

QC
AVRO
C-105
P/AD/32

QC X
Avro
CF105
P-AD-32

(10)

FILE IN VAULT

C-105 ANALYZED P/AERO DATA/32
LONGITUDINAL STABILITY DERIVATIVES
AND DRAG DATA
3 1/2% WING
S. Kwiatkowski August 1954.

UNCLASSIFIED / NON CLASSIFIÉ

ANALYZED



National Research Council
Canada

C.I.S.T.I.

Aeronautical and
Mechanical

Engineering Library

Conseil national de recherches
Canada

I.C.I.S.T.

Bibliothèque
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et de génie mécanique

TO
A

DATE

Dec. 7, 1992

Report no.: QCX - AVRO - CF105- P. AD-32

has been ☐ downgraded to: _____

☒ de-classified

by (Name): Michel W. Drapeau

(Dept.): A/DND Coordinator, Access to Information

Date: Dec. 7, 1992

R. Auger
Signature



45130

12422229



A. V. ROE CANADA LIMITED
MALTON - ONTARIO

TECHNICAL DEPARTMENT (Aircraft)

AIRCRAFT: C-105

REPORT NO. P/AERO DATA/32

FILE NO:

NO OF SHEETS: _____

TITLE:

Classification cancelled / changed to: UNCLASSIFIED

By authority of: DRDA 7/DARFT 5-8/DAS Eng 6-4-5

Date: 5 Nov 1992

Signature: B Aubrey

Unit / Rank / Appointment: DSIS 3, Secretary CRAD HQ DRP

LONGITUDINAL STABILITY DERIVATIVES AND DRAG DATA

3.5% WING

UNCLASSIFIED
CONFIDENTIAL
UNCLASSIFIED
CONFIDENTIAL
UNCLASSIFIED

PREPARED BY

DATE

CHECKED BY

DATE

SUPERVISED BY

DATE

APPROVED BY

DATE

ISSUE NO.	REVISION NO.	REVISED BY	APPROVED BY	DATE	REMARKS

TECHNICAL DEPARTMENT (Aircraft)

REPORT NO. P/AERO DATA/32

SHEET NO.

PREPARED BY

DATE

S. Kwiatkowski

August 1954.

CHECKED BY

DATE

AIRCRAFT:

UNCLASSIFIED / NON CLASSIFIÉ

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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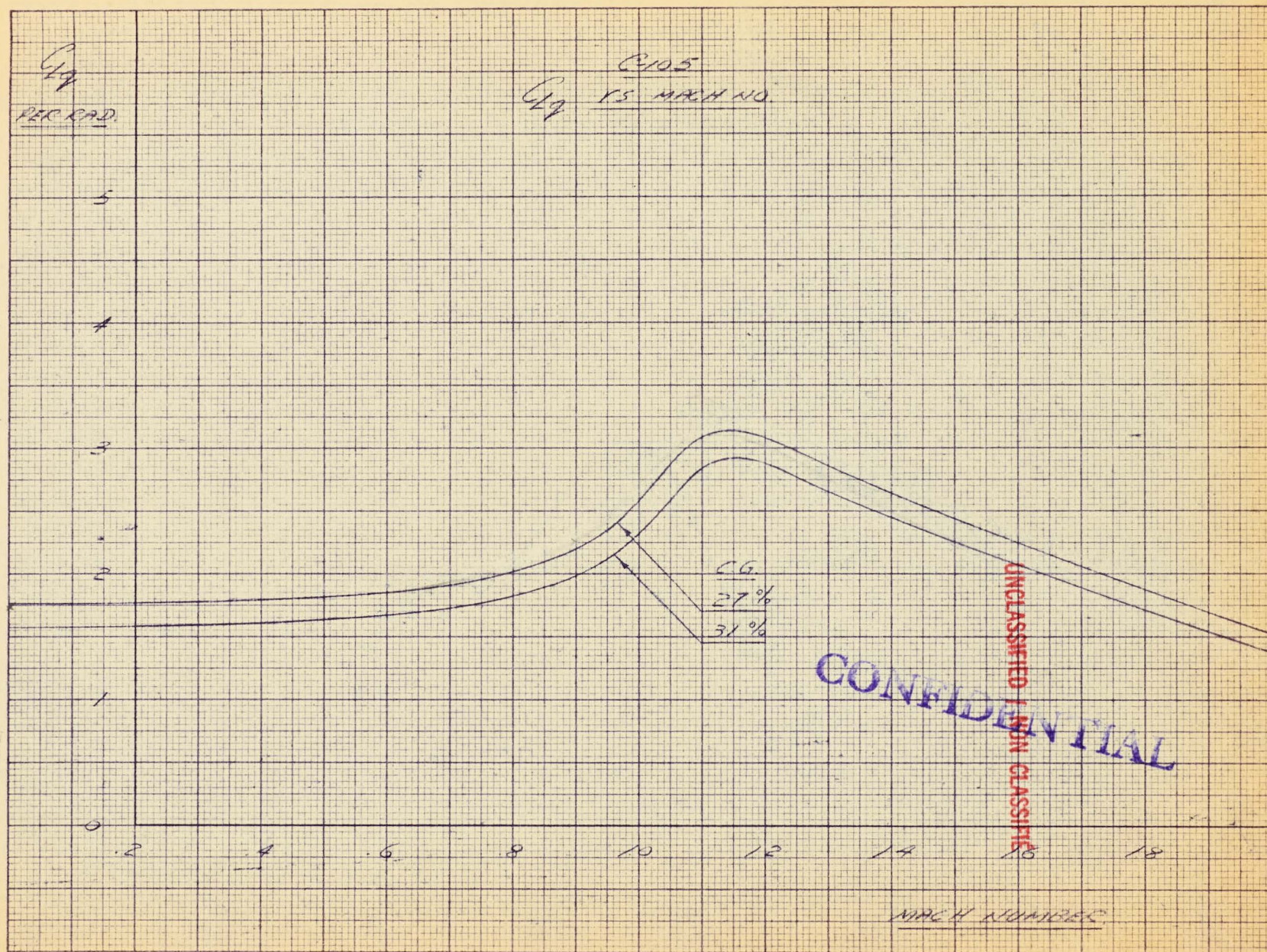
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35
OCT 34
1/5700/30/13
CLASS

