

QcX
Avro
CF105
P-AD-59

C-105 P/Aero Data/59
LONGITUDINAL STABILITY DERIVATIVES

ANALYZED AND DRAG DATA
3.5% WING

Copy (5)

August '55

TECHNICAL DEPARTMENT (Aircraft)

AIRCRAFT

ANALYZED

REPORT NO. P/AERO DATA/59

SHEET NO.

PREPARED BY

DATE

S. Kwiatkowski

August 1955.

CHECKED BY

DATE

C-105

LONGITUDINAL STABILITY DERIVATIVES AND DRAG DATA

3.5% WING

★ Measured in C.A.L. Wind Tunnel up to $M = 1.23$.

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Classification cancelled / Changed to UNCLASS
PAGE

By authority of AVES

Date 27 Sept 56 1

Signature DBilly

Unit / Rank / Appointment AVPSS

Geometry

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NRC - CISTI
AERO / M.E.
LIBRARY

89-05-11

BIBLIOTHÈQUE
AÉRO / G.M.
CNRC - ICIST

15784890

A. V. ROE CANADA LIMITED
MALTON - ONTARIO
TECHNICAL DEPARTMENT (Aircraft)

REPORT No. P/AERO DATA/59

SHEET No. _____

AIRCRAFT: _____

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AIRCRAFT
A. U. W.

COMPONENT

SHEET No. 1.2

REPORT No. P/AERO DATA / 59

DATE July 1955

PREP BY J. Papio

KE 10 X 10 TO THE 1/2 INCH 359-12
KEUFFEL & ESSER CO. MADE IN U.S.A.

C105

$C_{L\alpha}$ vs MACH NO.

CONF A: B₂ V, L₁ E₁₀ N₅ D₈ U.

$C_{L\alpha}$
PER DEG

06

05

04

03

02

01

$\alpha = 7^\circ$
 $\alpha = 12^\circ$

1.2 MACH

1.2 MACH

1.2 MACH

MACH NO.

