$
$C_{D_{\alpha^{45}}}$
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$C_{D_{\alpha^{48}}}$
$C_{D_{\alpha^{49}}}$

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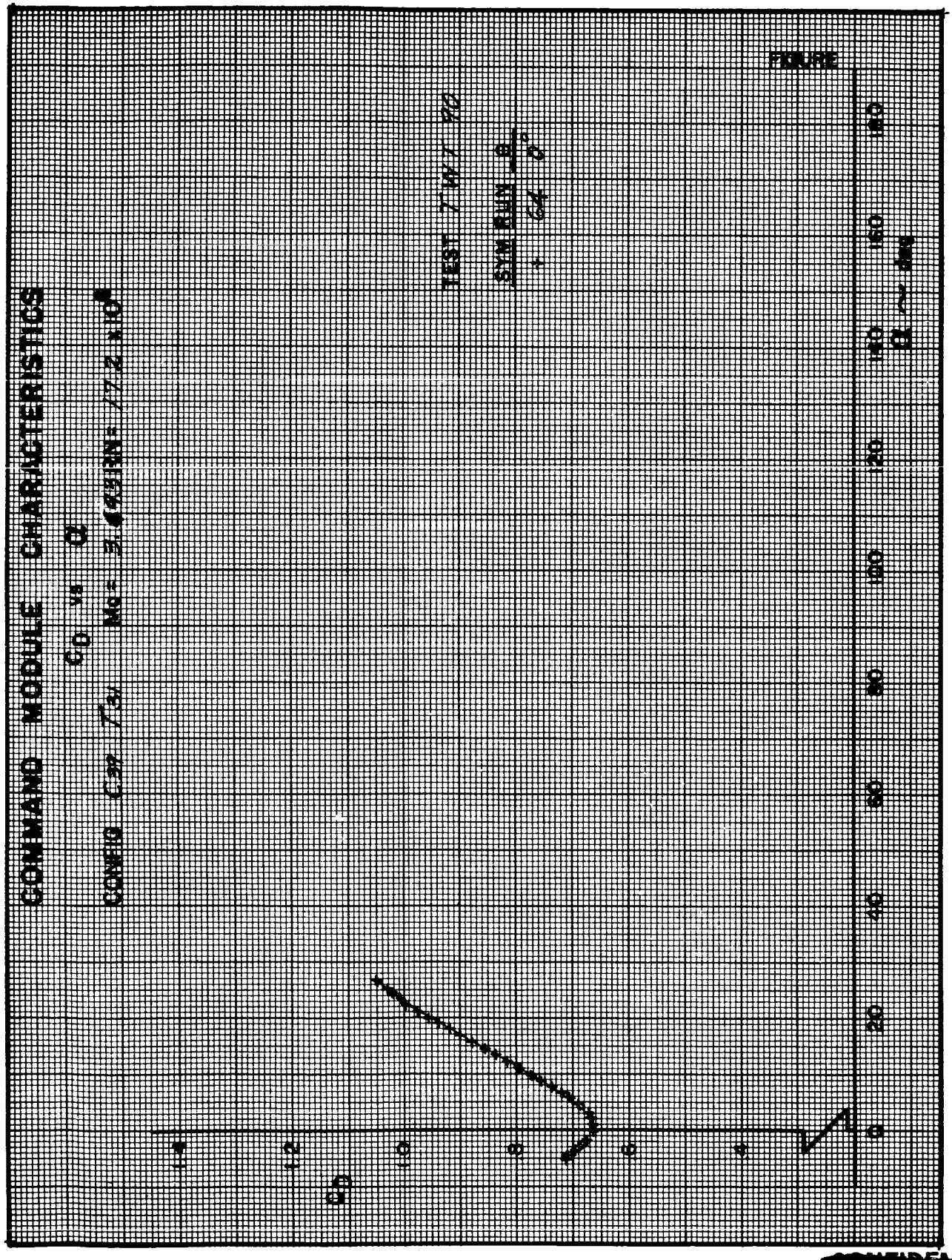

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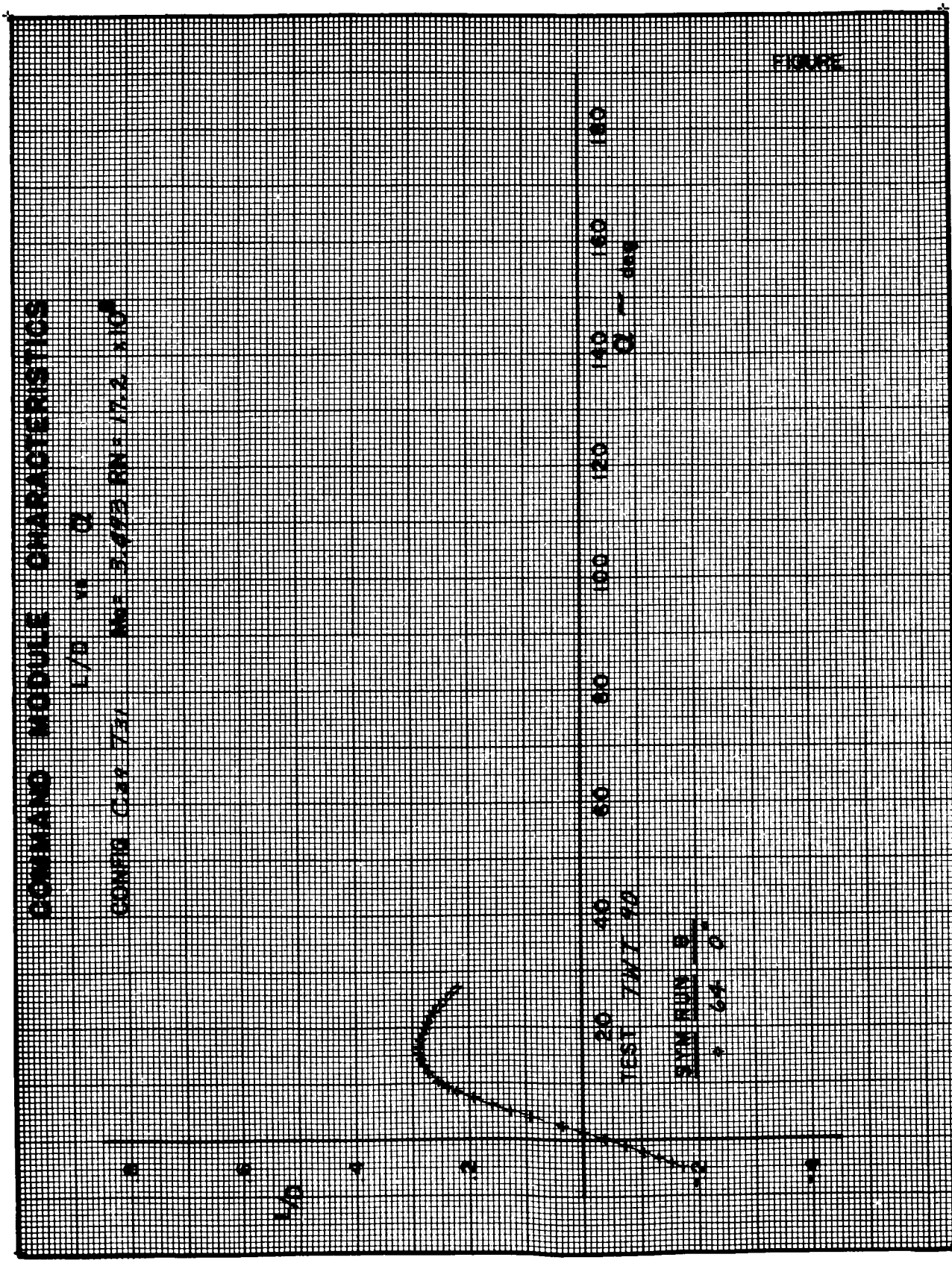
SID 63-1035

CONFIDENTIAL



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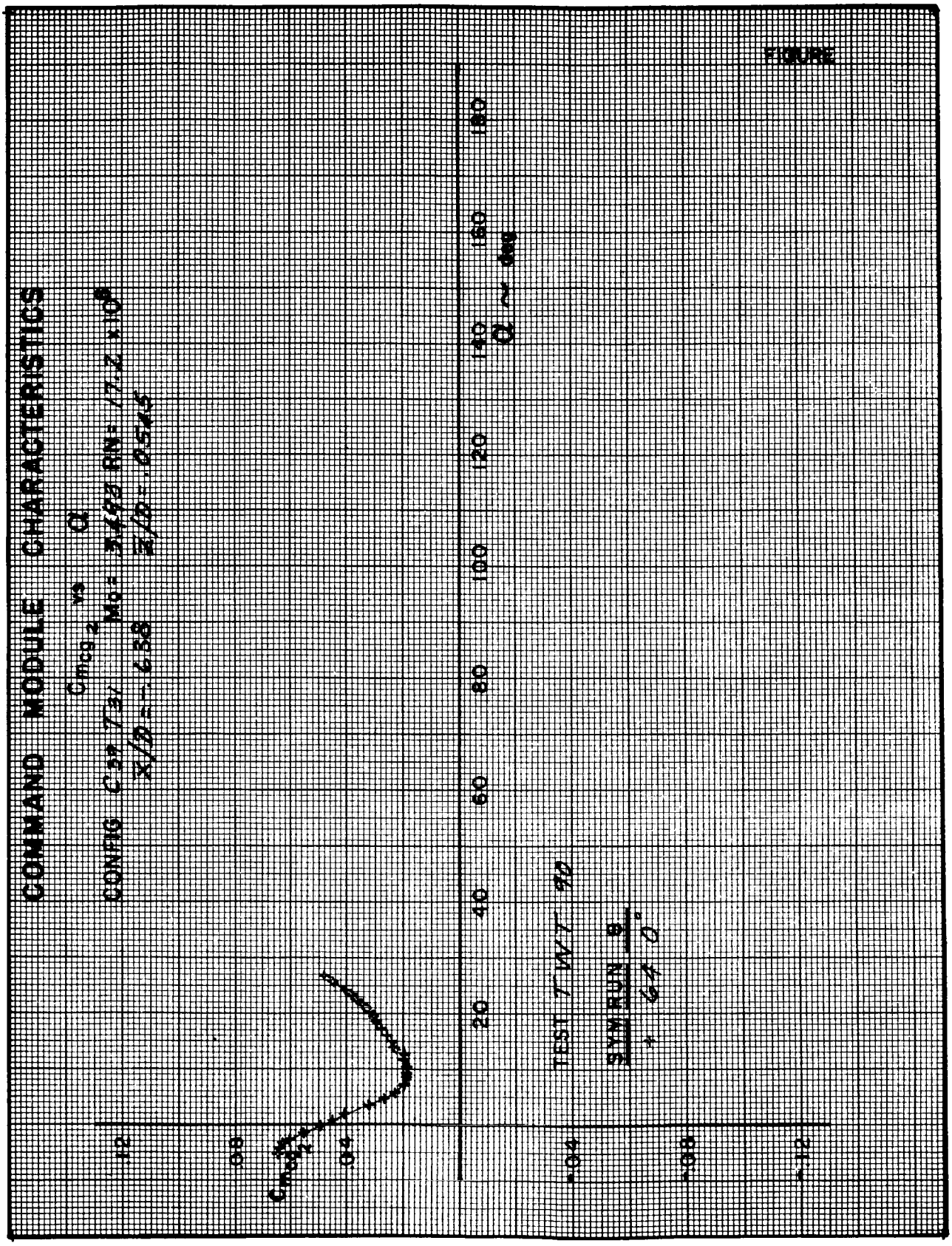

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APPENDIX B

TABULATED DATA

RUN INDEX

Config.	θ (deg)	Nominal α Range (deg)	Run Number				
			0.4		0.7	1.2	3.5
			5.0	11.3	13.0	14.2	17.0
C_2L_{36}	60	45 to 77		1*, 2			
C_2L_{38}	80	65 to 97		6			
C_2L_{37}	0	-15 to 17		17	24	35	56
	20	5 to 37		11		39	
	40	25 to 57		16	26	33	53
	60	45 to 77		8, 14**	28	31	57
	80	65 to 97	20	7	21	40	48, 54**
	100	85 to 117		9	22	38	55
	120	105 to 137		10			
	140	125 to 157		18	27	32	61
	160	145 to 177		19	29	30	63
$C_{39}T_{30}$	0	-5 to 27		43			62
	40	25 to 67		44			50
	80	65 to 97		41			47
	140	125 to 157					46
$C_{39}T_{26}$	80	65 to 97		42			
$C_{39}T_{31}$	0	-5 to 27					64

* Sector sweep rate = 3°/sec. All other blows at 4°/sec.
**Repeat blows.

[redacted]

DATA FORMAT

The key to reading the tabulated data is as follows:

1. The first two lines at the top of each page contain the following identification:

TWT 90	=	Trisonic Wind Tunnel Test number 90
Blow XX	=	Blow number
Conf	=	Configuration tested

2. First Page - Tunnel Conditions

BN	=	Block number, identifies block of data computed
ALPHA	=	Angle of attack, deg
YAW	=	Angle of yaw, deg
MACH	=	Test section Mach number
RN	=	Reynolds number x 10^{-6} (based on command module diameter, 16.170 inches)
HO	=	Test section total pressure, psfa
PO	=	Test section static pressure, psfa
Q	=	Test section dynamic pressure, psf
TTO	=	Test section total temperature, deg Rankin
DEC	=	Number of decimal places to left or last digit

3. Second Page - Body axis data and balance chamber pressure

BN	=	Block number, identifies block of data computer

[redacted]

ALPHA	=	Angle of attack, deg
YAW	=	Angle of yaw, deg
CA	=	Axial force coefficient
CN	=	Normal force coefficient
CNB	=	Yawing moment coefficient about Apollo standard reference c.g., body axis
CLB	=	Rolling moment coefficient, body axis
XCPN	=	Location of normal force center of pressure divided by the command module diameter
XCPY	=	Location of side force center of pressure divided by the command module diameter
PB	=	Balance chamber pressure coefficient
CMA	=	Pitch moment coefficient about the command module apex
DEC	=	Number of decimal places to the left of last digit

4. Third Page - Stability axis data and lift to drag ratio

BN	=	Block number, identifies block data computed
ALPHA	=	Angle of attack, deg
YAW	=	Angle of yaw, deg
CD	=	Drag coefficient
CL	=	Lift coefficient
CMSI	=	Pitching moment coefficient about Apollo standard reference c.g., stability axis
CY	=	Side force coefficient

CNS	=	Yawing moment coefficient about Apollo standard reference c.g., stability axis
CLS	=	Rolling moment coefficient, stability axis
L/D	=	Lift to drag ratio
CMS2	=	Pitching moment coefficient about current command module c.g., stability axis
DEC	=	Number of decimal places to left of last digit

TWT 90 BLOW 1 2ND REDUCTION

CONF C2 L36

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
781	4554		397	1125	6768	60703	6703	5218
839	4728		396	1123	6753	60627	6639	5203
860	4936		396	1125	6746	60536	6656	5199
880	5136		401	1139	6758	60495	6803	5196
902	5354		395	1124	6745	60564	6624	5192
924	5572		400	1138	6747	60419	6776	5186
945	5778		396	1127	6731	60410	6637	5182
965	5964		396	1125	6713	60249	6621	5177
988	6179		397	1125	6700	60122	6617	5174
1008	6344		395	1119	6684	60029	6552	5168
1027	6535		399	1129	6682	59879	6672	5167
1046	6733		397	1123	6659	59731	6596	5162
1068	6952		398	1123	6638	59502	6609	5158
1089	7160		401	1126	6595	59025	6658	5150
1109	7356		401	1127	6595	59025	6658	5145
1132	7572		401	1129	6595	59025	6658	5136

[redacted]

TWT 90 BLOW 1 2ND REDUCTION

CONF C2 L36

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
781	4554		1830	6646	24	5	- 4874	5582	- 3836	- 3239
839	4728		1613	6829	13	1	- 4890	5666	- 3455	- 3339
860	4936		1381	6937	12	- 1	- 4906	5497	- 3549	- 3403
880	5136		1066	6871	12	2	- 4924	5607	- 3585	- 3383
902	5354		860	7171	7	- 2	- 4949	5471	- 3682	- 3549
924	5572		751	6920	3	- 1	- 4999	6246	- 3437	- 3459
945	5778		813	6873	- 19	- 10	- 5052	4706	- 3746	- 3473
965	5964		2166	5693	- 143	- 50	- 5093	5050	- 3993	- 2899
988	6179		2242	5440	- 145	- 54	- 5377	5281	- 3196	- 2925
1008	6344		6337	3458	- 77	- 49	- 7093	6036	- 3743	- 2453
1027	6535		5984	2725	15	4	- 8434	8442	- 3649	- 2298
1046	6733		5505	2997	2	9	- 8309	7931	- 4108	- 2490
1068	6952		5000	3247	- 1	14	- 8117	6004	- 4194	- 2635
1089	7160		4484	3386	- 3	12	- 7912	5583	- 4405	- 2679
1109	7356		3994	3462	- 6	11	- 7744	5110	- 6459	- 2681
1132	7572		3490	3485	- 4	11	- 7552	5348	- 8273	- 2632

[redacted]

TWT 90 BLOW 1 2ND REDUCTION

CONF C2 L36

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
781	4554		6025	3349	1428	184	13	21	5559	1101
839	4728		6111	3448	1440	109	8	10	5642	1106
860	4936		6163	3470	1437	86	8	8	5631	1098
880	5136		6032	3457	1393	95	6	11	5731	1059
902	5354		6279	3570	1421	47	5	4	5685	1073
924	5572		6140	3277	1332	44	2	2	5337	996
945	5778		6248	2977	1290	- 90	- 2	- 22	4764	957
965	5964		6007	1008	1134	- 791	- 29	- 149	1678	851
988	6179		5854	596	939	- 916	- 21	- 153	1017	668
1008	6344		5927	- 4122	293	- 935	10	- 91	- 6955	100
1027	6535		4972	- 4302	- 76	- 93	3	15	- 8654	- 233
1046	6733		4888	- 3925	- 110	- 23	- 8	6	- 8030	- 277
1068	6952		4791	- 3548	- 113	- 16	- 14	4	- 7406	- 291
1089	7160		4628	- 3186	- 92	- 27	- 12		- 6885	- 274
1109	7356		4451	- 2851	- 70	- 37	- 12	- 3	- 6404	- 254
1132	7572		4238	- 2523	- 35	- 23	- 12	- 1	- 5953	- 218

TWT 90 BLOW 2

CONF C2 L36

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
706	4568		387	1086	6674	60181	6314	5216
787	4849		381	1067	6597	59672	6074	5187
808	5100		402	1133	6675	59721	6755	5177
816	5200		395	1122	6708	60233	6584	5175
826	5321		397	1132	6741	60472	6668	5174
836	5438		395	1127	6736	60495	6601	5172
848	5578		397	1129	6707	60154	6645	5168
857	5682		394	1122	6707	60270	6542	5163
867	5796		398	1132	6708	60152	6660	5163
876	5893		394	1120	6693	60156	6521	5160
885	5994		396	1130	6709	60200	6624	5160
895	6094		398	1136	6706	60107	6681	5153
905	6204		396	1132	6710	60212	6621	5153
915	6309		397	1133	6713	60220	6641	5153
936	6543		399	1138	6706	60104	6689	5148
946	6652		396	1130	6690	60045	6590	5145
955	6752		397	1132	6693	60049	6615	5146
966	6870		397	1131	6679	59918	6606	5141
976	6970		393	1121	6673	59990	6490	5139
988	7086		396	1128	6671	59884	6567	5138
1000	7204		395	1124	6661	59825	6529	5136
1012	7316		395	1124	6650	59728	6515	5131
1027	7463		394	1122	6641	59669	6483	5126
1039	7575		394	1123	6638	59628	6496	5126

TWT 90 BLOW 2

CONF C2 L36

BODY AXIS DATA AND BASE PRESSURE. (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
706	4568		1737	4983	27	5	- 4928	5524	-10443	- 2455
787	4849		1545	7084	20	1	- 4889	5561	- 3128	- 3464
808	5100		1186	6873	13	- 2	- 4913	5651	- 3862	- 3377
816	5200		1114	7183	9	- 3	- 4928	5315	- 3790	- 3540
826	5321		1022	7127	9	- 1	- 4939	5804	- 3924	- 3520
836	5438		909	7193	6	- 4	- 4974	5640	- 3830	- 3578
848	5578		1020	6925	- 15	- 11	- 5002	3338	- 3866	- 3464
857	5682		843	7081	- 4	- 8	- 5018	10619	- 3617	- 3553
867	5796		1263	6596	- 42	- 18	- 5045	4818	- 4052	- 3328
876	5893		2522	5852	98	20	- 5216	3167	- 2794	- 3052
885	5994		2904	5262	156	42	- 5336	4225	- 2995	- 2808
895	6094		5553	3821	167	50	- 6443	4476	- 3599	- 2462
905	6204		6632	3418	155	51	- 7085	4721	- 3402	- 2421
915	6309		6825	2664	41	7	- 8419	1242	- 3017	- 2243
936	6543		5965	2719	13	3	- 8473	9385	- 3434	- 2304
946	6652		5726	2970	10	6	- 8292	10615	- 3996	- 2463
955	6752		5468	3109	8	8	- 8235	10120	- 4303	- 2561
966	6870		5264	3206	5	7	- 8132	8515	- 4309	- 2607
976	6970		5175	3393	3	9	- 8052	8263	- 4477	- 2732
988	7086		4828	3508	2	10	- 7945	7970	- 4515	- 2787
1000	7204		4686	3599	1	10	- 7853	7295	- 4431	- 2826
1012	7316		4438	3727	- 3	12	- 7778	5348	- 4525	- 2899
1027	7463		4254	3877	- 5	14	- 7659	5223	- 4596	- 2969
1039	7575		4017	4003	- 3	11	- 7568	5784	- 4684	- 3030

[redacted]

TWT 90 BLOW 2

CONF C2 L36

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
706	4568		4778	2239	1065	198	15	22	4686	818
787	4849		6329	3538	1487	154	13	16	5591	1140
808	5100		6088	3404	1408	104	10	8	5591	1073
816	5200		6346	3544	1453	56	8	5	5584	1104
826	5321		6320	3450	1429	82	6	6	5459	1082
836	5438		6376	3451	1410	48	6	3	5412	1061
848	5578		6300	3051	1347	- 43	1	- 19	4843	1010
857	5682		6388	3169	1354	10	5	- 7	4962	1010
867	5796		6262	2429	1271	- 208	- 7	- 46	3879	949
876	5893		6314	860	1111	265	34	94	1362	819
885	5994		6009	122	973	592	41	156	203	708
895	6094		6037	- 2998	487	701	38	170	- 4965	279
905	6204		6128	- 4255	314	724	28	161	- 6944	121
915	6309		5464	- 4881	- 13	73	12	40	- 8931	- 171
936	6543		4953	- 4294	- 87	- 53	3	13	- 8669	- 243
946	6652		5006	- 4069	- 88	- 27	- 2	12	- 8129	- 255
955	6752		4964	- 3863	- 105	- 25	- 4	10	- 7783	- 278
966	6870		4900	- 3739	- 97	- 33	- 4	8	- 7632	- 274
976	6970		4978	- 3677	- 99	- 20	- 7	6	- 7388	- 285
988	7086		4898	- 3411	- 96	- 15	- 9	5	- 6964	- 285
1000	7204		4868	- 3347	- 81	- 13	- 9	4	- 6875	- 274
1012	7316		4853	- 3168	- 80	- 18	- 12	1	- 6527	- 279
1027	7463		4866	- 3074	- 59	- 31	- 15	- 1	- 6318	- 263
1039	7575		4869	- 2908	- 47	- 30	- 11		- 5973	- 256

NORTH AMERICAN AVIATION, INC.
SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 6

CONF C2 L38

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
687	6612		404	1155	6791	60699	6923	5180
697	6722		405	1162	6802	60748	6984	5177
706	6827		394	1133	6794	61051	6629	5177
715	6931		404	1160	6793	60687	6951	5174
725	7053		393	1127	6763	60797	6571	5170
735	7176		409	1172	6798	60595	7082	5170
743	7272		395	1135	6774	60829	6647	5168
753	7394		402	1156	6787	60707	6876	5165
764	7527		397	1140	6772	60766	6690	5163
774	7645		408	1174	6801	60628	7078	5162
783	7753		394	1134	6775	60889	6603	5160
791	7848		401	1153	6787	60759	6829	5160
800	7956		394	1134	6762	60748	6615	5158
810	8075		402	1158	6784	60692	6864	5153
820	8195		399	1147	6765	60632	6749	5153
830	8308		397	1143	6769	60727	6694	5153
842	8447		399	1152	6787	60826	6770	5150
852	8559		397	1150	6795	60958	6728	5146
862	8670		399	1154	6786	60802	6785	5146
872	8782		399	1150	6762	60602	6749	5143
882	8891		401	1154	6756	60470	6814	5143
894	9012		400	1153	6756	60499	6783	5139
905	9121		398	1145	6737	60395	6701	5138
917	9231		400	1151	6740	60365	6762	5136
930	9342		397	1142	6727	60344	6662	5134
944	9455		396	1140	6729	60386	6640	5134
960	9580		399	1145	6712	60149	6699	5128

TWT 90 BLOW 6

CONF C2 L38

BODY AXIS DATA AND BASE PRESSURE. (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB		CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4		4	4	4	4	4
687	6612		5050	5060	8	-	23	- 5742	7802	- 4446	- 2906
697	6722		5026	4976	10	-	22	- 5787	7751	- 4367	- 2879
706	6827		5788	4998	11	-	24	- 6037	7601	- 5089	- 3017
715	6931		6306	3748	19	-	12	- 6939	8779	- 5149	- 2601
725	7053		6612	3821	20	-	15	- 7097	8322	- 5529	- 2712
735	7176		5821	3584	14	-	13	- 7046	8481	- 5267	- 2525
743	7272		6135	3971	14	-	13	- 7017	8699	- 5357	- 2787
753	7394		5622	3935	15	-	14	- 6950	8400	- 5910	- 2734
764	7527		5570	4214	13	-	15	- 6862	8119	- 5364	- 2891
774	7645		5061	4027	14	-	15	- 6818	7991	- 5571	- 2746
783	7753		5299	4505	19	-	17	- 6749	8346	- 5716	- 3041
791	7848		4914	4382	18	-	15	- 6689	8218	- 5896	- 2931
800	7956		4913	4614	19	-	17	- 6633	8399	- 6069	- 3061
810	8075		4513	4487	23	-	17	- 6558	8750	- 5585	- 2942
820	8195		4384	4675	23	-	19	- 6481	8821	- 6013	- 3030
830	8308		4227	4825	25	-	21	- 6406	9021	- 6329	- 3091
842	8447		3925	4854	27	-	21	- 6326	8814	- 6292	- 3071
852	8559		3779	4975	26	-	22	- 6230	9029	- 6083	- 3100
862	8670		3542	4921	23	-	21	- 6162	9202	- 5946	- 3033
872	8782		3320	5000	22	-	21	- 6075	8781	- 5434	- 3037
882	8891		3092	4956	21	-	22	- 5995	8777	- 6043	- 2971
894	9012		2905	5006	20	-	22	- 5904	9125	- 6227	- 2956
905	9121		2704	5070	19	-	22	- 5825	9141	- 6594	- 2953
917	9231		2491	5035	20	-	24	- 5757	9402	- 6551	- 2898
930	9342		2247	5095	19	-	22	- 5697	10396	- 7118	- 2903
944	9455		2018	5088	17	-	25	- 5611	9004	- 7059	- 2855
960	9580		1708	5019	17	-	28	- 5531	8666	- 7160	- 2776

CONFIDENTIAL

NORTH AMERICAN AVIATION, INC.
SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 6

CONF C2 L38

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
687	6612		6672	- 2569	863 -	89	24	- 2	- 3850	602
697	6722		6533	- 2707	830 -	116	24	1	- 4144	572
706	6827		6786	- 3525	752 -	152	27	1	- 5196	490
715	6931		5734	- 4575	342 -	101	18	14	- 7979	137
725	7053		5807	- 4960	299 -	139	21	14	- 8542	89
735	7176		5226	- 4406	277 -	86	17	9	- 8431	81
743	7272		5614	- 4679	299 -	74	16	9	- 8334	84
753	7394		5337	- 4314	296 -	96	18	10	- 8084	85
764	7527		5491	- 4315	328 -	104	18	9	- 7859	104
774	7645		5101	- 3976	315 -	121	18	10	- 7796	102
783	7753		5543	- 4201	362 -	128	20	15	- 7579	126
791	7848		5275	- 3939	365 -	129	18	14	- 7467	136
800	7956		5428	- 3996	394 -	124	20	16	- 7361	154
810	8075		5153	- 3733	402 -	119	21	19	- 7244	169
820	8195		5243	- 3686	436 -	116	22	20	- 7031	195
830	8308		5299	- 3615	468 -	116	23	22	- 6822	221
842	8447		5210	- 3439	491 -	136	23	24	- 6600	243
852	8559		5251	- 3385	536 -	121	24	24	- 6446	284
862	8670		5117	- 3253	552 -	100	22	22	- 6358	303
872	8782		5122	- 3128	588 -	113	22	21	- 6106	337
882	8891		5014	- 2997	611 -	111	23	21	- 5977	363
894	9012		5000	- 2915	650 -	88	22	20	- 5830	400
905	9121		5012	- 2810	684 -	85	22	20	- 5608	432
917	9231		4930	- 2692	702 -	79	23	21	- 5461	453
930	9342		4952	- 2547	725 -	54	21	20	- 5143	474
944	9455		4912	- 2415	754 -	81	24	19	- 4917	504
960	9580		4821	- 2206	768 -	96	26	20	- 4576	522

TWT 90 BLOW 7

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
751	6560		391	1116	6754	60782	6503	5189
819	6627		399	1149	6786	60816	6772	5158
828	6715		399	1147	6766	60628	6758	5155
837	6819		391	1128	6767	60895	6521	5155
846	6925		406	1172	6800	60698	7010	5151
856	7046		396	1143	6779	60845	6675	5148
865	7157		405	1170	6799	60725	6970	5146
874	7265		397	1151	6800	60996	6736	5146
883	7377		399	1155	6800	60946	6782	5145
892	7484		403	1170	6819	60967	6937	5145
901	7590		394	1142	6785	60973	6619	5139
910	7698		402	1163	6781	60663	6867	5136
919	7806		399	1149	6745	60449	6727	5134
928	7916		398	1150	6760	60610	6721	5134
938	8032		403	1163	6763	60482	6868	5131
949	8163		397	1150	6773	60767	6696	5131
959	8282		400	1158	6773	60664	6792	5128
968	8384		396	1149	6770	60752	6678	5126
977	8484		402	1164	6764	60510	6846	5122
988	8605		399	1156	6756	60531	6751	5119
999	8725		402	1163	6754	60419	6837	5121
1009	8838		398	1151	6741	60431	6708	5119
1020	8950		404	1171	6767	60478	6905	5116
1031	9055		397	1151	6745	60503	6680	5114
1042	9159		398	1152	6736	60394	6695	5112
1054	9268		401	1159	6727	60217	6775	5109
1065	9367		400	1154	6708	60067	6735	5107
1075	9460		399	1152	6704	60076	6698	5104
1087	9579		397	1143	6692	60041	6613	5105

TWT 90 BLOW 7

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
751	6560		5258	5826	5	- 32	- 5758	7221	- 3871	- 3354
819	6627		5277	5582	5	- 30	- 5753	7297	- 4710	- 3211
828	6715		5384	5559	4	- 33	- 5809	7157	- 4155	- 3229
837	6819		6201	5458	6	- 29	- 6059	7245	- 5630	- 3307
846	6925		6738	4098	13	- 20	- 6911	7942	- 5213	- 2832
856	7046		7127	4178	15	- 20	- 7064	8088	- 5395	- 2951
865	7157		6563	4041	15	- 20	- 7028	8167	- 5422	- 2840
874	7265		6725	4379	12	- 22	- 6998	7937	- 5405	- 3065
883	7377		6465	4457	13	- 21	- 6945	8266	- 5428	- 3095
892	7484		6109	4463	14	- 23	- 6886	8152	- 5577	- 3073
901	7590		6256	4825	16	- 25	- 6844	8420	- 5517	- 3303
910	7698		5733	4690	16	- 26	- 6794	8581	- 5717	- 3186
919	7806		5662	4840	12	- 22	- 6756	7990	- 5537	- 3270
928	7916		5506	4985	12	- 23	- 6707	7854	- 5700	- 3343
938	8032		5149	4962	11	- 21	- 6652	7815	- 5907	- 3301
949	8163		5087	5265	11	- 22	- 6589	8433	- 6007	- 3469
959	8282		4808	5203	9	- 22	- 6528	8034	- 6047	- 3396
968	8384		4729	5332	15	- 28	- 6475	9731	- 6229	- 3452
977	8484		4407	5242	10	- 22	- 6425	8692	- 5601	- 3368
988	8605		4236	5407	10	- 22	- 6354	8422	- 6051	- 3435
999	8725		4023	5351	9	- 23	- 6271	8267	- 6044	- 3355
1009	8838		3877	5495	8	- 24	- 6233	7973	- 6592	- 3425
1020	8950		3543	5379	8	- 21	- 6151	8370	- 6502	- 3309
1031	9055		3509	5566	8	- 23	- 6095	8164	- 6364	- 3393
1042	9159		3277	5546	7	- 23	- 6021	8138	- 6570	- 3339
1054	9268		3002	5500	8	- 23	- 5953	8991	- 6426	- 3274
1065	9367		2829	5547	8	- 21	- 5876	9449	- 6911	- 3259
1075	9460		2653	5618	8	- 21	- 5812	9451	- 6321	- 3265
1087	9579		2418	5687	9	- 23	- 5743	10532	- 7210	- 3266

NORTH AMERICAN AVIATION, INC.
SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 7

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
751	6560		7478	- 2381	952	- 133	31	- 9	- 3183	653
819	6627		7233	- 2584	929	- 108	30	- 8	- 3573	642
828	6715		7214	- 2803	902	- 139	32	- 9	- 3886	615
837	6819		7371	- 3730	803	- 149	29	- 5	- 5061	517
846	6925		6220	- 4849	376	- 121	23	5	- 7796	153
856	7046		6321	- 5319	335	- 122	24	7	- 8414	106
865	7157		5908	- 4949	319	- 112	23	8	- 8376	99
874	7265		6186	- 5114	336	- 116	25	5	- 8267	99
883	7377		6086	- 4961	343	- 92	24	7	- 8152	104
892	7484		5905	- 4729	349	- 106	25	7	- 8008	110
901	7590		6204	- 4893	376	- 102	28	9	- 7887	120
910	7698		5862	- 4528	369	- 95	29	10	- 7726	122
919	7806		5907	- 4538	384	- 104	24	7	- 7683	130
928	7916		5932	- 4470	401	- 117	24	7	- 7537	141
938	8032		5757	- 4241	407	- 117	23	7	- 7367	149
949	8163		5949	- 4266	442	- 72	23	8	- 7170	171
959	8282		5763	- 4120	456	- 80	23	7	- 7150	189
968	8384		5808	- 4130	484	- 53	30	12	- 7110	211
977	8484		5617	- 3917	488	- 52	23	8	- 6974	220
988	8605		5686	- 3854	523	- 66	23	9	- 6778	249
999	8725		5538	- 3762	552	- 66	23	8	- 6793	281
1009	8838		5602	- 3720	573	- 69	24	7	- 6640	296
1020	8950		5410	- 3496	590	- 53	22	8	- 6462	320
1031	9055		5532	- 3563	632	- 60	22	8	- 6440	353
1042	9159		5453	- 3430	659	- 51	23	7	- 6291	381
1054	9268		5354	- 3256	676	- 36	22	9	- 6081	402
1065	9367		5354	- 3179	713	- 31	21	9	- 5938	437
1075	9460		5387	- 3095	745	- 29	20	9	- 5746	467
1087	9579		5415	- 2979	777	- 25	22	12	- 5501	497