AIRCRAFT C105
A. U. W.

COMPONENT

SHEET No. 15

REPORT No. P/AERO DATA/32

DATE AUG/57

PREP BY K. A. L. L.

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C105

CM₀ 15 MARCH No

20
MARCH No

18

16

14

12

10

8

6

4

CM₀

03

02

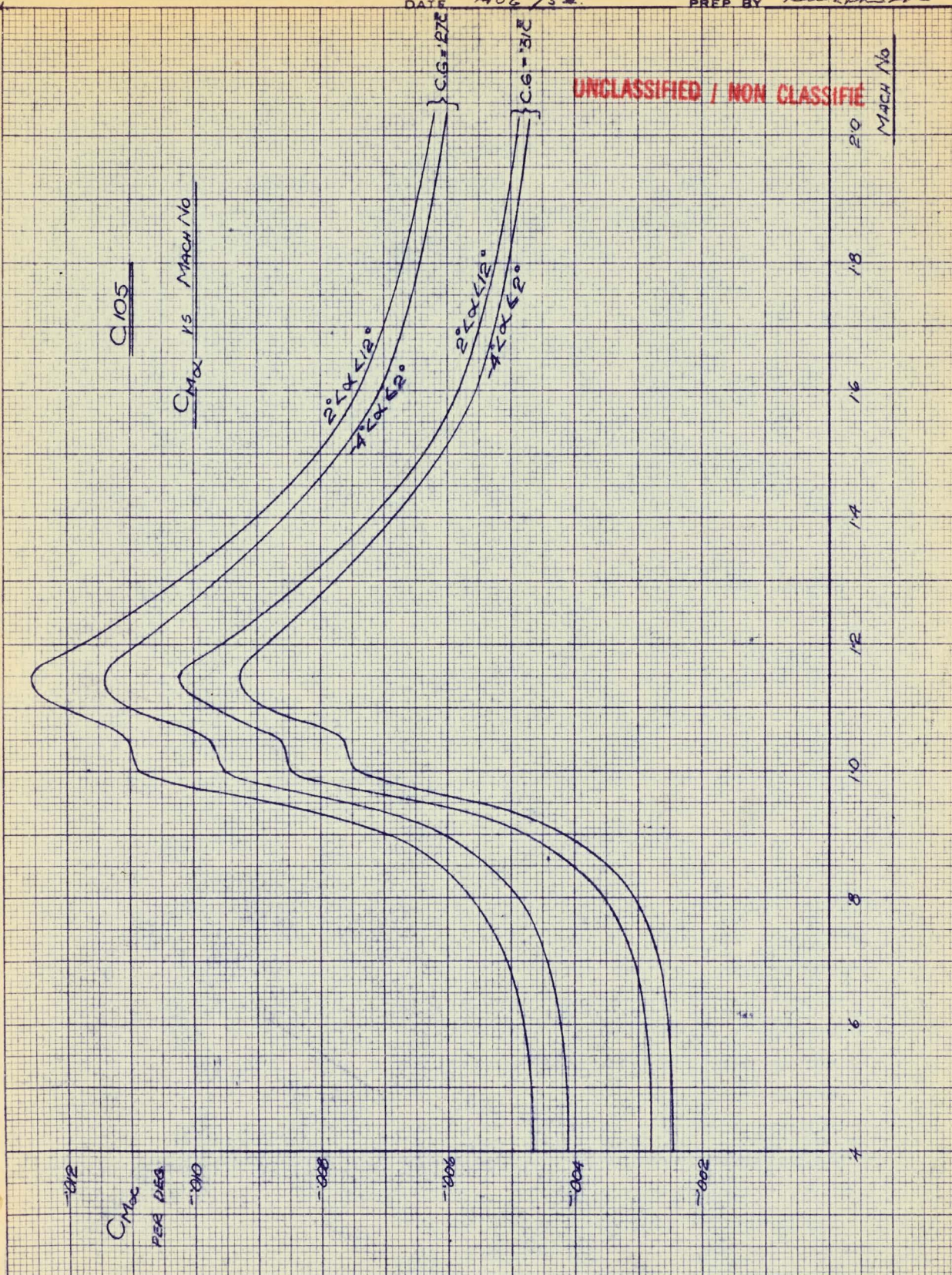
01

AIRCRAFT C105

COMPONENT

SHEET No. 1.7REPORT No. P/AER DATA / 32

A. U. W.

DATE AUG / 58PREP BY K. K. K. K.

