

QC
Auro
C-105
P/AD/56

QC X
Auro
CF105
P-AD-56

22

FILE IN VAULT

C-105

P/Aero Data/56

UNCLASSIFIED

LATERAL STABILITY DERIVATIVES

WING NOTCHED AND EXTENDED

ANALYZED

CROSS-PLOTS

April 1955

ANALYZED



National Research Council
Canada

Conseil national de recherches
Canada

C.I.S.T.I.

I.C.I.S.T.I.

Aeronautical and

Bibliothèque

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TP
A

DATE

Report no.: QCX - AVRO - CF105 - P-AD-56

has been downgraded to: _____

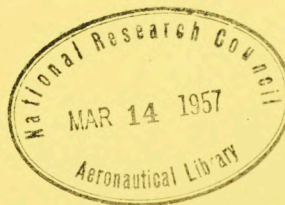
de-classified

by (Name): Michel W. Drapeau

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

Date: Dec. 7, 1992

R. Auger
Signature



45122

12422555



UNCLASSIFIED

A. V. ROE CANADA LIMITED
MALTON - ONTARIO

TECHNICAL DEPARTMENT (Aircraft)

AIRCRAFT:

REPORT No. P/AERO DATA/56

FILE No:

NO OF SHEETS: _____

TITLE:

C-105

LATERAL STABILITY DERIVATIVES

WING NOTCHED AND EXTENDED

CROSS-PLOTS

Classification ~~cancelled~~ ^{confirmed as} changed to: UNCLASSIFIED
 By authority of: DEDA 7/DARFT 5-8/DAS Eng 6-4-5
 Date: 5 Nov 1992
 Signature: B. Aubrey
 Unit / Rank / Appointment: SIS 3, Secretary CRAD HQ DRP

PREPARED BY _____ DATE April 1955
 CHECKED BY _____ DATE _____
 SUPERVISED BY _____ DATE _____
 APPROVED BY _____ DATE _____

ISSUE No	REVISION No.	REVISED BY	APPROVED BY	DATE	REMARKS



AIRCRAFT:

C-105

PREPARED BY _____

DATE

April 1955

CHECKED BY _____

DATE

LATERAL STABILITY DERIVATIVES

WING NOTCHED AND EXTENDED

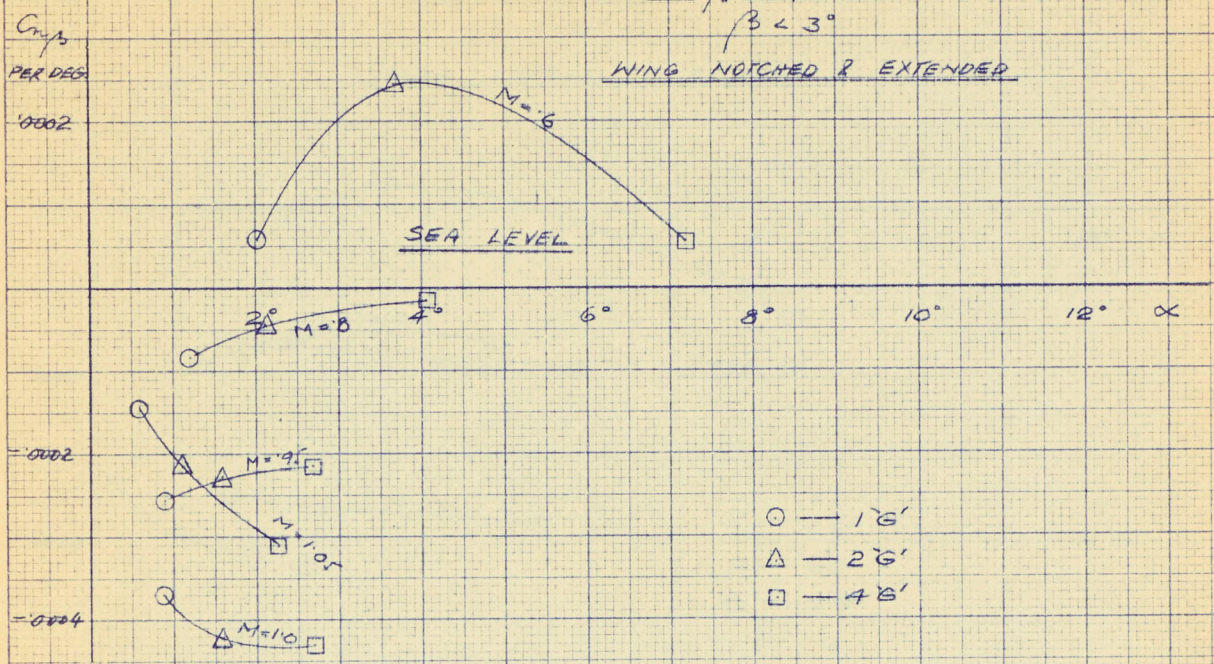
1.	$C_{n\beta}$	vs	α	$\beta < 3^\circ$ $\beta > 3^\circ$		1.1 1.2
2.	$C_{n\delta_a}$	vs	α			2.1
3.	C_{nr}	vs	α	$\beta < 3^\circ$ $\beta > 3^\circ$		3.1 3.2
4.	$C_{l\beta}$	vs	α			4.1
5.	$C_{l\delta_r}$	vs	α	$\beta < 3^\circ$ $\beta > 3^\circ$	$\delta_R 10^\circ$	5.1 5.2
6.	C_{lr}	vs	α	$\beta < 3^\circ$ $\beta > 3^\circ$		6.1 6.2