2.0

1.8

1.6

1.4

1.2

1.0

0.8

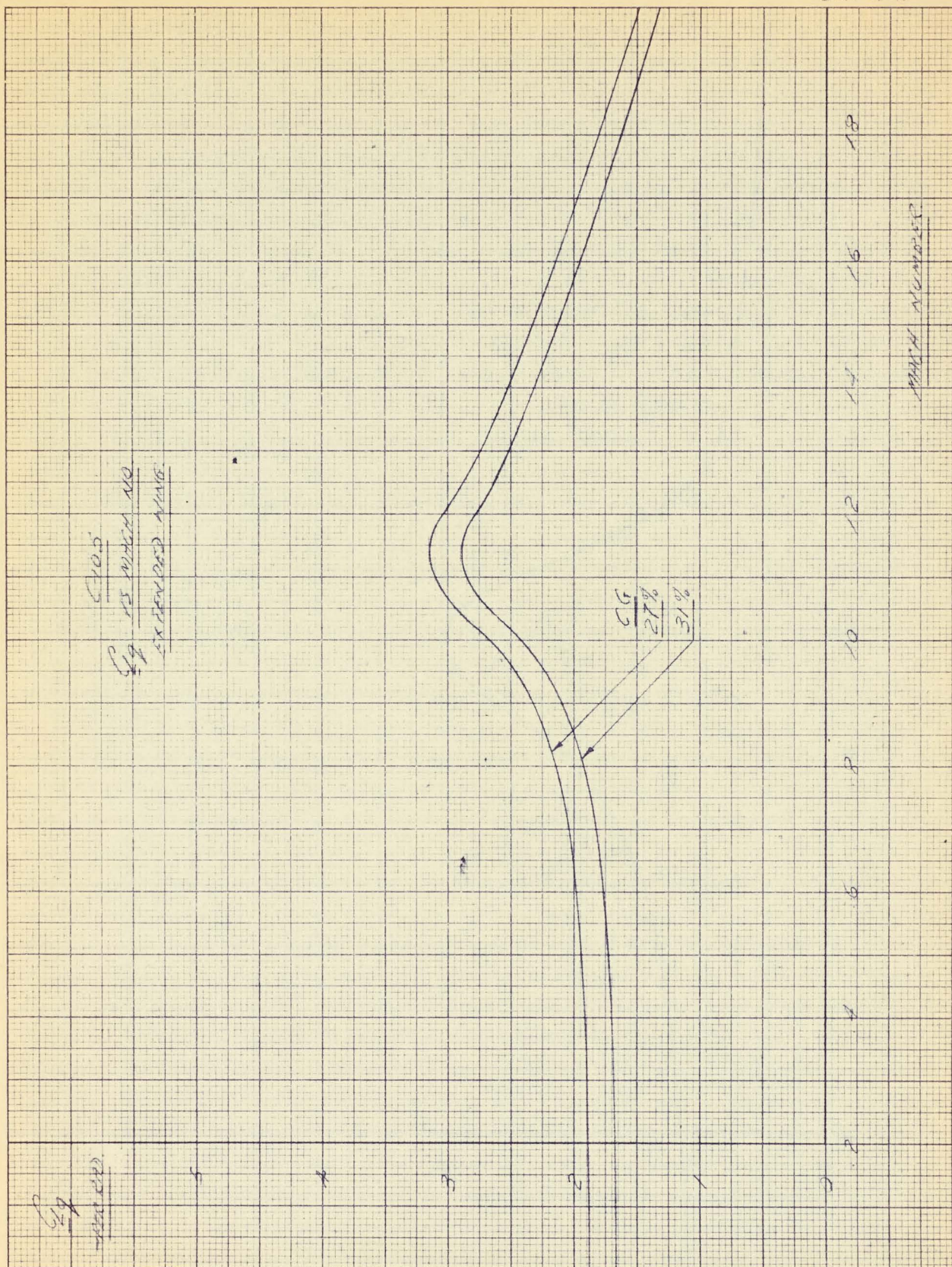
0.6

0.4

0.2

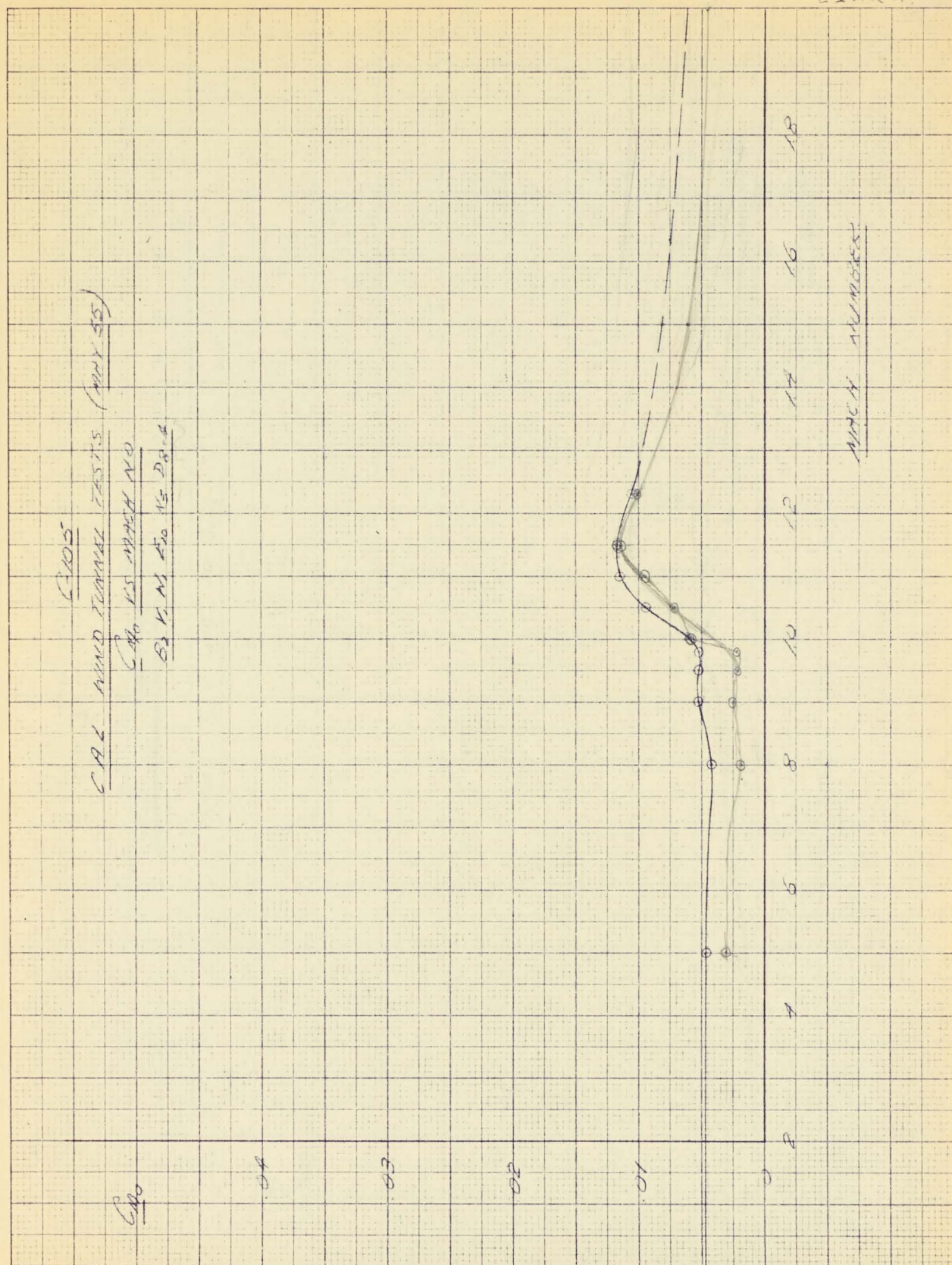
FORM 1746

P/WT / 80



P/STAB/30

15 P/ALLO DATA/59
MAY 55 CLARK



P WT / 80

AIRCRAFT
A. U. W.

COMPONENT

SHEET NO. 16
DATE June 1955

REPORT NO. P/AF CDA A 59
PREP. BY J. Kapis

10 X 10 TO THE 1/2 INCH 359-12