AIRCRAFT
A. U. W.

COMPONENT

SHEET No. 1.8
DATE Nov. 53.

REPORT No. P15TAB/26
PREP. BY CLARK

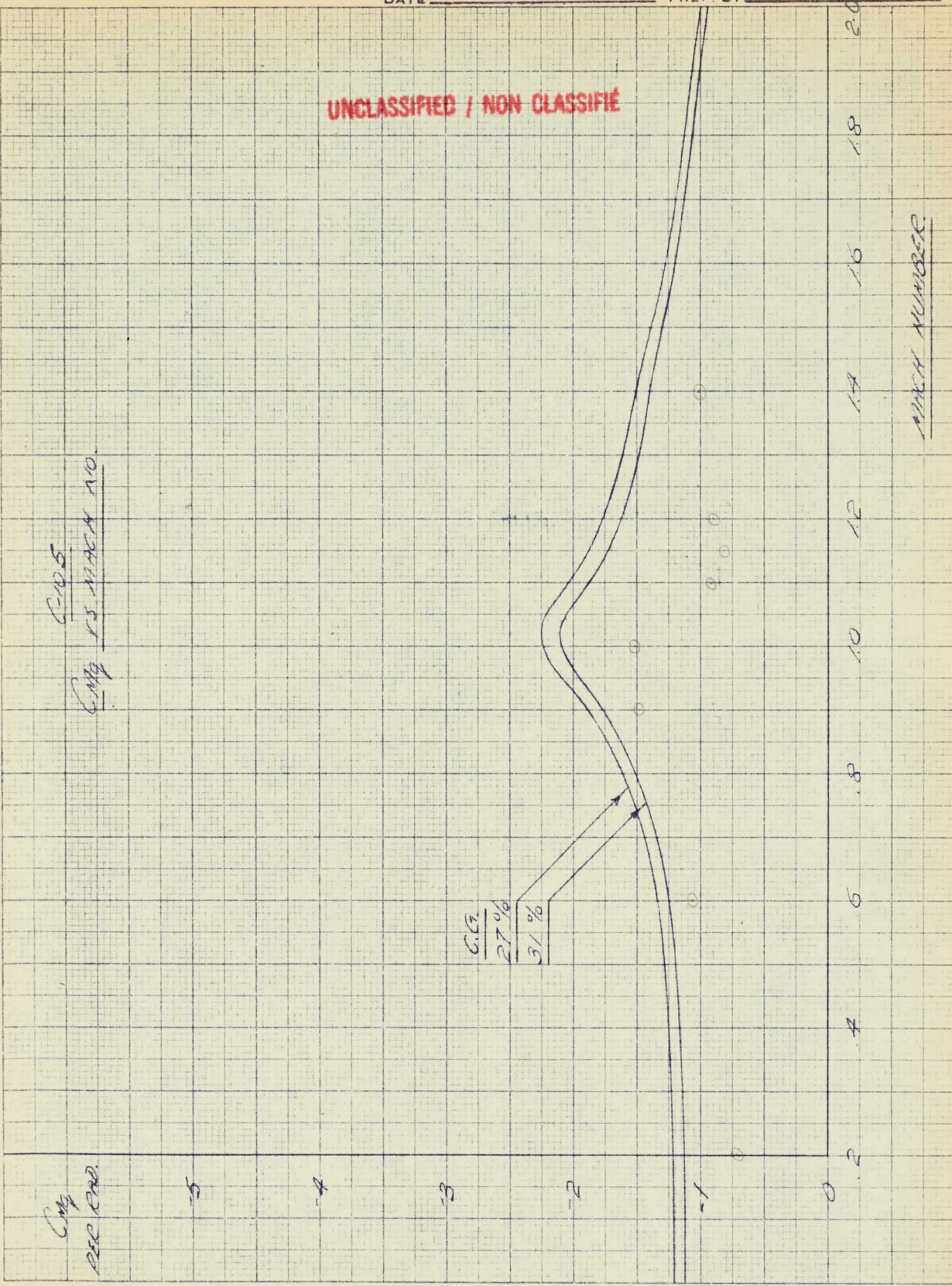
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C-105
CMg 15 MAX 110