TWT 90 BLOW 8

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
792	4640		393	1107	6700	60221	6519	5208
801	4732		405	1139	6711	59942	6884	5204
809	4828		399	1122	6688	59927	6686	5201
817	4925		402	1132	6707	60002	6792	5199
826	5036		398	1123	6701	60071	6674	5196
834	5131		401	1125	6670	59719	6712	5192
844	5251		393	1109	6679	60040	6497	5189
854	5372		401	1125	6666	59673	6713	5189
863	5479		409	1148	6679	59511	6980	5189
872	5583		400	1129	6691	59921	6719	5186
881	5685		402	1137	6700	59928	6793	5180
891	5797		399	1128	6696	60007	6685	5179
900	5892		402	1137	6698	59930	6771	5175
909	5985		398	1124	6673	59826	6638	5175
918	6086		399	1128	6676	59812	6675	5172
927	6190		394	1111	6655	59798	6495	5172
937	6302		400	1131	6673	59759	6701	5168
946	6401		399	1124	6656	59657	6635	5167
956	6513		398	1125	6666	59767	6628	5163
966	6627		401	1135	6672	59717	6729	5160
975	6728		395	1118	6661	59812	6536	5160
985	6840		398	1127	6659	59690	6633	5158
996	6957		399	1129	6662	59701	6647	5155
1007	7070		403	1140	6660	59543	6779	5153
1018	7182		400	1129	6648	59553	6661	5153
1029	7283		395	1116	6629	59524	6507	5148
1040	7384		400	1129	6633	59404	6654	5146
1053	7497		400	1128	6628	59381	6635	5145
1069	7602		398	1119	6599	59178	6547	5141

TWT 90 BLOW 8

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
792	4640		1961	8183	10	2	- 4634	5687	- 5110	- 3792
801	4732		1772	7682	2	1	- 4678	6511	- 4343	- 3594
809	4828		1726	7982	3	1	- 4687	6448	- 4398	- 3741
817	4925		1582	7902	3	-	- 4720	6360	- 4348	- 3730
826	5036		1467	8222	3	2	- 4753	6420	- 4257	- 3908
834	5131		1377	8066	1	2	- 4810	6649	- 4599	- 3880
844	5251		1291	8339	6	2	- 4934	5890	- 4795	- 4115
854	5372		1201	7944		4	- 5000	6793	- 4488	- 3973
863	5479		1078	7632	3	6	- 5077	6503	- 4244	- 3875
872	5583		1124	8034	- 1	7	- 5168	6978	- 4450	- 4152
881	5685		1379	7607	1	10	- 5398	6778	- 4064	- 4106
891	5797		1802	7269	2	11	- 5590	6569	- 4009	- 4063
900	5892		4170	5825	- 16		- 5628	4839	- 4501	- 3279
909	5985		6720	4748	3	6	- 6041	8456	- 4278	- 2868
918	6086		7206	4444	31	17	- 6244	4165	- 4036	- 2775
927	6190		7809	4369	55	24	- 6500	4499	- 3912	- 2840
937	6302		7821	3926	24	16	- 6940	4856	- 3205	- 2725
946	6401		7712	3630	5	18	- 7250	6481	- 3763	- 2632
956	6513		7342	3602	1	13	- 7324	6750	- 4006	- 2638
966	6627		6861	3744	- 4	13	- 7256	9178	- 4109	- 2716
975	6728		6853	3990	- 6	14	- 7233	8074	- 4493	- 2886
985	6840		6478	4082	- 6	12	- 7141	45986	- 3981	- 2915
996	6957		6264	4237	- 3	13	- 7102	9134	- 4021	- 3009
1007	7070		5911	4279	- 4	13	- 7036	8753	- 4293	- 3010
1018	7182		5854	4508	- 5	13	- 7010	25804	- 4093	- 3160
1029	7283		5797	4741	- 8	14	- 6964	-24414	- 4252	- 3302
1040	7384		5441	4753	- 9	12	- 6928	-13952	- 4457	- 3293
1053	7497		5274	4893	- 12	14	- 6881	92604	- 4382	- 3366
1069	7602		5129	5037	- 12	16	- 6837		- 4365	- 3444

TWT 90 BLOW 8

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
792	4640		7278	4223	1937	84	5	9	5802	1536
801	4732		6849	3905	1781	51		2	5701	1404
809	4828		7106	4024	1836	68	1	3	5663	1446
817	4925		7019	3960	1784	60	2	2	5642	1398
826	5036		7268	4116	1819	69		4	5663	1418
834	5131		7157	3968	1734	53	- 1	2	5544	1341
844	5251		7402	4052	1682	63	2	6	5474	1276
854	5372		7115	3733	1548	63	- 3	3	5247	1161
863	5479		6858	3519	1424	71	- 3	5	5132	1053
872	5583		7278	3582	1425	71	- 6	3	4921	1035
881	5685		7123	3005	1193	83	- 8	6	4219	822
891	5797		7118	2328	1029	76	- 8	7	3271	672
900	5892		7142	- 564	963	- 80	- 9	- 14	- 790	665
909	5985		7481	- 3426	785	- 17	- 4	5	- 4580	528
918	6086		7390	- 4130	699	116		36	- 5589	454
927	6190		7532	- 4831	618	235	5	60	- 6414	374
937	6302		7047	- 5188	430	117	- 4	28	- 7362	207
946	6401		6643	- 5341	313	128	- 14	12	- 8041	105
956	6513		6356	- 5146	266	46	- 12	6	- 8096	61
966	6627		6188	- 4774	256	19	- 13	1	- 7715	47
975	6728		6327	- 4780	255	47	- 15	-	- 7555	34
985	6840		6180	- 4521	267	1	- 14	- 1	- 7316	43
996	6957		6157	- 4391	267	13	- 13	2	- 7131	36
1007	7070		5992	- 4165	273	21	- 14	1	- 6951	42
1018	7182		6109	- 4156	278	2	- 14	-	- 6802	36
1029	7283		6241	- 4139	293	- 3	- 16	- 4	- 6631	40
1040	7384		6080	- 3903	288	- 4	- 14	- 5	- 6419	37
1053	7497		6093	- 3824	301	1	- 17	- 8	- 6277	43
1069	7602		6127	- 3761	314	- 1	- 18	- 8	- 6138	50

CONFIDENTIAL

TWT 90 BLOW 9 2ND REDUCTION

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
723	8623		394	1114	6699	60180	6549	5191
731	8708		400	1128	6701	60028	6714	5189
741	8832		394	1109	6674	59981	6504	5189
751	8956		394	1111	6678	60004	6519	5186
759	9056		401	1128	6671	59726	6710	5180
768	9169		395	1114	6666	59846	6550	5180
781	9330		400	1126	6669	59746	6675	5175
789	9430		400	1132	6690	59907	6721	5175
799	9554		398	1124	6676	59873	6626	5172
807	9650		398	1124	6680	59900	6633	5175
816	9760		395	1117	6672	59914	6543	5168
825	9869		401	1133	6666	59656	6727	5167
833	9968		396	1119	6654	59713	6564	5163
843	10090		400	1133	6677	59804	6695	5160
853	10215		400	1132	6673	59759	6695	5160
863	10331		396	1123	6680	59965	6570	5158
873	10446		398	1127	6671	59817	6629	5158
883	10560		394	1119	6663	59858	6516	5153
892	10662		399	1127	6651	59610	6630	5153
902	10777		394	1116	6650	59764	6482	5150
912	10889		401	1137	6660	59599	6724	5148
922	10994		397	1127	6658	59727	6591	5146
932	11096		398	1128	6655	59664	6618	5146

TWT 90 BLOW 9 2ND REDUCTION

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE. (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
723	8623		4908	5501	- 8	- 6	- 6348	5965	- 5161	- 3492
731	8708		4594	5376	- 7	- 9	- 6313	6213	- 5108	- 3394
741	8832		4555	5597	- 8	- 10	- 6250	6077	- 5051	- 3498
751	8956		4347	5593	- 9	- 11	- 6175	6091	- 5213	- 3454
759	9056		3983	5457	- 9	- 9	- 6126	6100	- 4795	- 3343
768	9169		3925	5653	- 8	- 10	- 6047	6186	- 5053	- 3418
781	9330		3507	5574	- 4	- 9	- 5946	6510	- 4715	- 3314
789	9430		3347	5602	- 2	- 10	- 5885	6657	- 4974	- 3297
799	9554		3126	5747	- 1	- 11	- 5812	6772	- 4899	- 3340
807	9650		2913	5753	- 2	- 11	- 5741	6727	- 5207	- 3303
816	9760		2736	5824	- 2	- 13	- 5658	6705	- 4951	- 3296
825	9869		2431	5621	- 1	- 9	- 5594	6703	- 4751	- 3144
833	9968		2325	5796	- 3	- 12	- 5514	6493	- 4998	- 3196
843	10090		2059	5679	- 3	- 9	- 5428	6221	- 4849	- 3082
853	10215		1835	5650	- 2	- 7	- 5335	6181	- 5021	- 3014
863	10331		1640	5771	- 3	- 7	- 5236	5712	- 5061	- 3021
873	10446		1399	5614	- 2	- 10	- 5137	5301	- 4876	- 2884
883	10560		1169	5731	- 1	- 12	- 5049	6520	- 5139	- 2894
892	10662		939	5533	- 1	- 11	- 4960	8617	- 5055	- 2744
902	10777		758	5636	- 1	- 13	- 4840	7704	- 5023	- 2728
912	10889		399	5361		- 13	- 4736	6758	- 5391	- 2539
922	10994		150	5465	1	- 15	- 4634	6528	- 5441	- 2532
932	11096	-	168	5427		- 18	- 4556	6805	- 5532	- 2472

TWT 9C BLOW 9 2ND REDUCTION

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN DEC=	ALPHA 2	YAW 2	CD 4	CL 4	CMS1 4	CY 4	CNS 4	CLS 4	L/D 4	CMS2 4
723	8623		5812	- 4535	571	- 93	5	- 9	- 7803	287
731	8708		5603	- 4314	565	- 110	8	- 8	- 7700	288
741	8832		5728	- 4389	610	- 101	10	- 8	- 7662	322
751	8956		5627	- 4303	640	- 114	11	- 9	- 7648	353
759	9056		5418	- 4036	635	- 123	9	- 9	- 7450	357
768	9169		5535	- 4090	691	- 117	11	- 8	- 7390	404
781	9330		5363	- 3821	716	- 112	10	- 3	- 7125	435
789	9430		5336	- 3758	744	- 113	10	- 2	- 7043	462
799	9554		5419	- 3666	786	- 99	11		- 6765	499
807	9650		5387	- 3546	815	- 116	11	-	- 6583	529
816	9760		5411	- 3482	861	- 112	13		- 6435	572
825	9869		5189	- 3252	855	- 93	9	-	- 6267	576
833	9968		5323	- 3266	917	- 83	13	- 1	- 6136	631
843	10090		5187	- 3096	935	- 51	9	- 1	- 5969	655
853	10215		5137	- 2983	970	- 36	8	- 1	- 5807	693
863	10331		5238	- 2925	1034	- 24	8	- 1	- 5584	752
873	10446		5087	- 2757	1050	- 13	11	1	- 5419	777
883	10560		5205	- 2667	1107	- 16	12	3	- 5124	829
892	10662		5033	- 2483	1106	7	11	2	- 4933	839
902	10777		5136	- 2442	1183	8	12	3	- 4756	912
912	10889		4943	- 2114	1162	39	12	5	- 4277	906
922	10994		5086	- 2004	1225	40	14	6	- 3940	965
932	11096		5127	- 1785	1240	40	16	6	- 3482	984

NORTH AMERICAN AVIATION, INC.
SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 10

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
763	10645		405	1138	6692	59771	6859	5194
773	10751		394	1107	6661	59862	6497	5191
782	10864		407	1144	6696	59750	6917	5189
792	10990		392	1108	6691	60181	6473	5189
801	11102		404	1139	6699	59875	6833	5186
810	11215		394	1116	6694	60135	6542	5180
822	11366		406	1151	6731	60091	6928	5179
831	11479		390	1106	6686	60187	6421	5177
839	11577		407	1151	6714	59921	6932	5175
848	11687		393	1113	6680	60040	6503	5174
856	11786		405	1142	6684	59716	6841	5172
864	11882		399	1129	6681	59857	6683	5170
874	12005		402	1140	6704	59977	6780	5168
884	12129		400	1133	6684	59854	6712	5167
893	12241		398	1130	6691	59986	6660	5163
902	12347		401	1134	6673	59743	6718	5160
911	12453		400	1132	6674	59778	6693	5160
920	12557		401	1133	6665	59669	6706	5158
929	12658		399	1131	6673	59787	6675	5158
939	12769		402	1139	6680	59776	6748	5155
950	12893		401	1136	6670	59716	6714	5153
961	13004		397	1124	6654	59686	6588	5151
984	13227		399	1131	6656	59638	6650	5148
997	13337		400	1135	6664	59675	6690	5146
1010	13440		398	1127	6643	59571	6590	5141
1023	13547		398	1127	6632	59461	6599	5139
1036	13656		398	1126	6626	59398	6600	5139

TWT 90 BLOW 10

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE. (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
773	10751		1197	5658	- 9	- 15	- 4956	10631	- 4536	- 2804
782	10864		933	5234	- 10	- 14	- 4885	86105	- 4400	- 2557
792	10990		771	5650	- 15	- 18	- 4787	66575	- 4586	- 2705
801	11102		465	5210	- 14	- 18	- 4726	44824	- 4292	- 2462
810	11215		247	5443	- 16	- 22	- 4638	-22324	- 4489	- 2524
822	11366		- 116	5043	- 13	- 22	- 4537	1640	- 4465	- 2288
831	11479		- 423	5440	- 15	- 27	- 4449	2343	- 4556	- 2420
839	11577		- 624	4892	- 16	- 27	- 4362	2084	- 4447	- 2134
848	11687		- 1001	5221	- 16	- 31	- 4240	4077	- 4806	- 2214
856	11786		- 1198	4836	- 15	- 28	- 4160	4531	- 4369	- 2011
864	11882		- 1507	4919	- 13	- 31	- 4026	5159	- 5015	- 1981
874	12005		- 1796	4744	- 14	- 29	- 3873	4328	- 4896	- 1838
884	12129		- 2163	4610	- 13	- 30	- 3692	4492	- 4959	- 1702
893	12241		- 2562	4514	- 13	- 29	- 3524	5346	- 5289	- 1590
902	12347		- 2923	4297	- 12	- 37	- 3385	6355	- 4882	- 1455
911	12453		- 3280	4148	- 5	- 54	- 3161	6756	- 5315	- 1311
920	12557		- 3435	4105	54	- 119	- 3049	7253	- 5422	- 1251
929	12658		- 3686	4066	82	- 135	- 2923	7341	- 5748	- 1188
939	12769		- 3923	3867	92	- 135	- 2739	7387	- 5556	- 1059
950	12893		- 4269	3698	102	- 135	- 2497	7457	- 5506	- 923
961	13004		- 4631	3531	106	- 132	- 2178	7508	- 5629	- 769
984	13227		- 5121	2943	22	- 47	- 1285	7389	- 5588	- 378
997	13337		- 5299	2667	- 8	- 22	- 773	5271	- 5485	- 206
1010	13440		- 5572	2525	- 6	- 27	- 364	6368	- 5589	- 92
1023	13547		- 5743	2332	- 19	- 15	172	18055	- 5594	40
1036	13656		- 5970	2140	56	- 64	930	7899	- 5530	199

TWT 90 BLOW 10

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
773	10751		5035	- 2844	1148	24	17	- 4	- 5647	871
782	10864		4661	- 2557	1089	1	16	- 5	- 5487	834
792	10990		5050	- 2648	1216	3	22	- 8	- 5244	942
801	11102		4697	- 2303	1139	4	22	- 7	- 4903	887
810	11215		4948	- 2280	1224	- 6	27	- 7	- 4608	962
822	11366		4666	- 1917	1165	- 25	25	- 3	- 4110	924
831	11479		5116	- 1897	1287	- 34	31	- 2	- 3707	1028
839	11577		4677	- 1565	1185	- 33	31	- 3	- 3346	954
848	11687		5110	- 1467	1309	- 58	34	- 1	- 2871	1063
856	11786		4835	- 1201	1235	- 64	32		- 2484	1009
864	11882		5036	- 1052	1305	- 79	33	3	- 2088	1076
874	12005		5006	- 822	1311	- 57	32	2	- 1642	1092
884	12129		5062	- 546	1333	- 55	32	4	- 1078	1122
893	12241		5184	- 257	1355	- 87	32	5	- 495	1151
902	12347		5197	69	1321	- 239	38	10	132	1129
911	12453		5277	350	1341	- 500	47	26	664	1158
920	12557		5337	406	1362	- 1373	65	113	762	1182
929	12658		5462	537	1383	- 1700	59	146	983	1206
939	12769		5458	741	1362	- 1744	51	156	1358	1196
950	12893		5559	997	1361	- 1711	40	164	1793	1205
961	13004		5682	1274	1380	- 1637	33	166	2242	1233
984	13227		5622	1810	1339	- 411	20	48	3219	1222
997	13337		5578	2020	1311	- 51	22	9	3621	1209
1010	13440		5702	2215	1311	- 117	23	15	3884	1217
1023	13547		5729	2365	1301	17	24	- 2	4128	1217
1036	13656		5806	2551	1315	- 535	4	85	4394	1241

TWT 9C BLOW 11

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
769	594		400	1121	6664	59688	6679	519
779	689		395	1111	6663	59819	6546	51
789	802		407	1144	6693	59718	6922	5189
799	921		397	1119	6683	59951	6612	5187
807	1016		403	1136	6699	59914	6798	5186
815	1110		396	1117	6682	59973	6581	5186
826	1239		401	1134	6694	59913	6755	5180
835	1347		397	1120	6670	59820	6613	5180
847	1485		397	1121	6680	59916	6619	5180
857	1600		398	1123	6669	59786	6633	5175
865	1691		401	1133	6682	59802	6739	5175
875	1808		402	1133	6672	59676	6762	5175
885	1924		401	1134	6694	59917	6743	5174
894	2030		402	1138	6695	59890	6779	5172
904	2143		398	1126	6687	59959	6642	5172
913	2249		398	1128	6693	60012	6650	5168
923	2361		397	1126	6692	60036	6621	5168
932	2457		401	1136	6695	59938	6741	5168
943	2574		398	1126	6674	59837	6637	5167
954	2691		400	1131	6668	59714	6695	5163
965	2810		396	1118	6649	59681	6553	5162
976	2924		398	1124	6652	59652	6605	5158
987	3031		399	1126	6647	59559	6639	5158
998	3138		397	1119	6635	59528	6556	5155
1009	3254		394	1114	6632	59581	6486	5153
1019	3356		405	1142	6647	59360	6823	5153
1030	3473		397	1119	6621	59384	6561	5151
1042	3593		398	1121	6618	59345	6573	5150

TWT 90 BLOW 11

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB		CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4		4	4	4	4	4
769	594		5212	986	11	-	2	- 5472	9010	- 3192	- 540
779	689		5253	1124	11	-		- 5455	8796	- 3754	- 613
789	802		4990	1263	5	-	1	- 5404	7459	- 3535	- 682
799	921		5214	1445	11	-	3	- 5318	8632	- 3527	- 769
807	1016		4945	1693	13	-	3	- 5294	10357	- 3888	- 896
815	1110		5084	1927	14		1	- 5281	17180	- 3800	- 1017
826	1239		4870	2094	10	-	3	- 5228	9367	- 3479	- 1095
835	1347		4895	2337	6	-	3	- 5184	7952	- 3906	- 1212
847	1485		4866	2587	7	-	4	- 5176	8172	- 3944	- 1339
857	1600		4765	2829	17		1	- 5095	-11381	- 3509	- 1442
865	1691		4579	2982	16		2	- 5051	- 4275	- 4168	- 1506
875	1808		4443	3184	4			- 4995	8580	- 3505	- 1590
885	1924		4358	3411	5	-	2	- 4943	8041	- 3780	- 1686
894	2030		4230	3592	6	-	2	- 4915	8436	- 3679	- 1765
904	2143		4245	3912	10	-	1	- 4885	65494	- 4120	- 1911
913	2249		4190	4121	14		2	- 4862	1016	- 4371	- 2004
923	2361		4024	4404	8	-	2	- 4819	9668	- 4155	- 2122
932	2457		3904	4493	12	-	1	- 4789	-87395	- 4028	- 2152
943	2574		3814	4807	8	-	1	- 4761	12249	- 4064	- 2289
954	2691		3585	5012	12			- 4730	1585	- 4000	- 2371
965	2810		3573	5364	12	-	1	- 4718	- 1554	- 4164	- 2531
976	2924		3444	5601	10	-		- 4691	2107	- 4077	- 2627
987	3031		3319	5775	7	-	2	- 4682	51085	- 4136	- 2704
998	3138		3240	6037	8	-	3	- 4658	17580	- 4406	- 2812
1009	3254		3121	6424	12		1	- 4663	3338	- 4225	- 2996
1019	3356		2804	6233	17		3	- 4643	3549	- 3875	- 2894
1030	3473		2779	6785	17			- 4641	3496	- 4406	- 3149
1042	3593		2649	7016	19		5	- 4644	3700	- 4391	- 3258

TWT 90 BLOW 11

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1		CY	CNS		CLS	L/D	CMS2
DEC=	2	2	4	4	4		4	4		4	4	4
769	594		5286	442	444	-	52	11	-	1	835	374
779	689		5350	485	468	-	58	11		1	907	391
789	802		5117	554	478	-	77	5	-		1083	396
799	921		5378	592	530	-	60	11	-	2	1101	438
807	1016		5166	794	557	-	36	13	-	1	1537	454
815	1110		5360	912	604	-	14	14		3	1701	489
826	1239		5206	1000	629	-	39	10	-	1	1921	507
835	1347		5305	1132	680	-	55	7	-	2	2135	547
847	1485		5366	1253	723	-	54	8	-	2	2335	577
857	1600		5361	1406	780		9	16		6	2623	624
865	1691		5249	1521	810		14	15		6	2898	647
875	1808		5212	1647	856	-	25	4		2	3161	684
885	1924		5239	1785	911	-	38	5	-		3407	728
894	2030		5213	1902	948	-	37	6			3648	758
904	2143		5381	2090	1023	-	2	10		3	3884	817
913	2249		5448	2205	1071		24	12		7	4048	855
923	2361		5451	2424	1136	-	28	8		1	4447	908
932	2457		5419	2463	1161		1	11		4	4545	928
943	2574		5523	2674	1234	-	15	8		2	4841	987
954	2691		5465	2847	1279		23	11		6	5211	1023
965	2810		5678	3049	1360		14	11		5	5369	1087
976	2924		5741	3205	1418		21	9		5	5583	1135
987	3031		5779	3311	1453	-	2	7		1	5728	1162
998	3138		5910	3466	1520	-	8	8		2	5865	1217
1009	3254		6087	3737	1595		35	10		7	6140	1274
1019	3356		5782	3644	1547		51	12		12	6302	1236
1030	3473		6149	3994	1669		50	14		10	6495	1333
1042	3593		6262	4128	1711		61	13		15	6592	1363

TWT 90 BLOW 14

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
657	4646		405	1131	6664	59529	6826	5201
669	4768		405	1128	6644	59343	6812	5199
677	4861		404	1130	6674	59652	6804	5199
686	4970		404	1132	6667	59565	6818	5196
695	5077		400	1117	6646	59536	6652	5194
704	5187		402	1127	6661	59588	6749	5191
713	5294		405	1134	6664	59523	6832	5191
723	5410		399	1117	6650	59606	6628	5189
733	5524		407	1140	6663	59455	6890	5187
741	5620		402	1125	6651	59511	6721	5186
751	5735		402	1128	6656	59541	6737	5182
761	5846		402	1127	6658	59576	6729	5186
771	5940		403	1133	6669	59629	6778	5180
780	6036		400	1125	6651	59550	6685	5179
788	6131		406	1141	6671	59553	6867	5177
798	6240		402	1132	6677	59742	6747	5177
817	6447		400	1126	6661	59657	6680	5175
829	6581		402	1131	6654	59529	6738	5174
839	6690		399	1121	6636	59459	6637	5172
848	6786		402	1129	6632	59313	6725	5168
858	6895		398	1117	6621	59347	6595	5168
868	6994		403	1129	6625	59248	6726	5167
879	7104		400	1122	6614	59219	6649	5165
891	7221		401	1124	6615	59216	6659	5160
902	7323		402	1127	6615	59177	6695	5160
912	7416		399	1118	6601	59146	6594	5160
923	7524		400	1120	6596	59070	6618	5158
937	7634		397	1112	6583	59051	6520	5153

TWT 90 BLOW 14

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
657	4646		1883	7601	13	2	- 4653	5819	- 3984	- 3537
669	4768		1743	7717	11	2	- 4680	5924	- 4279	- 3611
677	4861		1639	7896	10	1	- 4702	6054	- 4708	- 3713
686	4970		1507	7939	15	3	- 4746	5902	- 4234	- 3768
695	5077		1419	8203	15	2	- 4769	5925	- 4505	- 3912
704	5187		1275	8043	12	5	- 4882	6008	- 4568	- 3927
713	5294		1186	7916	11	3	- 4958	6042	- 4499	- 3925
723	5410		1134	8171	10	4	- 5023	6096	- 4774	- 4105
733	5524		1075	7777	5	1	- 5102	6366	- 4595	- 3968
741	5620		1124	7946	8	2	- 5192	6211	- 4319	- 4126
751	5735		1307	7658	3	4	- 5416	6551	- 4137	- 4148
761	5846		1836	7135	10	7	- 5611	5961	- 3658	- 4003
771	5940		5740	5002	- 39	- 6	- 5778	4570	- 4682	- 2890
780	6036		7007	4500	- 144	- 35	- 6002	4846	- 4349	- 2701
788	6131		6944	4339	- 69	- 13	- 6191	5020	- 4339	- 2686
798	6240		7496	4167	48	25	- 6515	4778	- 4377	- 2715
817	6447		7449	3447	4	16	- 7307	6460	- 5042	- 2519
829	6581		6961	3563	5	8	- 7270	5697	- 5519	- 2590
839	6690		6841	3769	3	10	- 7218	6247	- 5633	- 2720
848	6786		6506	3886	5	12	- 7162	5707	- 5054	- 2783
858	6895		6434	4129	2	11	- 7130	5998	- 5468	- 2944
868	6994		6112	4147	1	12	- 7077	6712	- 4285	- 2935
879	7104		5996	4352	- 1	12	- 7049	7161	- 4334	- 3068
891	7221		5778	4506	- 3	11	- 7003	8941	- 4353	- 3156
902	7323		5545	4602	- 3	11	- 6956	9072	- 4355	- 3201
912	7416		5456	4799	- 5	11	- 6918	10881	- 4322	- 3320
923	7524		5213	4894	- 3	14	- 6888	7618	- 4663	- 3371
937	7634		5073	5105	- 5	14	- 6823	7969	- 4501	- 3483

TWT 90 BLOW 14

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
657	4646		6806	3871	1788	129	8	11	5687	1415
669	4768		6879	3906	1785	118	6	9	5679	1407
677	4861		7008	3991	1801	123	5	8	5696	1415
686	4970		7029	3985	1766	152	7	13	5670	1379
695	5077		7251	4090	1799	158	7	13	5640	1399
704	5187		7114	3963	1665	137	4	12	5571	1274
713	5294		7031	3824	1575	137	4	11	5438	1190
723	5410		7284	3874	1567	134	3	11	5318	1170
733	5524		7003	3550	1430	99	2	5	5070	1053
741	5620		7228	3486	1391	123	2	8	4822	1005
751	5735		7153	3031	1182	111	- 1	5	4237	809
761	5846		7041	2167	999	114	- 1	13	3077	649
771	5940		7227	- 2395	879	- 169	- 14	- 37	- 3313	614
780	6036		7376	- 3865	799	- 718	- 41	- 143	- 5240	553
788	6131		7140	- 4008	700	- 375	- 22	- 67	- 5613	461
798	6240		7166	- 4713	586	230	-	54	- 6577	353
817	6447		6321	- 5236	285	109	- 13	11	- 8283	87
829	6581		6102	- 4890	265	47	- 5	8	- 8013	63
839	6690		6151	- 4814	269	42	- 8	6	- 7827	58
848	6786		6051	- 4562	266	42	- 9	9	- 7539	51
858	6895		6164	- 4521	268	21	- 10	6	- 7335	42
868	6994		5991	- 4319	271	40	- 11	5	- 7209	45
879	7104		6064	- 4258	271	17	- 12	3	- 7021	36
891	7221		6056	- 4125	276	12	- 11	1	- 6811	35
902	7323		6006	- 3982	283	14	- 11		- 6631	38
912	7416		6106	- 3940	294	13	- 12	- 2	- 6453	40
923	7524		6061	- 3794	294	46	- 14		- 6260	36
937	7634		6159	- 3724	318	44	- 15	- 1	- 6047	51

TWT 90 BLOW 16 2ND REDUCTION

CONF C2 L37

TUNNEL CONDITIONS

BN DEC=	ALPHA 2	YAW 2	MACH 3	RN 2	HO	PO 1	Q 1	TTO 1
605	2625		393	1086	6578	59140	6386	5208
615	2731		408	1130	6619	59027	6873	5204
624	2836		397	1095	6571	58941	6506	5208
634	2957		395	1089	6567	58975	6441	5208
644	3076		401	1104	6561	58722	6615	5204
653	3185		399	1103	6585	59004	6578	5204
662	3291		402	1111	6587	58924	6673	5204
671	3400		401	1111	6600	59075	6651	5203
681	3518		402	1110	6576	58820	6667	5203
690	3625		400	1106	6583	58954	6605	5201
699	3732		401	1107	6577	58864	6630	5201
708	3837		399	1101	6568	58846	6565	5201
717	3941		399	1103	6572	58881	6576	5199
727	4060		399	1103	6574	58906	6570	5199
737	4176		403	1113	6580	58834	6687	5199
746	4278		398	1101	6579	58989	6541	5199
756	4393		399	1101	6562	58814	6545	5196
766	4505		394	1090	6564	58970	6417	5196
775	4604		405	1120	6582	58771	6763	5196
785	4712		395	1092	6567	58987	6427	5194
794	4812		402	1114	6582	58877	6667	5191
805	4930		401	1111	6597	59064	6635	5194
815	5030		399	1105	6579	58962	6566	5192
826	5141		396	1095	6557	58853	6461	5189
836	5244		399	1101	6552	58715	6543	5189
848	5356		399	1099	6544	58656	6522	5189
858	5451		397	1096	6538	58643	6479	5186
870	5558		400	1104	6544	58602	6569	5186
886	5657		398	1096	6521	58470	6477	5180

NORTH AMERICAN AVIATION, INC.
SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 16 2ND REDUCTION

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
605	2625		4069	5017	7	- 13	- 4763	8588	- 4501	- 2390
615	2731		3520	4777	8	- 10	- 4743	9702	- 4392	- 2266
624	2836		3667	5271	10	- 12	- 4718	10571	- 4475	- 2487
634	2957		3665	5558	12	- 14	- 4710	23674	- 5328	- 2618
644	3076		3480	5620	9	- 13	- 4690	10644	- 5193	- 2636
653	3185		3275	5948	8	- 13	- 4670	15194	- 5050	- 2778
662	3291		3117	6065	10	- 12	- 4661	- 4004	- 5243	- 2827
671	3400		3014	6354	9	- 13	- 4652	- 292	- 5142	- 2956
681	3518		2779	6491	6	- 13	- 4642	24512	- 4998	- 3013
690	3625		2727	6793	12	- 11	- 4642	3848	- 5426	- 3153
699	3732		2545	6976	6	- 15	- 4649	19242	- 4978	- 3243
708	3837		2463	7254	8	- 11	- 4647	2731	- 5337	- 3371
717	3941		2351	7375	4	- 13	- 4637	- 798	- 5466	- 3420
727	4060		2196	7607	5	- 14	- 4639	34306	- 5276	- 3529
737	4176		2085	7599	3	- 10	- 4649	4583	- 5138	- 3533
746	4278		2035	7889	2	- 12	- 4696	4050	- 5342	- 3704
756	4393		1931	7929		- 12	- 4708	12743	- 4764	- 3733
766	4505		1849	8190	- 2	- 10	- 4752	-12164	- 5166	- 3892
775	4604		1638	7827		- 10	- 4774	7112	- 4711	- 3737
785	4712		1650	8354	- 5	- 9	- 4797	5317	- 4752	- 4007
794	4812		1487	8014	- 4	- 8	- 4825	4823	- 4980	- 3867
805	4930		1428	8248	- 6	- 8	- 4849	4873	- 4741	- 4000
815	5030		1383	8334	- 3	- 7	- 4874	5484	- 4455	- 4062
826	5141		1264	8386	- 5	- 5	- 5019	4352	- 4445	- 4209
836	5244		1224	8248	- 8	- 8	- 5067	5366	- 4222	- 4179
848	5356		1232	8312	- 4	- 4	- 5115	5174	- 4113	- 4252
858	5451		1247	8354	1	- 4	- 5183	4929	- 4119	- 4330
870	5558		1377	8134	10	- 2	- 5288	3493	- 4371	- 4302
886	5657		2228	7262	8		- 5670	4957	- 4914	- 4117

NORTH AMERICAN AVIATION, INC.
SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 16 2ND REDUCTION

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
605	2625		5869	2700	1292	- 43	12	- 8	4601	1040
615	2731		5319	2630	1219	- 29	12	- 5	4944	981
624	2836		5731	2896	1345	- 26	14	- 6	5053	1084
634	2957		5930	3025	1411	- 7	18	- 7	5102	1136
644	3076		5865	3049	1424	- 23	14	- 7	5199	1148
653	3185		5921	3323	1495	- 10	14	- 6	5612	1204
662	3291		5912	3398	1517	9	15	- 5	5748	1222
671	3400		6051	3583	1580	13	15	- 6	5921	1272
681	3518		6011	3704	1603	- 3	12	- 7	6162	1289
690	3625		6216	3866	1667	39	16	- 2	6219	1339
699	3732		6253	4005	1692	- 5	14	- 8	6405	1357
708	3837		6434	4158	1750	20	14	- 4	6462	1402
717	3941		6498	4206	1778	5	11	- 8	6473	1425
727	4060		6619	4346	1819	- 2	12	- 8	6567	1456
737	4176		6617	4280	1803	14	9	- 6	6468	1441
746	4278		6852	4407	1827	7	10	- 8	6432	1452
756	4393		6891	4371	1820	- 1	9	- 8	6344	1444
766	4505		7103	4477	1836	- 1	5	- 9	6303	1447
775	4604		6771	4254	1729	- 15	7	- 7	6282	1358
785	4712		7244	4475	1820	- 31	3	- 10	6177	1425
794	4812		6959	4243	1718	- 19	4	- 9	6097	1339
805	4930		7184	4296	1742	- 31	2	- 10	5979	1353
815	5030		7295	4260	1736	- 25	3	- 7	5840	1343
826	5141		7343	4243	1618	- 22	1	- 8	5777	1223
836	5244		7285	4057	1551	- 51	2	- 11	5569	1162
848	5356		7419	3946	1523	- 27		- 6	5319	1132
858	5451		7526	3834	1474	3	3	- 2	5095	1081
870	5558		7489	3462	1360	30	8	7	4624	976
886	5657		7288	2141	996	42	4	7	2938	648

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NORTH AMERICAN AVIATION, INC.
SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 17

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
894	- 1400		401	1096	6535	58480	6596	5218
904	- 1301		399	1089	6517	58398	6513	5215
913	- 1196		405	1107	6541	58413	6714	5215
922	- 1086		401	1092	6504	58210	6563	5215
931	- 980		399	1091	6529	58507	6521	5215
940	- 871		401	1098	6541	58550	6590	5213
949	- 765		404	1106	6543	58463	6685	5213
959	- 642		391	1071	6515	58627	6284	5213
969	- 524		402	1098	6522	58353	6597	5208
978	- 417		399	1088	6502	58262	6492	5208
987	- 310		402	1099	6518	58298	6611	5208
997	- 195		403	1102	6519	58272	6640	5206
1007	- 77		399	1092	6522	58432	6522	5208
1018	50		400	1093	6518	58378	6536	5206
1028	167		407	1115	6542	58369	6771	5204
1037	271		395	1079	6495	58317	6378	5203
1046	375		401	1095	6505	58225	6556	5201
1056	488		395	1078	6496	58347	6359	5201
1067	607		400	1092	6510	58316	6516	5201
1076	707		401	1097	6511	58283	6557	5198
1086	816		397	1083	6489	58211	6425	5201
1098	946		400	1092	6495	58174	6515	5199
1109	1057		397	1084	6489	58226	6412	5196
1120	1169		402	1097	6498	58150	6565	5194