KLEFFEL & ESSER CO.
KLEFFEL & ESSER CO.

0105

Lo u MACH NO.

CONF: B₂ V, W, E, S D₃₋₄

No
DEGREES.

30

20

10

4

6

8

10

12

14

16

18

MACH NO.

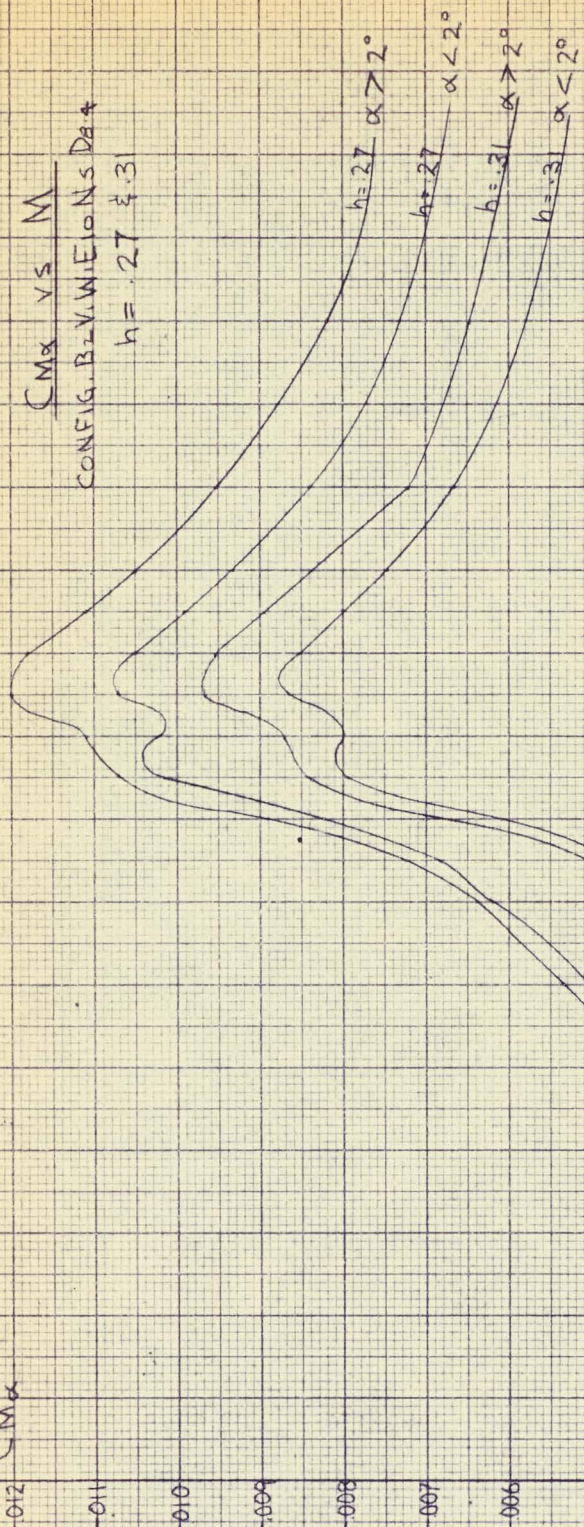
P/WT/80

FORM 1745

C-105

$C_{M\alpha}$ vs M
CONFIG. B-2 V. W. E. 10 N. S. D. 4
 $h = .27 \pm .3$

$C_{M\alpha}$



MACH No. 2 4 6 8 10 12 14 16 18

MACH No.