CMg
PER END

C.13
27%
31%

WING NUMBER



Sheet. 1.10.1
Sept. '54

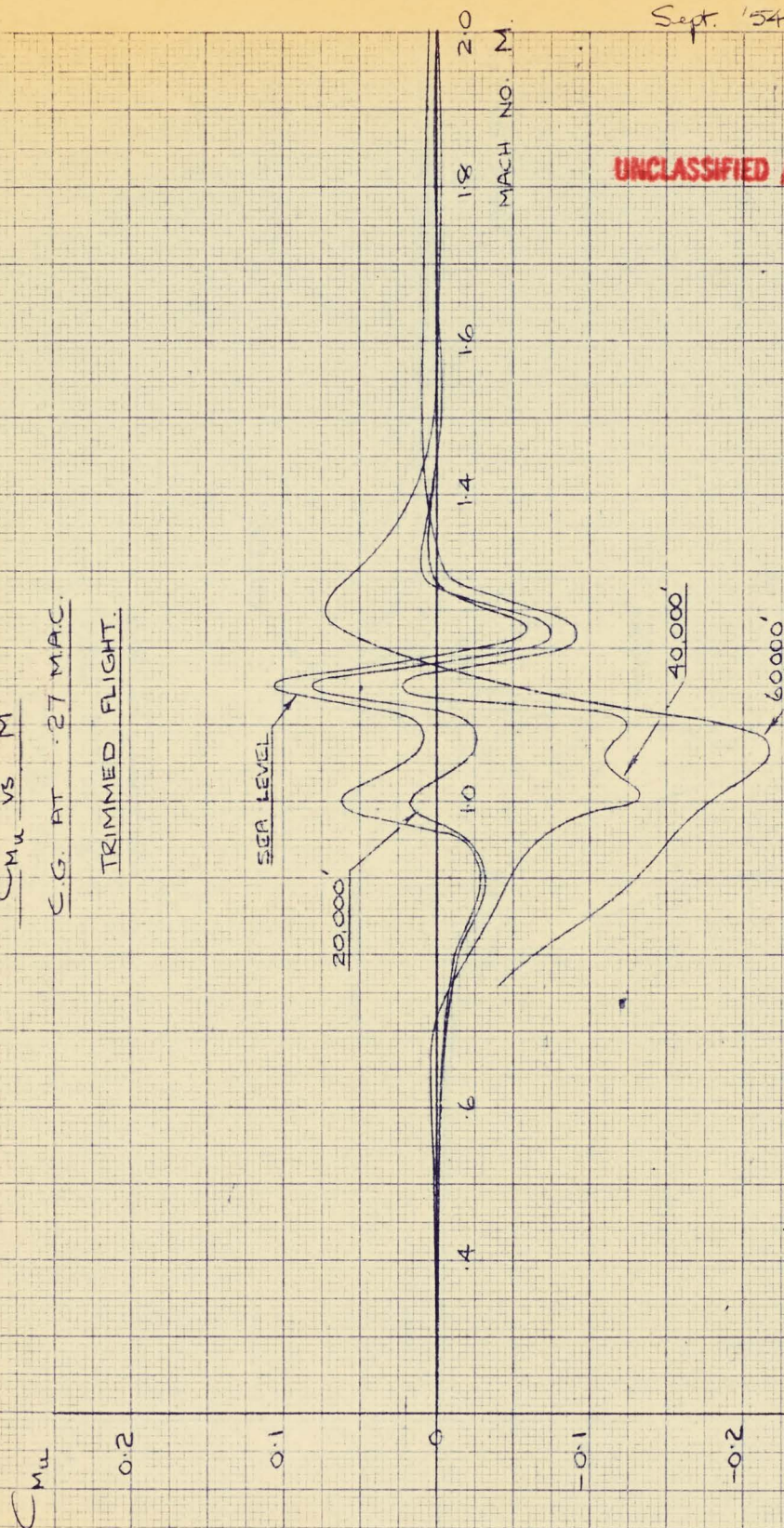
P/Aero Data/32
L. Stewart.

C-105

C_{mu} vs M

C.G. AT .27 MAC.

TRIMMED FLIGHT.



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C-105

C_{Mu} vs M

C.G. AT .31 M.A.C.