TWT 90 BLOW 17

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
894	- 1400		4635	- 2289	20	- 1	- 4972	10369	- 3705	1138
904	- 1301		4734	- 2148	18	- 2	- 4973	9558	- 4084	1068
913	- 1196		4580	- 1902	12	- 5	- 5012	7906	- 3809	953
922	- 1086		4775	- 1741	8	- 5	- 5018	7581	- 3504	874
931	- 980		4869	- 1604	10	- 4	- 5044	7716	- 4130	809
940	- 871		4906	- 1413	12	- 4	- 5008	8163	- 3867	708
949	- 765		4824	- 1178	20	- 1	- 5012	11073	- 4057	591
959	- 642		5168	- 1047	18	- 1	- 5005	9993	- 4245	524
969	- 524		4941	- 845	13	- 4	- 4925	8148	- 3649	416
978	- 417		5093	- 647	22	- 1	- 4816	15159	- 3772	312
987	- 310		4988	- 482	18	- 3	- 4787	9865	- 4671	231
997	- 195		5027	- 323	14	- 4	- 4274	8502	- 3419	138
1007	- 77		5188	- 147	18	- 3	- 3092	9747	- 3770	45
1018	50		5083	48	26	- 2	-12588	13093	- 4039	- 61
1028	167		4884	187	16	- 4	- 6893	9378	- 3691	- 129
1037	271		5207	349	14	- 6	- 6633	8267	- 3272	- 232
1046	375		5104	540	23	- 3	- 6080	12596	- 3741	- 328
1056	488		5239	735	17	- 4	- 5841	9695	- 3809	- 429
1067	607		5072	859	23	- 2	- 5793	23107	- 3275	- 498
1076	707		5011	1054	25	- 1	- 5670	-36785	- 3808	- 598
1086	816		5093	1267	20	- 1	- 5588	41145	- 3386	- 708
1098	946		4962	1458	25	-	- 5512	- 4772	- 3419	- 804
1109	1057		5019	1645	13	- 3	- 5468	10174	- 3350	- 899
1120	1169		4838	1852	7	- 6	- 5392	7795	- 3463	- 999

TWT 90 BLOW 17

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
851	- 1464		4817	- 1072	- 167	- 35	15	- 4	- 2226	- 80
894	- 1400		5051	- 1100	- 159	- 57	19	- 6	- 2177	- 71
904	- 1301		5097	- 1027	- 126	- 66	17	- 6	- 2016	- 45
913	- 1196		4875	- 912	- 81	- 110	10	- 7	- 1870	- 12
922	- 1086		5017	- 810	- 39	- 114	7	- 6	- 1615	22
931	- 980		5071	- 752	- 4	- 112	9	- 6	- 1483	50
940	- 871		5064	- 654	28	- 91	11	- 5	- 1291	73
949	- 765		4938	- 526	67	- 47	19	- 4	- 1065	101
959	- 642		5253	- 462	111	- 59	18	- 3	- 880	137
969	- 524		4997	- 391	128	- 99	12	- 5	- 783	146
978	- 417		5127	- 275	168	- 27	22	- 2	- 537	176
987	- 310		5007	- 211	194	- 59	18	- 4	- 422	195
997	- 195		5036	- 153	213	- 87	14	- 4	- 303	206
1007	- 77		5190	- 77	251	- 62	18	- 3	- 148	235
1018	50		5083	4	272	- 42	26	- 2	8	247
1028	167		4887	44	287	- 65	16	- 3	90	257
1037	271		5217	103	315	- 102	15	- 5	197	275
1046	375		5128	205	343	- 41	23	- 1	400	295
1056	488		5282	287	384	- 61	18	- 2	543	326
1067	607		5134	318	391	- 14	23	1	620	328
1076	707		5103	429	421	6	25	2	841	349
1086	816		5221	531	461	- 6	20	1	1018	379
1098	946		5134	623	489	21	24	4	1214	398
1109	1057		5236	696	525	- 40	14	- 1	1329	425
1120	1169		5113	833	557	- 73	8	- 4	1630	448
1132	1285		5278	870	603	- 7	15	2	1648	486
1144	1398		5248	1044	647	59	21	7	1990	518
1155	1499		5105	1121	669	1	12	2	2195	534
1169	1617		5119	1261	725	9	14	3	2464	580

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CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
659	12549		396	1094	6611	59351	6501	5223
709	12626		397	1115	6703	60129	6635	5216
718	12717		402	1124	6683	59773	6774	5215
727	12822		395	1106	6681	60006	6544	5215
736	12932		404	1131	6690	59772	6845	5215
745	13041		397	1114	6687	59973	6633	5213
754	13150		401	1123	6693	59913	6740	5213
763	13258		396	1112	6694	60094	6581	5208
772	13365		405	1136	6694	59771	6878	5208
781	13475		395	1106	6677	59974	6534	5208
790	13584		405	1136	6701	59846	6874	5208
798	13678		394	1106	6680	60016	6531	5208
808	13794		406	1141	6716	59966	6905	5203
817	13904		397	1115	6677	59885	6617	5203
825	13998		401	1129	6704	60006	6756	5201
834	14108		400	1128	6717	60163	6738	5201
842	14201		400	1126	6708	60091	6720	5201
851	14306		400	1123	6693	59960	6700	5201
860	14406		398	1118	6683	59913	6645	5199
869	14506		398	1116	6668	59790	6627	5198
878	14610		399	1118	6663	59698	6658	5199
889	14727		399	1119	6670	59776	6654	5194
898	14827		397	1115	6663	59758	6608	5194
908	14934		398	1116	6655	59654	6631	5194
919	15044		398	1115	6648	59602	6613	5191
931	15163		402	1127	6662	59612	6735	5189
944	15289		399	1118	6643	59516	6646	5187
954	15381		404	1131	6650	59427	6787	5186
966	15493		399	1115	6625	59372	6614	5186
979	15610		400	1117	6620	59298	6635	5182

TWT 90 BLOW 18

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
659	12549		- 3229	4280	- 5	2	- 3369	8320	- 4799	- 1442
709	12626		- 3338	4130	- 5	2	- 3266	8669	- 4819	- 1349
718	12717		- 3510	3885	- 4	- 2	- 3157	8613	- 4471	- 1226
727	12822		- 3955	3841	- 9	-	- 2921	8539	- 4815	- 1122
736	12932		- 4071	3434	- 4	- 8	- 2665	6159	- 4240	- 915
745	13041		- 4501	3327	9	- 31	- 2297	7118	- 4354	- 764
754	13150		- 4687	3103	23	- 44	- 1946	7440	- 4350	- 604
763	13258		- 5082	2885	17	- 38	- 1347	7341	- 4436	- 389
772	13365		- 5031	2533	- 33	18	- 923	7761	- 4078	- 234
781	13475		- 5554	2433	- 20	4	- 138	7771	- 4708	- 34
790	13584		- 5325	2135	- 28	5	496	8274	- 5421	106
798	13678		- 5767	2236	- 58	28	680	7643	- 5158	152
808	13794		- 5584	1954	- 9	- 20	1280	7940	- 5590	250
817	13904		- 6085	1855	38	- 56	2113	7571	- 5733	392
825	13998		- 6122	1607	42	- 52	3166	7554	- 5815	509
834	14108		- 6426	1376	- 31	8	4955	7792	- 5135	682
842	14201		- 6599	1124	- 34	6	7258	7821	- 5394	816
851	14306		- 6791	886	2	- 14	10615	7336	- 5503	940
860	14406		- 6904	710	45	- 21	13934	8438	- 5551	990
869	14506		- 7087	632	3	- 13	14756	3885	- 5800	933
878	14610		- 7265	511	- 7	- 5	18436	7584	- 5541	941
889	14727		- 7559	234	- 3	- 6	41886	7416	- 5745	982
898	14827		- 7736	145	- 5	- 2	63366	7249	- 5485	919
908	14934		- 7853	- 31	10	- 8	-	5641	- 5540	985
919	15044		- 8077	- 141	- 1	- 5	-76656	6938	- 5225	1079
931	15163		- 7985	- 163	- 1	- 5	-55319	6931	- 4949	901
944	15289		- 8072	- 119	- 6	-	-61402	7227	- 5006	728
954	15381		- 8004	- 148	- 5	- 2	-47234	7218	- 5251	701
966	15493		- 8156	- 93	- 4	- 4	-65815	7086	- 4760	613
979	15610		- 8207	- 128	3	- 15	-46829	6707	- 5292	600

TWT 90 BLOW 18

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
659	12549		5360	144	1303	34	1	- 5	268	1118
709	12626		5305	249	1287	28	1	- 6	469	1109
718	12717		5216	449	1231	22	4	- 2	861	1065
727	12822		5465	731	1280	51	5	- 7	1338	1118
736	12932		5236	974	1200	- 57	9	2	1860	1057
745	13041		5451	1270	1253	- 335	18	27	2330	1117
754	13150		5430	1454	1248	- 397	17	46	2678	1123
763	13258		5563	1790	1291	- 347	17	38	3218	1178
772	13365		5306	1892	1207	361	10	- 36	3566	1110
781	13475		5638	2231	1307	223	12	- 17	3958	1217
790	13584		5307	2178	1256	201	17	- 24	4104	1179
798	13678		5734	2321	1346	734	23	- 59	4047	1265
808	13794		5455	2291	1261	87	20	9	4199	1193
817	13904		5811	2588	1305	- 540	8	67	4454	1244
825	13998		5722	2705	1250	- 598	2	67	4728	1201
834	14108		5864	2966	1247	329	19	- 25	5059	1209
842	14201		5893	3176	1198	356	23	- 26	5390	1173
851	14306		5961	3373	1147	- 42	7	13	5660	1134
860	14406		6007	3477	1069	- 287	- 24	43	5788	1065
869	14506		6172	3540	949	11	5	13	5736	948
878	14610		6315	3629	863	96	9		5747	869
889	14727		6486	3889	696	59	6	4	5997	716
898	14827		6656	3945	562	131	5	- 1	5927	587
908	14934		6739	4031	501	80	- 4	12	5982	534
919	15044		6956	4107	506	159	4	4	5904	546
931	15163		6948	3937	318	143	3	4	5666	358
944	15289		7131	3784	171	175	6	- 3	5307	209
954	15381		7117	3666	127	131	5	-	5151	167
966	15493		7348	3541	68	191	6	2	4819	106
979	15610		7451	3443	28	213	3	15	4620	67

TWT 90 BLOW 19

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=		2	2	3	2		1	1	1
676	14556			378	1057	6665	60390	6044	5235
730	14626			402	1124	6710	60041	6780	5228
740	14728			394	1107	6714	60316	6567	5227
750	14845			409	1144	6713	59815	7020	5225
759	14954			390	1097	6703	60338	6440	5223
768	15058			402	1128	6723	60144	6805	5223
777	15164			393	1104	6703	60245	6525	5221
787	15281			404	1131	6714	60018	6843	5221
796	15385			396	1113	6705	60168	6615	5218
805	15489			403	1130	6713	60023	6824	5218
814	15592			395	1108	6694	60106	6570	5218
823	15696			404	1134	6718	60045	6851	5215
831	15787			396	1114	6708	60196	6616	5215
840	15891			398	1117	6705	60131	6655	5215
849	15996			401	1126	6700	59957	6765	5213
858	16098			400	1121	6703	60053	6710	5215
867	16203			397	1115	6698	60080	6632	5213
877	16312			398	1115	6692	60017	6640	5213
887	16423			403	1131	6700	59897	6819	5208
896	16520			400	1124	6703	60036	6721	5208
907	16639			399	1119	6680	59861	6671	5204
916	16734			396	1110	6676	59918	6576	5206
927	16852			400	1122	6686	59894	6690	5204
937	16955			401	1124	6678	59776	6732	5201
947	17055			398	1117	6675	59840	6642	5201
957	17156			403	1131	6688	59793	6808	5201
970	17283			400	1119	6670	59754	6677	5201
982	17403			401	1121	6661	59634	6706	5199
993	17517			399	1116	6651	59606	6636	5196
1005	17625			397	1109	6635	59514	6572	5196

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TWT 90 BLOW 19

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
676	14556		- 8007	779	- 5	- 6	12042	7199	- 5369	938
730	14626		- 7197	637	- 1	- 10	14431	6989	- 4599	919
740	14728		- 7763	479	- 3	- 12	20878	7365	- 5388	1000
750	14845		- 7318	343	6	- 2	27726	5972	- 5226	952
759	14954		- 8405	166	6	2	68252	6317	- 5433	1134
768	15058		- 8027	16	7	5	-	6366	- 5375	1032
777	15164		- 8529	- 78	9	2	-23063	6084	- 4985	961
787	15281		- 8225	- 156	12	4	-57987	5732	- 5081	907
796	15384		- 8718	- 160	4		-51969	6427	- 5220	830
805	15489		- 8264	- 59		- 4	- 8736	7124	- 5163	640
814	15592		- 8717	- 92	2	- 7	-69964	4844	- 5203	645
823	15696		- 8277	- 137	- 3	- 4	-44379	7595	- 4962	609
831	15787		- 8712	- 166	- 5	- 6	-37232	-11527	- 4894	618
840	15891		- 8699	- 234	- 3	- 1	-27208	7164	- 5175	636
849	15996		- 8598	- 258	- 3	- 2	-23739	7123	- 4597	612
858	16098		- 8603	- 242	- 6	- 2	-23319	7222	- 4726	564
867	16203		- 8702	- 276	- 1	- 1	-20025	6994	- 4572	552
877	16312		- 8659	- 300	- 3	2	-17748	7075	- 4325	532
887	16423		- 8523	- 369	- 3	- 1	-14600	7096	- 4382	538
896	16520		- 8583	- 328	- 3	1	-14598	7062	- 4291	479
907	16639		- 8638	- 422	1	-	-12356	6794	- 3926	522
916	16734		- 8694	- 294	- 1	- 10	-14070	11678	- 4027	414
927	16852		- 8445	- 306	- 1	- 3	-12005	6928	- 4301	368
937	16955		- 8488	- 333	- 3	- 4	-10734	7198	- 4681	358
947	17055		- 8686	- 383	- 3	2	- 9706	7068	- 4413	372
957	17156		- 8397	- 243	- 2	- 3	-11061	7009	- 4031	269
970	17283		- 8498	170	- 2	- 7	- 1968	7956	- 4239	- 34
982	17403		- 8534	167	1	- 3	- 3059	6678	- 4985	- 51
993	17517		- 8591	557	1	- 5	- 5991	6712	- 5235	- 334
1005	17625		- 8768	493	- 3	- 7	- 6275	6118	- 5146	- 309

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CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
676	14556		7044	3886	1000	153	8	2	5517	999
73[illegible]	14626		6339	3467	932	107	7	7	5470	933
74[illegible]	14728		6790	3793	870	54	9	8	5586	882
750	14845		6416	3536	755	64 -	4	4	5512	771
759	14954		7329	4118	752	103 -	6	1	5618	782
768	15058		7000	3928	569	140 -	8 -	1	5612	604
777	15164		7468	4121	404	118 -	9	2	5518	446
787	15281		7245	3893	314	110 -	13	2	5381	358
796	15384		7755	3986	206	85 -	3	1	5140	252
805	15489		7458	3560	112 -	1	2	3	4773	152
814	15592		7921	3641	67 -	8	4	6	4596	110
823	15696		7563	3365	27	47	5	2	4450	70
831	15787		8008	3436 -	10 -	3	7	3	4291	37
840	15891		8032	3348 -	38	94	3		4168	12
849	15996		7988	3189 -	72	123	4	1	3992 -	22
858	16098		8055	3032 -	109	152	6 -		3765 -	59
867	16203		8193	2948 -	151	90	1		3598 -	99
877	16312		8199	2802 -	184	142	2 -	3	3417 -	131
887	16423		8102	2672 -	217	135	3		3298 -	162
896	16520		8215	2509 -	253	132	2 -	1	3054 -	199
907	16639		8297	2443 -	278	81 -	1		2944 -	219
916	16734		8418	2193 -	301	3	3	9	2605 -	248
927	16852		8215	1981 -	341	121	1	3	2412 -	288
937	16955		8287	1868 -	372	94	4	3	2254 -	318
947	17055		8505	1804 -	403	154	3 -	3	2121 -	346
957	17156		8270	1473 -	393	164	3	2	1782 -	344
970	17283		8453	891 -	418	17	3	6	1055 -	388
982	17403		8505	722 -	440	72 -	1	3	848 -	410
993	17517		8608	169 -	459	46 -		5	196 -	447
1005	17625		8781	82 -	488 -	46	4	7	93 -	473

TWT 90 BLOW 20 2ND REDUCTION

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
687	6531		407	515	2988	26655	3091	5153
745	6595		384	490	2992	27023	2795	5168
755	6693		411	524	3022	26900	3187	5168
765	6807		385	492	3003	27106	2820	5172
773	6904		411	522	3015	26847	3170	5172
783	7021		382	487	2998	27106	2768	5174
792	7127		412	522	3012	26801	3184	5174
802	7246		398	508	3020	27076	2999	5175
810	7341		394	501	3002	26965	2935	5175
821	7469		396	506	3017	27079	2975	5175
830	7574		398	504	2995	26853	2978	5177
840	7691		389	497	3013	27134	2881	5177
849	7791		403	512	3012	26932	3064	5177
859	7911		393	502	3016	27114	2934	5177
869	8031		402	510	3007	26910	3039	5180
879	8148		401	511	3019	27032	3038	5180
888	8250		395	504	3015	27067	2962	5180
898	8366		403	514	3024	27044	3074	5180
908	8478		405	515	3019	26968	3097	5180
918	8593		392	497	2998	26968	2899	5182
928	8706		403	513	3024	27037	3072	5186
937	8807		385	490	3005	27124	2818	5186
948	8933		399	507	3014	27016	3007	5186
958	9041		398	505	3010	26984	2993	5186
968	9151		392	500	3021	27174	2920	5186
978	9257		408	517	3019	26920	3134	5186
989	9376		386	492	3007	27130	2833	5186
1000	9491		400	509	3023	27085	3026	5186
1017	9608		402	512	3022	27030	3065	5186

TWT 90 BLOW 20 2ND REDUCTION

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB		CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4		4	4	4	4	4
687	6531		7015	3300	29	-	19	- 7214	9461	- 5427	- 2381
745	6595		7982	3886	32	-	20	- 7215	9462	- 6326	- 2804
755	6693		6776	3463	31	-	17	- 7153	12323	- 5421	- 2477
765	6807		7751	4122	25	-	19	- 7124	9243	- 6194	- 2936
773	6904		6485	3732	19	-	17	- 7049	9186	- 5262	- 2631
783	7021		7669	4524	19	-	27	- 7020	8036	- 6987	- 3176
792	7127		6263	3945	20	-	21	- 6952	8319	- 5292	- 2742
802	7246		6713	4454	28	-	23	- 6906	8568	- 6465	- 3076
810	7341		6584	4631	30	-	24	- 6840	8657	- 5921	- 3168
821	7469		6316	4678	31	-	27	- 6809	8614	- 6642	- 3185
830	7574		6041	4754	31	-	26	- 6766	8768	- 5714	- 3217
840	7691		6211	5028	31	-	28	- 6728	8473	- 6904	- 3383
849	7791		5472	4844	32	-	29	- 6671	9051	- 5834	- 3231
859	7911		5686	5198	32	-	30	- 6634	8973	- 6431	- 3448
869	8031		5150	5045	30	-	27	- 6576	9403	- 5834	- 3318
879	8148		5011	5160	30	-	26	- 6567	9986	- 6122	- 3388
888	8250		4951	5399	26	-	21	- 6478	10652	- 6282	- 3498
898	8366		4570	5200	25	-	21	- 6417	10527	- 6497	- 3337
908	8478		4318	5308	24	-	22	- 6344	12736	- 5978	- 3368
918	8593		4363	5730	27	-	28	- 6295	12805	- 6434	- 3607
928	8706		3949	5414	24	-	30	- 6216	14808	- 7020	- 3365
937	8807		4098	6035	26	-	34	- 6180	16806	- 7198	- 3730
948	8933		3534	5547	23	-	33	- 6108	13530	- 6779	- 3388
958	9041		3295	5672	19	-	27	- 6025	41182	- 6470	- 3417
968	9151		3236	5811	15	-	32	- 5975	17159	- 7617	- 3472
978	9257		2689	5382	15	-	29	- 5915	27489	- 6108	- 3183
989	9376		2857	6059	17	-	40	- 5828	10572	- 7375	- 3531
1000	9491		2377	5585	17	-	33	- 5767	15033	- 6988	- 3221
1017	9608		2065	5542	16	-	32	- 5664	16646	- 6785	- 3139

NORTH AMERICAN AVIATION, INC.
SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 20 2ND REDUCTION

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN DEC=	ALPHA 2	YAW 2	CD 4	CL 4	CMS1 4	CY 4	CNS 4	CLS 4	L/D 4	CMS2 4
687	6531		5928	- 4995	297	- 111	29	18	- 8426	110
745	6595		6802	- 5705	333	- 122	31	21	- 8387	114
755	6693		5841	- 4877	298	- 57	28	22	- 8351	104
765	6807		6719	- 5651	348	- 105	27	16	- 8411	119
773	6904		5805	- 4721	312	- 80	22	11	- 8133	107
783	7021		6853	- 5684	380	- 160	32	9	- 8293	132
792	7127		5747	- 4665	333	- 136	27	12	- 8118	119
802	7246		6270	- 5058	375	- 162	31	19	- 8067	135
810	7341		6318	- 4988	398	- 168	32	22	- 7894	149
821	7469		6179	- 4857	396	- 176	35	22	- 7860	147
830	7574		6096	- 4683	401	- 162	33	23	- 7683	149
840	7691		6304	- 4910	432	- 193	35	24	- 7789	167
849	7791		5882	- 4337	414	- 146	35	25	- 7373	161
859	7911		6178	- 4602	453	- 153	36	26	- 7450	182
869	8031		5841	- 4226	447	- 119	32	25	- 7236	185
879	8148		5845	- 4191	447	- 97	30	26	- 7170	180
888	8250		6000	- 4203	498	- 69	24	23	- 7006	221
898	8366		5673	- 3968	500	- 69	23	23	- 6994	233
908	8478		5679	- 3817	528	- 40	24	22	- 6722	258
918	8593		6026	- 3945	581	- 46	30	25	- 6547	290
928	8706		5610	- 3665	582	- 30	31	22	- 6533	308
937	8807		6169	- 3893	652	- 27	35	25	- 6311	348
948	8933		5588	- 3469	625	- 35	33	23	- 6208	347
958	9041		5648	- 3336	668	- 6	26	19	- 5906	385
968	9151		5724	- 3388	705	- 14	31	16	- 5919	415
978	9257		5256	- 2928	667	- 1	28	16	- 5571	400
989	9376		5859	- 3249	794	- 45	39	19	- 5545	494
1000	9491		5362	- 2846	750	- 21	32	20	- 5308	475
1017	9608		5292	- 2641	784	- 16	30	19	- 4991	513

[redacted]

TWT 90 BLOW 21

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
609	6538		701	1304	5066	36478	12557	5189
639	6535		711	1298	4998	35682	12619	5186
657	6597		696	1272	4956	35860	12157	5182
666	6686		714	1311	5029	35818	12766	5180
675	6788		704	1291	4994	35876	12441	5180
684	6893		711	1308	5029	35895	12704	5180
693	6994		703	1293	5007	36016	12443	5180
704	7118		708	1300	5006	35832	12574	5175
714	7233		699	1280	4965	35818	12260	5175
723	7337		712	1307	5014	35766	12686	5174
732	7438		701	1295	4971	35805	12319	5172
742	7550		714	1316	5037	35849	12804	5172
751	7652		703	1290	4979	35811	12376	5168
762	7781		707	1295	4982	35708	12477	5163
771	7886		707	1296	4988	35747	12497	5163
781	8003		704	1291	4977	35755	12404	5167
792	8135		711	1307	5003	35704	12646	5163
804	8273		707	1295	4976	35656	12467	5162
813	8378		707	1299	4986	35707	12509	5162
824	8505		706	1296	4980	35712	12461	5160
833	8603		707	1293	4964	35577	12436	5158
842	8707		706	1293	4964	35597	12418	5158
852	8821		710	1300	4972	35531	12527	5153
863	8941		706	1293	4957	35539	12407	[illegible]
875	9068		708	1297	4964	35529	12472	[illegible]
885	9174		705	1293	4958	35575	[illegible]	5150
897	9295		705	1289	4941	[illegible]	[illegible]	[illegible]
909	9414		707	1293	4942	[illegible]	[illegible]	[illegible]
923	9531		707	1291	[illegible]	[illegible]	[illegible]	5141
940	9633		704	[illegible]	[illegible]	[illegible]	[illegible]	5139

[redacted]

TWT 90 BLOW 21

CONF C2 L37

BODY AXIS DATA AND [illegible] (DELTA PB)/Q

BN	[illegible]	YAW	[illegible]	CN	CNB	CLB	XCPN	XCPY	P B	CMA
[illegible]	2	[illegible]	4	4	4	4	4	4	4	4
[illegible]	[illegible]		3595	7193	5	- 11	- 5803	8434		- 4174
[illegible]	[illegible]		3717	6408	3	- 11	- 5781	8242		- 3705
[illegible]	6597		4889	6501	6	- 12	- 5726	8120	- 4677	- 3723
666	6686		4733	6062	8	- 14	- 5746	8165	- 4410	- 3483
675	6788		5187	6260	4	- 15	- 5800	7256	- 4372	- 3631
684	6893		5418	5997	4	- 15	- 5896	7341	- 4154	- 3536
693	6994		6124	6034	- 3	- 14	- 6029	6622	- 4382	- 3638
704	7118		6735	5726	- 82	- 28	- 6278	4856	- 4351	- 3595
714	7233		6995	5811	- 38	- 25	- 6383	5600	- 4434	- 3709
723	7337		6889	5478	- 1	- 18	- 6522	6780	- 4605	- 3572
732	7432		7390	5632	- 10	- 19	- 6672	6406	- 4892	- 3758
742	7550		7300	5339	- 1	- 14	- 6804	6813	- 4996	- 3633
751	7652		7604	5540	5	- 14	- 6843	7229		- 3791
762	7781		7384	5492	15	- 13	- 6842	8024		- 3757
771	7886		7124	5515	18	- 7	- 6789	8610		- 3744
781	8003		6831	5668	20	- 11	- 6702	8691		- 3799
792	8135		6247	5526	18	- 9	- 6612	9132		- 3654
804	8273		5915	5700	19	- 10	- 6526	10429		- 3720
813	8378		5642	5732	18	- 10	- 6469	11460		- 3708
824	8505		5338	5815	17	- 8	- 6389	18748		- 3715
833	8603		5115	5829	15	- 8	- 6322	17232		- 3685
842	8707		4966	5862	14	- 6	- 6247	-14567		- 3662
852	8821		4665	5871	12	- 9	- 6174	18163		- 3625
863	3941		4488	5972	11	- 10	- 6092	10461		- 3638
875	9068		4215	5953	12	- 9	- 6009	19107		- 3577
885	9174		4020	6012	10	- 8	- 5939	-11973		- 3571
897	9295		3739	6058	9	- 7	- 5859	- 4053		- 3550
909	9414		3477	6040	8	- 7	- 5781	1599		- 3492
923	9531		3206	6066	8	- 5	- 5694	4057		- 3454
940	9633		3000	6111	9	- 6	- 5622	4213		- 3435

TWT 90 BLOW 21

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
609	6538		8037	- 271	972	- 31	12	-	- 337	616
639	6535		7375	- 706	911	- 20	11	- 2	- 957	591
657	6597		7929	- 1817	1025	- 50	14	1	- 2292	696
666	6686		7434	- 1970	954	- 63	16	2	- 2649	646
675	6788		7753	- 2448	970	- 98	15	- 2	- 3157	650
684	6893		7544	- 2900	897	- 92	16	- 1	- 3845	590
693	6994		7769	- 3682	863	- 128	12	- 8	- 4740	550
704	7118		7593	- 4527	730	- 407		- 86	- 5963	430
714	7233		7660	- 4902	690	- 306	12	- 44	- 6399	384
723	7337		7220	- 5034	592	- 169	17	- 7	- 6972	302
732	7438		7414	- 5601	542	- 214	16	- 14	- 7556	242
742	7550		6987	- 5720	460	- 166	14	- 4	- 8190	175
751	7652		7160	- 6103	458	- 146	15	2	- 8524	162
762	7781		6927	- 6058	445	- 131	16	12	- 8745	153
771	7886		6787	- 5924	459	- 105	10	17	- 8728	167
781	8003		6765	- 5746	492	- 109	14	18	- 8494	194
792	8135		6403	- 5345	505	- 80	12	16	- 8348	216
804	8272		6403	- 5146	539	- 58	12	17	- 8036	243
813	8378		6310	- 4988	557	- 39	12	17	- 7904	261
824	8505		6253	- 4817	588	- 14	10	16	- 7703	290
833	8603		6170	- 4699	615	- 14	9	14	- 7616	317
842	8707		6108	- 4660	652	7	7	14	- 7630	352
852	8821		6015	- 4479	678	- 10	9	11	- 7447	379
863	8941		6018	- 4427	723	- 29	10	11	- 7356	421
875	9068		5902	- 4236	755	- 10	9	12	- 7262	454
885	9174		5838	- 4200	790	5	7	10	- 7134	488
897	9295		5858	- 4045	827	9	6	10	- 6905	523
909	9414		5773	- 3904	857	16	6	9	- 6763	555
923	9531		5744	- 3753	896	28	4	8	- 6534	595
940	9633		5742	- 3655	933	34	5	10	- 6364	631

TWT 90 BLOW 22

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
703	8994		703	1288	5000	35940	12448	5194
759	9052		708	1318	5096	36483	12795	5191
770	9161		703	1309	5073	36462	12632	5186
785	9334		708	1313	5073	36316	12739	5189
793	9430		705	1303	5044	36189	12601	5189
802	9537		712	1321	5081	36239	12860	5186
812	9656		702	1302	5050	36343	12535	5186
820	9750		714	1323	5082	36179	12907	5186
830	9870		709	1314	5071	36271	12753	5186
840	9991		705	1304	5047	36217	12607	5186
850	10109		709	1315	5064	36198	12752	5180
858	10201		706	1308	5049	36205	12635	5180
868	10323		708	1312	5057	36195	12703	5180
878	10435		707	1308	5048	36178	12642	5180
888	10546		710	1318	5068	36196	12784	5177
898	10660		712	1320	5068	36137	12829	5177
908	10776		706	1307	5040	36144	12609	5175
917	10877		714	1322	5063	36057	12855	5174
927	10984		708	1313	5055	36174	12701	5175
938	11102		704	1304	5034	36157	12548	5174
948	11208		711	1317	5052	36059	12762	5172
958	11310		706	1306	5029	36059	12582	5168
968	11411		709	1311	5032	35980	12668	5168
978	11517		709	1311	5032	35994	12658	5167

TWT 90 BLOW 22

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE. (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
703	8994		4498	6053	- 5		- 6104	6400	- 4220	- 3694
759	9052		4714	6109	- 5	- 1	- 6050	6398	- 4969	- 3696
770	9161		4456	6101	- 5	- 2	- 5990	6399	- 4814	- 3654
785	9334		4044	6017	- 4	- 1	- 5882	6500	- 4811	- 3539
793	9430		3853	6057	- 2	- 2	- 5817	6680	- 4757	- 3523
802	9537		3611	6016	-	- 2	- 5740	6840	- 4728	- 3453
812	9656		3467	6234	-	- 3	- 5657	6854	- 4906	- 3526
820	9750		3088	5976	- 1	- 1	- 5593	6781	- 4697	- 3342
830	9870		2959	6164	- 2	- 1	- 5493	6698	- 4814	- 3386
840	9991		2723	6236	- 1	- 1	- 5405	6787	- 4783	- 3370
850	10109		2483	6132	- 2	- 1	- 5309	6560	- 4784	- 3255
858	10201		2311	6206	- 1	-	- 5236	6619	- 4818	- 3249
868	10323		2061	6151	- 2	- 2	- 5146	5371	- 4861	- 3165
878	10435		1820	6150	- 3	- 1	- 5061	15917	- 4733	- 3113
888	10546		1569	6036	- 4	- 1	- 4973	10128	- 4700	- 3002
898	10660		1308	5940	- 4	- 1	- 4878	12580	- 4735	- 2897
908	10776		1060	5982	- 4	- 2	- 4782	8733	- 4746	- 2860
917	10877		792	5760	- 1	- 4	- 4684	7316	- 4728	- 2698
927	10984		508	5819	- 3	- 7	- 4574	7573	- 4812	- 2662
938	11102		142	5784	- 1	- 9	- 4467	7066	- 4934	- 2584
948	11208	-	215	5560	- 1	- 9	- 4374	6969	- 4901	- 2432
958	11310	-	578	5565	2	- 11	- 4289	6610	- 4931	- 2387
968	11411	-	963	5430	3	- 13	- 4210	6348	- 5055	- 2286
978	11517	-	1347	5337	6	- 14	- 4120	5658	- 5042	- 2199

TWT 90 BLOW 22

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
703	8994		6057	- 4492	723	- 106	-	- 5	- 7415	414
759	9052		6065	- 4769	773	- 106	1	- 5	- 7863	460
770	9161		5973	- 4625	793	- 113	2	- 5	- 7743	483
785	9334		5771	- 4388	827	- 112	2	- 4	- 7603	522
793	9430		5751	- 4296	859	- 116	2	- 2	- 7469	553
802	9537		5652	- 4157	887	- 105	2	-	- 7355	584
812	9656		5797	- 4157	954	- 110	3		- 7171	642
820	9750		5522	- 3842	939	- 109	2	- 1	- 6958	641
830	9870		5645	- 3858	1017	- 100	2	- 1	- 6834	711
840	9991		5674	- 3756	1068	- 84	1	-	- 6619	759
850	10109		5540	- 3616	1097	- 55	1	- 1	- 6527	794
858	10201		5589	- 3552	1144	- 43	1	- 1	- 6356	839
868	10323		5516	- 3415	1176	- 11	- 1	- 2	- 6191	874
878	10435		5507	- 3287	1213	3	- 1	- 3	- 5969	913
888	10546		5399	- 3121	1231	12		- 4	- 5781	938
898	10660		5319	- 2950	1255	8	2	- 4	- 5547	967
908	10776		5374	- 2834	1306	21	3	- 3	- 5274	1017
917	10877		5199	- 2603	1300	27	5		- 5007	1023
927	10984		5301	- 2453	1360	36	7	-	- 4627	1082
938	11102		5348	- 2208	1392	58	9	2	- 4128	1117
948	11208		5233	- 1891	1369	66	9	3	- 3613	1106
958	11310		5346	- 1651	1396	71	9	6	- 3089	1135
968	11411		5349	- 1339	1382	60	11	8	- 2503	1129
978	11517		5403	- 1051	1383	47	10	11	- 1945	1136

NORTH AMERICAN AVIATION, INC.
SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 24

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
714	- 997		712	1312	5072	36161	12847	5208
776	- 929		704	1296	5031	36137	12542	5196
785	- 840		710	1303	5033	35973	12679	5194
796	- 717		709	1308	5049	36108	12701	5189
806	- 602		695	1272	4973	36019	12174	5191
816	- 487		713	1308	5032	35862	12754	5187
826	- 376		709	1307	5044	36076	12691	5187
835	- 276		696	1275	4974	35977	12208	5187
845	- 163		713	1312	5035	35872	12768	5180
855	- 51		699	1284	4986	35967	12316	5180
865	61		714	1309	5024	35778	12753	5180
876	185		708	1309	5047	36119	12680	5180
886	292		708	1306	5032	36022	12638	5177
895	390		703	1296	5010	36026	12458	5175
905	496		705	1295	4995	35856	12471	5174
915	605		707	1301	5010	35906	12550	5172
925	711		708	1304	5014	35881	12602	5172
935	817		705	1299	5004	35896	12506	5168
945	921		708	1304	5012	35876	12590	5168
956	1032		701	1286	4973	35832	12314	5167
966	1136		710	1305	5003	35756	12602	5163
976	1246		705	1297	4986	35783	12448	5160
986	1350		712	1312	5017	35778	12697	5160
995	1452		706	1300	4993	35810	12488	5158
1005	1562		706	1298	4985	35743	12459	5155
1015	1675		705	1296	4975	35715	12420	5153
1025	1788		705	1297	4976	35707	12431	5153
1035	1899		704	1293	4964	35675	12361	5150
1045	2007		703	1288	4948	35583	12304	5148
1061	2125		706	1291	4959	35416	12358	5145