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NON CLASSIFIE

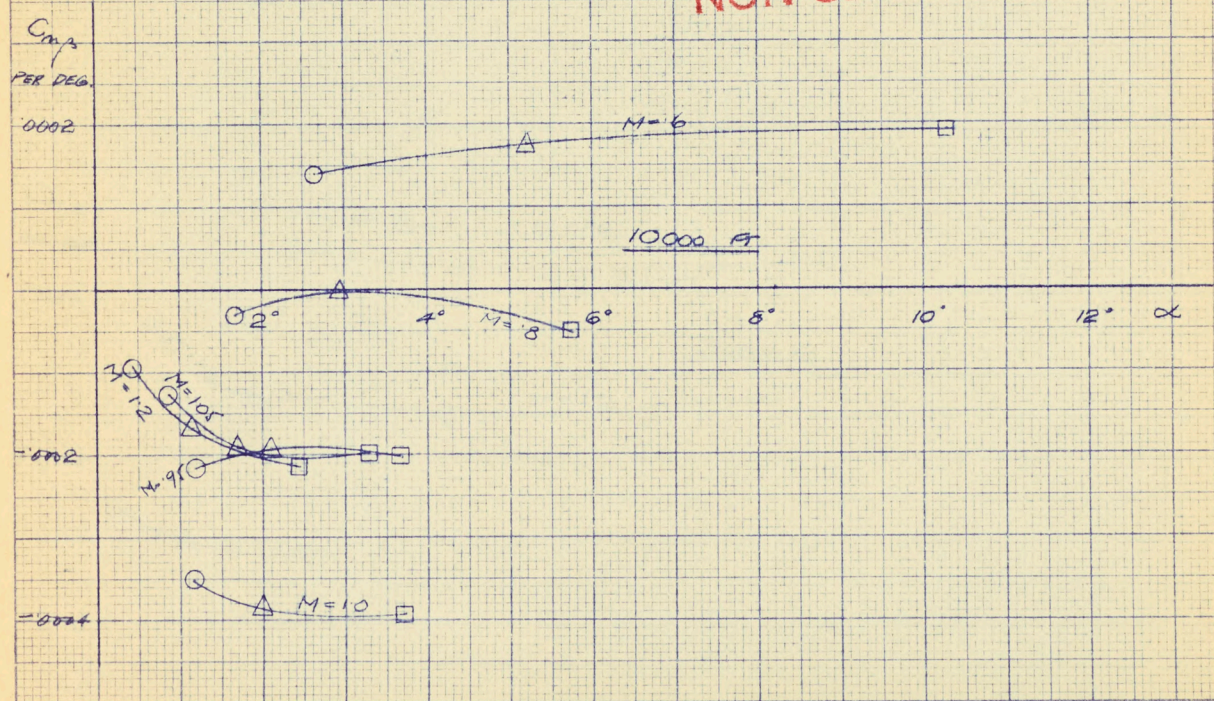
C105

Comp β α
 $\beta < 3^\circ$

WING NOTCHED & EXTENDED

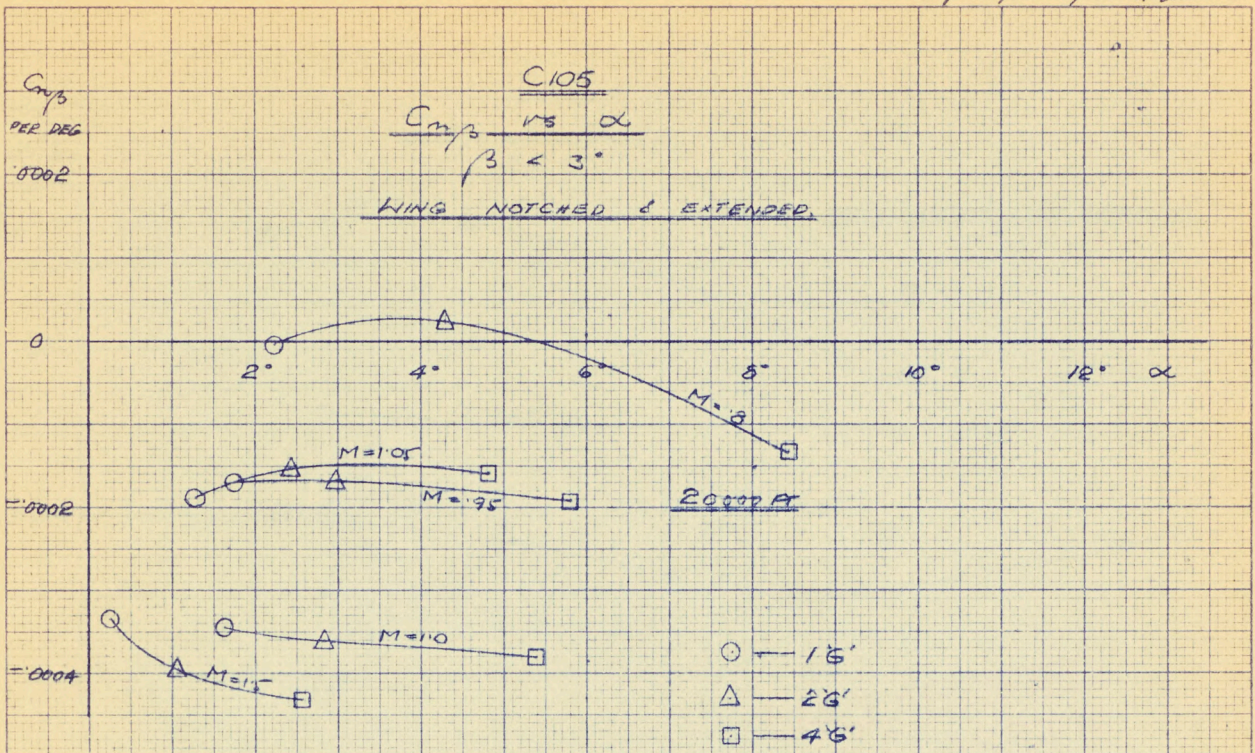


NON CLASSIFIE