TRIMMED FLIGHT

C_{Mu}

.2

.1

0

-.1

-.2

2.0

MACH NO. M

1.6

1.4

1.2

1.0

.8

.6

.4

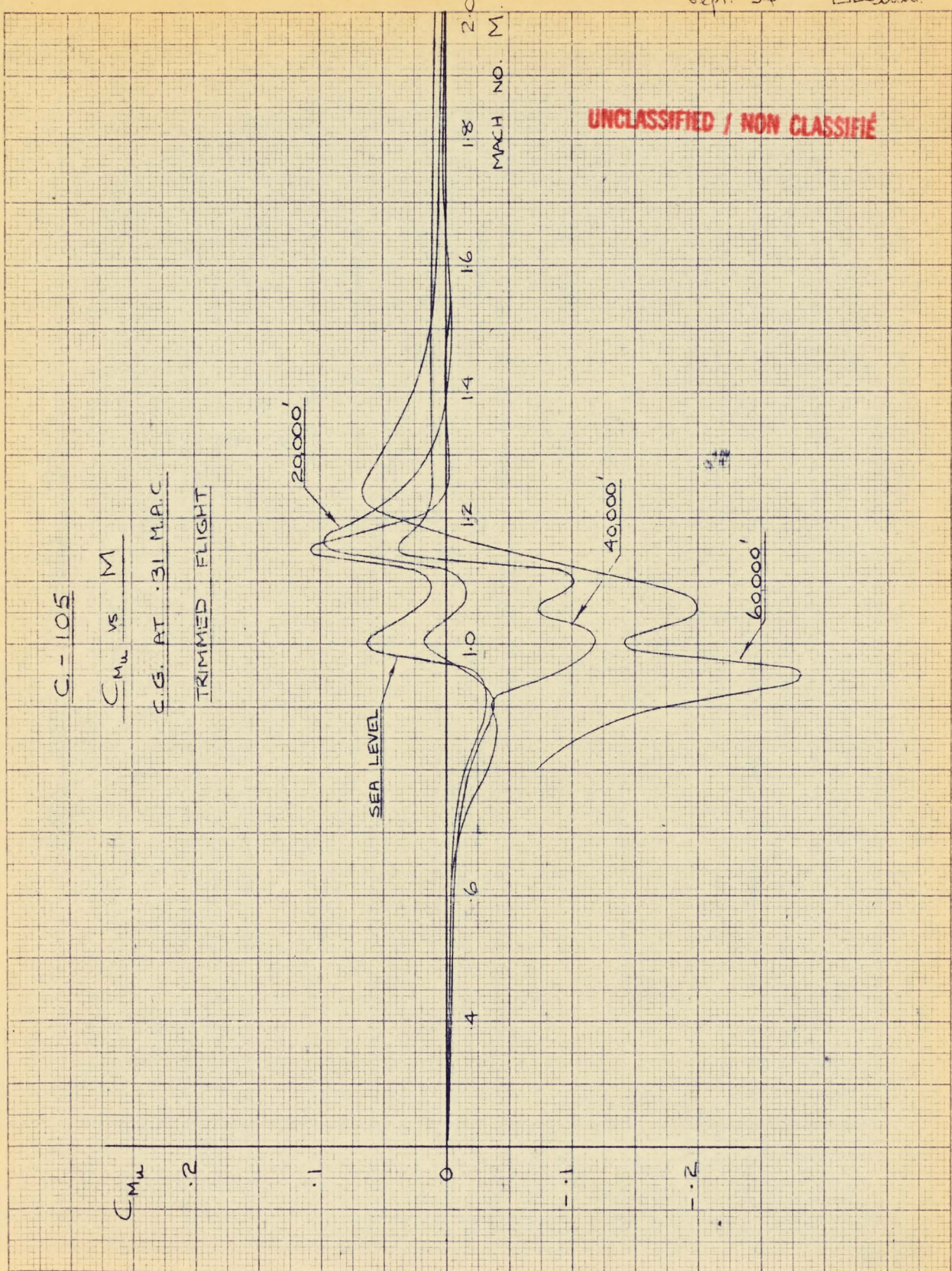
SEA LEVEL

29,000'

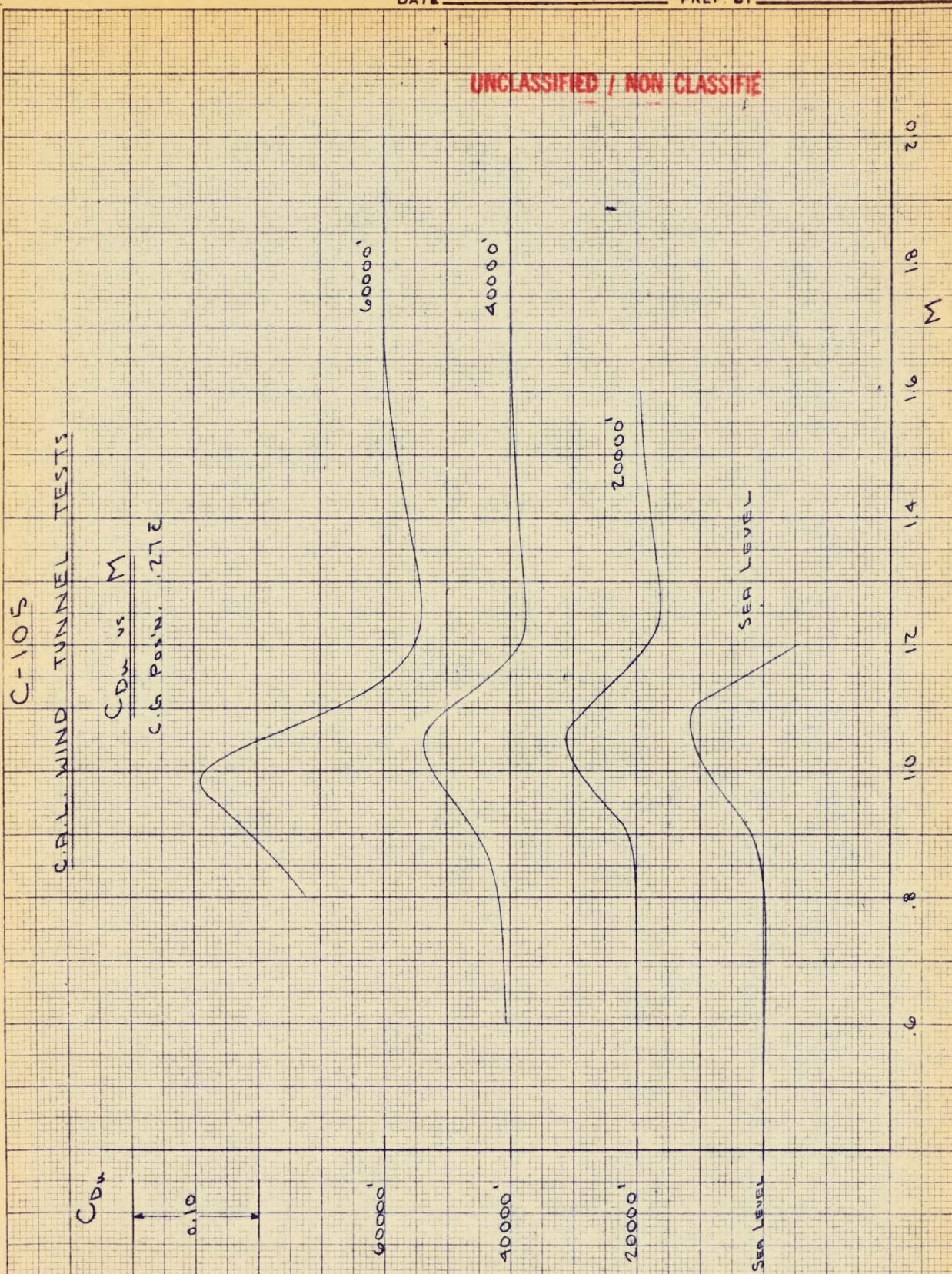
40,000'