TWT 90 BLOW 24

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
714	- 997		6228	- 1762	- 9	- 3	- 5509	5862	- 4235	971
776	- 929		5938	- 1613	5	- 1	- 5442	8023	- 3992	878
785	- 840		5777	- 1381	10	- 1	- 5495	12519	- 3798	759
796	- 717		5842	- 1200	1	- 2	- 5514	6975	- 3805	662
806	- 602		6110	- 1032	4	- 2	- 5507	7673	- 3719	568
816	- 487		5733	- 779	3	- 2	- 5562	7380	- 3688	433
826	- 376		5890	- 608	20	1	- 5578	-64771	- 4050	339
835	- 276		6102	- 487	18		- 5396	41558	- 3584	263
845	- 163		5736	- 304	6	- 2	- 5143	9131	- 3344	156
855	- 51		6079	- 162	10	- 2	- 4218	11291	- 3285	68
865	61		5763	6	5	- 3	-	8150	- 2937	- 27
876	185		6055	169	8	- 1	- 7753		- 3147	- 131
886	292		6047	365	4	- 1	- 6454	13688	- 3008	- 235
895	390		6151	537	3	-	- 6239	2632	- 3356	- 335
905	496		6062	709	2	-	- 6044	5185	- 3010	- 428
915	605		6057	886	- 6	- 2	- 5958	- 244	- 3253	- 528
925	711		6013	1086	- 11	- 3	- 5833	2503	- 3352	- 634
935	817		6030	1271	- 7	- 3	- 5737	- 5968	- 3301	- 729
945	921		5926	1483	-	- 1	- 5661	7064	- 3219	- 840
956	1032		6057	1708	7	1	- 5585	5560	- 2933	- 954
966	1136		5758	1852	- 2	- 2	- 5554	8692	- 2994	- 1029
976	1246		5809	2108	- 4	- 2	- 5485	11752	- 3238	- 1156
986	1350		5615	2276	7	1	- 5416	5707	- 3169	- 1233
995	1452		5654	2505	1	- 1	- 5359	6458	- 3036	- 1342
1005	1562		5522	2733	2	- 1	- 5295	6276	- 3318	- 1447
1015	1675		5448	2988	- 8	- 4	- 5243	- 1503	- 3401	- 1567
1025	1788		5289	3239		- 2	- 5187	6800	- 3129	- 1680
1035	1899		5245	3543	4	- 1	- 5119	5707	- 3200	- 1814
1045	2007		5105	3783	8	-	- 5076	5452	- 3619	- 1920
1061	2125		4855	4031	- 4	- 4	- 5022	2313	- 3266	- 2024

TWT 90 BLOW 24

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN DEC=	ALPHA 2	YAW 2	CD 4	CL 4	CMS1 4	CY 4	CNS 4	CLS 4	L/D 4	CMS2 4
714	- 997		6439	- 657	129	- 85	- 9	- 2	- 1021	185
776	- 929		6120	- 634	122	- 46	5	- 2	- 1035	172
785	- 840		5917	- 522	152	- 18	10	- 2	- 882	192
796	- 717		5946	- 461	183	- 59		- 2	- 776	214
806	- 602		6184	- 385	221	- 53	4	- 3	- 623	243
816	- 487		5778	- 290	237	- 53	3	- 2	- 501	248
826	- 376		5917	- 220	270	3	20	- 1	- 372	272
835	- 276		6119	- 192	289	- 1	18	- 1	- 314	285
845	- 163		5743	- 141	286	- 28	6	- 2	- 246	275
855	- 51		6080	- 108	316	- 23	10	- 2	- 177	296
865	61		5763	- 55	318	- 39	5	- 2	- 95	292
876	185		6058	- 26	342	-	8	-	- 43	307
886	292		6057	56	372	- 6	4	- 1	92	327
895	390		6173	117	396	8	3	-	190	343
905	496		6101	182	416	11	2	-	298	355
915	605		6117	242	437	- 9	- 6	- 2	396	368
925	711		6101	334	466	- 26	- 11	- 5	547	388
935	817		6149	402	498	- 5	- 6	- 4	654	411
945	921		6087	515	527	20	-	- 1	847	431
956	1032		6264	595	575	51	6	2	950	467
966	1136		6010	681	631	13	- 2	- 2	1134	468
976	1246		6127	806	632	8	- 3	- 3	1315	507
986	1350		5991	902	660	58	6	2	1506	527
995	1452		6101	1008	710	30	1	- 1	1653	566
1005	1562		6054	1145	754	42	3	-	1891	600
1015	1675		6078	1291	804	- 9	- 6	- 6	2124	639
1025	1788		6028	1459	854	29	1	- 1	2420	677
1035	1899		6112	1643	926	38	5		2688	735
1045	2007		6093	1801	976	55	7	2	2956	774
1061	2125		5986	1997	1027	- 9	- 2	- 5	3336	815

CONFIDENTIAL

NORTH AMERICAN AVIATION, INC.
SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 26 2ND REDUCTION

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
960	2632		702	1289	5027	36163	12487	5208
969	2726		709	1302	5046	36097	12690	5204
977	2825		703	1296	5045	36265	12555	5204
985	2925		706	1299	5040	36138	12610	5201
994	3037		706	1297	5035	36098	12599	5201
1002	3131		707	1298	5028	36007	12615	5199
1012	3251		706	1296	5027	36062	12566	5196
1020	3347		711	1310	5058	36113	12768	5194
1029	3455		706	1298	5033	36097	12583	5194
1039	3574		709	1309	5053	36122	12724	5191
1048	3679		703	1293	5016	36071	12474	5189
1057	3785		707	1298	5015	35925	12573	5187
1067	3906		708	1302	5027	35986	12626	5186
1077	4023		707	1303	5036	36085	12618	5186
1087	4140		707	1304	5032	36063	12607	5180
1097	4257		706	1302	5023	36014	12574	5177
1111	4416		708	1305	5018	35910	12607	5172
1121	4528		710	1307	5025	35911	12664	5175
1130	4627		704	1298	5011	35984	12498	5174
1140	4736		704	1297	5001	35919	12472	5168
1150	4847		707	1300	5001	35845	12527	5168
1160	4952		709	1306	5012	35857	12600	5165
1171	5056		706	1303	5007	35905	12526	5160
1183	5167		703	1294	4984	35831	12398	5160
1196	5291		705	1296	4984	35784	12434	5158
1206	5383		703	1293	4971	35744	12360	5153
1218	5493		705	1296	4972	35695	12404	5150
1231	5587		702	1288	4950	35622	12289	5148

TWT 90 BLOW 26 2ND REDUCTION

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
960	2632		4447	5084	- 10	- 9	- 4860	5485	- 4311	- 2471
969	2726		4254	5186	- 10	- 8	- 4854	5356	- 4058	- 2517
977	2825		4189	5508	- 10	- 7	- 4846	5196	- 4313	- 2669
985	2925		4039	5638	- 7	- 6	- 4849	5232	- 4078	- 2734
994	3037		3792	5854	- 12	- 6	- 4837	4921	- 3984	- 2832
1002	3131		3658	6026	- 13	- 6	- 4837	4624	- 4231	- 2915
1012	3251		3559	6355	- 16	- 6	- 4844	4114	- 4297	- 3078
1020	3347		3362	6459	- 15	- 5	- 4845	3844	- 4138	- 3130
1029	3455		3284	6799	- 14	- 3	- 4844	2185	- 4308	- 3293
1039	3574		3121	6949	- 16	- 3	- 4845	2879	- 4100	- 3367
1048	3679		3049	7299	- 16	- 3	- 4847	1645	- 4302	- 3538
1057	3785		2869	7354	- 12	- 3	- 4857	778	- 4207	- 3571
1067	3906		2741	7604	- 12	- 5	- 4879	3513	- 4271	- 3710
1077	4023		2630	7874	- 10	- 4	- 4900	2450	- 4396	- 3859
1087	4140		2494	8012	- 14	- 5	- 4916	2213	- 4267	- 3938
1097	4257		2385	8178	- 15	- 5	- 4937	2093	- 4289	- 4038
1111	4416		2219	8236	- 16	- 2	- 5038	199	- 4261	- 4149
1121	4528		2079	8267	- 17	- 2	- 5105	2463	- 4144	- 4220
1130	4627		2020	8504	- 19	- 3	- 5160	3272	- 4280	- 4388
1140	4736		1964	8519	- 14	- 2	- 5220	2326	- 4109	- 4447
1150	4847		1866	8527	- 11	-	- 5246	1647	- 4092	- 4473
1160	4952		1911	8488	- 9	1	- 5339	- 8630	- 4100	- 4532
1171	5056		2371	8012	- 10	2	- 5511	21323	- 4008	- 4415
1183	5167		2719	7605	- 8	3	- 5616	13986	- 3922	- 4270
1196	5291		2779	7507	- 9	3	- 5646	15110	- 4041	- 4239
1206	5383		2934	7454	- 8	4	- 5682	9617	- 4061	- 4235
1218	5493		2989	7385	- 7	3	- 5709	11345	- 4264	- 4216
1231	5587		4584	6481	- 8	5	- 5697	8775	- 5656	- 3692

TWT 90 BLOW 26 2ND REDUCTION

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
960	2632		6240	2585	1279	- 72	- 5	- 13	4142	1022
969	2726		6157	2661	1291	- 64	- 5	- 12	4322	1031
977	2825		6298	2869	1357	- 62	- 6	- 11	4556	1082
985	2925		6279	2946	1372	- 45	- 4	- 9	4691	1091
994	3037		6231	3134	1408	- 59	- 7	- 11	5030	1119
1002	3131		6256	3248	1434	- 59	- 8	- 12	5191	1138
1012	3251		6417	3446	1491	- 59	- 11	- 14	5369	1180
1020	3347		6367	3534	1500	- 50	- 10	- 12	5550	1185
1029	3455		6560	3737	1564	- 29	- 10	- 10	5696	1233
1039	3574		6592	3817	1584	- 41	- 11	- 12	5790	1247
1048	3679		6813	4019	1649	- 31	- 11	- 12	5899	1296
1057	3785		6778	4046	1642	- 19	- 7	- 9	5970	1288
1067	3906		6920	4178	1668	- 36	- 6	- 11	6038	1302
1077	4023		7093	4313	1698	- 24	- 6	- 10	6080	1320
1087	4140		7169	4361	1705	- 30	- 7	- 13	6083	1321
1097	4257		7288	4410	1713	- 32	- 8	- 14	6051	1322
1111	4416		7329	4362	1631	- 24	- 10	- 12	5952	1239
1121	4528		7336	4340	1573	- 38	- 10	- 13	5916	1180
1130	4627		7541	4419	1565	- 54	- 11	- 16	5860	1161
1140	4736		7597	4327	1513	- 30	- 8	- 11	5696	1109
1150	4847		7620	4257	1486	- 21	- 7	- 8	5586	1082
1160	4952		7697	4057	1403	- 6	- 7	- 7	5271	1001
1171	5056		7693	3259	1220	7	- 8	- 7	4236	838
1183	5167		7652	2583	1106	12	- 8	- 5	3376	741
1196	5291		7664	2310	1075	11	- 8	- 6	3015	714
1206	5383		7749	2030	1051	28	- 8	- 4	2620	692
1218	5493		7762	1797	1026	16	- 7	- 4	2314	670
1231	5587		7937	- 159	1024	41	- 8	- 4	- 200	702

NORTH AMERICAN AVIATION, INC.
SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 27

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
860	12615		708	1319	5038	36058	12658	5145
870	12717		705	1313	5027	36092	12541	5141
879	12822		712	1329	5055	36056	12788	5139
889	12939		704	1308	5001	35915	12473	5134
899	13056		706	1317	5023	36013	12568	5131
908	13161		703	1308	4996	35931	12418	5126
918	13278		708	1321	5019	35939	12595	5121
927	13382		710	1327	5025	35918	12660	5116
937	13496		707	1323	5020	35967	12582	5114
945	13587		706	1320	5013	35948	12538	5114
956	13710		709	1325	5010	35830	12602	5105
966	13821		709	1326	5011	35820	12620	5105
976	13934		709	1327	5014	35854	12621	5104
986	14045		706	1320	4997	35847	12492	5100
996	14155		711	1333	5020	35841	12677	5097
1006	14266		706	1324	5001	35849	12518	5095
1015	14366		706	1323	4998	35842	12501	5093
1025	14475		706	1322	4992	35808	12480	5090
1035	14584		706	1322	4983	35730	12465	5085
1046	14702		705	1324	4993	35827	12471	5083
1057	14820		705	1324	4986	35770	12458	5080
1067	14927		702	1317	4971	35787	12329	5076
1080	15057		705	1324	4978	35722	12431	5071
1090	15159		703	1319	4966	35688	12363	5071
1100	15262		704	1321	4966	35680	12372	5068
1107	15358		703	1319	4959	35654	12335	5066
1117	15459		702	1316	4949	35602	12299	5064
1129	15568		702	1315	4941	35549	12273	5059
1152	15685		699	1307	4916	35476	12132	5054

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CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE. (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
860	12615		- 4674	3819	- 1	1	- 2868	7085	- 4474	- 1095
870	12717		- 4999	3708	- 7	3	- 2659	7682	- 4488	- 986
879	12822		- 5130	3430	- 5	1	- 2342	7596	- 4362	- 803
889	12939		- 5486	3255	- 4	- 4	- 1833	7440	- 4293	- 597
899	13056		- 5678	2959	- 11	- 1	- 1209	8123	- 4310	- 358
908	13161		- 5951	2746	- 19	2	- 645	8505	- 4162	- 177
918	13278		- 6122	2455	- 16	1	75	8465	- 4215	19
927	13382		- 6308	2234	- 12	1	799	8040	- 4286	178
937	13496		- 6569	2047	- 4	- 3	1682	7548	- 4324	344
945	13587		- 6755	1928	- 2	- 4	2270	7202	- 4739	438
956	13710		- 6950	1758	- 22	- 2	3093	7789	- 4836	544
966	13821		- 7202	1494	- 20	- 2	4889	7942	- 5019	730
976	13934		- 7369	1332	- 9	- 7	6041	7698	- 5007	805
986	14045		- 7522	1212	- 49	7	6651	8219	- 4998	806
996	14155		- 7549	1088	- 13	- 1	7202	7621	- 5183	784
1006	14266		- 7912	989	- 6	- 8	8011	9159	- 5216	792
1015	14366		- 8131	785	23	- 8	11189	19308	- 5323	878
1025	14475		- 8375	619	34	- 6	14397	31066	- 5283	891
1035	14584		- 8588	441	12	- 7	21880	2785	- 5221	965
1046	14702		- 8793	295	5	- 11	31849	421	- 5218	940
1057	14820		- 8885	163	1	- 12	55314	5800	- 4944	904
1067	14927		- 9076	71	- 5	- 8	26476	7563	- 5049	893
1080	15057		- 9067	- 16	- 2	- 5	-	7037	- 4849	830
1090	15159		- 9052	- 28	- 4	- 8	-	7320	- 4634	767
1100	15262		- 9047	- 46	- 1	- 10	-55904	7004	- 4653	715
1107	15358		- 9157	- 21	- 2	- 9	-	7041	- 4725	655
1117	15459		- 9180	- 33		- 12	-	6847	- 4521	632
1129	15568		- 9160	- 48	1	- 12	-27103	6773	- 4341	613
1152	15685		- 9321	- 63	- 2	- 8	-91743	6999	- 4348	574

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CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
860	12615		5841	1522	1249	47	- -	1	2605	1090
870	12717		5975	1743	1263	90	2 -	8	2917	1111
879	12822		5869	1908	1247	74	3 -	5	3251	1109
889	12939		5998	2174	1313	66	5 -	1	3626	1184
899	13056		5940	2389	1337	84	8 -	7	4022	1223
908	13161		6005	2626	1355	116	11 -	15	4373	1252
918	13278		5959	2826	1341	100	10 -	12	4742	1252
927	13382		5979	3004	1339	103	8 -	9	5025	1261
937	13496		6091	3201	1361	65	6 -	1	5256	1293
945	13587		6191	3320	1362	63	4	1	5362	1300
956	13710		6288	3443	1340	232	17 -	13	5475	1286
966	13821		6365	3686	1330	183	16 -	12	5791	1290
976	13934		6458	3791	1284	107	11 -		5870	1252
986	14045		6572	3855	1193	363	34 -	37	5867	1168
996	14155		6588	3842	1085	175	11 -	7	5832	1065
1006	14266		6891	4013	1004	27	10	3	5823	990
1015	14366		7014	4186	936 -	18 -	14	20	5967	933
1025	14475		7197	4328	821 -	14 -	25	25	6014	826
1035	14584		7354	4457	761	29 -	6	12	6061	775
1046	14702		7537	4539	624	7	2	12	6023	646
1057	14820		7638	4543	492	13	5	11	5948	521
1067	14927		7837	4577	406	72	9	4	5841	440
1080	15057		7889	4468	284	90	4	4	5664	322
1090	15159		7949	4331	214	89	7	5	5448	252
1100	15262		8012	4202	150	79	6	8	5244	189
1107	15358		8191	4093	100	91	6	8	4996	138
1117	15459		8278	3969	68	110	5	11	4794	107
1129	15568		8328	3816	39	139	4	12	4583	79
1152	15685		8546	3722	19	130	5	7	4355	22

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CONF C2 L37

TUNNEL CONDITIONS

BN DEC=	ALPHA 2	YAW 2	MACH 3	RN 2	HO	PO 1	Q 1	TTO 1
762	4641		700	1303	5019	36190	12403	5150
771	4731		708	1320	5038	36042	12664	5143
779	4825		706	1315	5032	36093	12582	5145
789	4944		703	1305	5004	35900	12439	5141
799	5060		704	1303	4989	35844	12430	5139
808	5158		708	1318	5025	35959	12624	5136
818	5269		701	1306	5005	36041	12411	5134
827	5366		705	1308	4997	35866	12478	5134
839	5501		699	1298	4980	35936	12292	5131
848	5605		708	1322	5026	35959	12635	5126
858	5716		698	1302	4989	36018	12301	5126
867	5816		709	1322	5018	35891	12622	5121
877	5925		705	1319	5016	35994	12533	5119
888	6033		700	1306	4984	35922	12331	5116
899	6153		707	1324	5025	36007	12592	5114
910	6271		701	1311	4995	35976	12379	5112
919	6368		705	1319	5005	35912	12506	5109
930	6481		701	1310	4987	35930	12352	5105
941	6595		705	1319	5002	35893	12498	5105
952	6710		707	1326	5015	35927	12575	5104
962	6817		703	1317	4996	35925	12424	5098
975	6950		705	1318	4990	35819	12453	5097
990	7095		706	1322	4995	35828	12488	5093
1001	7201		703	1314	4971	35752	12360	5090
1016	7340		703	1312	4958	35648	12336	5085
1027	7443		706	1318	4967	35614	12426	5085
1040	7550		702	1311	4952	35638	12295	5081

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CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEG	2	2	4	4	4	4	4	4	4	4
762	4641		2210	8684	- 1	13	- 5055	6909	- 4565	- 4390
771	4731		2090	8369	1	14	- 5091	6763	- 4442	- 4260
779	4825		1908	8502	3	16	- 5125	6627	- 4567	- 4357
789	4944		1841	8503	5	16	- 5177	6497	- 4514	- 4449
799	5060		1787	8472	4	16	- 5207	6521	- 4383	- 4462
[illegible]	[illegible]		2134	7980	6	16	- 5449	6389	- 4248	- 4348
[illegible]	[illegible]		2511	7740	5	17	- 5562	6384	- 4074	- 4305
[illegible]	[illegible]		[illegible]	7400	3	15	- 5599	6457	- 4178	- 4144
839	[illegible]		[illegible]	[illegible]	3	15	- 5640	6357	- 4383	- 4176
848	5605		[illegible]	[illegible]		14	- 5664	6825	- 4260	- 4113
858	5716		2750	[illegible]	- 1	[illegible]	- 5697	7033	- 4238	- 4240
867	5816		2913	7007	- 1	19	[illegible]	6927	- 4117	- 4000
877	5925		3235	6878		[illegible]	- 5716	[illegible]	- 4007	- 3931
888	6033		4944	6279	- 7	24	- [illegible]	[illegible]	- [illegible]	- 3540
899	6150		5290	6058	- 7	22	- 5676	[illegible]	- [illegible]	- [illegible]
910	6271		5545	6166	- 8	20	- 5727	209	- [illegible]	- [illegible]
919	6368		5650	6019	- 14	22	- 5783	45835	- 4994	- 3401
930	6481		6086	6074	- 13	22	- 5904	- 4518	- 4896	- 3586
941	6595		6344	5880	- 16	21	- 6023	- 4010	- 4587	- 3541
952	6710		6535	5849	- 19	23	- 6120	- 7983	- 4559	- 3580
962	6817		6759	5885	- 22	24	- 6203	- 1596	- 4612	- 3650
975	6950		6704	5826	- 9	25	- 6281	10807	- 4595	- 3639
990	7095		6915	5761	- 8	27	- 6434	8517	- 4617	- 3707
1001	7201		7126	5767	- 5	30	- 6582	7438	- 4418	- 3796
1016	7340		7253	5737	- 25	26	- 6829		- 4246	- 3917
1027	7443		7101	5627	- 18	28	- 7014	18516	- 4345	- 3954
1040	7550		6977	5705	- 16	26	- 7065	1925	- 4681	- 4031

TWT 90 BLOW 28

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
762	4641		7815	4385	1698	109	- 10	9	5611	1271
771	4731		7507	4203	1598	108	- 10	10	5599	1188
779	4825		7614	4237	1587	129	- 10	13	5565	1171
789	4944		7726	4189	1554	138	- 9	14	5423	1134
799	5060		7681	3997	1454	128	- 9	13	5204	1040
808	5158		7579	3287	1252	118	- 9	14	4337	860
818	5269		7678	2695	1153	107	- 10	14	3510	770
827	5366		7491	2306	1085	79	- 10	11	3078	719
839	5501		7638	1997	1064	69	- 10	11	2615	697
848	5605		7492	1873	1023	60	- 11	8	2500	663
858	5716		7767	1689	1030	76	- 14	8	2174	661
867	5816		7489	1222	979	81	- 16	9	1631	630
877	5925		7565	736	978	73	- 16	9	973	633
888	6033		7903	- 1188	1059	46	- 24	5	- 1503	736
899	6153		7847	- 1761	1029	24	- 22	5	- 2245	715
910	6271		8022	- 2102	1025	- 12	- 21	2	- 2620	705
919	6368		7891	- 2377	980	4	- 26	- 3	- 3013	667
930	6481		8087	- 2923	940	- 12	- 26	- 3	- 3614	621
941	6595		7955	- 3397	866	- 15	- 26	- 6	- 4271	556
952	6710		7931	- 3744	818	- 13	- 29	- 9	- 4720	509
962	6817		7976	- 4087	785	- 26	- 30	- 12	- 5124	473
975	6950		7805	- 4239	733	23	- 27		- 5431	424
990	7095		7702	- 4656	653	50	- 28	1	- 6044	347
1001	7201		7686	- 4996	580	86	- 30	5	- 6500	273
1016	7340		7569	- 5312	446	1	- 32	- 16	- 7018	139
1027	7443		7336	- 5327	332	15	- 32	- 10	- 7261	31
1040	7550		7270	- 5326	295	- 33	- 29	- 9	- 7326	- 10

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CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
742	15395		701	1305	4997	35984	12391	5133
753	15523		702	1313	5025	36164	12469	5131
763	15640		704	1316	5022	36089	12504	5126
773	15755		700	1306	5001	36062	12358	5126
782	15859		708	1320	5020	35940	12599	5126
792	15974		702	1312	5010	36046	12439	5122
802	16094		700	1309	5003	36062	12380	5119
811	16197		704	1318	5014	36007	12507	5117
821	16312		700	1310	5000	36053	12358	5114
830	16412		700	1309	4994	36016	12343	5112
840	16522		702	1311	4992	35906	12403	5112
850	16630		703	1315	5000	35964	12425	5107
860	16740		700	1309	4991	35994	12332	5107
870	16847		701	1311	4988	35929	12356	5104
882	16971		701	1312	4990	35933	12372	5104
893	17077		700	1312	4987	35947	12332	5098
903	17175		698	1307	4971	35893	12248	5095
915	17291		697	1301	4951	35781	12178	5093
926	17401		700	1304	4950	35689	12235	5090
937	17519		697	1299	4941	35712	12148	5090
946	17615		697	1298	4931	35662	12111	5085
956	17728		695	1293	4918	35600	12048	5085
966	17836		695	1289	4902	35510	11992	5080
976	17945		696	1288	4889	35370	11998	5080
988	18060		699	1285	4861	35063	12003	5076

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CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
742	15395		- 9299	204	8	- 2	24505	6000	- 4740	501
753	15523		- 9394	133	7	- 2	37675	5936	- 4899	503
763	15640		- 9423	149	5	-	30766	6421	- 4542	458
773	15755		- 9530	77	6	- 1	62388	6160	- 4603	478
782	15859		- 9281	70	3		63827	6607	- 4225	446
792	15974		- 9428	62	3	- 2	68334	6458	- 4113	427
802	16094		- 9604	- 17	5	- 4	-	6199	- 4145	463
811	16197		- 9474	- 66	2	-	-69470	6710	- 4020	462
821	16312		- 9587	- 101	1	- 2	-44733	6801	- 4135	450
830	16412		- 9587	- 127	3	- 1	-35178	6598	- 3924	446
840	16522		- 9462	- 129	3	-	-31923	6503	- 4007	411
850	16630		- 9520	- 185	4		-22547	6507	- 3761	418
860	16740		- 9508	- 175	3	-	-22175	6615	- 3611	388
870	16847		- 9404	- 105	9	- 5	-28777	5131	- 3894	302
882	16971		- 9362	- 90	8	- 7	-27746	6181	- 3864	250
893	17077		- 9303	42	6	- 7	33615	6541	- 3871	140
903	17175		- 9301	222	7	- 13	- 180	5488	- 4069	- 4
915	17291		- 9421	347	10	- 2	- 3279	6064	- 4365	- 114
926	17401		- 9460	268	10	-	- 3371	4894	- 4468	- 90
937	17519		- 9636	359	12	7	- 4742	5996	- 4742	- 170
946	17615		- 9671	424	12		- 5155	5787	- 4606	- 219
956	17728		- 9841	335	18	- 1	- 5853	4932	- 4793	- 196
966	17836		- 9953	422	15	- 3	- 6206	16959	- 4884	- 262
976	17945		- 9919	441	20	- 6	- 6741	13221	- 4829	- 297
988	18060		- 9844	465	19	- 5	- 7275	12291	- 4861	- 338

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CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
574	15374		9803	4426	214	125	8	5	4515	244
580	15372		8817	3795	288	97	8	5	4304	306
716	15373		8323	3855	255	155	6	8	4632	285
726	15373		8294	3872	182	147	6	8	4668	213
734	15372		8264	3834	126	103	4	7	4639	156
742	15395		8445	3900	92	91	6	5	4618	124
753	15523		8586	3814	40	74	5	5	4442	76
763	15640		8695	3636	5	106	4	2	4182	40
773	15755		8837	3568	-32	82	5	3	4037	7
782	15859		8666	3322	-53	118	3	1	3834	-15
792	15974		8867	3206	-87	85	2	3	3615	-47
802	16094		9071	3153	-115	80	4	5	3475	-71
811	16197		8988	2996	-143	128	2	1	3334	-98
821	16312		9145	2880	-185	119		2	3150	-137
830	16412		9186	2746	-206	100	2	2	2989	-158
840	16522		9116	2538	-236	86	3	1	2784	-187
850	16630		9205	2435	-271	117	4	1	2645	-220
860	16740		9241	2245	-293	107	3	1	2429	-242
870	16847		9193	1983	-325	53	8	7	2157	-278
882	16971		9195	1761	-364	118	7	8	1915	-318
893	17077		9189	1451	-380	174	4	8	1579	-340
903	17175		9236	1115	-400	52	5	14	1207	-370
915	17291		9392	819	-432	123	9	3	872	-406
926	17401		9436	721	-465	51	10	1	764	-435
937	17519		9633	451	-492	141	13	5	468	-467
946	17615		9678	226	-498	114	12	1	234	-475
956	17728		9846	133	-547	93	18	2	135	-519
966	17836		9961	-137	-560	-1	15	3	-137	-535
976	17945		9923	-345	-580	-31	20	6	-348	-557
988	18060		9839	-568	-600	-36	19	5	-577	-578

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CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
637	15144		1174	1430	4555	19418	18747	5146
711	15217		1172	1438	4563	19505	18765	5131
722	15322		1172	1442	4569	19530	18786	5126
732	15431		1167	1430	4533	19514	18599	5126
740	15523		1171	1435	4542	19460	18665	5122
751	15649		1171	1442	4565	19550	18760	5122
761	15765		1172	1450	4585	19601	18851	5119
771	15880		1168	1439	4551	19558	18679	5117
781	15994		1167	1438	4544	19546	18646	5114
791	16109		1170	1442	4555	19535	18710	5114
801	16219		1167	1440	4545	19552	18648	5110
811	16332		1171	1449	4572	19569	18792	5109
821	16430		1165	1438	4536	19568	18597	5107
832	16538		1167	1444	4551	19589	18672	5104
844	16651		1166	1440	4539	19569	18612	5104
855	16766		1164	1441	4535	19594	18584	5098
865	16869		1163	1443	4537	19615	18586	5095
875	16973		1162	1440	4528	19622	18534	5095
885	17075		1159	1439	4523	19675	18491	5093
896	17184		1153	1437	4517	19782	18423	5092
906	17284		1147	1435	4510	19919	18335	5087
916	17385		1139	1434	4509	20110	18264	5087
926	17485		1129	1427	4489	20281	18090	5085
936	17590		1124	1431	4498	20440	18083	5081

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CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE. (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
637	15144		-11736	818	7	1	1100	6211	- 3682	90
711	15217		-11812	773	8	-	1139	6105	- 3769	88
722	15322		-11873	702	8	1	1274	6156	- 3716	89
732	15431		-12001	663	9	1	1223	6011	- 3692	81
740	15523		-11959	622	10	1	1238	5883	- 3602	77
751	15649		-12021	567	10	2	1356	5958	- 3583	77
761	15765		-11994	540	10	2	1362	5901	- 3464	74
771	15880		-12087	518	10	3	1396	6049	- 3372	72
781	15994		-12075	465	11	3	1807	5935	- 3283	84
791	16109		-12036	414	10	3	2287	6068	- 3203	95
801	16219		-12152	375	10	4	2635	6077	- 3159	99
811	16332		-12039	299	9	6	4207	6276	- 3078	126
821	16430		-12189	271	13	4	5010	5776	- 3057	136
832	16538		-12118	219	9	5	6638	6295	- 3000	145
844	16651		-12120	180	16	2	8421	5175	- 2981	151
855	16766		-12120	132	17	2	11904	5283	- 2853	157
865	16869		-12101	92	18	2	17171	5247	- 2830	158
875	16973		-12090	121	20	3	9362	4978	- 2842	114
885	17075		-12067	103	22	-	9048	3570	- 2941	93
896	17184		-12043	313	9	13	- 2724	6509	- 3221	- 85
906	17284		-12108	396	6	18	- 4198	6642	- 3406	- 166
916	17385		-12110	484	14	11	- 4863	6138	- 3478	- 235
926	17485		-12144	501	19	7	- 5076	5383	- 3498	- 254
936	17590		-12113	435	22	6	- 5364	4397	- 3503	- 233

TWT 90 BLOW 30

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
637	15144		10699	4892	- 41	110	- 7	3	4573	- 28
711	15217		10806	4831	- 79	106	- 7	4	4470	- 63
722	15322		10916	4723	- 130	110	- 7	3	4327	- 110
732	15431		11102	4605	- 172	103	- 8	3	4148	- 150
740	15523		11119	4446	- 202	107	- 10	3	3999	- 178
751	15649		11250	4275	- 244	111	- 10	2	3800	- 217
761	15765		11299	4062	- 264	109	- 10	2	3595	- 236
771	15880		11456	3888	- 286	121	- 10		3394	- 257
781	15994		11502	3706	- 310	115	- 11	1	3222	- 278
791	16109		11521	3508	- 331	124	- 10		3045	- 298
801	16219		11685	3359	- 361	132	- 11	- 1	2875	- 324
811	16332		11618	3169	- 379	153	- 10	- 3	2728	- 340
821	16430		11808	3036	- 397	120	- 14	-	2572	- 356
832	16538		11781	2846	- 419	159	- 10	- 3	2416	- 376
844	16651		11827	2653	- 440	95	- 16	2	2244	- 395
855	16766		11869	2461	- 467	108	- 17	2	2073	- 419
865	16869		11884	2283	- 492	110	- 18	1	1921	- 443
875	16973		11918	2037	- 516	105	- 20	1	1709	- 468
885	17075		11927	1838	- 548	67	- 22	4	1541	- 499
896	17184		11966	1399	- 581	246	- 10	- 11	1169	- 542
906	17284		12063	1115	- 609	295	- 9	- 17	925	- 574
916	17385		12092	817	- 618	198	- 15	- 9	676	- 587
926	17485		12140	591	- 627	130	- 20	- 5	487	- 597
936	17590		12113	432	- 650	89	- 22	- 4	356	- 616

NORTH AMERICAN AVIATION, INC.

SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 31

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
730	4526		1170	1428	4563	19553	18747	5158
775	4593		1172	1432	4562	19501	18759	5148
783	4675		1172	1431	4559	19485	18747	5146
792	4780		1174	1435	4569	19482	18804	5146
802	4901		1170	1427	4540	19469	18649	5141
810	4993		1174	1435	4564	19463	18781	5141
820	5109		1171	1431	4550	19472	18702	5139
829	5213		1172	1430	4548	19443	18701	5139
839	5325		1169	1426	4531	19443	18610	5136
850	5447		1174	1434	4554	19425	18737	5134
859	5548		1171	1433	4547	19461	18689	5131
869	5657		1170	1432	4542	19470	18661	5131
879	5768		1169	1432	4537	19472	18633	5126
889	5876		1169	1431	4536	19478	18623	5126
901	6005		1167	1427	4521	19449	18550	5124
911	6111		1169	1428	4524	19424	18576	5124
920	6204		1169	1430	4524	19408	18580	5119
932	6323		1168	1428	4514	19402	18529	5117
943	6423		1167	1428	4513	19424	18517	5116
953	6516		1165	1424	4496	19397	18432	5110
963	6618		1163	1422	4488	19400	18384	5109
969	6680		1166	1427	4504	19408	18471	5109
986	6857		1163	1420	4477	19373	18337	5105
996	6955		1161	1415	4461	19350	18254	5104
1007	7068		1160	1414	4454	19336	18221	5100

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NORTH AMERICAN AVIATION, INC.

SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 31

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
730	4526		5069	8930	- 6	30	- 5544	7475	- 3348	- 4951
775	4593		4973	8959	- 6	28	- 5549	7440	- 3337	- 4971
783	4675		4903	9034	- 5	28	- 5555	7416	- 3345	- 5018
792	4780		4763	9125	- 3	28	- 5557	7144	- 3322	- 5070
802	4901		4717	9315	- 3	28	- 5569	7102	- 3384	- 5187
810	4993		4645	9271	- 3	27	- 5583	7168	- 3383	- 5176
820	5109		4640	9369	- 2	27	- 5611	7065	- 3491	- 5257
829	5213		4600	9363	- 2	26	- 5635	7052	- 3513	- 5276
839	5325		4615	9396	- 3	26	- 5664	7132	- 3553	- 5322
850	5447		4623	9265	- 4	26	- 5693	7279	- 3545	- 5275
859	5548		4739	9282	- 4	27	- 5722	7312	- 3640	- 5311
869	5657		4810	9269	- 5	27	- 5745	7359	- 3732	- 5325
879	5768		4843	9231	- 4	27	- 5764	7245	- 3776	- 5321
889	5876		4940	9234	- 5	26	- 5788	7480	- 3852	- 5345
901	6005		4981	9218	- 7	28	- 5809	7677	- 3892	- 5354
911	6111		5002	9083	- 7	28	- 5838	7735	- 3818	- 5303
920	6204		5067	8896	- 8	29	- 5877	7989	- 3737	- 5228
932	6323		5417	8675	- 9	30	- 5917	8187	- 3819	- 5133
943	6423		5901	8490	- 13	32	- 5955	9351	- 3991	- 5056
953	6516		6174	8469	- 28	30	- 5984	21055	- 4119	- 5068
963	6618		6575	8478	- 13	32	- 6020	9900	- 4184	- 5104
969	6680		6669	8450	- 12	33	- 6038	9596	- 4199	- 5103
986	6857		6959	8511	- 13	33	- 6085	10228	- 4131	- 5179
996	6955		7134	8536	- 13	34	- 6109	10491	- 3966	- 5214
1007	7068		7206	8535	- 14	34	- 6119	11038	- 3722	- 5222

TWT 90 BLOW 31

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
730	4526		9911	2685	1474	96	- 25	17	2709	1023
775	4593		9896	2659	1468	95	- 24	16	2687	1016
783	4675		9939	2619	1468	95	- 24	15	2635	1013
792	4780		9959	2601	1470	114	- 23	16	2612	1011
802	4901		10125	2549	1481	116	- 23	16	2518	1013
810	4993		10085	2413	1458	101	- 23	15	2393	993
820	5109		10205	2275	1444	108	- 22	15	2229	974
829	5213		10215	2117	1418	106	- 22	14	2072	949
839	5325		10290	1924	1396	112	- 22	13	1870	924
850	5447		10227	1622	1354	97	- 24	12	1586	889
859	5548		10333	1356	1335	96	- 25	12	1312	869
869	5657		10386	1092	1317	94	- 25	11	1051	851
879	5768		10390	842	1297	100	- 25	11	810	833
889	5876		10457	565	1281	88	- 25	9	540	816
901	6005		10474	287	1263	81	- 28	8	274	799
911	6111		10369	10	1223	78	- 28	8	9	765
920	6204		10234	- 304	1174	74	- 29	6	- 297	725
932	6323		10185	- 929	1137	65	- 30	6	- 913	697
943	6423		10212	- 1622	1116	51	- 34	2	- 1589	683
953	6516		10279	- 2046	1106	20	- 39	- 13	- 1990	672
963	6618		10411	- 2590	1099	42	- 34	1	- 2488	664
969	6680		10394	- 2801	1087	44	- 35	2	- 2695	653
986	6857		10465	- 3367	1070	39	- 35	-	- 3218	631
996	6955		10491	- 3702	1062	34	- 36		- 3529	621
1007	7068		10439	- 3976	1057	33	- 37	- 1	- 3809	616

TWT 90 BLOW 32

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
803	12562		1193	1420	4569	19012	18944	5189
862	12639		1190	1418	4552	19010	18851	5180
870	12721		1194	1427	4581	19037	19002	5180
881	12852		1193	1427	4578	19045	18982	5177
891	12972		1194	1424	4564	18973	18929	5175
901	13094		1192	1425	4570	19034	18940	5175
912	13225		1188	1415	4535	18982	18768	5174
920	13320		1195	1426	4568	18968	18954	5172
930	13436		1193	1425	4561	18994	18909	5170
939	13541		1191	1421	4549	18981	18844	5168
949	13655		1191	1420	4544	18960	18825	5167
960	13782		1191	1424	4551	18984	18854	5163
971	13907		1194	1429	4563	18974	18922	5160
981	14020		1192	1424	4548	18946	18852	5160
990	14124		1191	1421	4536	18933	18789	5158
1000	14238		1193	1425	4549	18924	18864	5158
1010	14349		1189	1421	4531	18951	18759	5153
1020	14455		1190	1424	4539	18968	18797	5153
1031	14565		1188	1421	4527	18964	18735	5150
1043	14675		1186	1417	4512	18938	18661	5146
1053	14768		1187	1418	4515	18939	18678	5148
1063	14872		1186	1415	4504	18928	18622	5146
1074	14987		1184	1413	4497	18936	18581	5145
1084	15092		1181	1412	4490	18971	18530	5141
1093	15185		1178	1409	4478	19008	18456	5139
1104	15296		1172	1407	4471	19116	18384	5136
1115	15408		1162	1402	4454	19283	18237	5134

TWT 90 BLOW 32

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE. (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
803	12562		- 7291	5679	13	4	- 4141	4056		- 2352
862	12639		- 7520	5570	13	5	- 4064	4197		- 2263
870	12721		- 7719	5372	10	5	- 3950	5068		- 2122
881	12852		- 8150	5178	7	6	- 3777	6016		- 1956
891	12972		- 8496	4940	7	6	- 3597	6008		- 1777
901	13094		- 8868	4703	9	7	- 3410	5976		- 1604
912	13225		- 9267	4446	12	7	- 3192	5774		- 1419
920	13320		- 9335	4174	12	7	- 3015	5878		- 1258
930	13436		- 9639	3946	12	7	- 2786	5877		- 1099
939	13541		- 9866	3764	20	6	- 2542	5388		- 957
949	13655		-10060	3473	22	4	- 2295	5192		- 797
960	13782		-10307	3194	11	5	- 2025	5899		- 647
971	13907		-10495	2901	4	6	- 1710	6542		- 496
981	14020		-10675	2648	1	5	- 1365	6744		- 362
990	14124		-10888	2379		5	- 985	6854		- 234
1000	14238		-11005	2085	3	3	- 510	6517		- 106
1010	14349		-11339	1898	6	3	- 143	6279		- 27
1020	14455		-11491	1712	4	1	106	6483		18
1031	14565		-11611	1505	- 1	2	468	6971	- 4336	70
1043	14675		-11654	1300	4	1	894	6500	- 4219	116
1053	14768		-11606	1168	11	- 4	1083	4816	- 4042	126
1063	14872		-11502	1070	30	- 16	1106	9432	- 3895	118
1074	14987		-11580	913	28	- 15	1679	8805	- 3788	153
1084	15092		-11690	772	21	- 13	2187	8831	- 3728	169
1093	15185		-11741	674	16	- 9	2500	9821	- 3642	168
1104	15296		-11797	594	11	- 4	2706	2777	- 3606	161
1115	15408		-11850	549	8	- 2	2903	5576	- 3559	159

TWT 90 BLOW 32

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN DEC=	ALPHA 2	YAW 2	CD 4	CL 4	CMS1 4	CY 4	CNS 4	CLS 4	L/D 4	CMS2 4
803	12562		8863	2619	1114	46	- 10	8	2955	880
862	12639		8945	2749	1114	48	- 11	7	3073	886
870	12721		8946	2899	1108	58	- 10	5	3240	890
881	12852		9127	3151	1115	81	- 9	2	3453	908
891	12972		9229	3377	1111	88	- 9	2	3660	916
901	13094		9363	3618	1099	103	- 11	2	3864	917
912	13225		9522	3870	1084	107	- 13	4	4064	916
920	13320		9434	3948	1054	118	- 13	4	4185	899
930	13436		9561	4132	1039	124	- 14	4	4322	895
939	13541		9668	4246	1043	136	- 19	10	4391	909
949	13655		9692	4398	992	132	- 19	12	4537	872
960	13782		9783	4554	936	115	- 11	4	4655	830
971	13907		9829	4684	875	121	- 7	- 2	4766	783
981	14020		9896	4798	825	123	- 4	- 3	4848	746
990	14124		9980	4960	755	124	- 3	- 4	4970	689
1000	14238		9989	5066	675	98	- 5	- 1	5071	623
1010	14349		10243	5221	606	105	- 6	2	5098	564
1020	14455		10353	5270	514	107	- 4	1	5091	482
1031	14565		10435	5308	418	114		- 2	5087	396
1043	14675		10459	5303	320	102	- 4	1	5070	307
1053	14768		10432	5217	243	55	- 8	9	5001	236
1063	14872		10385	5058	174	- 117	- 17	30	4870	171
1074	14987		10473	5024	96	- 144	- 17	27	4797	101
1084	15092		10591	5008	8	- 105	- 12	22	4728	20
1093	15185		10670	4945	- 62	- 54	- 10	16	4634	- 45
1104	15296		10778	4834	- 128	28	- 8	9	4485	- 107
1115	15408		10898	4686	- 163	65	- 7	6	4300	- 140

TWT 90 BLOW 33 2ND REDUCTION

CONF C2 L37

TUNNEL CONDITIONS

BN DEC=	ALPHA 2	YAW 2	MACH 3	RN 2	HO	PO 1	Q 1	TTO 1
705	2533		1189	1432	4613	19292	19097	5194
761	2604		1187	1423	4576	19196	18925	5186
771	2708		1187	1429	4590	19241	18992	5182
780	2818		1184	1421	4563	19202	18857	5180
788	2911		1181	1407	4518	19089	18649	5180
797	3022		1190	1423	4567	19074	18913	5177
805	3117		1192	1431	4590	19113	19026	5177
815	3240		1191	1430	4587	19134	19003	5175
825	3357		1190	1425	4568	19075	18922	5174
835	3476		1195	1434	4594	19077	19059	5174
844	3580		1188	1426	4568	19125	18908	5172
853	3694		1191	1424	4559	19025	18888	5168
863	3810		1191	1420	4545	18961	18828	5168
873	3925		1192	1424	4553	18967	18872	5165
883	4040		1192	1425	4553	18968	18871	5162
893	4155		1191	1423	4543	18954	18824	5160
902	4256		1192	1422	4540	18910	18818	5160
912	4362		1190	1421	4537	18950	18792	5158
1120	4477		1189	1422	4536	18962	18781	5155
923	4580		1189	1419	4525	18927	18731	5153
935	4689		1188	1417	4517	18931	18690	5153
950	4829		1187	1417	4516	18943	18677	5150
960	4932		1186	1419	4516	18959	18677	5146
970	5035		1182	1413	4500	18986	18579	5146
980	5139		1179	1411	4490	19035	18512	5145
990	5238		1174	1410	4485	19128	18454	5141
1000	5339		1165	1403	4463	19253	18299	5139

TWT 90 BLOW 33 2ND REDUCTION

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
705	2533		7662	4669	8	- 6	- 5183	9217	- 3462	- 2420
761	2604		7582	4825	8	- 6	- 5195	9913	- 3458	- 2506
771	2708		7453	5082	3	- 7	- 5202	7528	- 3506	- 2644
780	2818		7353	5408	2	- 8	- 5218	7354	- 3599	- 2822
788	2911		7236	5666	- 3	- 8	- 5248	6421	- 3582	- 2974
797	3022		6953	5846	- 8	- 7	- 5274	5664	- 3561	- 3083
805	3117		6823	6078	- 11	- 6	- 5289	5361	- 3615	- 3215
815	3240		6674	6395	- 15	- 4	- 5311	4652	- 3677	- 3397
825	3357		6488	6666	- 17	- 2	- 5330	3830	- 3644	- 3553
835	3476		6261	6883	- 21	- 1	- 5359	3211	- 3618	- 3689
844	3580		6164	7202	- 20	- 1	- 5393	3193	- 3629	- 3884
853	3694		5950	7424	- 19	-	- 5418	2976	- 3599	- 4022
863	3810		5778	7689	- 17	1	- 5446	2753	- 3624	- 4187
873	3925		5604	7941	- 19	1	- 5472	2536	- 3648	- 4346
883	4040		5435	8176	- 19	1	- 5503	1890	- 3649	- 4499
893	4155		5322	8407	- 20	2	- 5527	1157	- 3676	- 4647
902	4256		5220	8577	- 21	2	- 5546	679	- 3705	- 4757
912	4362		5188	8807	- 20	3	- 5565	- 1358	- 3828	- 4901
1120	4477		5094	8999	- 16	4	- 5573	-36444	- 3918	- 5015
923	4580		5012	9124	- 11	4	- 5572	- 4325	- 3924	- 5084
935	4689		4976	9224	- 16	2	- 5567	2253	- 3958	- 5135
950	4829		4927	9248	- 22	1	- 5595	1948	- 3955	- 5174
960	4932		4929	9262	- 18	2	- 5627	366	- 3890	- 5212
970	5035		4932	9354	- 17	3	- 5657	- 3874	- 3925	- 5292
980	5139		4933	9405	- 17	3	- 5684	- 9680	- 3943	- 5346
990	5238		4980	9348	- 15	6	- 5721	12199	- 3987	- 5348
1000	5339		5030	9339	- 8	6	- 5747	8849	- 4028	- 5367

TWT 90 BLOW 33 2ND REDUCTION

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1		CY		CNS		CLS	L/D	CMS2
DEC=	2	2	4	4	4		4		4		4	4	4
705	2533		8922	942	1235	-	33		9	-	2	1056	983
761	2604		8931	1007	1251	-	27		10	-	2	1128	992
771	2708		8950	1132	1282	-	40		5	-	5	1265	1012
780	2818		9035	1295	1322	-	48		6	-	6	1433	1037
788	2911		9079	1430	1340	-	61		1	-	8	1575	1044
797	3022		8950	1551	1337	-	71	-	4	-	11	1733	1034
805	3117		8984	1669	1357	-	74	-	6	-	11	1857	1044
815	3240		9062	1824	1384	-	66	-	10	-	12	2013	1057
825	3357		9092	1966	1403	-	55	-	13	-	11	2163	1063
835	3476		9068	2086	1402	-	58	-	17	-	13	2300	1054
844	3580		9212	2235	1420	-	53	-	15	-	12	2426	1058
853	3694		9217	2358	1421	-	49	-	15	-	11	2558	1049
863	3810		9291	2486	1428	-	41	-	14	-	10	2676	1045
873	3925		9364	2603	1432	-	45	-	16	-	11	2780	1038
883	4040		9438	2703	1430	-	39	-	16	-	12	2864	1026
893	4155		9560	2761	1434	-	36	-	17	-	12	2889	1020
902	4256		9646	2788	1435	-	34	-	17	-	13	2890	1013
912	4362		9832	2796	1446	-	24	-	16	-	12	2844	1014
1120	4477		9954	2802	1458	-	4	-	15	-	9	2815	1017
923	4580		10036	2768	1470	-	10	-	11	-	5	2758	1024
935	4689		10135	2671	1486	-	34	-	12	-	10	2636	1035
950	4829		10182	2474	1460	-	44	-	15	-	15	2430	1008
960	4932		10237	2300	1433	-	28	-	14	-	12	2247	980
970	5035		10350	2172	1416	-	15	-	13	-	11	2098	959
980	5139		10427	2013	1396	-	10	-	13	-	11	1931	938
990	5238		10444	1762	1358		27	-	13	-	8	1688	902
1000	5339		10496	1530	1336		40	-	10	-	3	1458	880

NORTH AMERICAN AVIATION, INC.

SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 35

CONF C2 L37

TUNNEL CONDITIONS

BN DEC=	ALPHA 2	YAW 2	MACH 3	RN 2	HO	PO 1	Q 1	TTO 1
688	- 936		1185	1402	4550	19130	18805	5221
742	- 861		1186	1405	4551	19112	18818	5213
753	- 763		1185	1406	4554	19138	18827	5213
762	- 673		1188	1413	4568	19125	18904	5208
773	- 552		1189	1413	4570	19125	18918	5208
782	- 456		1182	1403	4537	19153	18731	5206
791	- 357		1187	1409	4552	19089	18830	5203
802	- 239		1187	1410	4553	19097	18833	5203
813	- 118		1187	1408	4545	19056	18804	5201
824	1		1191	1413	4559	19034	18885	5201
835	117		1187	1406	4534	19019	18755	5198
846	236		1188	1410	4546	19031	18817	5196
855	331		1186	1402	4521	18981	18698	5196
866	449		1187	1405	4528	18993	18729	5194
876	557		1185	1402	4513	18970	18658	5189
887	676		1189	1410	4536	18986	18776	5189
897	784		1187	1408	4532	19019	18746	5189
907	889		1186	1405	4519	18974	18687	5186
918	1007		1186	1405	4517	18966	18677	5186
929	1126		1182	1401	4500	18993	18577	5180
940	1236		1178	1396	4484	19028	18481	5179
950	1341		1171	1394	4476	19154	18399	5177
961	1455		1164	1392	4471	19316	18318	5175

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CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
688	- 936		9593	- 1455	-	- 3	- 5462	6820	- 3351	795
742	- 861		9552	- 1347	- 6	- 4	- 5488	5968	- 3303	739
753	- 763		9611	- 1192	- 4	- 3	- 5497	6310	- 3325	655
762	- 673		9595	- 1037	- 7	- 4	- 5549	5795	- 3294	576
773	- 552		9662	- 853	- 6	- 3	- 5610	5884	- 3328	479
782	- 456		9782	- 710	- 13	- 4	- 5622	4987	- 3417	399
791	- 357		9717	- 544	2	- 2	- 5746	7495	- 3354	312
802	- 239		9678	- 368	- 11	- 3	- 5717	4790	- 3237	210
813	- 118		9684	- 207	- 4	- 2	- 5082	5632	- 3072	105
824	1		9623	- 47	- 7	- 2	- 159	4094	- 2750	1
835	117		9752	88	- 5	- 2	-10437	3148	- 2646	- 91
846	236		9766	269	- 4	- 1	- 7183	- 5700	- 2559	- 193
855	331		9797	425	- 7	- 1	- 6556	40218	- 2556	- 279
866	449		9779	625	- 9	- 1	- 6143	20080	- 2692	- 384
876	557		9773	802	- 10	- 1	- 5953	18969	- 2693	- 478
887	676		9704	992	- 11	- 1	- 5832	19892	- 2711	- 579
897	784		9694	1159	- 9	- 1	- 5756	12866	- 2744	- 667
907	889		9670	1345	- 9	- 1	- 5664	11235	- 2746	- 762
918	1007		9596	1544	- 11	- 1	- 5585	13016	- 2807	- 862
929	1126		9556	1750	- 10	- 1	- 5538	11133	- 2889	- 969
940	1236		9471	1956	- 8	- 1	- 5468	10089	- 2904	- 1070
950	1341		9410	2159	- 9	- 1	- 5446	10719	- 2997	- 1176
961	1455		9304	2371	- 10	- 2	- 5399	11117	- 3095	- 1280

TWT 90 BLOW 35

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
688	- 936		9702	124	363	- 60	- 1	- 3	128	389
742	- 861		9646	99	379	- 70	- 7	- 3	102	400
753	- 763		9685	95	405	- 64	- 4	- 3	98	418
762	- 673		9651	94	430	- 66	- 7	- 3	97	437
773	- 552		9699	81	463	- 61	- 6	- 3	83	461
782	- 456		9807	70	489	- 69	- 13	- 3	71	479
791	- 357		9732	63	513	- 36	2	- 3	65	495
802	- 239		9685	36	529	- 51	- 11	- 3	37	503
813	- 118		9686	- 8	535	- 30	- 4	- 2	- 9	501
824	1		9623	- 48	536	- 26	- 7	- 2	- 50	496
835	117		9752	- 112	544	- 15	- 5	- 2	- 115	496
846	236		9768	- 134	567	- 3	- 4	- 1	- 137	511
855	331		9806	- 142	591	2	- 7	- 2	- 144	527
866	449		9798	- 142	622	7	- 9	- 2	- 145	549
876	557		9805	- 150	649	8	- 10	- 2	- 153	568
887	676		9753	- 157	674	8	- 11	- 3	- 161	584
897	784		9762	- 174	700	16	- 9	- 3	- 178	602
907	889		9761	- 165	731	21	- 9	- 2	- 169	625
918	1007		9718	- 157	763	17	- 10	- 3	- 161	647
929	1126		9713	- 150	795	22	- 9	- 3	- 154	670
940	1236		9670	- 116	831	25	- 8	- 3	- 120	696
950	1341		9654	- 82	860	24	- 9	- 3	- 85	716
961	1455		9602	- 43	895	23	- 9	- 4	- 45	742

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TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
704	9024		1187	1426	4639	19446	19191	5232
755	9108		1185	1417	4602	19344	19023	5225
765	9198		1185	1413	4591	19306	18976	5225
775	9304		1185	1412	4585	19267	18954	5223
785	9411		1190	1416	4594	19202	19020	5221
795	9522		1188	1413	4584	19195	18970	5221
805	9629		1190	1415	4588	19175	19000	5218
815	9742		1189	1416	4587	19175	18990	5215
825	9853		1190	1421	4602	19221	19062	5215
835	9962		1188	1410	4566	19125	18896	5213
846	10082		1192	1416	4584	19111	18994	5211
856	10191		1192	1416	4580	19076	18986	5209
866	10301		1195	1422	4598	19084	19077	5208
876	10411		1193	1420	4589	19090	19026	5206
886	10521		1194	1419	4583	19056	19004	5203
896	10631		1191	1413	4559	19018	18889	5201
906	10742		1191	1409	4548	18978	18839	5201
916	10851		1193	1412	4554	18954	18879	5199
926	10960		1191	1408	4539	18943	18806	5198
936	11067		1190	1407	4535	18947	18780	5194
946	11176		1186	1406	4530	19023	18732	5194
957	11294		1181	1405	4524	19134	18668	5191
967	11404		1172	1401	4512	19295	18550	5189
978	11517		1164	1399	4505	19469	18456	5187
988	11624		1158	1400	4493	19555	18365	5174
1000	11754		1148	1385	4459	19652	18143	5180

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CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
704	9024		3416	8550	-	7	- 5710	6850	- 4062	- 4882
755	9108		3262	8558		7	- 5696	6887	- 3997	- 4874
765	9198		3087	8510		7	- 5670	6908	- 3936	- 4825
775	9304		2863	8435		7	- 5632	6876	- 3865	- 4750
785	9411		2624	8310	-	7	- 5604	6796	- 3686	- 4657
795	9522		2371	8283	-	7	- 5587	6812	- 3757	- 4628
805	9629		2074	8299	- 1	7	- 5552	6655	- 3986	- 4608
815	9742		1776	8343	1	7	- 5516	7100	- 4127	- 4602
825	9853		1490	8342	3	7	- 5477	8978	- 4132	- 4569
835	9962		1208	8361	4	6	- 5438		- 4121	- 4547
846	10082		869	8268	5	5	- 5392	3518	- 4114	- 4458
856	10191		581	8218	5	4	- 5358	3644	- 4079	- 4403
866	10301		258	8149	5	3	- 5322	4553	- 4097	- 4337
876	10411		- 56	8136	5	3	- 5293	5429	- 4107	- 4306
886	10521		- 401	8077	5	1	- 5258	5751	- 4098	- 4247
896	10631		- 727	8013	5 -		- 5228	5944	- 4121	- 4189
906	10742		- 1079	7928	5		- 5191	6044	- 4140	- 4116
916	10851		- 1472	7851	6		- 5159	6193	- 4207	- 4050
926	10960		- 1859	7807	7		- 5122	6158	- 4250	- 3999
936	11067		- 2248	7724	7 -		- 5082	6197	- 4318	- 3925
946	11176		- 2660	7663	6	1	- 5038	6329		- 3861
957	11294		- 3108	7597	7		- 4988	6308		- 3789
967	11404		- 3486	7526	9	1	- 4942	6241		- 3719
978	11517		- 3891	7384	11 -		- 4883	6108		- 3606
988	11624		- 4258	7253	16 -		- 4836	5595		- 3508
1000	11754		- 4760	7136	20 -	2	- 4773	5279		- 3406

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CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
704	9024		8536	- 3451	1185	- 82	- 7	-	- 4043	763
755	9108		8494	- 3424	1188	- 76	- 7		- 4031	767
765	9198		8398	- 3379	1194	- 70	- 7		- 4024	776
775	9304		8272	- 3306	1205	- 74	- 7	-	- 3996	791
785	9411		8100	- 3213	1198	- 59	- 7	- 1	- 3967	792
795	9522		8033	- 3115	1194	- 55	- 7	- 1	- 3877	790
805	9629		8021	- 2971	1207	- 39	- 6	- 2	- 3704	804
815	9742		8044	- 2838	1226	- 28	- 7	-	- 3529	822
825	9853		8029	- 2710	1242	- 15	- 7	2	- 3376	839
835	9962		8041	- 2588	1260	-	- 7	3	- 3219	857
846	10082		7958	- 2405	1265	15	- 6	4	- 3022	868
856	10191		7921	- 2265	1268	16	- 5	4	- 2859	876
866	10301		7881	- 2087	1268	24	- 4	5	- 2647	880
876	10411		7905	- 1929	1271	34	- 4	4	- 2441	886
886	10521		7899	- 1733	1270	46	- 2	5	- 2194	889
896	10631		7894	- 1553	1265	54	- 1	5	- 1968	888
906	10742		7888	- 1344	1259	66	- 2	5	- 1704	888
916	10851		7913	- 1096	1248	83	- 2	5	- 1385	883
926	10960		7978	- 867	1247	94	- 2	6	- 1087	885
936	11067		8020	- 623	1240	104	- 2	7	- 777	885
946	11176		8103	- 371	1239	121	- 3	6	- 458	889
957	11294		8208	- 99	1239	133	- 3	7	- 121	894
967	11404		8293	118	1238	144	- 4	8	142	898
978	11517		8338	382	1230	147	- 5	10	458	898
988	11624		8389	613	1217	128	- 7	15	731	893
1000	11754		8528	922	1208	123	- 8	18	1081	893

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TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
658	511		1168	1419	4615	19833	18946	5228
708	580		1165	1410	4583	19776	18785	5223
718	674		1169	1417	4606	19776	18911	5223
727	771		1168	1414	4594	19734	18858	5221
737	882		1166	1404	4559	19651	18697	5221
746	983		1171	1415	4594	19673	18880	5221
755	1083		1170	1410	4577	19615	18805	5220
765	1193		1176	1425	4623	19668	19041	5218
775	1305		1175	1426	4627	19712	19049	5218
785	1415		1171	1414	4587	19653	18849	5216
795	1526		1172	1414	4582	19602	18837	5215
805	1635		1171	1407	4560	19520	18743	5213
815	1742		1176	1415	4581	19499	18865	5209
825	1851		1177	1416	4581	19477	18872	5208
834	1951		1176	1412	4571	19441	18827	5209
845	2071		1178	1416	4580	19434	18876	5208
855	2179		1175	1410	4557	19412	18760	5204
865	2289		1178	1413	4565	19375	18815	5203
875	2395		1176	1410	4552	19360	18750	5201
884	2491		1176	1409	4549	19357	18735	5201
894	2600		1179	1414	4566	19340	18831	5201
903	2700		1176	1409	4546	19345	18719	5196
913	2808		1176	1406	4534	19294	18673	5196
924	2928		1176	1407	4536	19300	18683	5194
934	3035		1174	1404	4526	19302	18626	5192
945	3155		1172	1398	4519	19328	18579	5203
956	3269		1168	1401	4513	19401	18523	5189
966	3373		1161	1396	4498	19518	18403	5189
978	3494		1151	1393	4488	19708	18285	5186
991	3622		1142	1383	4456	19798	18076	5182

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CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
658	511		9400	785	- 4	-	- 5129	5755	- 3518	- 402
708	.580		9356	861	14	4	- 5247	80914	- 3496	- 452
718	674		9277	968	17	3	- 5319	-31079	- 3436	- 515
727	771		9251	1144	13	3	- 5284	-19965	- 3452	- 604
737	882		9243	1338	19	4	- 5238	- 5319	- 3482	- 701
746	983		9060	1489	10	4	- 5202	-10228	- 3530	- 775
755	1083		9042	1675	11	5	- 5210	- 831	- 3462	- 873
765	1193		8859	1846	11	6	- 5209	2497	- 3505	- 962
775	1305		8814	2053	- 6	5	- 5183	-41248	- 3504	- 1064
785	1415		8785	2285	- 10	5	- 5139	- 5809	- 3518	- 1174
795	1526		8609	2484	- 7	7	- 5125	17251	- 3560	- 1273
805	1635		8475	2703	- 2	8	- 5109	7671	- 3567	- 1381
815	1742		8293	2907	- 11	8	- 5088	15163	- 3581	- 1479
825	1851		8182	3145	- 8	8	- 5080	11148	- 3512	- 1598
834	1951		8097	3366	- 6	8	- 5071	9541	- 3517	- 1707
845	2071		7914	3623	- 21	7	- 5060	-48545	- 3514	- 1833
855	2179		7830	3901	- 18	8	- 5062	34721	- 3543	- 1975
865	2289		7622	4118	- 16	8	- 5083	17488	- 3461	- 2093
875	2395		7527	4393	- 4	10	- 5097	7765	- 3417	- 2239
884	2491		7430	4607	- 18	8	- 5121	17370	- 3274	- 2359
894	2600		7211	4801	- 23	8	- 5166	30295	- 3119	- 2480
903	2700		7129	5084	- 24	8	- 5182	38438	- 3152	- 2635
913	2808		6969	5337	- 12	9	- 5209	10805	- 3251	- 2780
924	2928		6776	5640	- 21	7	- 5242	30659	- 3253	- 2957
934	3035		6692	5922	- 20	7	- 5268	27167	- 3357	- 3119
945	3155		6552	6188	- 18	7	- 5299	17372	- 3499	- 3279
956	3269		6402	6439	- 21	8	- 5324	18585	- 3635	- 3428
966	3373		6296	6689	- 22	9	- 5341	16557	- 3782	- 3573
978	3494		6144	7008	- 19	9	- 5367	11925	- 3930	- 3761
991	3622		5982	7307	- 20	11	- 5391	12553	- 4033	- 3939

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CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
658	511		9432	- 55	690	- 40	- 4	-	- 59	611
708	580		9395	- 90	691	- 2	13	5	- 96	608
718	674		9326	- 127	696	5	17	5	- 136	609
727	771		9321	- 107	726	5	13	5	- 115	630
737	882		9338	- 95	762	15	18	7	- 102	657
746	983		9182	- 79	781	6	9	6	- 87	670
755	1083		9196	- 54	810	15	10	7	- 58	690
765	1193		9049	- 25	827	25	10	9	- 28	700
775	1305		9050	11	864	- 1	- 7	4	12	727
785	1415		9077	68	911	- 8	- 11	3	75	763
795	1526		8960	131	939	7	- 9	5	147	782
805	1635		8893	208	973	24	- 4	7	234	806
815	1742		8783	291	1004	13	- 13	4	331	828
825	1851		8758	384	1042	18	- 10	5	438	856
834	1951		8757	469	1080	23	- 9	6	536	883
845	2071		8684	589	1119	- 4	- 22	- 1	678	910
855	2179		8719	715	1163	6	- 19		820	942
865	2289		8624	829	1182	16	- 18	1	962	951
875	2395		8662	959	1218	42	- 7	7	1108	975
884	2491		8679	1048	1239	17	- 19	-	1207	986
894	2600		8586	1154	1239	10	- 24	- 3	1344	977
903	2700		8660	1293	1274	8	- 25	- 4	1493	999
913	2808		8661	1428	1292	31	- 15	2	1649	1006
924	2928		8668	1607	1312	9	- 22	- 4	1853	1012
934	3035		8767	1728	1337	10	- 21	- 4	1971	1024
945	3155		8821	1845	1353	17	- 19	- 3	2091	1027
956	3269		8866	1962	1367	18	- 21	- 5	2213	1030
966	3373		8951	2067	1387	22	- 23	- 5	2309	1039
978	3494		9050	2227	1409	37	- 21	- 3	2461	1046
991	3622		9143	2361	1426	36	- 23	- 3	2582	1050

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CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
637	6504		1186	1420	4635	19465	19164	5244
698	6569		1184	1415	4617	19440	19076	5242
708	6661		1175	1404	4583	19512	18872	5244
717	6754		1178	1402	4571	19389	18845	5240
726	6846		1179	1405	4577	19396	18876	5235
736	6950		1179	1404	4573	19381	18858	5235
745	7048		1180	1409	4590	19415	18936	5235
756	7166		1182	1416	4612	19462	19044	5235
766	7275		1175	1397	4546	19359	18717	5232
777	7392		1179	1403	4566	19346	18829	5232
787	7498		1183	1411	4586	19324	18945	5228
797	7606		1180	1405	4567	19318	18840	5227
807	7713		1183	1409	4578	19292	18908	5227
816	7820		1182	1401	4552	19221	18793	5227
827	7941		1185	1409	4576	19231	18918	5223
838	8057		1183	1403	4554	19205	18807	5223
847	8152		1186	1406	4561	19160	18860	5221
858	8268		1185	1404	4553	19150	18815	5218
869	8388		1184	1402	4543	19118	18774	5216
879	8500		1185	1400	4534	19057	18745	5215
890	8617		1187	1400	4536	19019	18762	5215
900	8726		1188	1402	4539	19002	18788	5213
909	8826		1186	1396	4519	18984	18686	5213
919	8936		1187	1396	4516	18950	18678	5208
930	9055		1187	1396	4515	18944	18677	5208
942	9179		1181	1391	4495	19002	18552	5204
955	9316		1174	1390	4492	19160	18486	5203
966	9430		1164	1384	4470	19318	18315	5199

TWT 90 BLOW 40

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE. (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
637	6504		5009	8724	6	- 13	- 5971	7895	- 4453	- 5209
698	6569		5015	8715	6	- 12	- 5970	7947	- 4534	- 5203
708	6661		5222	8872	7	- 12	- 5987	7712		- 5311
717	6754		5476	8715	7	- 12	- 6009	7684		- 5236
726	6846		5958	8647	49	- 7	- 6052	27067		- 5233
736	6950		6464	8719	91		- 6104	- 8584		- 5322
745	7048		6564	8739	48	- 7	- 6120	18052		- 5348
756	7166		6611	8757	5	- 16	- 6121	7589		- 5360
766	7275		6788	8897	12	- 17	- 6134	10839		- 5458
777	7392		6927	8828	16	- 16	- 6122	18843		- 5405
787	7498		7005	8792	2	- 17	- 6101	7110		- 5364
797	7606		7056	8873	-	- 13	- 6091	6843		- 5405
807	7713		6893	8768	6	- 11	- 6087	7582		- 5337
816	7820		6672	8788	8	- 12	- 6077	7916		- 5340
827	7941		6350	8717	7	- 12	- 6053	7724	- 4475	- 5277
838	8057		6076	8772	7	- 12	- 6037	7696	- 4444	- 5296
847	8152		5787	8681	6	- 12	- 6014	7766	- 4363	- 5221
858	8268		5488	8688	6	- 12	- 5983	7757	- 4339	- 5198
869	8388		5136	8684	8	- 12	- 5953	8054	- 4302	- 5170
879	8500		4805	8641	6	- 13	- 5921	8048	- 4268	- 5116
890	8617		4430	8593	6	- 13	- 5871	8061	- 4211	- 5045
900	8726		4090	8590	7	- 14	- 5817	8533	- 4207	- 4997
909	8826		3850	8664	6	- 14	- 5767	8385	- 4221	- 4996
919	8936		3554	8657	6	- 14	- 5731	8533	- 4186	- 4962
930	9055		3247	8625	6	- 15	- 5694	9089	- 4171	- 4910
942	9179		2952	8644	7	- 14	- 5661	11312	- 4216	- 4894
955	9316		2630	8595	8	- 14	- 5623	14547	- 4222	- 4833
966	9430		2382	8604	7	- 11	- 5586	9501	- 4223	- 4806

NORTH AMERICAN AVIATION, INC.