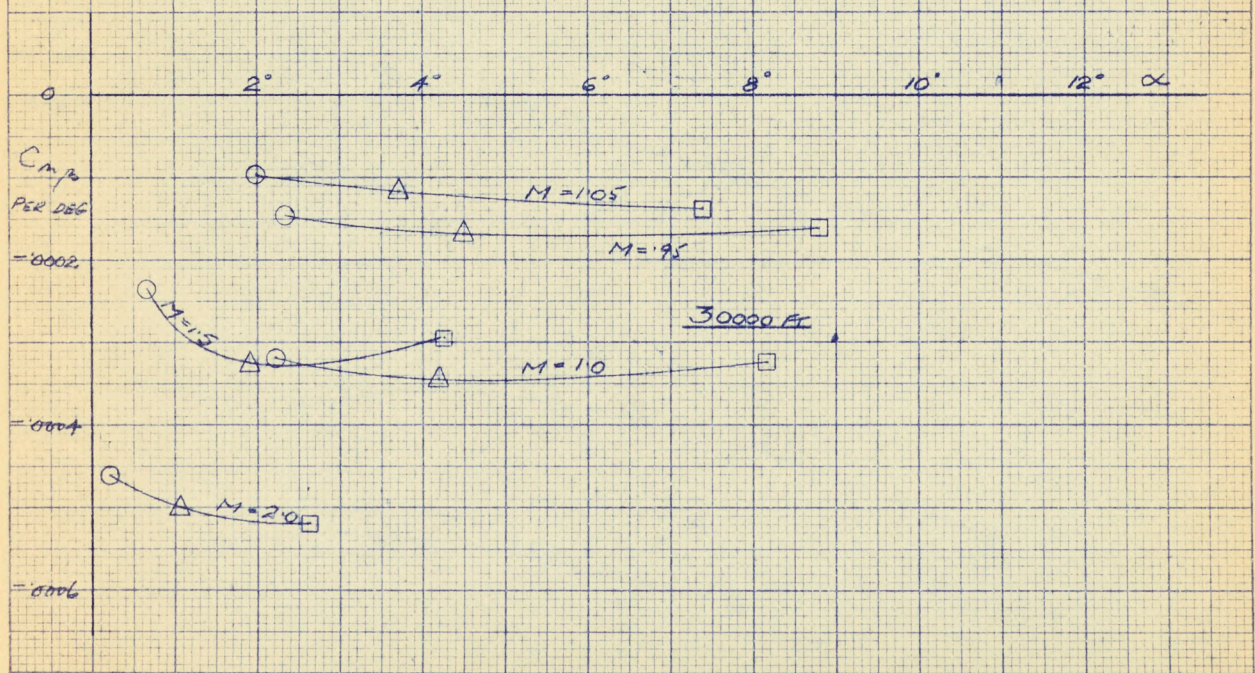


1.1.2

P/STAB/TS 244
April/55 K. H. H. H.



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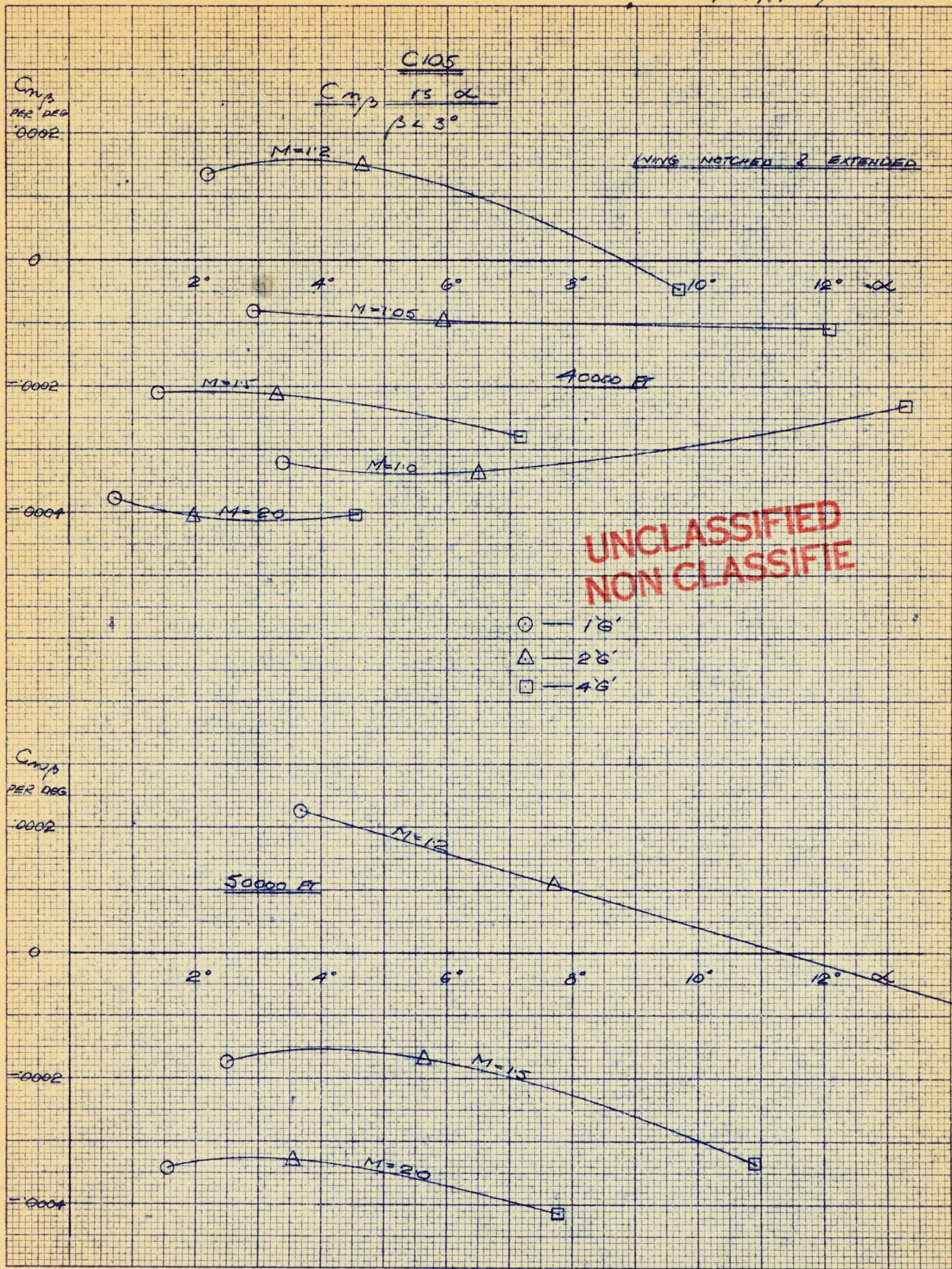
10 X 10 TO THE 1/2 INCH 359.12
KUPPEL & FESSER CO. MADE IN U.S.A.