AIRCRAFT
A. U. W.

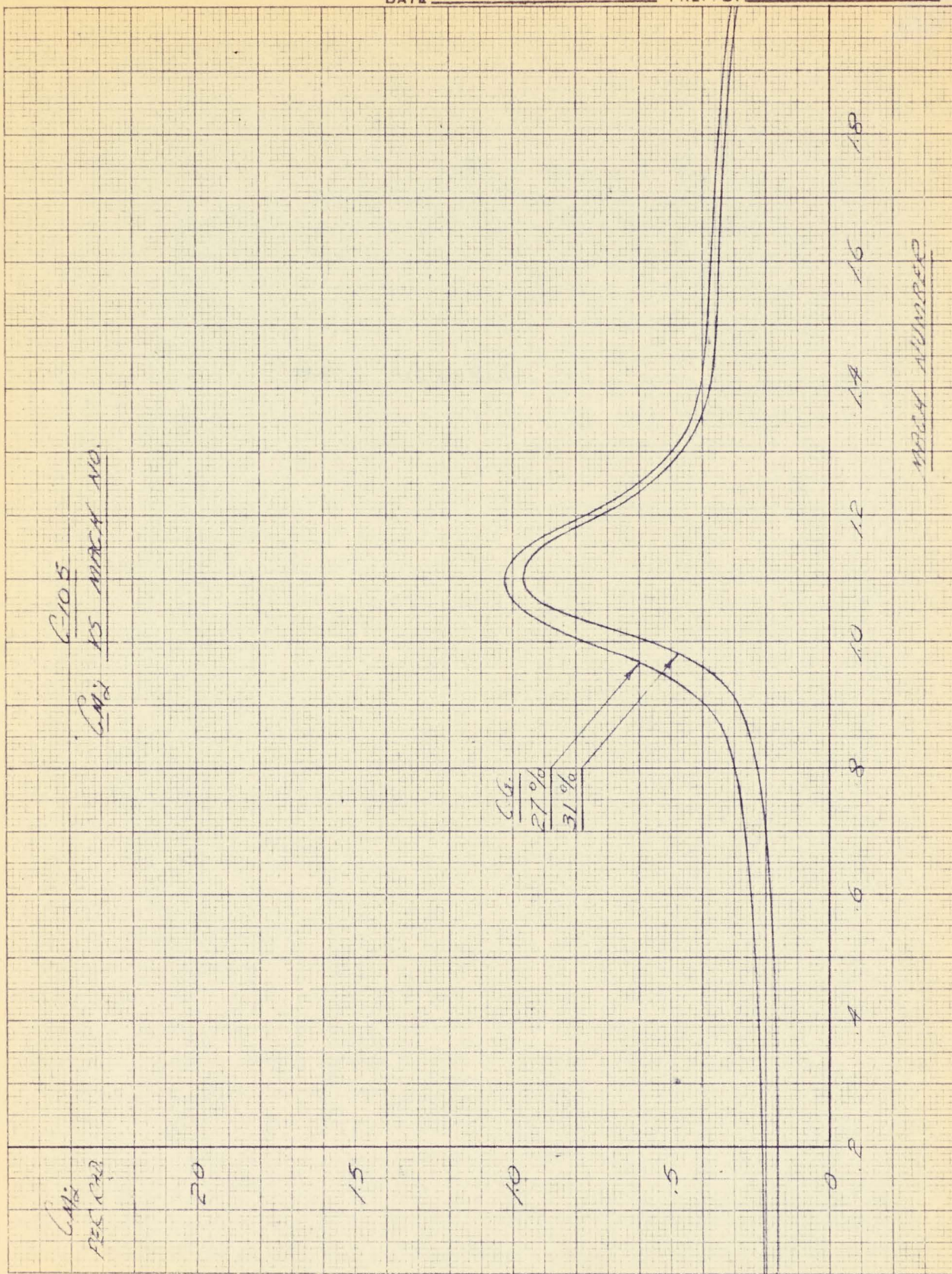
COMPONENT

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REPORT No. D/AERO DATA/59

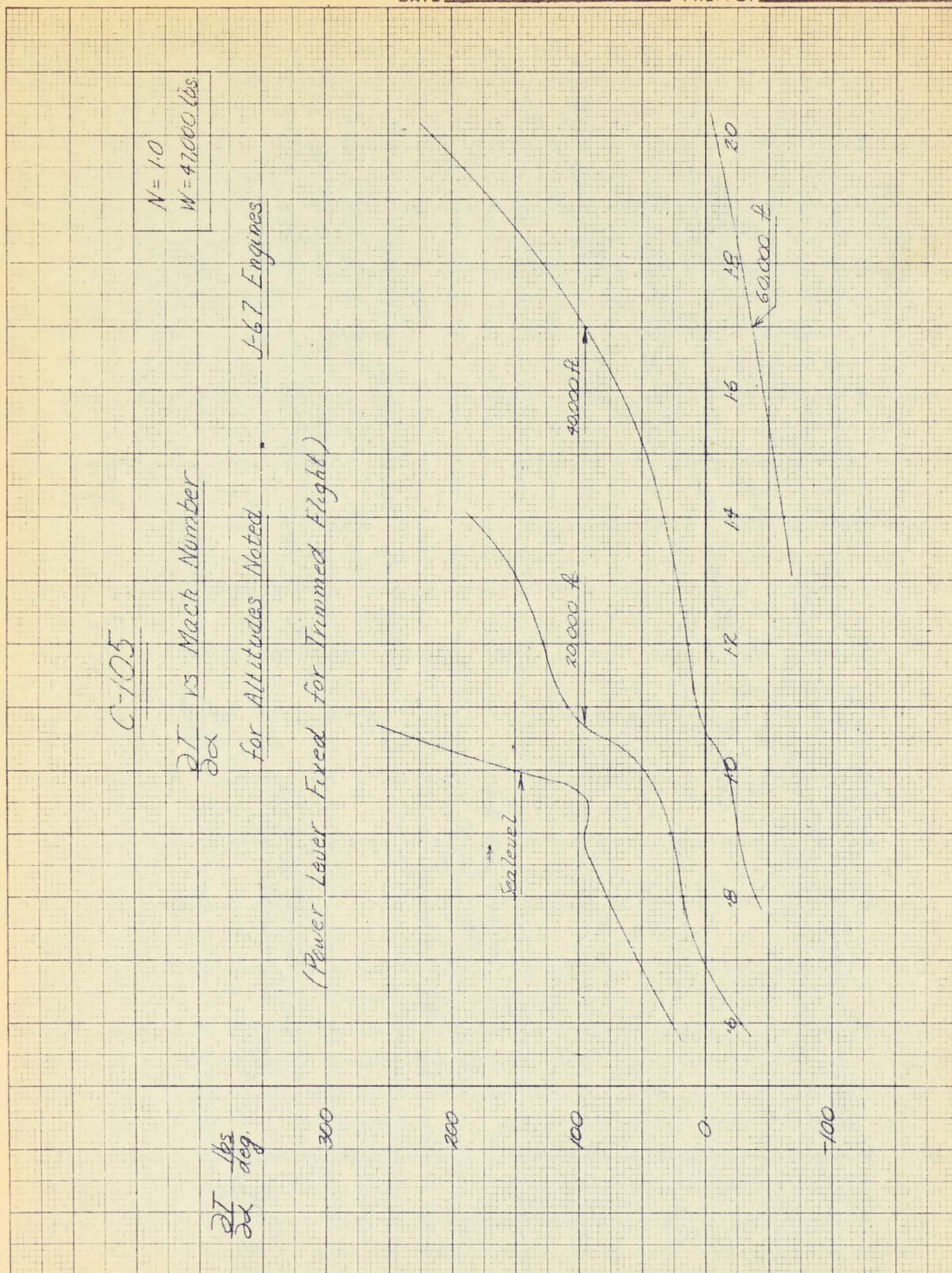
DATE Nov. 53

PREP BY CLARK



P/STAB/33

FORM 1746



C-105 ~J-673

$\frac{\partial T}{\partial h}$ vs Mach No.

"Rate of Change of Thrust with Altitude"

Flight Conditions ~ Weight 41,000 lbs
Load Factor = 1.0

POWER LEVER SET FOR EQUILIBRIUM
AT SPEED AND ALTITUDE.