60,000'

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C-105

FACTOR TO CORRECT WIND TUNNEL CDW RESULTS
FOR AIC POWER ON CONDITIONS

3-07 ENGINE + AFTERBURNER

ΔC_{DW}

0.008
0.006
0.004
0.002
0
-0.002
-0.004
-0.006
-0.008

SEA LEVEL

20000' 40000' 60000'

1.0 1.2 1.4 1.6 1.8 2.0
M

$N = 1.0$
 $W = 47000 \text{ lbs}$

J-67 Engines

C-105

DT vs Mach Number

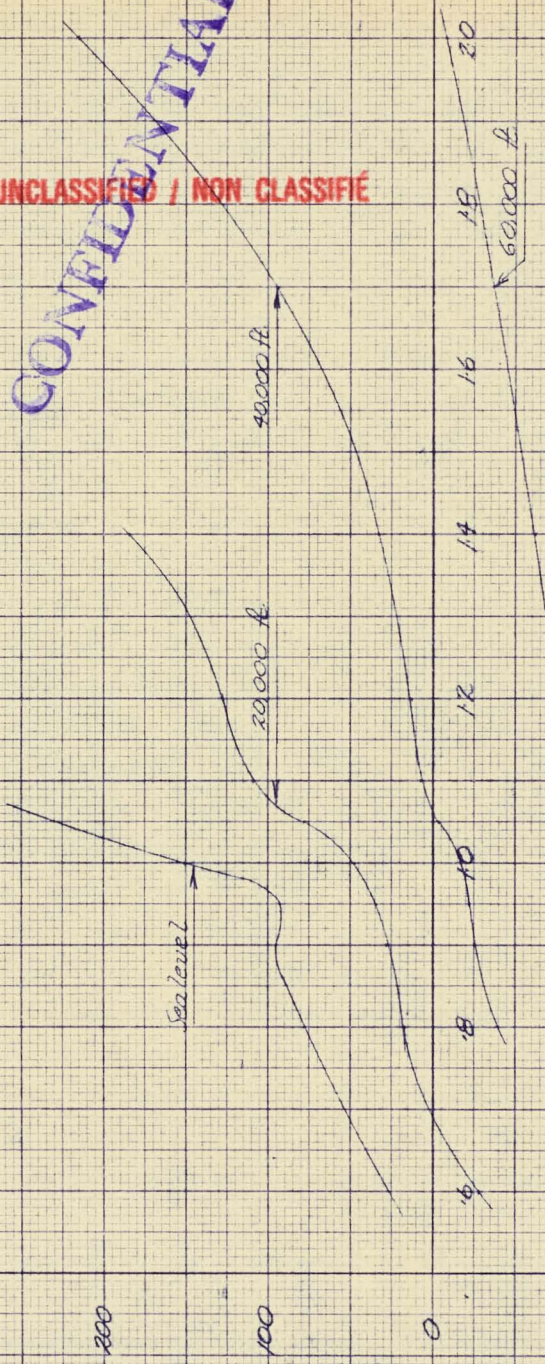
α

for Altitudes Noted

(Power Lever Fixed for Trimmed Flight)