110156

1.1.3.

P/STAR/56 2-44

April 1955 Kuratowski



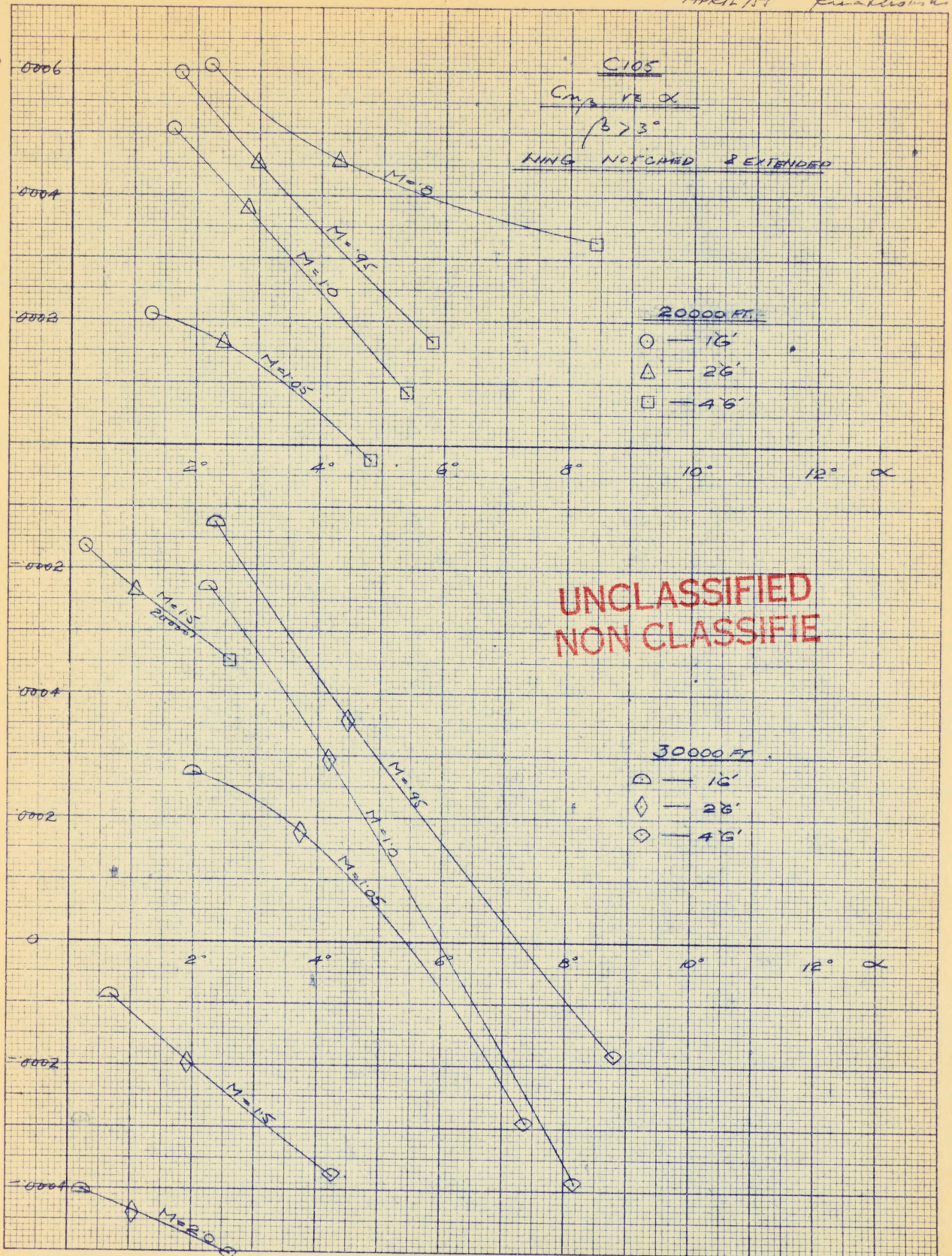
UNCLASSIFIED
NON CLASSIFIE

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

1.2.2

P/STAB/75 244.111

APRIL 15T Kuznetsov



P/STAB/75 ~~242~~ 112.3
 April 15 Kinchroost