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TWT 90 BLOW 40

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
637	6504		10023	- 859	1071	- 58	15	-	- 857	636
698	6569		10007	- 983	1071	- 59	14	1	- 982	636
708	6661		10216	- 1270	1083	- 77	14	1	- 1243	640
717	6754		10146	- 1731	1065	- 87	14	2	- 1706	628
726	6846		10231	- 2367	1050	- 24	25	43	- 2313	614
736	6950		10430	- 3001	1040	59	32	86	- 2878	599
745	7048		10430	- 3267	1034	- 43	23	43	- 3132	591
756	7166		10392	- 3519	1037	- 68	16	-	- 3386	593
766	7275		10510	- 3845	1046	- 30	20	6	- 3658	595
777	7392		10402	- 4210	1059	- 13	20	11	- 4047	611
787	7498		10307	- 4487	1080	- 67	17	- 3	- 4354	633
797	7606		10311	- 4710	1098	- 84	13	- 3	- 4568	647
807	7713		10083	- 4766	1084	- 78	12	3	- 4727	638
816	7820		9967	- 4735	1082	- 73	13	5	- 4751	636
827	7941		9736	- 4639	1077	- 82	13	5	- 4765	637
838	8057		9650	- 4556	1080	- 78	13	5	- 4722	638
847	8152		9440	- 4444	1076	- 69	13	4	- 4707	639
858	8268		9317	- 4336	1086	- 70	13	5	- 4654	650
869	8388		9183	- 4181	1090	- 63	13	6	- 4553	656
879	8500		9027	- 4034	1094	- 53	13	5	- 4468	664
890	8617		8870	- 3846	1111	- 50	14	5	- 4336	684
900	8726		8776	- 3674	1137	- 44	14	7	- 4187	712
909	8826		8776	- 3585	1174	- 36	14	5	- 4085	747
919	8936		8696	- 3457	1186	- 35	14	6	- 3975	761
930	9055		8593	- 3330	1197	- 29	15	7	- 3875	775
942	9179		8547	- 3221	1210	- 16	14	8	- 3769	788
955	9316		8437	- 3099	1218	- 10	13	8	- 3673	799
966	9430		8402	- 3020	1237	- 26	10	8	- 3594	819

TWT 90 BLOW 41

CONF C39 T3e

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
755	6550		395	1115	6774	60825	6655	5244
808	6625		398	1128	6791	60879	6761	5232
819	6728		398	1124	6771	60705	6734	5232
829	6825		395	1118	6772	60807	6647	5228
839	6925		401	1133	6780	60695	6827	5228
849	7035		399	1131	6784	60779	6786	5227
860	7159		398	1130	6798	60951	6753	5223
871	7281		402	1141	6797	60800	6887	5223
881	7395		392	1115	6783	60999	6576	5221
891	7506		401	1137	6781	60695	6834	5218
901	7614		398	1124	6754	60561	6708	5218
911	7725		399	1131	6764	60603	6762	5215
921	7834		396	1123	6760	60661	6672	5215
931	7944		398	1127	6756	60559	6725	5213
942	8066		397	1122	6748	60543	6669	5213
951	8164		396	1121	6744	60541	6637	5208
961	8274		397	1125	6742	60466	6688	5208
971	8381		398	1127	6742	60444	6707	5204
981	8488		397	1122	6729	60382	6647	5203
991	8595		397	1122	6722	60288	6662	5203
1001	8701		400	1128	6720	60197	6728	5201
1011	8807		396	1117	6709	60220	6604	5201
1021	8913		399	1124	6702	60063	6687	5196
1032	9029		397	1116	6685	59983	6602	5196
1042	9136		398	1116	6671	59821	6620	5196
1052	9246		396	1110	6651	59682	6564	5194
1062	9358		396	1109	6639	59588	6544	5189
1071	9453		394	1097	6598	59283	6440	5189

TWT 90 BLOW 41

CONF C39 T 30

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
755	6550		836	5801	- 13	- 19	- 4734	5311	- 2908	- 2746
808	6625		809	5680	- 6	- 19	- 4733	5492	- 2788	- 2689
819	6728		725	5665	- 11	- 22	- 4767	5550	- 2705	- 2700
829	6825		2832	4567	- 9	- 32	- 4955	6432	- 5003	- 2263
839	6925		4951	2926	6	- 27	- 5693	7233	- 5236	- 1666
849	7035		5073	2848	17	- 24	- 5871	8047	- 5145	- 1672
860	7159		4948	2989	24	- 27	- 5916	8700	- 5333	- 1768
871	7281		4641	3033	18	- 29	- 5927	7894	- 4929	- 1798
881	7395		4705	3316	12	- 28	- 5921	7777	- 5191	- 1964
891	7506		4258	3231	1	- 27	- 5901	6950	- 4935	- 1907
901	7614		4155	3368	- 11	- 30	- 5851	6332	- 4747	- 1971
911	7725		3960	3439	- 4	- 28	- 5805	6648	- 5242	- 1997
921	7834		3825	3580	- 17	- 29	- 5784	6021	- 5025	- 2071
931	7944		3570	3626	- 27	- 32	- 5756	5608	- 4484	- 2087
942	8066		3345	3736	- 17	- 32	- 5729	5919	- 5049	- 2140
951	8164		3209	3819	- 18	- 32	- 5696	5810	- 4714	- 2175
961	8274		2976	3837	- 17	- 28	- 5647	5481	- 4754	- 2167
971	8381		2802	3900	- 21	- 31	- 5620	5230	- 4138	- 2192
981	8488		2562	3960	- 16	- 29	- 5591	5133	- 4165	- 2214
991	8595		2339	3967	- 19	- 29	- 5515	4865	- 3941	- 2187
1001	8701		2142	3971	- 16	- 30	- 5463	5188	- 3283	- 2169
1011	8807		1998	4098	- 9	- 29	- 5408	3750	- 2455	- 2216
1021	8913		1845	4014	- 10	- 27	- 5330	2199	- 2594	- 2139
1032	9029		1672	4067	- 16	- 30	- 5244	3369	- 1917	- 2132
1042	9136		1459	4019	- 15	- 31	- 5157	3717	- 2045	- 2073
1052	9246		1248	4045	- 11	- 31	- 5066	4515	- 1459	- 2049
1062	9358		1066	4057	- 15	- 28	- 4971	1997	- 1055	- 2017
1071	9453		909	4116	- 19	- 28	- 4871	3343	- 1277	- 2005

NORTH AMERICAN AVIATION, INC.
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CONF C39 T 30

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
755	6550		5625	1645	1282	- 83	12	- 20	2924	1004
808	6625		5525	1547	1256	- 44	15	- 13	2800	983
819	6728		5505	1519	1228	- 82	16	- 18	2759	957
829	6825		5291	- 938	1037	- 214	26	- 20	- 1772	808
839	6925		4490	- 3593	633	- 157	27	- 4	- 8003	473
849	7035		4388	- 3819	581	- 144	29	8	- 8705	424
860	7159		4399	- 3750	574	- 132	34	14	- 8526	411
871	7281		4269	- 3537	557	- 176	33	9	- 8284	393
881	7395		4488	- 3605	589	- 129	31	4	- 8034	411
891	7506		4220	- 3281	561	- 128	27	- 6	- 7774	389
901	7614		4266	- 3227	585	- 213	27	- 18	- 7565	407
911	7725		4228	- 3103	596	- 186	26	- 10	- 7339	416
921	7834		4279	- 3023	611	- 199	25	- 22	- 7064	424
931	7944		4219	- 2845	611	- 219	26	- 33	- 6742	423
942	8066		4229	- 2694	620	- 181	29	- 22	- 6371	428
951	8164		4245	- 2619	634	- 176	29	- 23	- 6170	439
961	8274		4183	- 2467	641	- 127	26	- 21	- 5898	446
971	8381		4179	- 2365	649	- 131	28	- 25	- 5658	452
981	8488		4173	- 2198	654	- 92	28	- 18	- 5267	455
991	8595		4122	- 2053	671	- 93	27	- 21	- 4980	473
1001	8701		4077	- 1931	681	- 98	29	- 18	- 4737	484
1011	8807		4162	- 1859	713	- 28	29	- 10	- 4466	510
1021	8913		4041	- 1784	723	- 22	27	- 11	- 4414	525
1032	9029		4058	- 1693	756	- 44	30	- 15	- 4171	556
1042	9136		3983	- 1554	770	- 47	31	- 14	- 3902	574
1052	9246		3987	- 1421	799	- 46	32	- 10	- 3564	602
1062	9358		3983	- 1317	829	- 31	29	- 13	- 3307	633
1071	9453		4032	- 1231	872	- 54	30	- 17	- 3054	673

TWT 90 BLOW 42

CONF C39 T26

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
851	6625		406	1143	6796	60665	7004	5249
862	6717		402	1133	6793	60769	6880	5249
871	6802		401	1129	6785	60741	6826	5245
881	6911		399	1126	6783	60772	6782	5244
890	7016		402	1133	6786	60706	6870	5244
900	7131		397	1120	6777	60796	6707	5240
909	7231		404	1140	6799	60766	6937	5240
919	7344		401	1132	6787	60757	6838	5239
930	7468		402	1136	6788	60726	6874	5235
940	7578		396	1119	6773	60785	6676	5233
949	7678		403	1135	6769	60537	6866	5232
958	7777		401	1132	6781	60716	6819	5230
967	7876		401	1135	6783	60703	6848	5230
976	7978		401	1137	6799	60860	6849	5228
986	8092		396	1122	6776	60808	6689	5228
995	8188		396	1121	6770	60771	6667	5225
1006	8309		405	1144	6773	60490	6948	5223
1016	8416		395	1114	6739	60516	6612	5221
1025	8513		402	1135	6751	60395	6838	5218
1036	8628		395	1114	6733	60461	6604	5220
1045	8729		401	1131	6736	60278	6800	5215
1054	8826		400	1127	6731	60282	6751	5215
1064	8930		400	1124	6717	60175	6725	5215
1074	9036		396	1113	6708	60220	6595	5213
1084	9141		399	1122	6704	60065	6702	5209
1093	9237		398	1117	6690	59983	6652	5209
1103	9344		398	1115	6679	59883	6642	5208
1112	9444		400	1120	6673	59762	6697	5204
1123	9558		397	1109	6644	59588	6584	5201

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CONF C39 T26

BODY AXIS DATA AND BASE PRESSURE. (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
851	6625		724	5212	- 1	- 15	- 5133	9832	- 2429	- 2675
862	6717		2961	4197	6	- 11	- 5481	5879	- 4581	- 2301
871	6802		5073	2698	9	- 15	- 6467	8897	- 5085	- 1745
881	6911		5226	2490	12	- 18	- 6708	8003	- 5214	- 1670
890	7016		5035	2558	14	- 15	- 6746	8554	- 5242	- 1725
900	7131		4992	2752	10	- 20	- 6755	7802	- 4760	- 1859
909	7231		4656	2743	8	- 19	- 6759	8101	- 4679	- 1854
919	7344		4525	2877	- 3	- 22	- 6722	6614	- 4763	- 1934
930	7468		4313	2936	10	- 18	- 6660	8351	- 4946	- 1956
940	7578		4287	3120	- 5	- 21	- 6587	6455	- 5016	- 2055
949	7678		3955	3108	- 1	- 23	- 6527	6809	- 4677	- 2029
958	7777		3881	3226	- 9	- 27	- 6438	6216	- 5022	- 2077
967	7876		3682	3314	- 14	- 25	- 6384	5774	- 4900	- 2116
976	7978		3503	3398	- 25	- 28	- 6325	5638	- 4744	- 2149
986	8092		3371	3543	- 27	- 28	- 6242	4991	- 4801	- 2212
995	8188		3206	3609	- 19	- 29	- 6149	5485	- 5323	- 2219
1006	8309		2823	3508	- 15	- 27	- 6073	5709	- 4554	- 2130
1016	8416		2778	3722	- 14	- 31	- 6005	5764	- 4435	- 2235
1025	8513		2543	3654	- 10	- 32	- 5933	6053	- 4164	- 2168
1036	8628		2528	3864	- 1	- 31	- 5827	6748	- 3780	- 2252
1045	8729		2231	3704	- 11	- 31	- 5742	5693	- 3442	- 2127
1054	8826		2112	3793	- 21	- 32	- 5667	5279	- 3525	- 2150
1064	8930		1934	3811	- 9	- 29	- 5570	5748	- 2719	- 2123
1074	9036		1800	3920	- 16	- 35	- 5482	5355	- 1516	- 2149
1084	9141		1592	3843	2	- 31	- 5387	7427	- 2150	- 2070
1093	9237		1427	3875	4	- 31	- 5295	8276	- 1719	- 2052
1103	9344		1225	3920	9	- 29	- 5190	2231	- 1530	- 2035
1112	9444		1032	3893	16	- 32	- 5095	-16281	- 1720	- 1984
1123	9558		848	3972	11	- 32	- 4992	12803	- 1653	- 1983

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CONF C39 T26

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
851	6625		5062	1436	943	2	13	- 7	2836	693
862	6717		5018	- 1101	753	66	12	2	- 2194	541
871	6802		4401	- 3694	405	- 43	17	3	- 8393	255
881	6911		4190	- 3995	346	- 101	21	4	- 9535	205
890	7016		4115	- 3868	326	- 80	19	8	- 9402	183
900	7131		4206	- 3846	323	- 108	23	3	- 9144	171
909	7231		4028	- 3602	302	- 64	21	2	- 8943	152
919	7344		4047	- 3517	307	- 138	20	- 10	- 8691	150
930	7468		3971	- 3383	313	- 68	20	5	- 8520	155
940	7578		4077	- 3390	338	- 112	19	- 10	- 8313	171
949	7678		3930	- 3139	337	- 118	23	- 6	- 7988	172
958	7777		3975	- 3110	365	- 147	24	- 15	- 7824	195
967	7876		3968	- 2965	375	- 130	22	- 19	- 7472	202
976	7978		3965	- 2845	388	- 201	24	- 29	- 7175	212
986	8092		4031	- 2770	418	- 147	23	- 31	- 6871	235
995	8188		4026	- 2664	446	- 139	26	- 23	- 6617	261
1006	8309		3822	- 2380	443	- 133	25	- 18	- 6227	264
1016	8416		3985	- 2385	482	- 123	30	- 17	- 5984	294
1025	8513		3857	- 2223	489	- 125	31	- 13	- 5765	304
1036	8628		4020	- 2272	548	- 85	31	- 3	- 5651	354
1045	8729		3806	- 2054	546	- 97	30	- 13	- 5396	361
1054	8826		3855	- 1996	577	- 134	31	- 22	- 5177	388
1064	8930		3834	- 1888	605	- 84	29	- 10	- 4923	416
1074	9036		3909	- 1824	646	- 105	35	- 16	- 4667	453
1084	9141		3803	- 1686	660	- 38	31	3	- 4433	471
1093	9237		3813	- 1586	691	- 30	31	6	- 4160	501
1103	9344		3840	- 1458	727	19	29	11	- 3798	536
1112	9444		3801	- 1330	748	1	31	19	- 3499	559
1123	9558		3871	- 1230	792	- 18	31	14	- 3178	600

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TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
635	- 507		403	1139	6817	60963	6919	5245
718	- 435		398	1132	6785	60844	6735	5208
728	- 344		398	1132	6782	60800	6748	5209
738	- 240		398	1132	6777	60766	6734	5204
748	- 132		399	1138	6785	60784	6787	5201
759	- 15		400	1138	6779	60715	6798	5203
769	97		398	1137	6788	60847	6764	5199
779	205		396	1130	6773	60784	6676	5194
789	314		401	1143	6776	60648	6832	5194
799	422		399	1139	6771	60660	6773	5189
810	538		398	1135	6772	60729	6724	5189
821	655		400	1143	6776	60687	6801	5186
831	758		398	1138	6770	60711	6724	5180
841	864		397	1134	6765	60705	6681	5180
851	969		401	1147	6776	60650	6834	5180
861	1072		398	1135	6752	60557	6698	5177
872	1190		399	1141	6759	60559	6756	5175
882	1298		404	1156	6771	60496	6927	5175
892	1405		395	1126	6728	60423	6598	5170
903	1523		398	1134	6733	60382	6680	5170
914	1643		399	1136	6725	60269	6709	5167
924	1752		394	1124	6712	60300	6563	5163
935	1870		399	1135	6708	60118	6693	5162
945	1978		398	1134	6702	60073	6676	5158
955	2085		399	1133	6688	59941	6672	5155
965	2194		396	1123	6666	59828	6574	5155
975	2301		398	1128	6660	59707	6630	5153
986	2419		397	1122	6633	59497	6570	5148

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CONF C39 T30

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	.2	2	4	4	4	4	4	4	4	4
635	- 507		5419	- 951	4	- 5	- 5696	7154	- 4112	542
718	- 435		5461	- 924	14	- 1	- 5526	8431	- 3955	511
728	- 344		5448	- 749	18	- 1	- 5384	9482	- 3698	403
738	- 240		5480	- 569	18	- 1	- 5255	9952	- 4387	299
748	- 132		5415	- 355	13	- 2	- 4958	8670	- 3203	176
759	- 15		5317	- 99	6	- 4	- 2386	7485	- 3566	24
769	97		5502	123	8	- 3	- 8140	7927	- 3491	- 100
779	205		5493	271	7	- 5	- 6818	7601	- 3328	- 185
789	314		5314	655	6	- 4	- 6038	7648	- 3764	- 395
799	422		5354	798	7	- 4	- 5956	7823	- 3703	- 475
810	538		5420	974	-	- 5	- 5990	6850	- 3037	- 584
821	655		5335	1133	- 2	- 5	- 5979	6581	- 3492	- 677
831	758		5375	1380	4	- 1	- 5968	14413	- 4187	- 823
841	864		5438	1721	6	1	- 5936	4625	- 4018	- 1022
851	969		5271	1744	6	1	- 5934	5004	- 3644	- 1035
861	1072		5374	1938	6	3	- 5914	6009	- 3932	- 1146
872	1190		5313	2082	- 9		- 5877	18191	- 3778	- 1223
882	1298		5048	2169	- 3	2	- 5784	7585	- 3594	- 1255
892	1405		5253	2448	- 2	2	- 5752	7551	- 3347	- 1408
903	1523		5090	2609	- 17	- 1	- 5697	- 3618	- 3701	- 1486
914	1643		5028	2754	- 12		- 5645		- 3155	- 1555
924	1752		5067	2987	-	4	- 5626	6914	- 3843	- 1681
935	1870		4912	3156	-	1	- 5583	7031	- 4160	- 1762
945	1978		4837	3307	4	1	- 5545	5742	- 3605	- 1833
955	2085		4794	3480	- 1	- 2	- 5510	6091	- 4126	- 1918
965	2194		4735	3706	4	- 1	- 5479	- 635	- 4069	- 2030
975	2301		4574	3845	4	1	- 5460	5569	- 3884	- 2100
986	2419		4474	4055	- 4		- 5423		- 3854	- 2199

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STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
635	- 507		5481	- 469	209	- 144	4	- 6	- 855	230
718	- 435		5515	- 507	199	- 89	14	- 3	- 920	218
728	- 344		5483	- 421	211	- 69	18	- 2	- 768	222
738	- 240		5499	- 338	232	- 59	18	- 2	- 615	235
748	- 132		5422	- 230	252	- 73	13	- 2	- 424	245
759	- 15		5317	- 85	270	- 94	6	- 4	- 160	251
769	97		5503	30	309	- 72	8	- 3	54	279
779	205		5499	74	325	- 91	7	- 4	135	288
789	314		5342	362	367	- 74	6	- 3	678	313
799	422		5399	401	388	- 68	7	- 3	743	326
810	538		5487	461	404	- 72		- 5	841	334
821	655		5429	518	415	- 83	- 2	- 5	953	337
831	758		5511	658	440	- 5	4	-	1195	351
841	864		5635	885	480	27	6	2	1570	374
851	969		5490	832	472	30	5	2	1515	366
861	1072		5640	904	500	67	5	4	1604	385
872	1190		5628	941	518	8	- 9	- 2	1673	396
882	1298		5407	980	531	36	- 3	1	1812	406
892	1405		5691	1100	581	34	- 3	2	1933	442
903	1523		5597	1181	604	- 16	- 16	- 5	2109	458
914	1643		5601	1219	631		- 12	- 3	2177	478
924	1752		5731	1323	667	68	- 1	3	2309	503
935	1870		5665	1415	693	29	- 1	1	2497	521
945	1978		5671	1475	720	35	3	2	2601	542
955	2085		5719	1546	752	- 17	-	- 3	2704	566
965	2194		5777	1668	791	6	4		2887	595
975	2301		5713	1751	808	32	3	3	3065	606
986	2419		5743	1866	846	-	- 4	- 2	3249	635

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TUNNEL CONDITIONS

BN DEC=	ALPHA 2	YAW 2	MACH 3	RN 2	HO	PO 1	Q 1	TTO 1
761	2533		407	1144	6730	60038	6965	5215
838	2615		398	1131	6766	60676	6714	5199
849	2720		396	1133	6792	60953	6698	5196
859	2832		407	1165	6817	60807	7062	5194
869	2943		397	1135	6789	60914	6707	5189
878	3043		395	1130	6782	60919	6641	5187
887	3143		399	1141	6778	60724	6778	5187
897	3255		400	1146	6791	60816	6818	5186
907	3366		398	1135	6750	60517	6715	5180
916	3466		394	1127	6761	60749	6596	5177
925	3565		399	1143	6768	60630	6771	5175
934	3663		393	1123	6747	60659	6554	5175
943	3761		403	1150	6763	60478	6866	5174
953	3871		396	1133	6754	60604	6668	5175
963	3982		396	1132	6755	60632	6648	5172
973	4092		395	1128	6747	60602	6608	5172
982	4189		398	1140	6758	60594	6715	5167
992	4297		400	1143	6741	60371	6763	5163
1001	4390		393	1124	6734	60537	6542	5163
1012	4508		399	1141	6739	60396	6724	5160
1021	4600		398	1138	6738	60413	6696	5160
1031	4704		397	1136	6734	60399	6669	5158
1043	4833		400	1144	6734	60320	6748	5155
1054	4947		397	1133	6710	60193	6638	5153
1065	5058		400	1142	6717	60161	6734	5150
1076	5174		397	1132	6689	59996	6625	5148
1086	5282		397	1131	6686	59977	6614	5146
1095	5381		398	1131	6675	59859	6627	5145
1106	5497		397	1128	6661	59755	6587	5139
1119	5608		395	1121	6632	59546	6520	5136

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BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB		CLB		XCPN	XCPY		P B		CMA
DEC=	2	2	4	4	4		4		4	4		4		4
761	2533		4350	3781	10	-	4	-	5438	4589	-	4281	-	2056
838	2615		4324	4018	8	-	7	-	5432	2257	-	4285	-	2183
849	2720		4211	4179		-	5	-	5415	4495	-	4575	-	2263
859	2832		3876	4045	2	-	3	-	5391	6014	-	4034	-	2181
869	2943		4084	4412	4	-	3	-	5380	5772	-	4511	-	2373
878	3043		3890	4572	4	-	3	-	5367	5687	-	4354	-	2454
887	3143		3732	4541	7	-	3	-	5372	5443	-	4326	-	2439
897	3255		3573	4667	10	-	2	-	5361	4989	-	4904	-	2502
907	3366		3567	4852	16	-	1	-	5379	4587	-	3966	-	2610
916	3466		3487	5076	26	-		-	5366	4243	-	4589	-	2724
925	3565		3311	5041	27		1	-	5352	3840	-	4479	-	2698
934	3663		3253	5308	30			-	5346	3774	-	4417	-	2838
943	3761		2968	5110	29		1	-	5328	3917	-	4095	-	2723
953	3871		2912	5409	28		2	-	5300	4507	-	4717	-	2867
963	3982		2845	5555	19		4	-	5277	5053	-	4575	-	2931
973	4092		2860	5671	19		2	-	5279	4976	-	4694	-	2994
982	4189		2791	5680	16	-	1	-	5255	3095	-	4410	-	2984
992	4297		2477	5596	13	-		-	5208	4583	-	4317	-	2914
1001	4390		2404	5886	19		2	-	5192	4972	-	5055	-	3056
1012	4508		2321	5839	16		4	-	5167	4702	-	4637	-	3017
1021	4600		2176	5886	22		3	-	5148	4566	-	4547	-	3030
1031	4704		2104	5959	26		3	-	5130	4605	-	4503	-	3057
1043	4833		1827	5864	20		5	-	5076	5112	-	4013	-	2977
1054	4947		1708	6010	28		6	-	5061	4924	-	4266	-	3041
1065	5058		1559	5973	27		5	-	5043	4838	-	4034	-	3012
1076	5174		1422	6080	26		5	-	5026	4963	-	3851	-	3056
1086	5282		1339	6117	27		8	-	5006	5401	-	4165	-	3062
1095	5381		1262	6122	31		9	-	4991	5149	-	4354	-	3055
1106	5497		1331	6008	52		9	-	4948	4300	-	4602	-	2973
1119	5608		2679	4868	192		33	-	4938	4047	-	3904	-	2404

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STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	. 2	2	4	4	4	4	4	4	4	4
761	2533		5549	1557	794	44	11	1	2805	599
838	2615		5652	1701	829	16	10	- 3	3010	622
849	2720		5656	1792	852	1	3	- 5	3168	639
859	2832		5331	1722	823	23	3	- 2	3231	617
869	2943		5725	1836	894	33	4	-	3207	670
878	3043		5670	1972	912	31	5	- 1	3477	682
887	3143		5553	1928	896	47	7	1	3473	668
897	3255		5523	2012	910	54	10	4	3642	677
907	3366		5658	2061	929	71	14	8	3643	687
916	3466		5756	2192	964	98	21	14	3808	713
925	3565		5628	2167	955	90	22	16	3850	706
934	3663		5778	2320	996	98	24	18	4015	734
943	3761		5470	2237	958	99	23	18	4089	707
953	3871		5655	2399	1015	117	20	19	4242	751
963	3982		5743	2444	1047	106	12	15	4255	776
973	4092		5876	2412	1065	99	13	14	4105	789
982	4189		5870	2364	1076	42	13	10	4028	800
992	4297		5627	2406	1070	58	10	9	4275	799
1001	4390		5814	2574	1123	99	12	15	4427	839
1012	4508		5773	2480	1125	75	9	14	4295	843
1021	4600		5746	2523	1136	94	13	17	4392	853
1031	4704		5794	2521	1155	114	15	21	4351	868
1043	4833		5595	2535	1154	115	9	18	4530	873
1054	4947		5678	2607	1182	146	14	26	4592	895
1065	5058		5604	2588	1177	132	13	24	4619	893
1076	5174		5655	2648	1199	137	12	24	4682	910
1086	5282		5683	2629	1213	188	10	27	4626	923
1095	5381		5686	2596	1219	180	11	30	4566	929
1106	5497		5684	2358	1227	204	22	48	4149	942
1119	5608		5535	493	1093	684	80	178	891	855

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TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
~~615~~	~~13103~~		~~3493~~	~~1620~~	~~14055~~	~~1861~~	~~15896~~	~~5336~~
709	13125		3493	1674	14213	1882	16075	5264
720	13235		3493	1675	14192	1879	16050	5256
730	13347		3493	1677	14190	1879	16049	5252
740	13461		3493	1680	14182	1878	16039	5244
749	13566		3493	1683	14193	1879	16051	5240
758	13669		3493	1687	14204	1881	16064	5235
768	13783		3493	1688	14202	1881	16062	5232
778	13897		3493	1693	14194	1880	16053	5221
788	14010		3493	1692	14166	1876	16022	5216
797	14113		3493	1695	14181	1878	16038	5215
806	14216		3493	1697	14168	1876	16024	5208
816	14330		3493	1698	14182	1878	16040	5208
826	14443		3493	1702	14186	1878	16044	5201
837	14563		3493	1703	14179	1878	16036	5198
847	14674		3493	1707	14180	1878	16038	5191
858	14789		3493	1707	14164	1876	16019	5187
869	14905		3493	1706	14152	1874	16005	5186
881	15023		3493	1709	14154	1874	16008	5180
892	15125		3493	1706	14131	1871	15982	5180
903	15226		3493	1707	14117	1869	15966	5175
913	15323		3493	1707	14099	1867	15946	5172
923	15432		3493	1704	14078	1864	15922	5172
933	15541		3493	1705	14063	1862	15905	5167
943	15648		3493	1704	14047	1860	15887	5165
952	15747		3493	1702	14017	1856	15853	5162
962	15854		3493	1697	13965	1849	15794	5160
971	15950		3493	1692	13917	1843	15740	5158
982	16063		3493	1686	13856	1835	15671	5155

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BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
~~615~~	~~13103~~		~~-16567~~	~~2008~~	~~19~~	~~5~~	~~1494~~	~~6049~~	~~378~~	~~300~~
709	13125		- 8839	3797 -	1	12	- 2096	6937	- 202	- 796
720	13235		- 9149	3659		13	- 2057	6843	- 257	- 753
730	13347		- 9413	3501	2	14	- 2024	6702	- 304	- 709
740	13461		- 9679	3337	2	14	- 1976	6699	- 347	- 659
749	13566		- 9908	3199	2	13	- 1943	6682	- 373	- 622
758	13669		-10137	3070	1	12	- 1925	6782	- 404	- 591
768	13783		-10403	2931 -	1	9	- 1878	6935	- 443	- 551
778	13897		-10668	2801 -	1	8	- 1853	6980	- 464	- 519
788	14010		-10930	2674 -	1	7	- 1813	6964	- 485	- 485
797	14113		-11153	2559 -	1	7	- 1776	6943	- 503	- 455
806	14216		-11380	2460 -	1	7	- 1743	6929	- 519	- 429
816	14330		-11614	2331 -	1	6	- 1682	6915	- 529	- 392
826	14443		-11851	2221 -		6	- 1621	6891	- 546	- 360
837	14563		-12112	2104 -		6	- 1526	6884	- 641	- 321
847	14674		-12338	2010 -	1	5	- 1453	6951	- 589	- 292
858	14789		-12583	1914 -	2	4	- 1389	6990	- 601	- 266
869	14905		-12824	1818 -	2	5	- 1300	6989	- 618	- 236
881	15023		-13046	1726 -	2	4	- 1201	6980	- 631	- 207
892	15125		-13248	1638 -	1	4	- 1088	6964	- 652	- 178
903	15226		-13428	1566 -	1	4	- 994	6940	- 660	- 156
913	15323		-13588	1503 -	2	3	- 898	6993	- 668	- 135
923	15432		-13759	1429 -	3	3	- 759	7075	- 681	- 108
933	15541		-13922	1345 -	3	3	- 586	7066	- 685	- 79
943	15648		-14084	1265 -	2	3	- 393	7059	- 684	- 50
952	15747		-14238	1203 -	2	3	- 275	7051	- 687	- 33
962	15854		-14404	1144 -	3	3	- 195	7083	- 681	- 22
971	15950		-14532	1062 -	3	3	53	7097	- 680	6
982	16063		-14685	999 -	2	3	225	7024	- 677	22

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STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN DEC=	ALPHA 2	YAW 2	CD 4	CL 4	CMS1 4	CY 4	CNS 4	CLS 4	L/D 4	CMS2 4
~~615~~	~~13103~~		~~12391~~	~~11178~~	~~100~~	~~232~~	~~9~~	~~17~~	~~9021~~	~~74~~
709	13125		8683	4142	1287	119	- 8	- 8	4770	1147
720	13235		8867	4297	1217	125	- 9	- 8	4846	1085
730	13347		9017	4422	1138	131	- 11	- 8	4904	1014
740	13461		9173	4547	1059	134	- 11	- 8	4956	943
749	13566		9321	4637	988	136	- 11	- 8	4975	880
758	13669		9482	4721	917	131	- 9	- 8	4979	816
768	13783		9678	4812	846	122	- 5	- 7	4972	753
778	13897		9886	4891	773	123	- 4	- 7	4948	686
788	14010		10101	4959	704	120	- 4	- 6	4910	625
797	14113		10290	5006	643	121	- 4	- 6	4865	570
806	14216		10496	5038	587	122	- 3	- 6	4800	520
816	14330		10705	5071	522	125	- 3	- 5	4737	461
826	14443		10931	5087	464	125	- 3	- 5	4654	410
837	14563		11185	5101	408	127	- 3	- 5	4560	359
847	14674		11419	5086	359	125	- 2	- 5	4454	316
858	14789		11676	5067	304	126	- 1	- 5	4340	267
869	14905		11933	5036	254	125	- 1	- 5	4221	222
881	15023		12182	4978	207	126	- 1	- 5	4087	180
892	15125		12403	4937	164	125	- 1	- 4	3980	142
903	15226		12614	4865	127	125	- 1	- 4	3857	109
913	15323		12809	4778	94	122	-	- 4	3730	80
923	15432		13019	4675	60	124	1	- 4	3591	50
933	15541		13219	4571	23	124	1	- 4	3457	17
943	15648		13419	4460	- 13	122	1	- 4	3324	- 14
952	15747		13613	4344	- 48	128	1	- 3	3191	- 45
962	15854		13824	4205	- 87	131	2	- 4	3042	- 82
971	15950		13984	4094	- 123	135	2	- 4	2928	- 113
982	16063		14185	3929	- 159	137	1	- 3	2770	- 145

NORTH AMERICAN AVIATION, INC.
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TWT 90 BLOW 47

CONF C39 T30

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
590	6508		3493	1631	14138	1872	15990	5332
671	6584		3493	1667	14220	1883	16082	5280
681	6677		3493	1669	14200	1880	16060	5271
690	6778		3493	1672	14211	1882	16072	5268
700	6889		3493	1675	14198	1880	16058	5257
711	7012		3493	1677	14202	1881	16062	5254
720	7112		3493	1681	14199	1880	16058	5245
731	7235		3493	1685	14206	1881	16067	5240
741	7344		3493	1686	14199	1880	16058	5235
750	7443		3493	1689	14191	1879	16049	5228
761	7565		3493	1691	14189	1879	16047	5223
772	7685		3493	1694	14189	1879	16048	5218
781	7785		3493	1698	14201	1881	16061	5213
793	7916		3493	1699	14190	1879	16048	5208
804	8037		3493	1701	14191	1879	16050	5204
814	8148		3493	1700	14164	1876	16019	5201
825	8267		3493	1705	14183	1878	16041	5196
835	8378		3493	1703	14163	1875	16018	5194
845	8482		3493	1704	14161	1875	16015	5191
855	8588		3493	1705	14147	1873	16000	5186
865	8695		3493	1702	14117	1869	15966	5186
875	8797		3493	1704	14115	1869	15963	5180
885	8899		3493	1704	14109	1868	15957	5180
897	9021		3493	1706	14108	1868	15956	5175
907	9125		3493	1701	14066	1863	15909	5175
917	9232		3493	1699	14038	1859	15876	5172
927	9341		3493	1698	14015	1856	15851	5168
937	9449		3493	1695	13980	1851	15811	5167
948	9558		3493	1691	13927	1844	15751	5162

TWT 90 BLOW 47

CONF C39 T30

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
590	6508		5734	8482	- 7	- 24	- 5742	3709	683	- 4870
671	6584		5929	8583	- 22	- 19	- 5755	5319	- 43	- 4939
681	6677		5862	8628	- 24	- 20	- 5748	5261	- 85	- 4959
690	6778		5761	8630	- 24	- 21	- 5739	5187	- 103	- 4953
700	6889		5646	8670	- 26	- 20	- 5730	5053	- 128	- 4968
711	7012		5500	8690	- 27	- 20	- 5713	4939	- 158	- 4964
720	7112		5391	8717	- 29	- 20	- 5703	4876	- 184	- 4972
731	7235		5226	8716	- 29	- 19	- 5688	4793	- 223	- 4957
741	7344		5102	8726	- 30	- 19	- 5675	4725	- 262	- 4952
750	7443		4977	8738	- 30	- 18	- 5662	4683	- 287	- 4947
761	7565		4819	8743	- 28	- 19	- 5636	4823	- 326	- 4927
772	7685		4673	8743	- 32	- 21	- 5605	4495	- 343	- 4900
781	7785		4549	8748	- 35	- 21	- 5577	4309	- 374	- 4879
793	7916		4365	8755	- 33	- 21	- 5534	4324	- 391	- 4845
804	8037		4196	8739	- 31	- 21	- 5497	4379	- 408	- 4804
814	8148		4033	8741	- 27	- 20	- 5466	4453	- 641	- 4778
825	8267		3826	8712	- 23	- 20	- 5430	4501	- 438	- 4731
835	8378		3664	8688	- 23	- 21	- 5398	4557	- 459	- 4690
845	8482		3479	8664	- 21	- 19	- 5362	4643	- 467	- 4646
855	8588		3300	8632	- 21	- 18	- 5326	4677	- 480	- 4597
865	8695		3112	8597	- 23	- 18	- 5286	4656	- 491	- 4544
875	8797		2914	8548	- 25	- 17	- 5247	4695	- 504	- 4485
885	8899		2707	8494	- 26	- 14	- 5202	4751	- 499	- 4418
897	9021		2439	8440	- 28	- 12	- 5153	4812	- 517	- 4349
907	9125		2202	8400	- 31	- 10	- 5103	4689	- 511	- 4286
917	9232		1968	8336	- 35	- 9	- 5047	4588	- 509	- 4207
927	9341		1698	8281	- 36	- 7	- 4985	4543	- 530	- 4129
937	9449		1422	8214	- 35	- 6	- 4926	4498	- 537	- 4046
948	9558		1135	8138	- 35	- 4	- 4875	4469	- 544	- 3967

TWT 90 BLOW 47

CONF C39 T30

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN DEC=	ALPHA 2	YAW 2	CD 4	CL 4	CMS1 4	CY 4	CNS 4	CLS 4	L/D 4	CMS2 4
590	6508		10108	- 1627	1286	- 21	19	- 16	- 1609	860
671	6584		10258	- 1897	1298	- 144	9	- 28	- 1849	866
681	6677		10241	- 1983	1305	- 148	9	- 30	- 1937	871
690	6778		10168	- 2068	1307	- 142	10	- 30	- 2034	873
700	6889		10122	- 2145	1313	- 145	9	- 31	- 2119	877
711	7012		10042	- 2219	1321	- 143	10	- 33	- 2209	885
720	7112		9992	- 2280	1326	- 145	10	- 34	- 2282	889
731	7235		9890	- 2338	1330	- 142	10	- 34	- 2364	894
741	7344		9818	- 2403	1335	- 141	9	- 34	- 2447	899
750	7443		9753	- 2450	1341	- 137	10	- 34	- 2512	905
761	7565		9664	- 2502	1354	- 135	12	- 31	- 2589	919
772	7685		9577	- 2562	1373	- 136	13	- 36	- 2675	938
781	7785		9509	- 2606	1390	- 135	13	- 38	- 2740	956
793	7916		9420	- 2641	1418	- 130	15	- 36	- 2804	985
804	8037		9318	- 2674	1438	- 123	16	- 34	- 2870	1006
814	8148		9242	- 2693	1456	- 112	16	- 30	- 2914	1025
825	8267		9129	- 2684	1471	- 99	17	- 26	- 2940	1042
835	8378		9034	- 2701	1486	- 99	18	- 25	- 2990	1059
845	8482		8943	- 2682	1503	- 96	17	- 23	- 2999	1077
855	8588		8846	- 2672	1518	- 98	16	- 23	- 3020	1095
865	8695		8751	- 2650	1537	- 103	17	- 24	- 3028	1116
875	8797		8645	- 2610	1550	- 115	16	- 26	- 3019	1133
885	8899		8540	- 2558	1568	- 125	14	- 27	- 2995	1154
897	9021		8431	- 2469	1584	- 138	12	- 28	- 2929	1174
907	9125		8350	- 2384	1605	- 144	11	- 31	- 2856	1198
917	9232		8249	- 2304	1627	- 153	10	- 34	- 2792	1224
927	9341		8166	- 2187	1652	- 154	9	- 35	- 2679	1253
937	9449		8078	- 2060	1673	- 150	8	- 35	- 2551	1277
948	9558		7989	- 1920	1682	- 145	8	- 34	- 2404	1292

NORTH AMERICAN AVIATION, INC.
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TWT 90 BLOW 48

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
591	6507		3500	1637	14090	1847	15841	5297
659	6569		3500	1672	14211	1863	15977	5256
669	6663		3500	1671	14181	1859	15944	5250
677	6752		3500	1677	14217	1864	15983	5245
687	6863		3500	1677	14197	1861	15961	5242
697	6976		3500	1682	14214	1864	15980	5235
706	7079		3500	1684	14210	1863	15976	5230
715	7189		3500	1687	14206	1863	15971	5223
725	7299		3500	1689	14200	1862	15964	5218
875	7432		3500	1694	14203	1862	15968	5209
740	7562		3500	1696	14194	1861	15958	5204
751	7684		3500	1698	14197	1861	15961	5201
761	7793		3500	1701	14206	1863	15972	5196
772	7916		3500	1702	14188	1860	15951	5191
782	8027		3500	1704	14198	1862	15963	5189
792	8138		3500	1703	14175	1859	15937	5186
801	8233		3500	1706	14176	1859	15938	5180
811	8343		3500	1705	14171	1858	15932	5180
821	8449		3500	1710	14183	1860	15945	5174
831	8555		3500	1708	14157	1856	15917	5172
841	8658		3500	1710	14157	1856	15916	5168
851	8763		3500	1710	14153	1856	15911	5167
861	8867		3500	1709	14141	1854	15899	5165
873	8983		3500	1711	14130	1853	15886	5160
884	9091		3500	1710	14121	1851	15876	5160
894	9193		3500	1710	14097	1848	15848	5153
904	9300		3500	1710	14093	1848	15845	5153
914	9405		3500	1707	14055	1843	15801	5150
925	9518		3500	1704	14025	1839	15768	5148
947	9647		3500	1696	13944	1828	15677	5145

TWT 90 BLOW 48

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB		CLB		XCPN		XCPY		P B		CMA
DEC=	2	2	4	4	4		4		4		4		4		4
591	6507		6174	9226	41	-	14	-	5900		-71799		755	-	5443
659	6569		6728	9437	33	-	11	-	5928		15094	-	163	-	5594
669	6663		6678	9446	26	-	12	-	5924		10583	-	222	-	5596
677	6752		6584	9400	28	-	10	-	5921		12997	-	259	-	5566
687	6863		6531	9401	30	-	10	-	5913		11486	-	315	-	5558
697	6976		6426	9362	30	-	9	-	5905		11594	-	346	-	5528
706	7079		6331	9344	32	-	7	-	5898		14115	-	381	-	5511
715	7189		6200	9311	31	-	8	-	5896		14182	-	398	-	5489
725	7299		6092	9269	31	-	8	-	5888		14247	-	423	-	5457
875	7432		5911	9223	30	-	10	-	5875		12376	-	463	-	5419
740	7562		5763	9180	30	-	10	-	5859		13529	-	484	-	5378
751	7684		5596	9140	31	-	10	-	5849		14821	-	502	-	5346
761	7793		5428	9076	32	-	11	-	5837		14978	-	524	-	5298
772	7916		5248	9025	32	-	12	-	5825		16208	-	540	-	5258
782	8027		5068	8962	31	-	14	-	5813		15067	-	558	-	5210
792	8138		4889	8901	31	-	14	-	5804		15450	-	570	-	5166
801	8233		4714	8824	32	-	16	-	5789		17331	-	583	-	5108
811	8343		4532	8750	31	-	18	-	5778		15230	-	605	-	5056
821	8449		4329	8655	31	-	18	-	5763		16007	-	618	-	4988
831	8555		4148	8588	31	-	19	-	5753		17018	-	609	-	4941
841	8658		3954	8501	31	-	19	-	5735		16589	-	635	-	4875
851	8763		3752	8430	31	-	20	-	5719		17706	-	635	-	4821
861	8867		3548	8337	30	-	19	-	5700		20554	-	656	-	4752
873	8983		3307	8227	31	-	18	-	5673		36881	-	664	-	4667
884	9091		3091	8133	30	-	18	-	5654		37380	-	673	-	4598
894	9193		2869	8036	30	-	19	-	5632		63633	-	668	-	4526
904	9300		2641	7920	29	-	20	-	5609		66594	-	676	-	4442
914	9405		2390	7821	28	-	20	-	5584		67615	-	697	-	4367
925	9518		2123	7689	26	-	19	-	5558		50837	-	687	-	4273
947	9647		1754	7531	23	-	18	-	5515		20709	-	693	-	4154

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NORTH AMERICAN AVIATION, INC.

SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 48

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	.2	2	4	4	4	4	4	4	4	4
591	6507		10968	- 1710	1250	5	30	32	- 1559	786
659	6569		11370	- 2245	1277	- 40	23	25	- 1974	800
669	6663		11320	- 2382	1278	- 71	22	20	- 2105	801
677	6752		11203	- 2490	1271	- 45	19	22	- 2222	797
687	6863		11134	- 2657	1275	- 64	20	24	- 2386	802
697	6976		11007	- 2791	1273	- 63	19	25	- 2536	801
706	7079		10907	- 2903	1272	- 43	17	27	- 2662	802
715	7189		10777	- 2999	1264	- 43	17	27	- 2782	795
725	7299		10645	- 3113	1260	- 42	17	27	- 2925	794
875	7432		10478	- 3197	1257	- 55	18	26	- 3051	794
740	7562		10324	- 3303	1259	- 45	17	27	- 3200	799
751	7684		10175	- 3368	1254	- 39	17	28	- 3310	796
761	7793		10011	- 3410	1248	- 39	18	29	- 3406	795
772	7916		9851	- 3457	1243	- 34	18	29	- 3509	793
782	8027		9690	- 3480	1237	- 38	19	29	- 3592	790
792	8138		9533	- 3499	1228	- 36	18	29	- 3671	785
801	8233		9374	- 3494	1222	- 30	20	29	- 3727	784
811	8343		9212	- 3500	1214	- 37	22	29	- 3799	780
821	8449		9031	- 3478	1205	- 34	21	29	- 3851	776
831	8555		8884	- 3470	1195	- 30	21	29	- 3905	770
841	8658		8721	- 3440	1189	- 31	21	29	- 3945	769
851	8763		8578	- 3401	1183	- 28	21	30	- 3965	768
861	8867		8417	- 3353	1176	- 22	19	30	- 3983	766
873	8983		8237	- 3283	1172	- 10	18	31	- 3986	768
884	9091		8083	- 3220	1163	- 10	18	31	- 3983	765
894	9193		7935	- 3138	1156	- 5	18	31	- 3955	763
904	9300		7771	- 3051	1146	- 5	18	30	- 3926	760
914	9405		7632	- 2936	1136	- 5	18	29	- 3847	758
925	9518		7466	- 2809	1126	- 6	17	28	- 3763	753
947	9647		7286	- 2591	1116	- 17	15	25	- 3556	752

NORTH AMERICAN AVIATION, INC.

SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 50 2ND REDUCTION

CONF C39 T30

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
~~736~~	~~2536~~		~~3493~~	~~1589~~	~~14173~~	~~1877~~	~~16030~~	~~5432~~
827	2596		3493	1633	14169	1876	16025	5338
837	2701		3493	1640	14188	1879	16046	5327
846	2810		3493	1640	14170	1876	16026	5322
855	2918		3493	1645	14179	1878	16036	5314
865	3036		3493	1650	14185	1878	16043	5305
875	3155		3493	1653	14180	1878	16037	5298
885	3271		3493	1657	14182	1878	16039	5290
904	3493		3493	1664	14185	1878	16042	5276
914	3608		3493	1667	14176	1877	16033	5269
923	3710		3493	1669	14171	1877	16027	5262
933	3824		3493	1673	14180	1878	16038	5257
943	3942		3493	1674	14169	1876	16024	5252
952	4048		3493	1677	14168	1876	16024	5247
962	4161		3493	1676	14150	1874	16003	5244
972	4276		3493	1679	14163	1875	16017	5240
982	4391		3493	1681	14139	1872	15991	5232
992	4502		3493	1685	14157	1875	16011	5228
1003	4623		3493	1686	14142	1873	15994	5223
1012	4724		3493	1689	14159	1875	16013	5221
1022	4834		3493	1687	14127	1871	15978	5216
1033	4949		3493	1687	14113	1869	15961	5213
1045	5067		3493	1690	14114	1869	15963	5208
1057	5180		3493	1689	14092	1866	15938	5204
1069	5284		3493	1688	14069	1863	15911	5201
1084	5404		3493	1686	14033	1858	15871	5196
1097	5506		3493	1684	13996	1853	15829	5192
1111	5617		3493	1680	13947	1847	15774	5189

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NORTH AMERICAN AVIATION, INC.

SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 50 2ND REDUCTION

CONF C39 T30

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
~~736~~	~~2536~~		~~9816~~	~~9813~~	~~32~~	~~29~~	~~7155~~	~~8554~~	~~445~~	~~7021~~
827	2596		8324	6565	- 15	14	- 6460	12886	- 348	- 4241
837	2701		8322	6651	- 14	15	- 6420	12746	- 383	- 4269
846	2810		8348	6776	- 18	15	- 6367	23907	- 417	- 4314
855	2918		8348	6858	- 18	15	- 6317	17758	- 452	- 4333
865	3036		8352	6969	- 22	14	- 6260	41394	- 478	- 4362
875	3155		8338	7072	- 27	13	- 6205	-98196	- 508	- 4388
885	3271		8340	7181	- 28	13	- 6146		- 530	- 4413
904	3493		8288	7347	- 33	12	- 6048	-35073	- 578	- 4443
914	3608		8266	7420	- 32	11	- 6011	-91349	- 603	- 4460
923	3710		8232	7475	- 32	12	- 5992	-16757	- 621	- 4479
933	3824		8158	7512	- 35	12	- 5972		- 643	- 4486
943	3942		8072	7549	- 30	13	- 5952	32518	- 659	- 4493
952	4048		7968	7583	- 25	13	- 5942	24174	- 672	- 4506
962	4161		7873	7627	- 19	12	- 5932	15853	- 680	- 4524
972	4276		7770	7663	- 29	9	- 5928	53696	- 690	- 4542
982	4391		7708	7726	- 32	8	- 5922	-61924	- 710	- 4576
992	4502		7617	7765	- 31	8	- 5910	-17787	- 724	- 4589
1003	4623		7558	7838	- 27	9	- 5898	-36551	- 728	- 4623
1012	4724		7495	7878	- 21	10	- 5887	30307	- 737	- 4638
1022	4834		7428	7937	- 21	9	- 5878	27457	- 745	- 4666
1033	4949		7335	7973	- 22	9	- 5899	38400	- 757	- 4704
1045	5067		7217	7999	- 25	8	- 5911		- 771	- 4728
1057	5180		7103	8047	- 27	9	- 5905		- 770	- 4752
1069	5284		7013	8091	- 32	10	- 5894	-66317	- 795	- 4769
1084	5404		6903	8171	- 32	10	- 5883	-75164	- 781	- 4806
1097	5506		6825	8228	- 32	11	- 5872		- 802	- 4831
1111	5617		6728	8297	- 30	10	- 5857		- 801	- 4860

NORTH AMERICAN AVIATION, INC.
SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 50 2ND REDUCTION

CONF C39 T30

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
~~736~~	~~2536~~		~~13073~~	~~4663~~	~~289~~	~~188~~	~~41~~	~~13~~	~~3567~~	~~211~~
827	2596		10358	2259	753	25	20	6	2180	410
837	2701		10434	2145	784	24	19	7	2056	437
846	2810		10556	2045	826	10	22	5	1937	473
855	2918		10633	1917	864	16	23	4	1803	508
865	3036		10729	1791	911	6	26	1	1669	549
875	3155		10806	1665	955	-3	30	-3	1541	589
885	3271		10898	1535	1004		31	-4	1409	633
904	3493		11001	1278	1085	-2	34	-9	1162	706
914	3608		11050	1130	1118	-3	32	-9	1022	735
923	3710		11074	997	1134	-3	32	-10	900	750
933	3824		11058	850	1148	-2	35	-12	769	762
943	3942		11029	706	1162	12	32	-9	640	774
952	4048		10983	596	1166	14	27	-6	543	778
962	4161		10951	474	1172	21	22	-3	433	782
972	4276		10907	352	1173	6	28	-13	323	781
982	4391		10912	221	1179	-5	29	-16	203	785
992	4502		10877	100	1187	-13	27	-17	92	792
1003	4623		10888	-37	1199	-6	26	-13	-34	801
1012	4724		10873	-154	1209	9	22	-9	-142	809
1022	4834		10867	-274	1217	10	21	-9	-252	815
1033	4949		10827	-397	1199	7	21	-11	-367	795
1045	5067		10761	-512	1185	1	22	-14	-476	781
1057	5180		10716	-606	1187		24	-16	-565	781
1069	5284		10684	-702	1195	-4	27	-19	-657	788
1084	5404		10667	-790	1206	-4	27	-20	-740	795
1097	5506		10653	-883	1216	1	27	-20	-829	802
1111	5617		10639	-969	1229		25	-19	-911	813

CONFIDENTIAL

NORTH AMERICAN AVIATION, INC.
SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 53 2ND REDUCTION

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
853	2572		3493	1721	14167	1876	16023	5160
905	2638		3493	1734	14166	1876	16021	5136
916	2758		3493	1738	14175	1877	16032	5131
925	2870		3493	1739	14169	1876	16024	5126
935	2997		3493	1742	14171	1876	16026	5121
943	3097		3493	1743	14171	1877	16027	5119
952	3207		3493	1747	14182	1878	16039	5114
962	3329		3493	1746	14157	1875	16012	5110
971	3439		3493	1750	14176	1877	16032	5107
982	3571		3493	1750	14160	1875	16014	5104
990	3665		3493	1752	14163	1875	16018	5100
1000	3787		3493	1753	14156	1875	16010	5098
1008	3881		3493	1756	14169	1876	16025	5095
1016	3977		3493	1756	14158	1875	16012	5093
1027	4112		3493	1758	14171	1877	16027	5092
1038	4244		3493	1757	14144	1873	15996	5088
1048	4362		3493	1757	14135	1872	15986	5085
1058	4476		3493	1758	14142	1873	15995	5085
1068	4589		3493	1759	14125	1870	15975	5080
1078	4703		3493	1760	14133	1871	15984	5080
1087	4804		3493	1760	14120	1870	15970	5076
1097	4913		3493	1759	14115	1869	15963	5076
1107	5015		3493	1760	14098	1867	15944	5071
1119	5122		3493	1758	14077	1864	15921	5071
1133	5228		3493	1756	14050	1860	15890	5068
1155	5343		3493	1750	13985	1852	15816	5064
1165	5440		3493	1746	13950	1847	15777	5063
1177	5557		3493	1743	13905	1841	15726	5059
1191	5667		3493	1732	13816	1830	15626	5057

TWT 90 BLOW 53 2ND REDUCTION

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE. (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	.2	4	4	4	4	4	4	4	4
853	2572		7596	6704	- 2	13	- 6193	8587	- 190	- 4151
905	2638		7564	6810	- 4	14	- 6177	8191	- 437	- 4206
916	2758		7497	6970	- 5	14	- 6156	9315	- 485	- 4291
925	2870		7452	7145	- 5	14	- 6128	8715	- 502	- 4379
935	2997		7391	7328	- 4	14	- 6099	7915	- 537	- 4469
943	3097		7356	7485	- 5	13	- 6069	9305	- 554	- 4543
952	3207		7311	7630	- 5	13	- 6055	8513	- 568	- 4619
962	3329		7282	7804	- 5	13	- 6030	8589	- 605	- 4706
971	3439		7245	7931	- 5	14	- 6014	8453	- 611	- 4770
982	3571		7231	8078	- 6	13	- 6001	9598	- 632	- 4847
990	3665		7194	8170	- 7	13	- 5988	10054	- 653	- 4892
1000	3787		7145	8295	- 6	13	- 5976	9035	- 670	- 4957
1008	3881		7132	8368	- 7	13	- 5968	9618	- 688	- 4994
1016	3977		7121	8468	- 7	14	- 5958	9124	- 692	- 5045
1027	4112		7111	8564	- 8	13	- 5948	9828	- 706	- 5093
1038	4244		7104	8683	- 8	13	- 5934	9925	- 709	- 5152
1048	4362		7093	8778	- 9	13	- 5924	10820	- 717	- 5199
1058	4476		7084	8839	- 9	13	- 5920	11394	- 744	- 5232
1068	4589		7080	8914	- 9	13	- 5913	10928	- 743	- 5271
1078	4703		7067	8979	- 10	14	- 5912	11204	- 761	- 5309
1087	4804		7061	9043	- 10	14	- 5908	11364	- 756	- 5342
1097	4913		7055	9106	- 11	14	- 5907	11325	- 765	- 5379
1107	5015		7046	9168	- 11	14	- 5903	11289	- 777	- 5412
1119	5122		7040	9217	- 11	13	- 5903	11665	- 777	- 5441
1133	5228		7023	9268	- 12	14	- 5901	11884	- 785	- 5469
1155	5343		7003	9325	- 12	13	- 5900	11740	- 787	- 5502
1165	5440		6980	9361	- 12	14	- 5899	11194	- 786	- 5523
1177	5557		6951	9394	- 13	14	- 5899	11451	- 789	- 5541
1191	5667		6935	9454	- 13	14	- 5897	11381	- 800	- 5575

NORTH AMERICAN AVIATION, INC.
SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 53 2ND REDUCTION

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
853	2572		9753	2744	895	12 -	7	10	2813	549
905	2638		9802	2740	911	27 -	10	11	2795	560
916	2758		9873	2707	933	20 -	11	10	2742	575
925	2870		9968	2688	962	24 -	11	10	2697	597
935	2997		10063	2656	993	34 -	10	10	2639	619
943	3097		10159	2633	1025	20 -	11	9	2592	644
952	3207		10246	2584	1046	28 -	11	9	2521	658
962	3329		10371	2527	1077	28 -	11	8	2437	682
971	3439		10458	2453	1098	31 -	12	9	2346	697
982	3571		10586	2339	1120	23 -	13	7	2209	712
990	3665		10648	2260	1137	22 -	14	7	2122	725
1000	3787		10732	2162	1155	28 -	13	7	2015	737
1008	3881		10802	2051	1167	26 -	14	6	1899	746
1016	3977		10890	1954	1184	30 -	14	6	1794	758
1027	4112		10989	1776	1200	27 -	15	5	1616	770
1038	4244		11102	1614	1223	26 -	15	5	1454	787
1048	4362		11190	1462	1240	22 -	16	4	1307	800
1058	4476		11254	1288	1249	20 -	16	3	1145	806
1068	4589		11328	1121	1261	22 -	16	3	989	815
1078	4703		11387	949	1267	23 -	17	2	833	818
1087	4804		11445	796	1277	23 -	17	2	696	825
1097	4913		11502	622	1283	24 -	18	1	541	828
1107	5015		11553	465	1292	25 -	18	1	402	835
1119	5122		11595	286	1298	23 -	17 -		246	838
1133	5228		11628	114	1303	24 -	19 -	1	98	841
1155	5343		11662 -	67	1308	24 -	18 -	2	- 58	843
1165	5440		11675 -	226	1311	27 -	18 -	2	- 193	844
1177	5557		11678 -	422	1312	28 -	19 -	3	- 361	844
1191	5667		11710 -	599	1320	30 -	19 -	3	- 512	849

TWT 90 BLOW 54 2ND REDUCTION

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
869	6509		3493	1704	14195	1880	16054	5199
928	6586		3493	1720	14179	1878	16036	5165
938	6699		3493	1724	14189	1879	16048	5160
948	6817		3493	1728	14190	1879	16048	5153
958	6936		3493	1729	14177	1877	16034	5148
968	7055		3493	1730	14176	1877	16032	5145
979	7183		3493	1734	14181	1878	16038	5139
989	7294		3493	1738	14190	1879	16049	5134
999	7406		3493	1738	14179	1878	16036	5131
1009	7518		3493	1741	14179	1878	16036	5126
1019	7629		3493	1743	14172	1877	16028	5121
1029	7745		3493	1744	14171	1876	16027	5117
1038	7851		3493	1747	14177	1877	16033	5114
1047	7959		3493	1748	14182	1878	16039	5112
1057	8071		3493	1750	14175	1877	16031	5107
1067	8185		3493	1748	14146	1873	15999	5105
1076	8290		3493	1750	14159	1875	16013	5104
1086	8403		3493	1752	14153	1874	16007	5098
1096	8514		3493	1754	14155	1874	16009	5095
1106	8621		3493	1752	14131	1871	15982	5093
1116	8729		3493	1753	14141	1873	15993	5093
1125	8825		3493	1754	14127	1871	15978	5090
1138	8955		3493	1753	14106	1868	15953	5087
1149	9060		3493	1751	14085	1865	15930	5085
1162	9178		3493	1752	14076	1864	15919	5081
1175	9290		3493	1749	14045	1860	15884	5080
1186	9393		3493	1747	14019	1856	15855	5078
1196	9494		3493	1745	13996	1853	15829	5076
1207	9598		3493	1740	13939	1846	15765	5071

NORTH AMERICAN AVIATION, INC.

SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 54 2ND REDUCTION

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
869	6509		6592	9434	12	- 13	- 5905	8660	113	- 5571
928	6586		6540	9421	12	- 13	- 5903	8352	- 92	- 5561
938	6699		6466	9409	12	- 12	- 5898	8419	- 127	- 5550
948	6817		6371	9388	12	- 12	- 5890	8453	- 149	- 5530
958	6936		6286	9381	13	- 12	- 5877	8474	- 200	- 5513
968	7055		6190	9353	10	- 12	- 5869	8066	- 243	- 5489
979	7183		6063	9304	10	- 11	- 5855	8137	- 291	- 5448
989	7294		5946	9287	9	- 12	- 5843	8072	- 326	- 5427
999	7406		5837	9241	9	- 12	- 5832	8116	- 382	- 5389
1009	7518		5695	9208	9	- 12	- 5821	8082	- 408	- 5360
1019	7629		5552	9165	9	- 13	- 5807	8038	- 438	- 5322
1029	7745		5394	9134	9	- 14	- 5795	8170	- 459	- 5294
1038	7851		5237	9085	9	- 14	- 5780	8237	- 481	- 5251
1047	7959		5083	9036	9	- 14	- 5768	8196	- 495	- 5212
1057	8071		4907	8985	9	- 15	- 5749	8348	- 524	- 5166
1067	8185		4729	8941	10	- 14	- 5733	8576	- 562	- 5126
1076	8290		4547	8871	10	- 15	- 5712	8711	- 576	- 5067
1086	8403		4346	8794	9	- 17	- 5692	8707	- 589	- 5006
1096	8514		4139	8714	9	- 18	- 5668	8695	- 597	- 4940
1106	8621		3933	8651	9	- 19	- 5647	8677	- 622	- 4885
1116	8729		3716	8561	9	- 20	- 5625	8721	- 627	- 4815
1125	8825		3534	8480	9	- 21	- 5603	8685	- 644	- 4751
1138	8955		3274	8366	9	- 21	- 5574	8923	- 661	- 4663
1149	9060		3046	8268	9	- 21	- 5546	8858	- 660	- 4585
1162	9178		2786	8147	8	- 21	- 5518	8701	- 681	- 4496
1175	9290		2545	8043	8	- 18	- 5485	8704	- 689	- 4411
1186	9393		2323	7954	6	- 17	- 5458	8294	- 692	- 4341
1196	9494		2081	7852	5	- 15	- 5427	8119	- 700	- 4261
1207	9598		1828	7750	4	- 13	- 5391	7557	- 703	- 4178

SID 63-1035

NORTH AMERICAN AVIATION, INC.
SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 54 2ND REDUCTION

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
869	6509		11333	- 2006	1290	- 69	17	6	- 1770	814
928	6586		11271	- 2115	1287	- 79	16	6	- 1877	812
938	6699		11188	- 2273	1286	- 77	16	6	- 2032	812
948	6817		11084	- 2422	1286	- 75	16	6	- 2185	813
958	6936		10994	- 2576	1292	- 80	16	8	- 2343	821
968	7055		10880	- 2723	1292	- 84	15	6	- 2503	821
979	7183		10731	- 2859	1292	- 75	14	6	- 2664	825
989	7294		10623	- 2961	1295	- 74	14	5	- 2788	829
999	7406		10489	- 3075	1294	- 75	14	6	- 2932	831
1009	7518		10358	- 3150	1292	- 76	14	6	- 3041	831
1019	7629		10220	- 3221	1292	- 78	15	6	- 3152	834
1029	7745		10088	- 3281	1291	- 72	16	6	- 3252	834
1038	7851		9946	- 3323	1290	- 67	15	6	- 3341	836
1047	7959		9806	- 3367	1286	- 68	16	6	- 3433	836
1057	8071		9659	- 3392	1287	- 64	16	7	- 3512	840
1067	8185		9521	- 3415	1286	- 58	16	8	- 3586	842
1076	8290		9365	- 3417	1286	- 55	17	8	- 3648	846
1086	8403		9199	- 3408	1283	- 51	18	8	- 3704	848
1096	8514		9034	- 3386	1282	- 50	19	8	- 3748	852
1106	8621		8892	- 3352	1281	- 50	20	8	- 3770	854
1116	8729		8727	- 3307	1276	- 48	21	8	- 3789	854
1125	8825		8585	- 3272	1274	- 49	21	8	- 3812	857
1138	8955		8392	- 3208	1269	- 45	21	9	- 3823	858
1149	9060		8236	- 3133	1266	- 45	21	9	- 3804	861
1162	9178		8057	- 3038	1257	- 45	20	9	- 3771	859
1175	9290		7904	- 2948	1256	- 42	18	9	- 3730	864
1186	9393		7776	- 2863	1252	- 45	16	8	- 3682	865
1196	9494		7643	- 2750	1248	- 44	14	7	- 3598	867
1207	9598		7517	- 2625	1246	- 53	13	5	- 3492	871

TWT 90 BLOW 55 2ND REDUCTION

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
696	8979		3493	1700	14197	1880	16056	5208
739	9012		3493	1712	14198	1880	16057	5184
749	9112		3493	1715	14193	1879	16052	5177
759	9230		3493	1717	14191	1879	16049	5174
770	9361		3493	1719	14184	1878	16042	5168
780	9479		3493	1723	14197	1880	16056	5163
790	9597		3493	1722	14175	1877	16031	5160
800	9714		3493	1727	14186	1878	16044	5153
810	9831		3493	1730	14185	1878	16043	5148
818	9924		3493	1731	14183	1878	16040	5145
828	10042		3493	1734	14186	1878	16044	5139
838	10161		3493	1734	14172	1877	16028	5136
848	10274		3493	1735	14163	1875	16018	5133
859	10401		3493	1740	14174	1877	16030	5126
869	10516		3493	1739	14163	1875	16018	5126
879	10625		3493	1740	14156	1875	16010	5122
888	10725		3493	1745	14184	1878	16041	5119
897	10825		3493	1744	14165	1876	16020	5116
907	10930		3493	1743	14147	1873	16000	5114
919	11048		3493	1745	14138	1872	15989	5109
931	11163		3493	1746	14137	1872	15988	5107
942	11261		3493	1747	14140	1872	15992	5105
954	11374		3493	1744	14113	1869	15962	5104
966	11509		3493	1745	14101	1867	15948	5100
976	11621		3493	1744	14082	1865	15926	5097
985	11722		3493	1742	14066	1863	15908	5097
996	11844		3493	1740	14033	1858	15871	5093
1006	11955		3493	1737	14006	1855	15840	5093
1016	12064		3493	1734	13973	1850	15803	5090
1028	12180		3493	1729	13914	1843	15736	5087

TWT 90 BLOW 55 2ND REDUCTION

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
696	8979		3337	8308	8	11	- 5589	7957	- 160	- 4644
739	9012		3175	8297	10	12	- 5575	8895	- 372	- 4626
749	9112		2970	8233	10	13	- 5553	9025	- 419	- 4572
759	9230		2735	8126	10	13	- 5522	9072	- 449	- 4488
770	9361		2453	7991	10	12	- 5487	9330	- 475	- 4384
780	9479		2170	7853	9	12	- 5450	9521	- 489	- 4279
790	9597		1896	7755	9	10	- 5405	9534	- 505	- 4192
800	9714		1603	7624	8	10	- 5360	10487	- 536	- 4086
810	9831		1310	7505	8	9	- 5314	11462	- 566	- 3988
818	9924		1065	7398	9	9	- 5277	17720	- 562	- 3904
828	10042		761	7269	9	8	- 5227	- 6372	- 579	- 3800
838	10161		423	7135	9	6	- 5172	857	- 609	- 3690
848	10274		97	6987	10	5	- 5119	3002	- 626	- 3577
859	10401		- 275	6820	10	3	- 5052	4388	- 639	- 3445
869	10516		- 619	6670	11	1	- 4985	4911	- 643	- 3325
879	10625		- 943	6508	11		- 4921	5203	- 673	- 3203
888	10725		- 1254	6368	11	-	- 4865	5336	- 678	- 3098
897	10825		- 1566	6228	11	- 1	- 4802	5519	- 682	- 2991
907	10930		- 1906	6075	10	- 2	- 4730	5639	- 695	- 2874
919	11048		- 2287	5903	11	- 2	- 4645	5710	- 703	- 2742
931	11163		- 2657	5737	10	- 2	- 4562	5837	- 712	- 2617
942	11261		- 2965	5595	10	- 3	- 4483	5907	- 720	- 2508
954	11374		- 3323	5441	10	- 3	- 4408	5967	- 746	- 2399
966	11509		- 3746	5268	9	- 3	- 4310	6055	- 741	- 2271
976	11621		- 4106	5104	10	- 4	- 4224	6075	- 749	- 2156
985	11722		- 4423	4961	9	- 4	- 4148	6111	- 762	- 2058
996	11844		- 4809	4796	8	- 6	- 4064	6216	- 747	- 1949
1006	11955		- 5154	4637	6	- 12	- 3987	6338	- 769	- 1849
1016	12064		- 5514	4485	4	- 16	- 3906	6469	- 759	- 1752
1028	12180		- 5891	4310	2	- 21	- 3829	6648	- 766	- 1650

CONFIDENTIAL

NORTH AMERICAN AVIATION, INC.
SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 55 2ND REDUCTION

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
696	8979		8320	- 3307	1252	- 72	- 11	8	- 3975	842
739	9012		8291	- 3193	1253	- 51	- 12	10	- 3851	844
749	9112		8174	- 3130	1251	- 48	- 13	10	- 3830	847
759	9230		8010	- 3059	1248	- 45	- 13	9	- 3819	849
770	9361		7820	- 2951	1242	- 40	- 13	9	- 3774	851
780	9479		7644	- 2819	1235	- 36	- 13	8	- 3687	852
790	9597		7513	- 2693	1240	- 33	- 11	8	- 3582	863
800	9714		7365	- 2538	1238	- 23	- 11	7	- 3446	869
810	9831		7237	- 2381	1238	- 18	- 10	7	- 3291	875
818	9924		7132	- 2239	1234	- 8	- 10	7	- 3140	878
828	10042		7011	- 2063	1231	7	- 9	8	- 2943	883
838	10161		6904	- 1851	1229	16	- 8	8	- 2680	889
848	10274		6794	- 1636	1222	26	- 7	9	- 2408	890
859	10401		6684	- 1385	1217	41	- 5	9	- 2072	895
869	10516		6600	- 1147	1214	55	- 4	10	- 1737	900
879	10625		6512	- 916	1206	65	- 3	10	- 1407	902
888	10725		6453	- 691	1196	71	- 3	10	- 1070	900
897	10825		6405	- 463	1189	78	- 2	10	- 723	901
907	10930		6364	- 210	1181	86	- 2	10	- 329	902
919	11048		6330	77	1173	94	- 2	11	122	904
931	11163		6312	356	1162	102	- 2	11	563	902
942	11261		6305	586	1154	107	- 1	11	930	903
954	11374		6319	851	1138	113	- 1	10	1347	896
966	11509		6359	1159	1122	117	- 1	10	1822	890
976	11621		6393	1430	1103	122	- 1	10	2237	881
985	11722		6434	1664	1084	125	-	10	2587	870
996	11844		6508	1945	1057	127	2	10	2988	853
1006	11955		6576	2197	1028	114	8	11	3341	833
1016	12064		6669	2458	999	106	12	12	3685	813
1028	12180		6767	2735	959	97	17	13	4042	783

CONFIDENTIAL

NORTH AMERICAN AVIATION, INC.
SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 SLOW 56

CONF C2 L37

TUNNEL CONDITIONS

RN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
623	- 1205		3493	1692	14196	1880	16055	5223
670	- 943		3493	1706	14195	1880	16054	5196
693	- 839		3493	1708	14186	1879	16044	5191
694	- 784		3493	1711	14190	1879	16048	5186
698	- 623		3493	1712	14177	1877	16034	5180
709	- 491		3493	1715	14179	1878	16035	5175
719	- 372		3493	1718	14174	1877	16030	5168
729	- 255		3493	1722	14178	1877	16035	5162
739	- 136		3493	1724	14183	1878	16041	5158
749	- 16		3493	1727	14187	1879	16045	5153
759	103		3493	1726	14174	1877	16030	5148
769	220		3493	1733	14191	1879	16049	5143
779	337		3493	1732	14179	1876	16025	5139
790	465		3493	1736	14177	1877	16033	5134
799	566		3493	1738	14186	1878	16044	5133
810	689		3493	1735	14157	1875	16011	5131
820	797		3493	1737	14145	1873	15998	5126
831	909		3493	1740	14159	1875	16013	5122
842	1015		3493	1741	14148	1874	16001	5119
854	1129		3493	1741	14146	1873	15999	5117
868	1235		3493	1741	14133	1871	15984	5114
877	1330		3493	1744	14129	1871	15978	5109
886	1430		3493	1743	14122	1870	15971	5109
897	1550		3493	1741	14091	1866	15937	5105
908	1673		3493	1741	14085	1866	15930	5104
917	1773		3493	1738	14057	1861	15898	5104
927	1881		3493	1738	14037	1859	15875	5098
~~944~~	~~2064~~		~~3493~~	~~1731~~	~~13986~~	~~1852~~	~~15817~~	~~5098~~
~~956~~	~~2178~~		~~3493~~	~~1729~~	~~13942~~	~~1846~~	~~15768~~	~~5093~~

TWT 90 BLOW 56

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CND	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
623	- 1005		7328	- 3029	3	1	- 6324	7865	- 52	1916
670	- 943		7775	- 2854	- 1	- 1	- 6303	6680	- 337	1799
680	- 839		7799	- 2545	-	- 1	- 6300	6784	- 376	1604
690	- 720		7815	- 2200	1	- 1	- 6299	7032	- 411	1386
698	- 623		7821	- 1905	1	- 2	- 6301	7164	- 440	1200
709	- 490		7838	- 1500	3	- 2	- 6308	7594	- 479	946
719	- 372		7858	- 1137	2	- 2	- 6311	7768	- 505	718
729	- 255		7881	- 785	3	- 2	- 6303	8211	- 514	494
739	- 136		7910	- 426	4	- 2	- 6258	9412	- 549	267
749	- 16		7905	- 74	2	- 1	- 5826	11281	- 571	43
759	103		7910	269	2	- 1	- 6479	5924	- 618	- 174
769	220		7905	631	- 4		- 6372	7812	- 614	- 402
779	337		7887	992	- 8	-	- 6353	8611	- 639	- 631
790	465		7881	1375	- 10	-	- 6353	8767	- 652	- 874
799	566		7868	1683	- 10	-	- 6333	8673	- 660	- 1066
810	689		7874	2053	- 11	-	- 6331	8698	- 678	- 1306
820	797		7886	2391	- 12	- 1	- 6324	8744	- 699	- 1512
831	909		7860	2739	- 11	- 1	- 6324	8424	- 699	- 1732
842	1015		7847	3060	- 9	- 1	- 6322	8152	- 712	- 1935
854	1120		7840	3380	- 10	- 2	- 6320	8306	- 729	- 2136
868	1235		7825	3728	- 10	- 2	- 6310	8246	- 733	- 2352
877	1330		7807	3993	- 10	- 2	- 6314	8282	- 750	- 2522
886	1430		7796	4277	- 13	- 2	- 6317	8753	- 768	- 2702
897	1550		7783	4635	- 15	- 2	- 6307	9177	- 767	- 2923
908	1673		7763	4969	- 15	- 2	- 6303	9109	- 775	- 3132
917	1773		7750	5242	- 14	- 2	- 6297	9027	- 783	- 3301
927	1881		7732	5511	- 14	- 3	- 6286	9077	- 783	- 3464
~~944~~	~~2064~~		~~7697~~	~~5941~~	~~14~~	~~3~~	~~6262~~	~~8866~~	~~796~~	~~3721~~
~~956~~	~~2178~~		~~7663~~	~~6080~~	~~14~~	~~3~~	~~6207~~	~~8888~~	~~811~~	~~3774~~

NORTH AMERICAN AVIATION, INC.

SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 56

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	. 2	2	4	4	4	4	4	4	4	4
623	- 1005		8237	- 1617	299	- 26	3	1	- 1963	408
670	- 943		8138	- 1541	300	- 39	- 1	- 1	- 1894	400
680	- 839		8087	- 1380	312	- 43	-	- 1	- 1706	404
690	- 720		8029	- 1203	338	- 41	1	- 1	- 1498	407
698	- 623		7982	- 1046	355	- 41	1	- 2	- 1310	410
709	- 490		7937	- 825	380	- 39	3	- 2	- 1039	416
719	- 372		7916	- 629	401	- 27	2	- 2	- 790	420
729	- 255		7900	- 433	420	- 26	3	- 2	- 548	423
739	- 136		7918	- 239	441	- 16	4	- 2	- 301	426
749	- 16		7909	- 52	459	- 5	2	- 1	- 66	427
759	103		7913	126	477	18	2	- 1	159	429
769	220		7924	327	497	38	- 4	-	413	432
779	337		7932	527	515	44	- 8	- 1	664	433
790	465		7966	732	534	52	- 10	- 1	918	434
799	566		7995	899	553	54	- 10	- 1	1124	438
810	689		8065	1104	574	60	- 11	- 2	1369	441
820	797		8142	1274	593	62	- 11	- 2	1565	445
831	909		8197	1462	611	69	- 11	- 2	1783	446
842	1015		8264	1630	628	70	- 9	- 3	1972	448
854	1120		8347	1792	645	67	- 9	- 4	2147	450
868	1235		8442	1967	667	69	- 9	- 4	2330	455
877	1330		8516	2091	678	71	- 9	- 5	2455	455
886	1430		8610	2219	692	69	- 12	- 5	2577	455
897	1550		8738	2387	715	65	- 14	- 6	2732	461
908	1673		8864	2524	735	65	- 13	- 6	2848	465
917	1773		8978	2633	752	66	- 13	- 7	2933	470
927	1881		9096	2723	772	65	- 13	- 7	2994	477
~~944~~	~~2064~~		~~9290~~	~~2847~~	~~805~~	~~69~~	~~- 12~~	~~- 7~~	~~3062~~	~~493~~
~~956~~	~~2178~~		~~9372~~	~~2893~~	~~849~~	~~68~~	~~- 12~~	~~- 8~~	~~2991~~	~~523~~

NORTH AMERICAN AVIATION, INC.

SPACE and INFORMATION SYSTEMS DIVISION

TWT 90 BLOW 57

CONF C2 L37

TUNNEL CONDITIONS

BN DEC=	ALPHA 2	YAW 2	MACH 3	RN 2	HO	PO 1	Q 1	TTO 1
813	4506		3493	1685	14176	1877	16033	5233
859	4572		3493	1698	14165	1876	16020	5204
869	4675		3493	1702	14180	1878	16038	5199
877	4770		3493	1703	14161	1875	16015	5194
888	4900		3493	1707	14176	1877	16032	5189
897	5005		3493	1709	14164	1876	16019	5182
906	5106		3493	1711	14160	1875	16014	5177
915	5213		3493	1713	14160	1875	16015	5174
925	5327		3493	1716	14164	1876	16020	5168
933	5419		3493	1719	14160	1875	16014	5163
942	5521		3493	1720	14159	1875	16014	5160
951	5622		3493	1721	14161	1875	16016	5158
960	5726		3493	1724	14158	1875	16013	5153
970	5838		3493	1726	14157	1875	16012	5148
980	5954		3493	1725	14135	1872	15987	5145
989	6057		3493	1728	14141	1873	15993	5141
999	6173		3493	1729	14134	1872	15985	5138
1008	6274		3493	1732	14147	1873	16000	5134
1017	6377		3493	1736	14165	1876	16020	5131
1027	6487		3493	1731	14124	1870	15974	5131
1037	6597		3493	1735	14134	1872	15986	5126
1046	6696		3493	1734	14125	1870	15975	5126
1056	6801		3493	1735	14110	1868	15958	5121
1065	6917		3493	1734	14095	1866	15941	5119
1081	7032		3493	1734	14075	1864	15919	5114
1094	7138		3493	1732	14054	1861	15895	5114
1107	7242		3493	1731	14041	1859	15880	5112
1117	7342		3493	1729	14001	1854	15835	5107
1127	7446		3493	1727	13976	1851	15806	5105
1138	7555		3493	1720	13919	1843	15742	5105
1154	7642		3493	1711	13832	1832	15643	5100

[redacted]

TAB 90 BLOW 57

CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

EN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
813	4506		7043	8833	- 4	40	- 5936	7392	367	- 5243
839	4572		7029	8844	- 9	39	- 5932	8760	222	- 5247
869	4675		7012	8885	- 8	40	- 5928	8342	212	- 5267
877	4770		7016	8948	- 10	40	- 5922	9088	210	- 5299
888	4900		6996	9013	- 9	41	- 5920	8695	213	- 5335
897	5005		6936	9074	- 9	41	- 5918	8419	205	- 5370
906	5106		6982	9134	- 10	40	- 5914	9113	197	- 5402
915	5213		6946	9175	- 10	41	- 5913	9097	184	- 5425
925	5327		6927	9211	- 11	41	- 5909	9155	188	- 5443
933	5419		6904	9251	- 10	41	- 5908	8729	176	- 5465
942	5521		6869	9297	- 11	42	- 5908	8806	171	- 5493
951	5622		6838	9327	- 11	42	- 5904	8815	119	- 5507
960	5726		6827	9353	- 11	42	- 5903	8882	94	- 5521
970	5838		6707	9375	- 11	42	- 5901	8853	42	- 5532
980	5954		6761	9413	- 11	43	- 5898	8756	14	- 5552
989	6057		6718	9422	- 11	43	- 5892	8812	- 23	- 5552
999	6173		6660	9440	- 11	43	- 5887	8824	- 72	- 5563
1008	6274		6608	9449	- 12	43	- 5886	8787	- 99	- 5561
1017	6377		6555	9444	- 13	43	- 5878	9216	- 148	- 5551
1027	6487		6499	9455	- 15	44	- 5870	9430	- 163	- 5550
1037	6597		6416	9435	- 17	44	- 5864	9310	- 202	- 5531
1046	6696		6379	9440	- 15	44	- 5856	9317	- 202	- 5528
1056	6801		6278	9434	- 14	45	- 5848	8878	- 235	- 5517
1068	6917		6152	9411	- 14	45	- 5840	8775	- 261	- 5496
1081	7032		6088	9407	- 14	45	- 5827	8704	- 281	- 5482
1094	7138		5982	9392	- 15	46	- 5817	8689	- 293	- 5464
1107	7242		5884	9357	- 14	46	- 5806	8543	- 309	- 5432
1117	7342		5881	9358	- 13	46	- 5795	8453	- 329	- 5422
1127	7446		5686	9331	- 13	46	- 5785	8442	- 319	- 5398
1138	7555		5553	9319	- 13	46	- 5774	8300	- 328	- 5381
1154	7642		5386	9271	- 12	45	- 5758	8240	- 323	- 5338

[redacted]

TWT 90 BLOW 57

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN DEC=	ALPHA 2	YAW 2	CD 4	CL 4	CMS1 4	CY 4	CNS 4	CLS 4	L/D 4	CMS2 4
813	4506		11227	1254	1231	81 -	31	25	1117	776
859	4572		11239	1143	1235	46 -	34	21	1017	780
869	4675		11276	981	1241	55 -	35	22	870	784
877	4770		11340	833	1253	43 -	36	20	734	793
888	4900		11391	633	1260	51 -	37	20	556	797
897	5005		11442	472	1266	56 -	37	19	413	800
906	5106		11493	310	1275	44 -	37	17	269	807
915	5213		11507	149	1278	45 -	38	17	130	808
925	5327		11525	- 43	1284	46 -	39	16	- 37	812
933	5419		11542	- 187	1288	56 -	40	16	- 162	814
942	5521		11566	- 352	1292	57 -	41	15	- 304	815
951	5622		11565	- 516	1296	58 -	41	14	- 446	818
960	5726		11559	- 683	1297	56 -	42	13	- 591	819
970	5838		11547	- 873	1300	56 -	42	13	- 756	820
980	5954		11541	- 1056	1304	57 -	42	12	- 915	823
989	6057		11507	- 1222	1308	58 -	43	12	- 1062	826
999	6173		11477	- 1391	1312	56 -	43	11	- 1212	829
1008	6274		11426	- 1546	1310	60 -	44	10	- 1353	828
1017	6377		11369	- 1707	1314	57 -	45	7	- 1501	832
1027	6487		11319	- 1869	1319	58 -	46	5	- 1651	837
1037	6597		11228	- 2019	1318	62 -	47	4	- 1798	838
1046	6696		11176	- 2157	1322	61 -	46	3	- 1930	842
1056	6801		11099	- 2289	1325	71 -	47	4	- 2062	844
1068	6917		10994	- 2432	1325	74 -	47	3	- 2213	846
1081	7032		10907	- 2565	1330	74 -	47	2	- 2352	852
1094	7138		10813	- 2675	1333	80 -	49	1	- 2474	856
1107	7242		10697	- 2782	1333	82 -	48	1	- 2601	858
1117	7342		10624	- 2890	1339	85 -	48		- 2721	864
1127	7446		10513	- 2970	1338	84 -	48	- 1	- 2833	866
1138	7555		10409	- 3049	1339	89 -	48	- 1	- 2929	867
1154	7642		10276	- 3059	1339	90 -	46	- 2	- 2977	871

TWT 90 BLOW 61

CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
729	12567		3493	1696	14228	1884	16091	5223
781	12634		3493	1703	14171	1876	16027	5196
792	12744		3493	1705	14175	1877	16031	5192
801	12850		3493	1706	14164	1876	16019	5189
809	12946		3493	1711	14175	1877	16031	5180
819	13062		3493	1712	14168	1876	16023	5177
830	13193		3493	1715	14170	1876	16025	5172
840	13309		3493	1717	14165	1876	16021	5168
850	13427		3493	1723	14178	1877	16035	5160
859	13529		3493	1722	14166	1876	16021	5158
869	13643		3493	1724	14158	1875	16013	5153
879	13756		3493	1725	14155	1874	16009	5150
888	13857		3493	1727	14158	1875	16012	5146
897	13960		3493	1729	14161	1875	16016	5145
905	14052		3493	1732	14172	1877	16028	5141
915	14168		3493	1731	14151	1874	16004	5138
925	14283		3493	1732	14145	1873	15998	5134
935	14398		3493	1734	14149	1874	16002	5131
944	14498		3493	1734	14136	1872	15987	5128
955	14617		3493	1738	14157	1875	16012	5126
965	14722		3493	1736	14124	1870	15974	5122
974	14818		3493	1739	14139	1872	15990	5119
986	14940		3493	1735	14105	1868	15952	5119
998	15052		3493	1737	14101	1867	15947	5116
1010	15157		3493	1735	14081	1865	15926	5114
1021	15251		3493	1733	14053	1861	15894	5112
1032	15360		3493	1732	14030	1858	15868	5109
1043	15477		3493	1731	14012	1855	15847	5105
1053	15581		3493	1728	13989	1852	15821	5105
1066	15695		3493	1723	13936	1845	15761	5104

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CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE. (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
729	12567		- 6691	3773	15	10	- 3706	5345	35	- 1398
781	12634		- 6892	3702	16	12	- 3675	5216	- 319	- 1360
792	12744		- 7182	3565	16	12	- 3609	5325	- 371	- 1287
801	12850		- 7464	3441	15	12	- 3537	5418	- 397	- 1217
809	12946		- 7744	3334	15	11	- 3471	5507	- 427	- 1157
819	13062		- 8085	3210	14	10	- 3388	5672	- 462	- 1088
830	13193		- 8437	3085	12	9	- 3308	5766	- 497	- 1021
840	13309		- 8759	2959	10	8	- 3210	5928	- 509	- 950
850	13427		- 9079	2842	8	7	- 3129	6081	- 545	- 889
859	13529		- 9370	2754	7	7	- 3072	6140	- 561	- 846
869	13643		- 9683	2654	6	6	- 2997	6257	- 583	- 795
879	13756		- 9972	2557	5	6	- 2922	6359	- 600	- 747
888	13857		-10223	2469	4	6	- 2852	6439	- 630	- 704
897	13960		-10474	2380	4	5	- 2765	6477	- 639	- 658
905	14052		-10691	2303	3	5	- 2700	6561	- 652	- 622
915	14168		-10976	2218	4	5	- 2614	6473	- 665	- 580
925	14283		-11246	2126	5	5	- 2529	6396	- 686	- 538
935	14398		-11486	2025	5	4	- 2414	6408	- 708	- 489
944	14498		-11722	1952	4	4	- 2323	6481	- 708	- 453
955	14617		-11969	1866	4	4	- 2231	6501	- 734	- 416
965	14722		-12242	1802	3	4	- 2180	6573	- 733	- 393
974	14818		-12421	1733	1	4	- 2100	6750	- 734	- 364
986	14940		-12702	1650	1	4	- 1999	6807	- 759	- 330
998	15052		-12915	1571	1	4	- 1898	6811	- 767	- 298
1010	15157		-13120	1498	-	4	- 1782	6871	- 771	- 267
1021	15251		-13289	1438	1	4	- 1688	6780	- 770	- 243
1032	15360		-13485	1372	1	4	- 1640	6724	- 787	- 225
1043	15477		-13693	1284		4	- 1496	6845	- 795	- 192
1053	15581		-13862	1196		4	- 1335	6850	- 799	- 160
1066	15695		-14063	1109		3	- 1170	6837	- 798	- 130

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TWT 90 BLOW 61

CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
729	12567		6967	3236	795	101	- 17	6	4644	647
781	12634		7066	3359	772	95	- 19	5	4753	628
792	12744		7197	3536	735	105	- 20	5	4913	599
801	12850		7340	3699	703	107	- 19	5	5040	574
809	12946		7495	3860	673	112	- 18	4	5150	550
819	13062		7701	4047	637	115	- 17	4	5255	521
830	13193		7933	4216	598	110	- 15	3	5315	489
840	13309		8145	4375	563	108	- 13	2	5371	462
850	13427		8373	4518	525	105	- 11	1	5396	430
859	13529		8596	4636	490	104	- 10		5393	401
869	13643		8845	4751	454	102	- 9	-	5371	370
879	13756		9084	4843	418	100	- 7	- 1	5331	340
888	13857		9299	4913	386	103	- 7	- 1	5283	314
897	13960		9519	4975	357	104	- 7	- 2	5227	289
905	14052		9716	5019	327	102	- 5	- 2	5166	264
915	14168		9987	5065	294	100	- 6	- 1	5071	236
925	14283		10245	5102	257	101	- 7	- 1	4980	204
935	14398		10481	5116	223	102	- 6	- 1	4881	176
944	14498		10720	5128	194	105	- 6	- 1	4784	151
955	14617		10981	5114	157	106	- 5	- 1	4657	120
965	14722		11268	5114	121	109	- 5	- 2	4538	88
974	14818		11468	5075	92	106	- 3	- 3	4426	62
986	14940		11773	5046	52	108	- 3	- 3	4286	28
998	15052		12016	4988	17	107	- 3	- 4	4151	- 3
1010	15157		12251	4929	- 13	111	- 2	- 4	4024	- 29
1021	15251		12453	4858	- 40	106	- 3	- 3	3901	- 53
1032	15360		12689	4767	- 80	106	- 3	- 3	3757	- 88
1043	15477		12934	4675	- 119	108	- 2	- 3	3614	- 123
1053	15581		13135	4589	- 157	109	- 2	- 3	3493	- 156
1066	15695		13374	4487	- 199	111	- 2	- 3	3355	- 193

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TUNNEL CONDITIONS

BN DEC=	ALPHA 2	YAW 2	MACH 3	RN 2	HO	PO 1	Q 1	TTO 1
730	- 540		3493	1682	14198	1880	16057	5244
781	- 472		3493	1692	14187	1879	16045	5221
791	- 378		3493	1697	14197	1880	16056	5215
800	- 284		3493	1697	14176	1877	16032	5209
809	- 179		3493	1698	14166	1876	16021	5204
818	- 77		3493	1701	14174	1877	16030	5201
828	41		3493	1704	14187	1879	16045	5198
837	148		3493	1705	14178	1877	16035	5194
847	268		3493	1708	14180	1878	16037	5189
859	405		3493	1708	14164	1876	16019	5186
868	505		3493	1711	14170	1876	16026	5180
878	617		3493	1714	14170	1876	16026	5175
889	734		3493	1714	14170	1876	16026	5174
899	843		3493	1716	14165	1876	16020	5170
910	955		3493	1717	14162	1875	16016	5167
921	1078		3493	1719	14154	1874	16007	5162
931	1188		3493	1720	14155	1874	16009	5160
943	1321		3493	1721	14158	1875	16012	5158
952	1421		3493	1721	14135	1872	15986	5153
965	1564		3493	1719	14121	1870	15971	5153
975	1674		3493	1723	14140	1872	15992	5150
985	1782		3493	1721	14118	1869	15966	5148
995	1889		3493	1721	14110	1868	15958	5146
1004	1987		3493	1720	14094	1866	15940	5145
1014	2096		3493	1720	14078	1864	15921	5141
1025	2215		3493	1718	14054	1861	15895	5139
1035	2324		3493	1715	14030	1858	15867	5139
1044	2421		3493	1713	14000	1854	15833	5136
1054	2522		3493	1712	13985	1852	15817	5134
1068	2643		3493	1704	13914	1842	15736	5134

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CONF C39 T30

BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
730	- 540		6870	- 1884	23	- 4	- 7411	8893	- 77	1396
781	- 472		6821	- 1645	23	- 4	- 7394	9006	- 378	1216
791	- 378		6760	- 1310	17	- 4	- 7362	8589	- 414	964
800	- 284		6742	- 982	8	- 3	- 7314	7973	- 460	718
809	- 179		6744	- 631	1	- 2	- 7212	7124	- 486	455
818	- 77		6760	- 276	- 1	-	- 6729	6514	- 512	186
828	41		6793	136	- 4	2	- 8842	19415	- 547	- 120
837	148		6802	498	- 7	3	- 7872	9619	- 564	- 392
847	268		6785	894	- 13	3	- 7633	9267	- 581	- 682
859	405		6803	1364	- 21	4	- 7604	9130	- 598	- 1037
868	505		6847	1729	- 26	5	- 7587	9450	- 620	- 1312
878	617		6936	2127	- 28	4	- 7515	9702	- 637	- 1598
889	734		7079	2547	- 31	4	- 7434	10138	- 655	- 1893
899	843		7177	2913	- 35	3	- 7331	11426	- 663	- 2136
910	955		7288	3287	- 31	2	- 7212	12441	- 680	- 2371
921	1078		7434	3652	- 29	1	- 7098	13006	- 680	- 2592
931	1188		7543	3952	- 32	1	- 7027	13619	- 710	- 2777
943	1321		7663	4302	- 31	-	- 6934	13435	- 715	- 2984
952	1421		7764	4556	- 30	- 2	- 6886	13811	- 736	- 3137
965	1564		7900	4908	- 32	- 2	- 6813	15542	- 735	- 3344
975	1674		7971	5137	- 35	- 2	- 6761	16995	- 753	- 3473
985	1782		8058	5367	- 36	- 3	- 6723	19911	- 766	- 3608
995	1889		8145	5591	- 35	- 4	- 6689	22927	- 779	- 3740
1004	1987		8202	5789	- 35	- 5	- 6661	24827	- 778	- 3856
1014	2096		8286	6007	- 33	- 5	- 6622	20150	- 786	- 3978
1025	2215		8333	6209	- 28	- 5	- 6575	21450	- 803	- 4083
1035	2324		8374	6377	- 27	- 5	- 6532	20535	- 811	- 4166
1044	2421		8412	6519	- 30	- 5	- 6489	21833	- 811	- 4230
1054	2522		8413	6650	- 27	- 4	- 6443	14701	- 823	- 4284
1068	2643		8440	6802	- 22	- 4	- 6391	12459	- 835	- 4347

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CONF C39 T30

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
730	- 540		7017	- 1229	509	- 115	23	- 6	- 1751	568
781	- 472		6933	- 1078	490	- 106	22	- 6	- 1555	538
791	- 378		6832	- 861	465	- 98	17	- 5	- 1261	497
800	- 284		6782	- 647	442	- 75	8	- 4	- 954	459
809	- 179		6761	- 421	420	- 48	1	- 2	- 622	420
818	- 77		6763	- 186	395	- 25	- 1	-	- 275	378
828	41		6794	87	374	3	- 4	2	129	337
837	148		6813	322	351	27	- 7	3	472	297
847	268		6819	576	331	53	- 13	3	845	259
859	405		6882	880	300	91	- 21	3	1279	205
868	505		6973	1119	278	101	- 26	3	1605	166
878	617		7124	1369	270	97	- 28	1	1921	138
889	734		7346	1622	271	95	- 31		2207	119
899	843		7526	1830	286	77	- 35	- 2	2431	116
910	955		7732	2033	314	56	- 31	- 3	2629	126
921	1078		7986	2196	352	48	- 29	- 5	2750	146
931	1188		8195	2314	379	48	- 32	- 6	2824	158
943	1321		8443	2438	420	47	- 30	- 8	2887	182
952	1421		8645	2510	446	44	- 29	- 9	2904	196
965	1564		8930	2596	489	37	- 31	- 11	2907	221
975	1674		9112	2623	521	34	- 33	- 12	2879	242
985	1782		9314	2643	549	27	- 33	- 14	2838	259
995	1889		9516	2654	576	22	- 32	- 15	2789	275
1004	1987		9681	2657	599	20	- 32	- 17	2745	289
1014	2096		9887	2645	631	25	- 29	- 16	2675	310
1025	2215		10059	2609	668	19	- 24	- 16	2593	337
1035	2324		10211	2555	703	20	- 23	- 16	2502	364
1044	2421		10346	2496	738	20	- 25	- 17	2412	392
1054	2522		10445	2431	774	35	- 23	- 16	2328	421
1068	2643		10585	2334	816	40	- 18	- 14	2205	457

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CONF C2 L37

TUNNEL CONDITIONS

BN	ALPHA	YAW	MACH	RN	HO	PO	Q	TTO
DEC=	2	2	3	2		1	1	1
766	15043		3493	1672	14161	1875	16015	5256
813	15091		3493	1685	14172	1877	16028	5232
823	15192		3493	1687	14170	1876	16025	5227
833	15305		3493	1691	14176	1877	16032	5221
843	15421		3493	1692	14159	1875	16013	5215
852	15530		3493	1696	14165	1876	16020	5208
861	15635		3493	1697	14159	1875	16013	5204
870	15740		3493	1700	14172	1877	16028	5201
880	15856		3493	1701	14165	1876	16020	5198
890	15974		3493	1702	14152	1874	16005	5194
899	16079		3493	1705	14155	1874	16009	5189
909	16198		3493	1708	14164	1876	16019	5186
919	16316		3493	1710	14160	1875	16014	5180
928	16419		3493	1708	14145	1873	15997	5180
937	16521		3493	1711	14151	1874	16005	5175
947	16634		3493	1714	14163	1876	16018	5172
956	16729		3493	1715	14154	1874	16008	5168
966	16837		3493	1714	14137	1872	15988	5167
977	16948		3493	1717	14145	1873	15998	5163
990	17064		3493	1718	14132	1871	15983	5158
1003	17168		3493	1718	14116	1869	15965	5155
1013	17272		3493	1719	14120	1870	15970	5153
1024	17387		3493	1716	14097	1867	15943	5153
1034	17498		3493	1717	14085	1865	15930	5150
1043	17593		3493	1717	14073	1864	15916	5146
1052	17688		3493	1714	14042	1859	15881	5145
1063	17803		3493	1709	13996	1853	15829	5143
1074	17922		3493	1710	13984	1852	15815	5139
~~1084~~	~~18025~~		~~3493~~	~~1706~~	~~13953~~	~~1848~~	~~15780~~	~~5139~~
~~1095~~	~~18132~~		~~3493~~	~~1704~~	~~13920~~	~~1843~~	~~15743~~	~~5136~~

NORTH AMERICAN AVIATION, INC.

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CONF C2 L37

BODY AXIS DATA AND BASE PRESSURE. (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DEC=	2	2	4	4	4	4	4	4	4	4
766	15043		-12787	1671	16	4	- 2059	5124	26	- 344
813	15091		-12834	1609	15	5	- 2020	5230	- 299	- 325
823	15192		-13028	1546	13	5	- 1922	5463	- 346	- 297
833	15305		-13215	1473	14	5	- 1860	5417	- 394	- 274
843	15421		-13437	1396	15	4	- 1763	5323	- 424	- 246
852	15530		-13607	1318	13	4	- 1689	5533	- 433	- 223
861	15635		-13794	1230	13	4	- 1550	5579	- 471	- 191
870	15740		-13950	1146	13	4	- 1443	5548	- 494	- 165
880	15856		-14145	1061	12	4	- 1288	5593	- 528	- 137
890	15974		-14317	1001	14	5	- 1227	5503	- 515	- 123
899	16079		-14426	938	16	4	- 1048	5375	- 545	- 98
909	16198		-14553	860	16	5	- 891	5458	- 571	- 77
919	16316		-14690	792	17	5	- 775	5365	- 576	- 61
928	16419		-14809	729	16	5	- 617	5349	- 597	- 45
937	16521		-14901	673	16	5	- 681	5294	- 606	- 46
947	16634		-14949	589	17	5	- 559	5289	- 615	- 33
956	16729		-15021	531	17	6	- 574	5246	- 640	- 31
966	16837		-15136	482	18	6	- 583	5294	- 648	- 28
977	16948		-15157	426	19	7	- 616	5122	- 649	- 26
990	17064		-15243	392	20	7	- 765	4968	- 640	- 30
1003	17168		-15295	352	19	7	- 848	5063	- 665	- 30
1013	17272		-15336	310	19	7	- 829	5131	- 652	- 26
1024	17387		-15387	270	20	7	- 1000	5050	- 651	- 27
1034	17498		-15414	257	20	8	- 1754	5075	- 664	- 45
1043	17593		-15416	239	22	8	- 2332	4892	- 663	- 56
1052	17688		-15441	215	22	8	- 2826	4863	- 662	- 61
1063	17803		-15479	194	23	8	- 3537	4856	- 648	- 69
1074	17922		-15449	150	20	9	- 4591	5247	- 647	- 69
1084	18025		-15466	118	19	9	- 5689	5368	- 659	- 67
1095	18132		-15459	102	20	9	- 7055	5216	- 658	- 72

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CONF C2 L37

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN	ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC=	2	2	4	4	4	4	4	4	4	4
766	15043		11946	4858	48	91 -	16	4	4066	25
813	15091		11998	4833	22	93 -	16	3	4028	2
823	15192		12222	4768 -	5	96 -	14	1	3902 -	21
833	15305		12448	4676 -	43	95 -	14	2	3757 -	55
843	15421		12706	4588 -	81	96 -	15	2	3611 -	88
852	15530		12913	4490 -	121	96 -	13	1	3477 -	124
861	15635		13129	4406 -	160	98 -	13	1	3356 -	158
870	15740		13319	4303 -	202	97 -	13	1	3231 -	195
880	15856		13554	4182 -	243	97 -	13	1	3085 -	231
890	15974		13778	4019 -	281	107 -	15	1	2917 -	265
899	16079		13931	3862 -	306	105 -	16	1	2772 -	287
909	16198		14105	3684 -	346	112 -	16		2612 -	322
919	16316		14289	3498 -	385	114 -	18		2448 -	357
928	16419		14447	3333 -	419	109 -	17 -		2307 -	388
937	16521		14580	3153 -	463	105 -	17 -		2162 -	429
947	16634		14665	2959 -	511	108 -	18 -	1	2017 -	472
956	16729		14769	2786 -	552	107 -	18 -	2	1886 -	511
966	16837		14923	2579 -	591	115 -	19 -	2	1728 -	546
977	16948		14981	2348 -	628	109 -	20 -	3	1568 -	581
990	17064		15104	2093 -	661	106 -	21 -	3	1386 -	611
1003	17168		15185	1864 -	691	108 -	20 -	4	1227 -	640
1013	17272		15252	1636 -	718	111 -	20 -	5	1073 -	664
1024	17387		15328	1374 -	749	111 -	21 -	5	896 -	694
1034	17498		15378	1094 -	778	111 -	20 -	6	711 -	722
1043	17593		15394	856 -	801	110 -	22 -	6	556 -	744
1052	17688		15430	626 -	824	112 -	23 -	7	406 -	766
1063	17803		15477	338 -	849	113 -	23 -	7	218 -	789
1074	17922		15449	61 -	877	124 -	20 -	9	39 -	816
~~1084~~	~~18025~~		~~15465~~	~~185~~ -	~~899~~	~~127~~ -	~~19~~ -	9	~~120~~ -	~~835~~
~~1095~~	18132		15453	459 -	914	121 -	20 -	10	~~297~~ -	~~850~~

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TUNNEL CONDITIONS

BN DEC=	ALPHA 2	YAW 2	MACH 3	RN 2	HO	PO 1	Q 1	TTO 1
570	- 531		3493	1619	14222	1883	16085	5379
631	- 458		3493	1646	14199	1880	16058	5317
641	- 361		3493	1651	14217	1883	16078	5310
650	- 265		3493	1653	14207	1881	16067	5303
660	- 150		3493	1660	14224	1884	16087	5295
670	- 35		3493	1661	14199	1880	16058	5286
680	82		3493	1667	14217	1883	16079	5278
690	201		3493	1669	14198	1880	16057	5269
702	340		3493	1674	14210	1882	16071	5262
712	455		3493	1677	14212	1882	16074	5257
723	577		3493	1681	14209	1882	16070	5249
734	694		3493	1684	14212	1882	16073	5244
744	800		3493	1686	14196	1880	16055	5235
754	903		3493	1686	14181	1878	16039	5232
765	1010		3493	1688	14178	1877	16035	5227
777	1125		3493	1693	14194	1880	16053	5221
788	1243		3493	1696	14189	1879	16047	5215
799	1362		3493	1699	14186	1879	16044	5208
809	1471		3493	1700	14183	1878	16041	5204
819	1579		3493	1700	14171	1877	16027	5201
830	1698		3493	1701	14163	1876	16018	5198
841	1816		3493	1702	14157	1875	16011	5194
851	1922		3493	1705	14155	1874	16009	5189
860	2019		3493	1703	14140	1872	15992	5189
870	2125		3493	1702	14119	1870	15968	5186
879	2222		3493	1701	14098	1867	15944	5182
888	2320		3493	1700	14078	1864	15922	5180
899	2434		3493	1701	14066	1863	15908	5175
910	2545		3493	1699	14034	1858	15872	5172
923	2657		3493	1695	13988	1852	15820	5168

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BODY AXIS DATA AND BASE PRESSURE, (DELTA PB)/Q

BN	ALPHA	YAW	CA	CN	CNB	CLB	XCPN	XCPY	P B	CMA
DFC=	2	2	4	4	4	4	4	4	4	4
570	- 531		7017	- 1855	12	- 2	- 7884	8740	12	1463
631	- 458		7036	- 1626	15	- 2	- 8059	9309	- 383	1310
641	- 361		6942	- 1327	24	- 2	- 8359	10192	- 427	1109
650	- 265		6863	- 1005	32	- 3	- 8722	10937	- 452	876
660	- 150		6756	- 631	31	- 3	- 9355	11365	- 488	590
670	- 35		6689	- 259	18	- 2	-11591	11415	- 508	301
680	82		6663	106	7	- 2	2060	10878	- 539	22
690	201		6677	493	4	- 1	- 5455	35015	- 564	- 269
702	340		6709	1022		1	- 6720	6810	- 586	- 687
712	455		6802	1432	- 3	1	- 7066	7530	- 604	- 1012
723	577		6898	1856	- 7	2	- 7149	7929	- 634	- 1327
734	694		7026	2275	- 16	3	- 7138	8782	- 647	- 1623
744	800		7109	2674	- 24	2	- 7085	9803	- 655	- 1894
754	903		7226	3024	- 31	2	- 7036	11262	- 663	- 2128
765	1010		7323	3360	- 32		- 6992	13470	- 689	- 2350
777	1125		7430	3698	- 32	- 1	- 6936	16223	- 698	- 2565
788	1243		7534	4027	- 31	- 2	- 6898	19152	- 707	- 2778
799	1362		7630	4345	- 26	- 1	- 6816	12378	- 715	- 2961
809	1471		7699	4618	- 22	- 1	- 6767	11742	- 728	- 3125
819	1579		7794	4877	- 24	- 2	- 6722	12405	- 741	- 3278
830	1698		7893	5148	- 25	- 2	- 6677	12425	- 749	- 3437
841	1816		7971	5398	- 27	- 3	- 6638	13000	- 771	- 3583
851	1922		8046	5614	- 26	- 3	- 6615	12136	- 775	- 3714
860	2019		8103	5820	- 24	- 3	- 6592	12333	- 792	- 3836
870	2125		8170	6031	- 23	- 3	- 6554	12500	- 791	- 3952
879	2222		8209	6208	- 23	- 3	- 6519	12843	- 804	- 4047
888	2320		8248	6367	- 24	- 3	- 6488	13419	- 808	- 4131
899	2434		8281	6535	- 25	- 4	- 6441	13896	- 812	- 4209
910	2545		8312	6682	- 25	- 4	- 6399	14403	- 815	- 4276
923	2657		8338	6815	- 27	- 5	- 6355	17362	- 827	- 4331

NORTH AMERICAN AVIATION, INC.

SPACE and INFORMATION SYSTEMS DIVISION

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STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

BN ALPHA	YAW	CD	CL	CMS1	CY	CNS	CLS	L/D	CMS2
DEC= 2	2	4	4	4	4	4	4	4	4
570 - 531		7158	- 1198	604	- 64	12	- 3	- 1674	661
631 - 458		7143	- 1059	610	- 63	15	- 3	- 1482	656
641 - 361		7012	- 887	608	- 71	24	- 4	- 1266	640
650 - 265		6902	- 686	592	- 78	32	- 5	- 995	609
660 - 150		6770	- 453	556	- 68	31	- 4	- 669	556
670 - 35		6690	- 219	517	- 40	18	- 2	- 327	500
680 82		6664	11	487	- 19	8	- 2	16	453
690 201		6690	259	463	- 1	4	- 1	387	410
702 340		6757	623	410	37		1	922	332
712 455		6895	889	372	47	- 3	1	1289	274
723 577		7050	1153	353	67	- 7	1	1635	235
734 694		7250	1409	351	81	- 16	1	1943	212
744 800		7412	1658	359	83	- 24	- 1	2237	201
754 903		7611	1853	373	70	- 31	- 3	2435	198
765 1010		7799	2025	388	49	- 32	- 6	2596	196
777 1125		8008	2178	410	34	- 31	- 7	2719	202
788 1243		8224	2312	429	25	- 30	- 8	2811	205
799 1362		8439	2426	469	47	- 25	- 7	2874	230
809 1471		8619	2512	497	46	- 21	- 7	2914	244
819 1579		8827	2572	527	43	- 22	- 8	2914	261
830 1698		9052	2618	560	46	- 24	- 9	2892	281
841 1816		9256	2645	590	44	- 25	- 11	2858	299
851 1922		9446	2652	612	49	- 24	- 11	2808	310
860 2019		9613	2665	634	44	- 22	- 11	2773	322
870 2125		9800	2659	667	41	- 21	- 11	2713	345
879 2222		9947	2642	696	39	- 20	- 12	2656	366
888 2320		10089	2603	723	36	- 21	- 12	2580	385
899 2434		10239	2541	762	35	- 21	- 13	2482	416
910 2545		10377	2462	798	33	- 21	- 14	2373	445
923 2657		10506	2367	836	26	- 22	- 16	2253	476

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