DT lbs
 α deg

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AIRCRAFT C105
A U W

COMPONENT

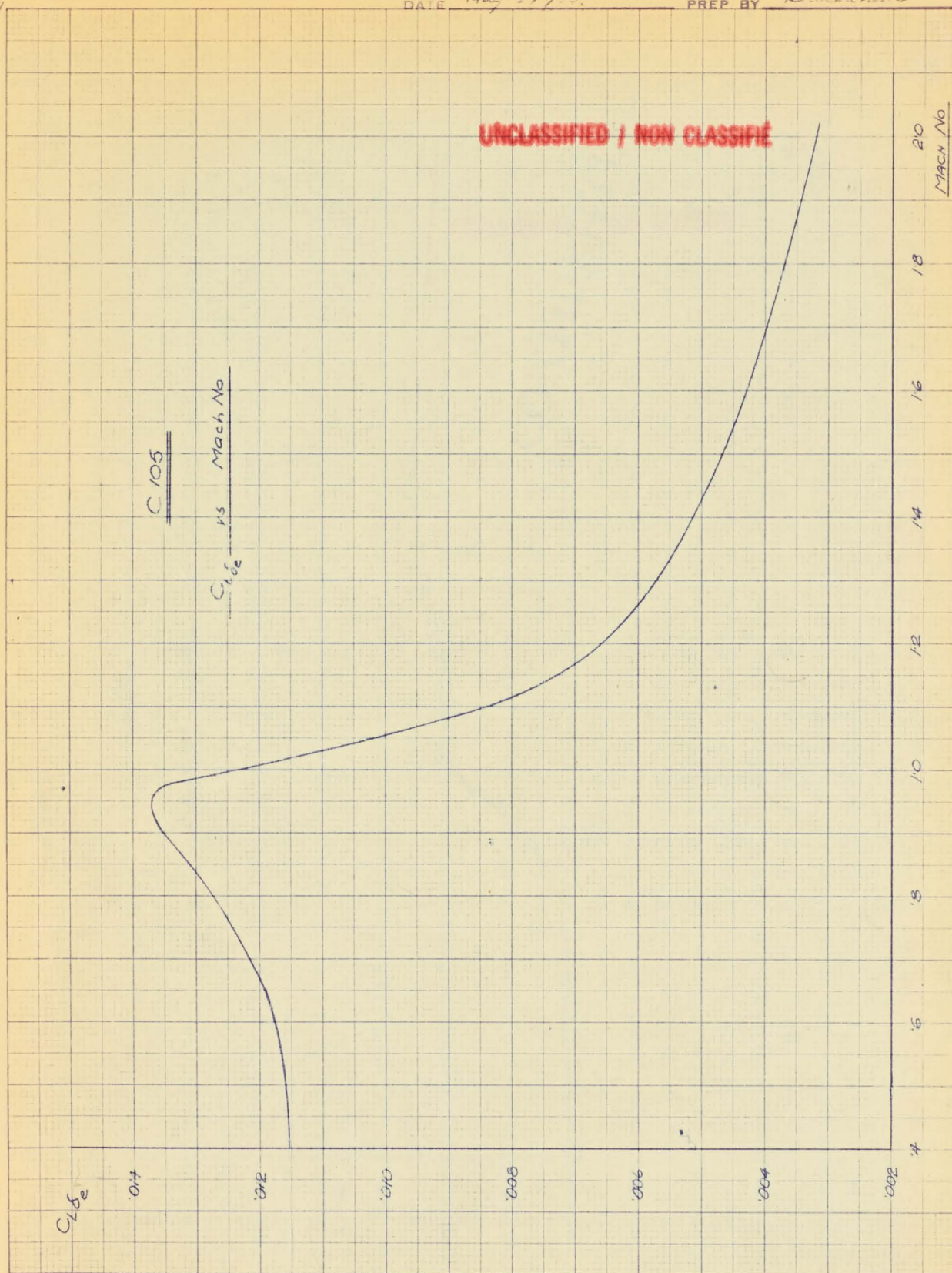
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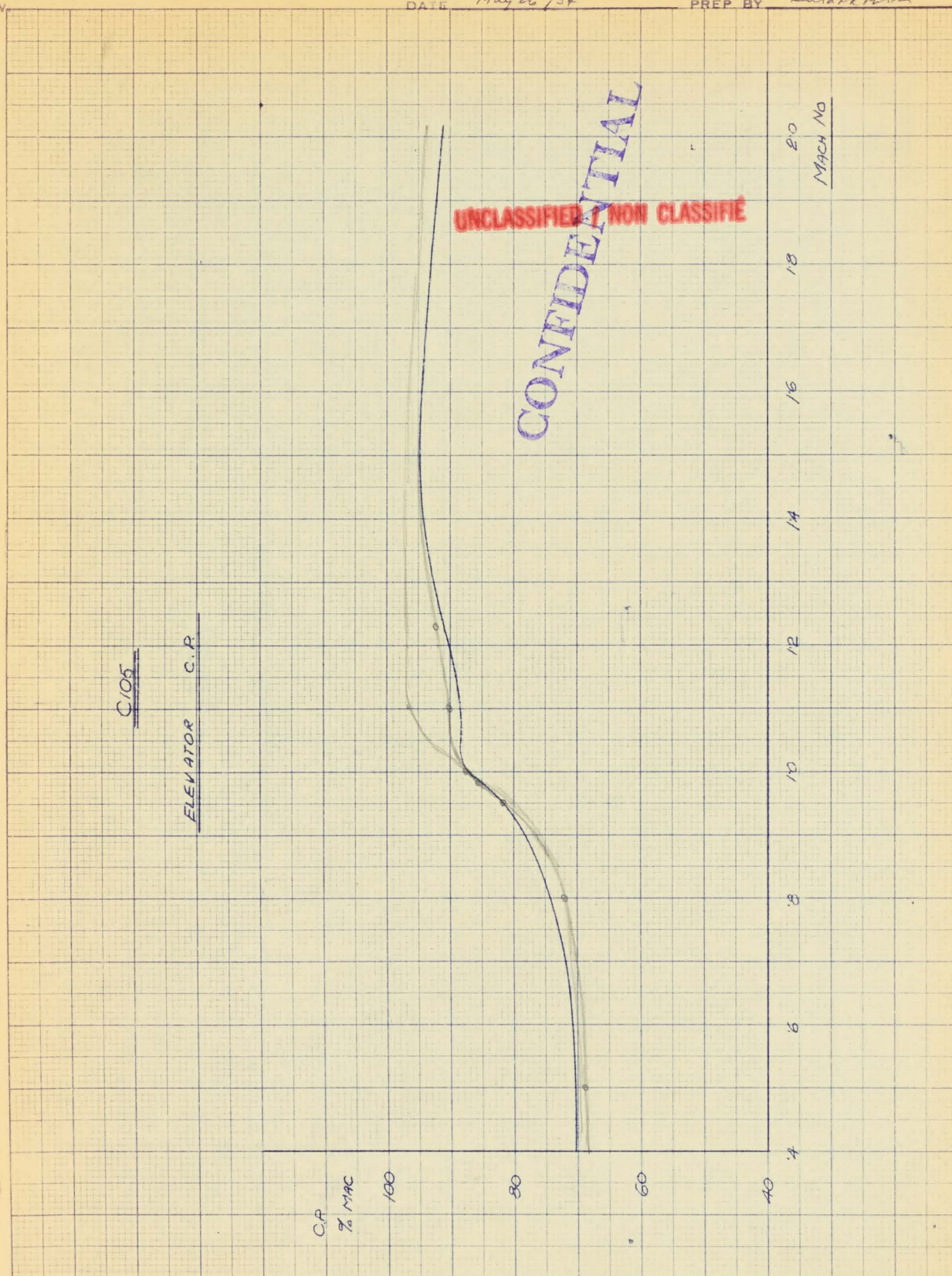
REPORT No. P/GER, D974/32