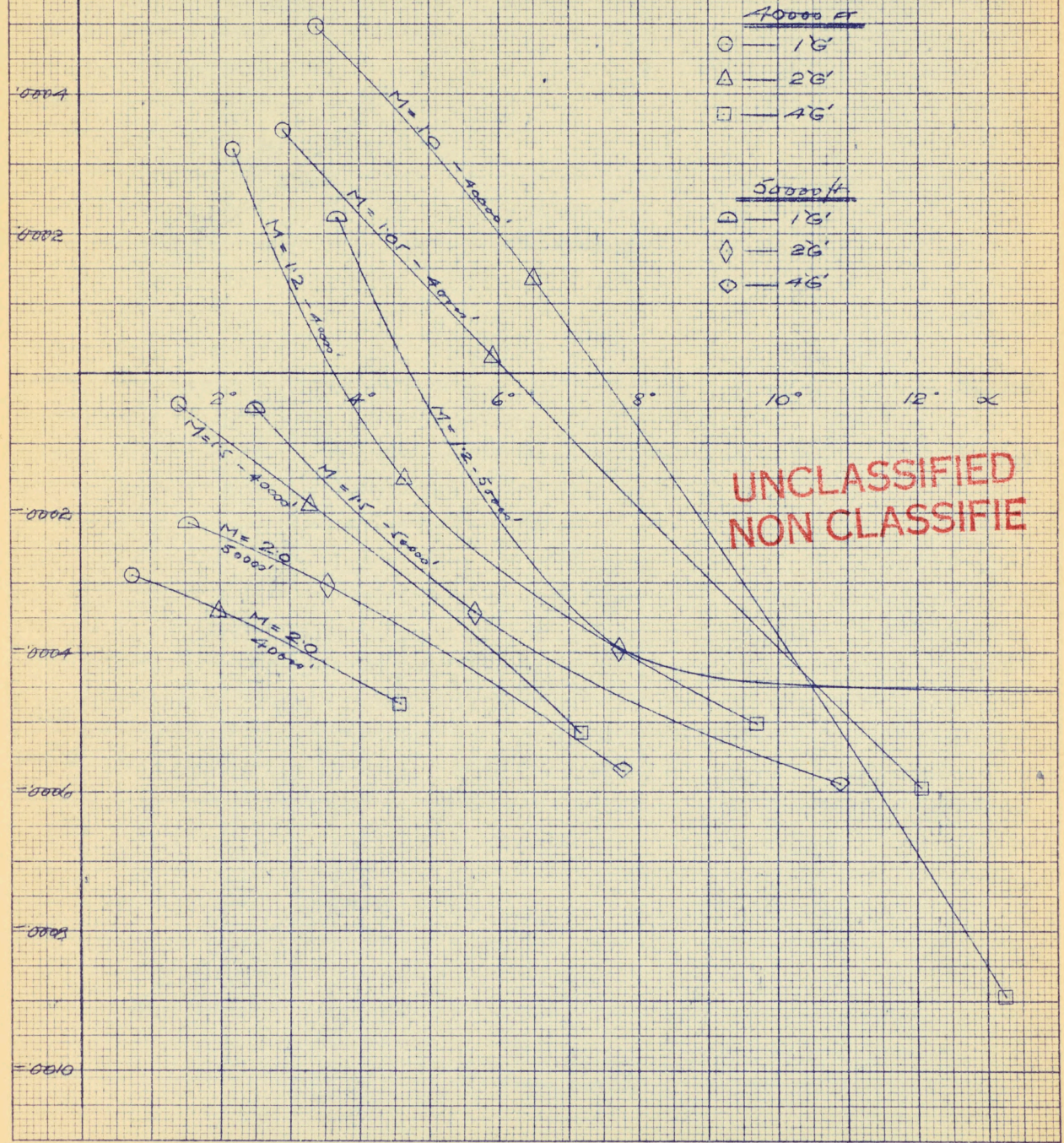
C105
 $C_{mp} \frac{15}{\beta} \alpha$
 $\beta > 3^\circ$

WING NOTCHED & EXTENDED

C_{mp}
 PER DEG

0.006
 0.004
 0.002
 0.000
 -0.002
 -0.004
 -0.006
 -0.008
 -0.010

- 40000 FT
- — 16'
 - △ — 26'
 - — 46'
- 50000 FT
- ◇ — 16'
 - ◇ — 26'
 - ◇ — 46'