NB $\frac{\partial T}{\partial h}$ is double-valued
at the Tropopause
(approx 35,000 ft.)
for all Mach Nos.

$\frac{\partial T}{\partial h}$ lbs
ft.

-1.5

-1.0

-0.5

0

2

4

6

8

10

12

14

16

18

20

Mach No.

40,000 ft

30,000 ft

20,000 ft

10,000 ft

Sea Level

Sea Level

20,000 ft

20,000 ft

Sea Level

57

276-277-

P/WT/80

五

25

24

22

905

600

2

1

1844 1845

CAL MT 105.5 (MAY 1955)
 CS VS AMNH NO
 SV V W. FO VS D. 2

WITNESSES

Grasshopper

B-1 V. W. F. 15 D. 4

0	1	2	3
---	---	---	---

2

4

4.7.

—L.T. with T.E. corp.

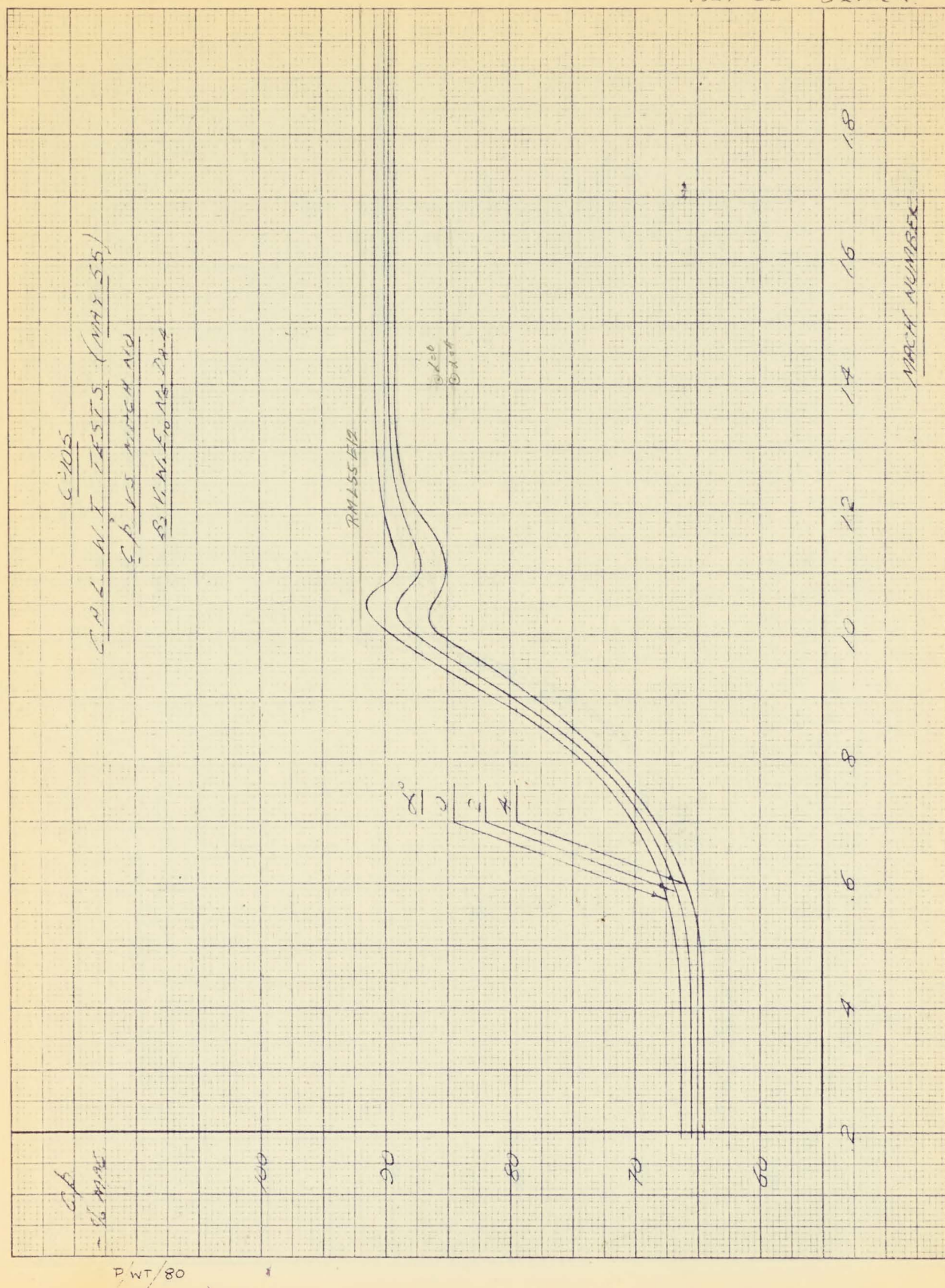
THEO. R.M. 455 E 12 (K=7.5)

2.1.1 P/AERO DATA 59
JULY 55 QAR

July 55

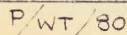
Garv.