DATE May 27/54

PREP BY Kunkle

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AIRCRAFT C105
A U. W.

COMPONENT

SHEET No. 26

REPORT No P/AERO DATA / 32

DATE May 27 / 54

PREP BY Kunal K. K.

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C106

C106 vs MACH No

MACH No

18

16

14

12

10

8

6

4

-05

-02

-01

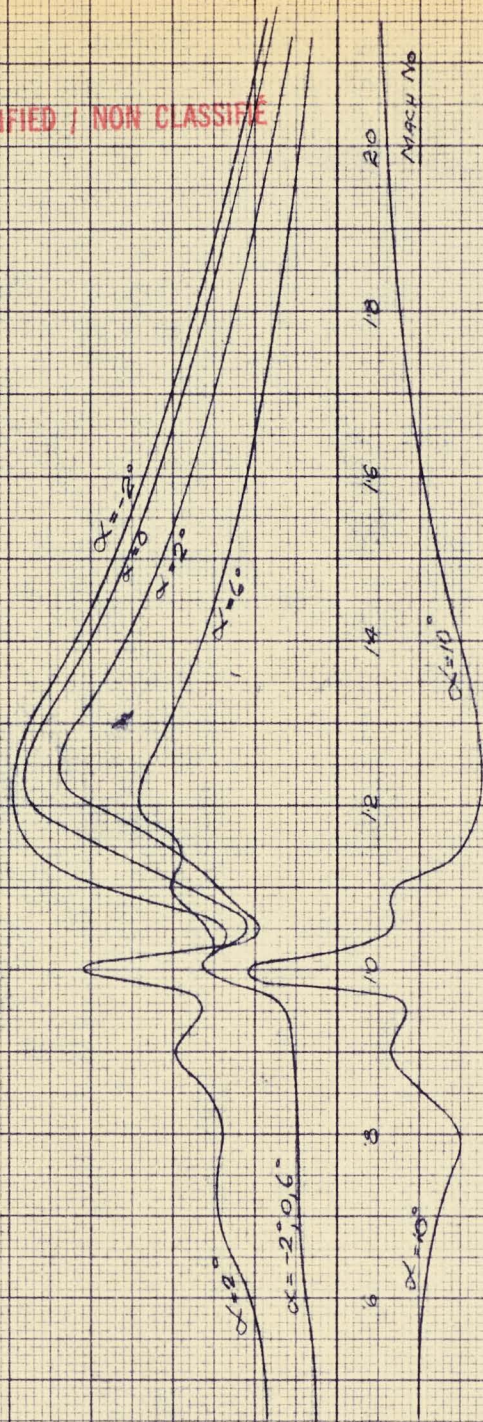
C105

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C105
C105 vs MACH No
 $\beta = 6^\circ$ FOR $2.5 \leq \alpha \leq 6^\circ$
 $\beta = 2^\circ$ FOR $\alpha = 10^\circ$
B. G. H. K. R.

C105
PER DEG

-010
-008
-006
-004
-002
0
002
004



MACH No

20
18
16
14
12
10
8