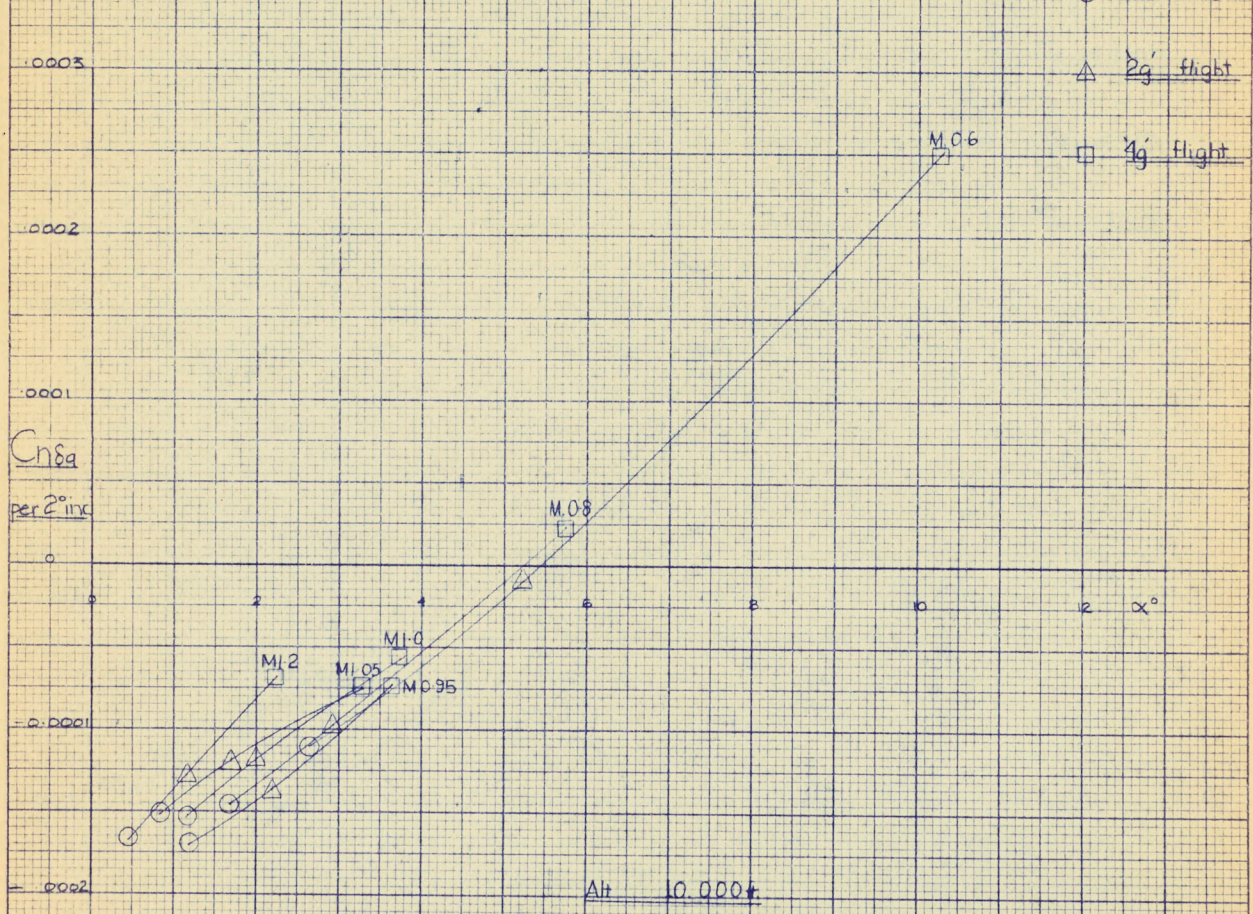
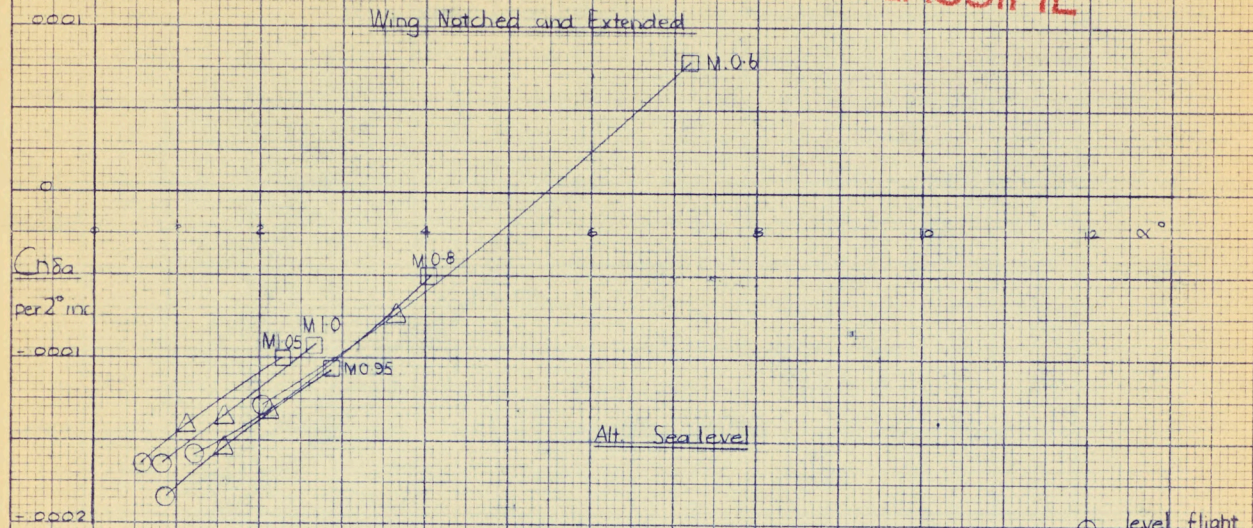


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C-105
 $C_{n\delta a}$ vs α
 Elastic