JULY 55 CLARK

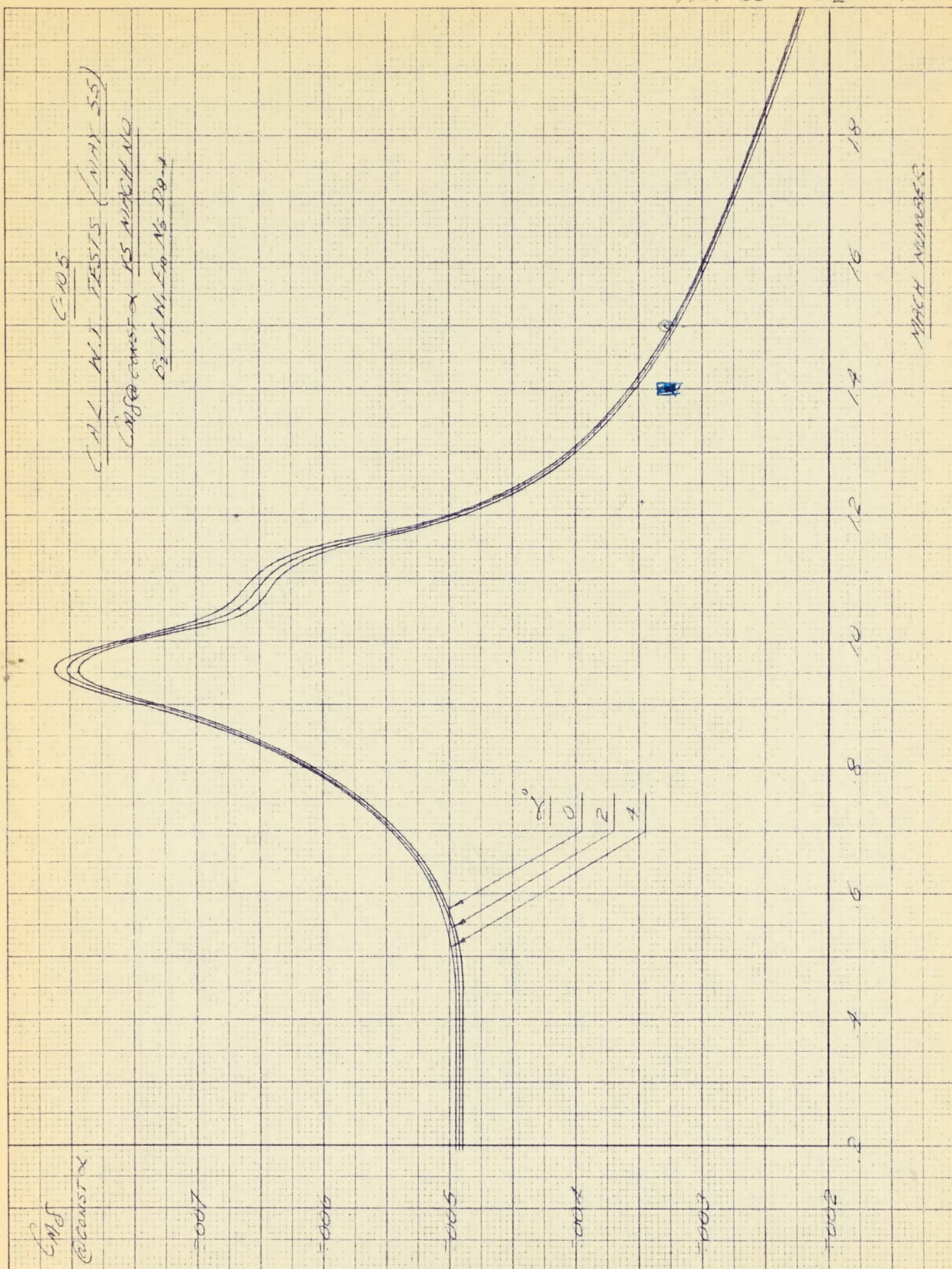


P/AFRC DATA, '59

Chart



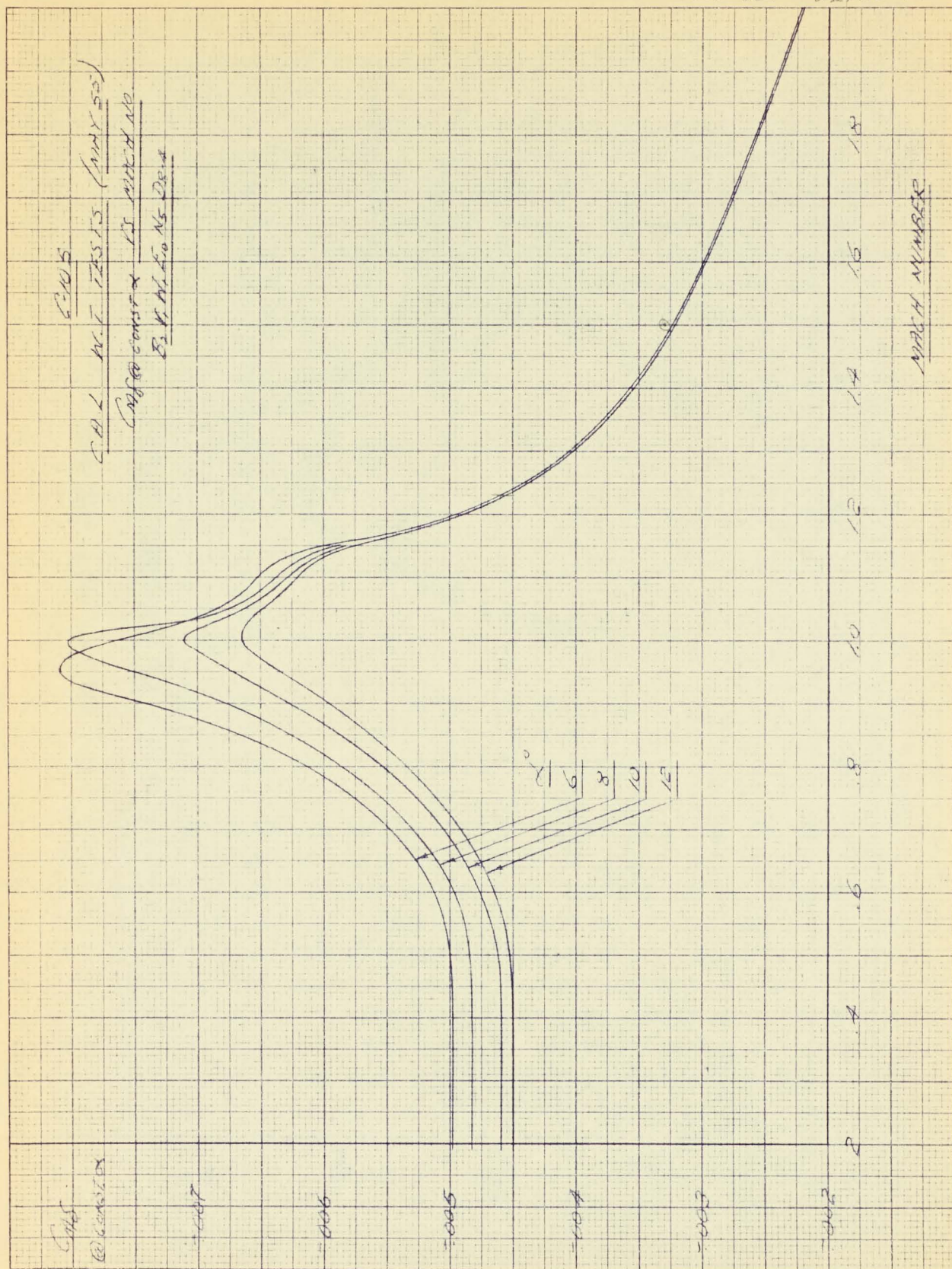
JULY 55 - 2nd Rk.



PWT/80

C-105
C-111 TESTS (MAY 55)
C-111 TESTS (MAY 55)
C-111 TESTS (MAY 55)
C-111 TESTS (MAY 55)

242. PAPER DATA 59
JULY 55. G. W. R. R.



6.405
CALCULATED
P/W T/80
P/W T/80
P/W T/80