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Wing Notched and Extended



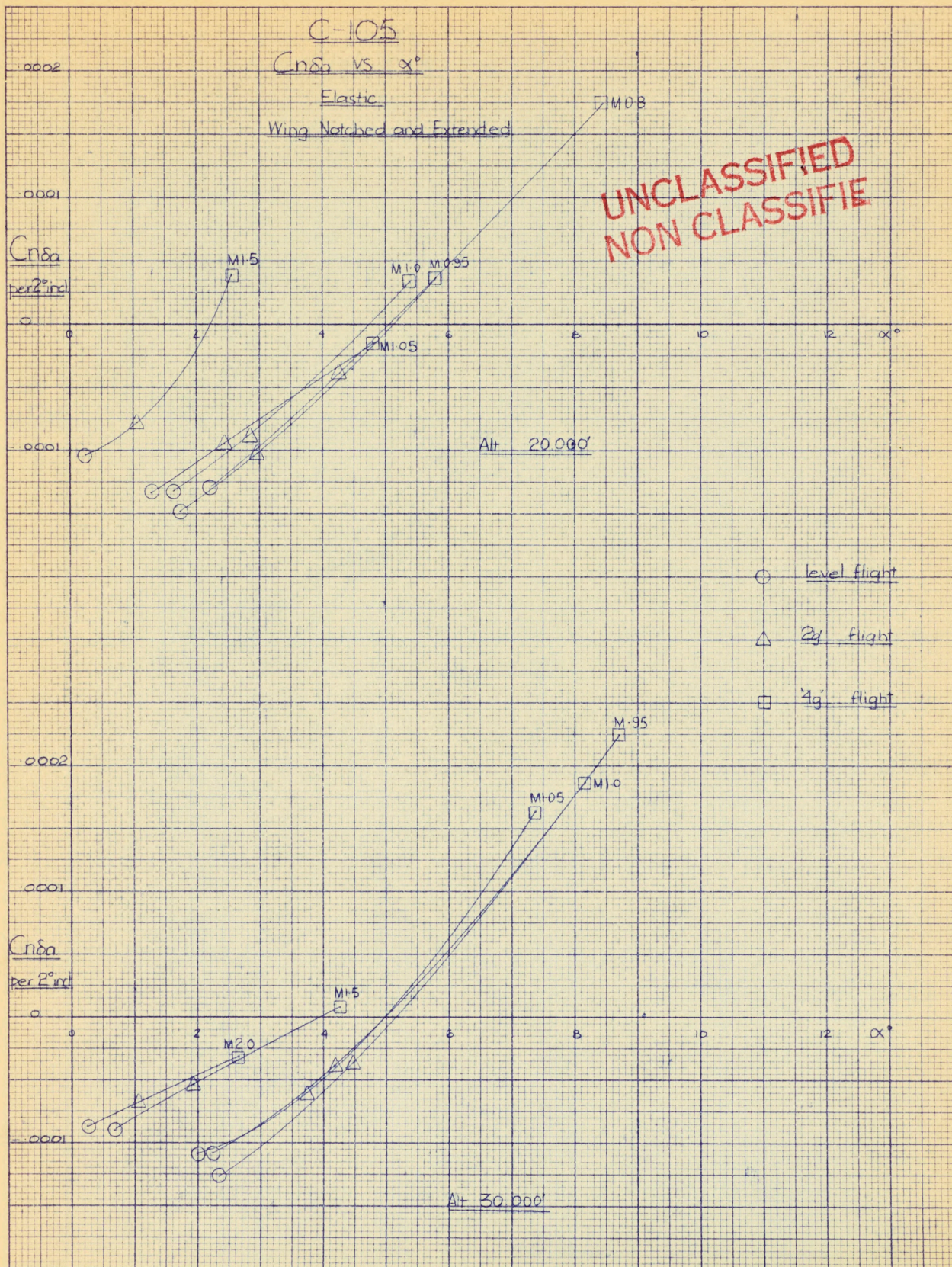
P/A0/56

P/Stat/75

2.1.2

C-57

617

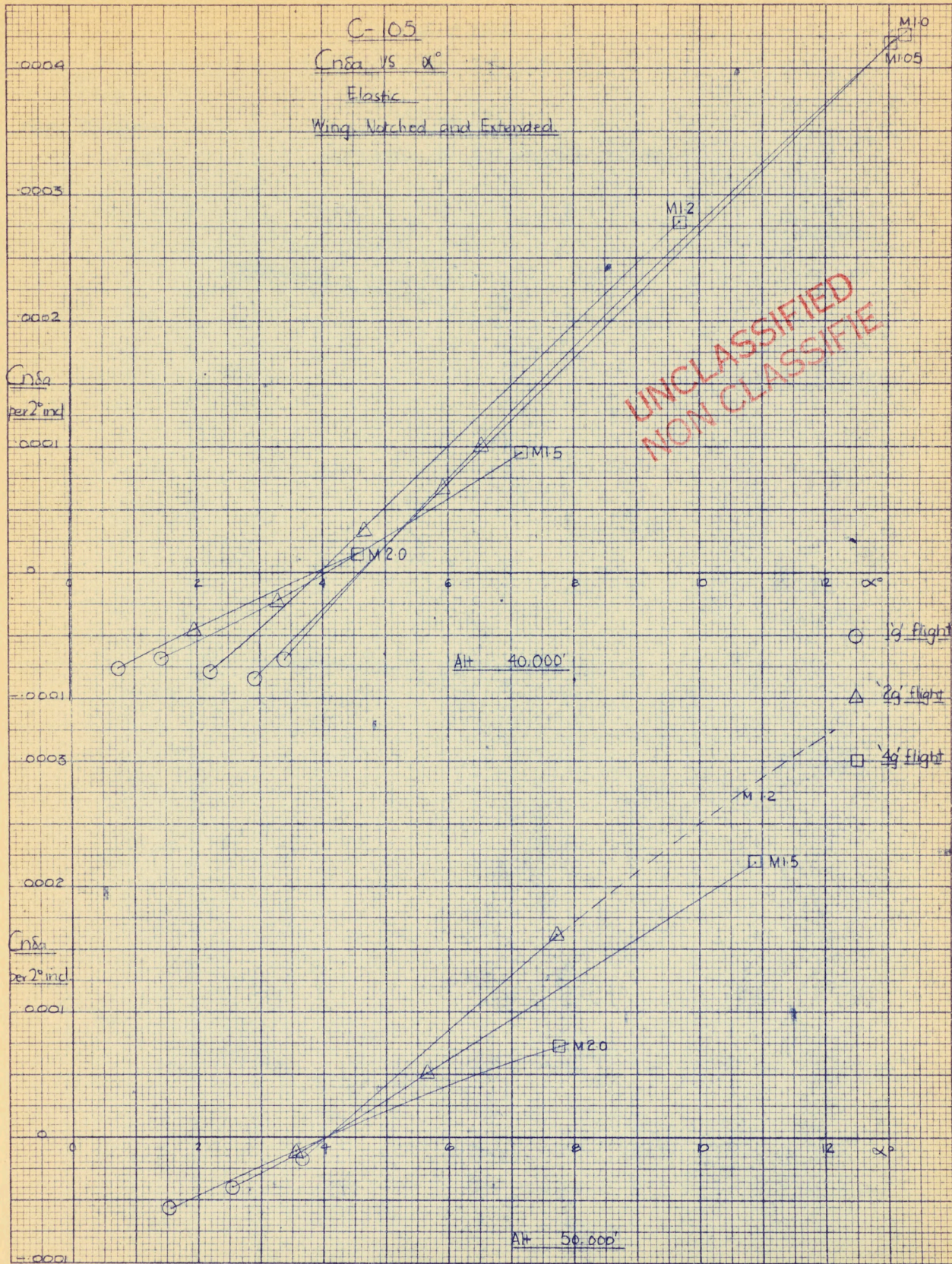


P1A0156

Altitude 75
GUSH

2.1.3
~~6.1.8~~

C-105
 $C_{n\delta a}$ vs α°
Elastic
Wing Notched and Extended



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P/A/D/56

3.1

P/S/10/70

SEA 8.

Apr. '55.

C-105

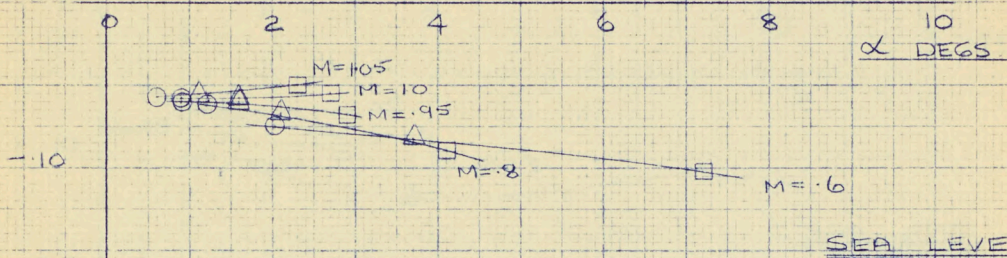
$C_{N_{YE}}$ VS INCIDENCE

$C_{N_{YE}}$
PER RADIAN
-05

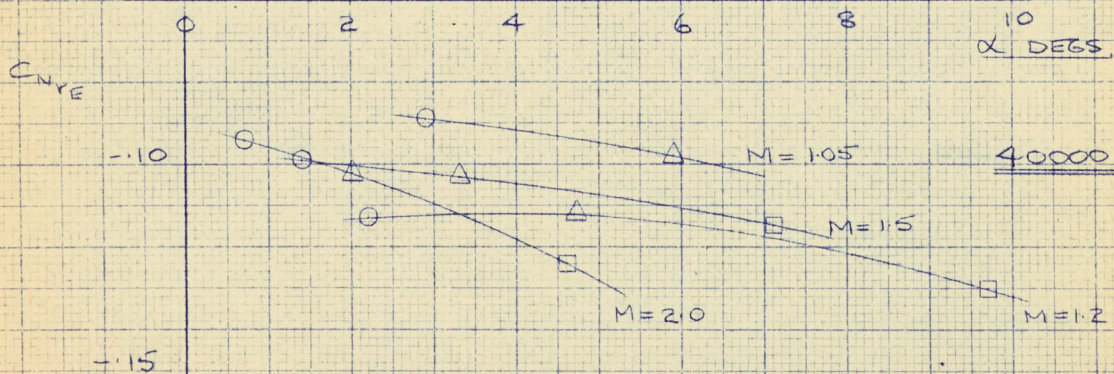
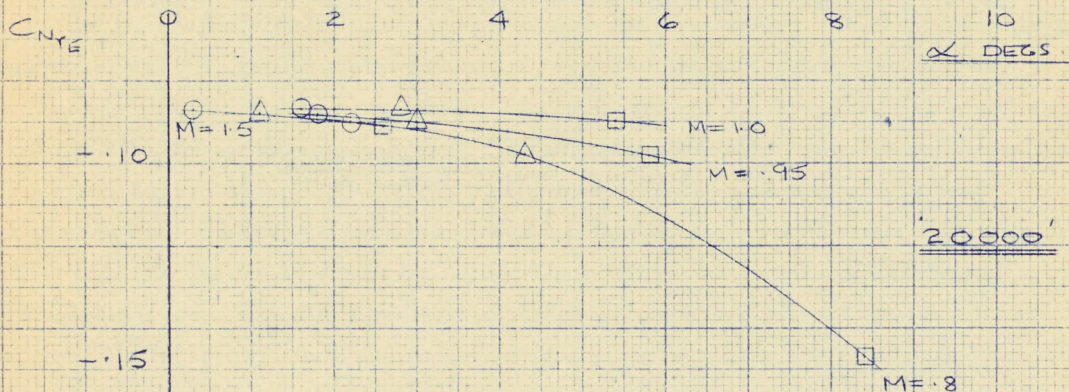
$|\beta| < 2^\circ$

NOTCHED & EXTENDED WING.

○ $n = 1$
△ $n = 2$
□ $n = 4$



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9/10/56

P/Stab/70 3.2

DRSO April '55

C-105

$C_{N_{YE}}$ VS INCIDENCE

$|\beta| > 3^\circ$

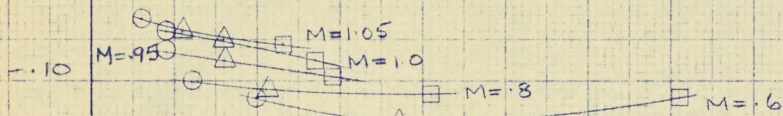
NOTCHED & EXTENDED WING.

- n = 1
- △ n = 2
- n = 4

$C_{N_{YE}}$
PER RADIAN

-05

0 2 4 6 8 10
X DEGS

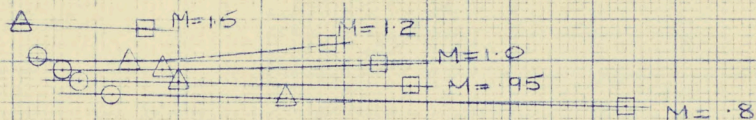


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NON CLASSIFIED

$C_{N_{YE}}$

-05

0 2 4 6 8 10
X DEGS

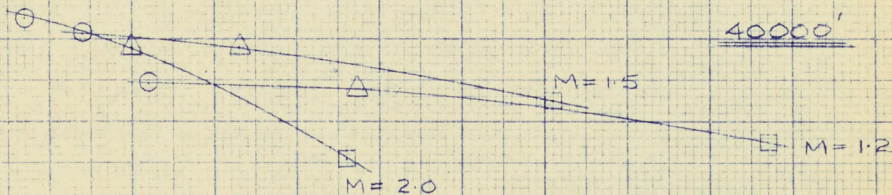


20000'

$C_{N_{YE}}$

-05

0 2 4 6 8 10
X DEGS



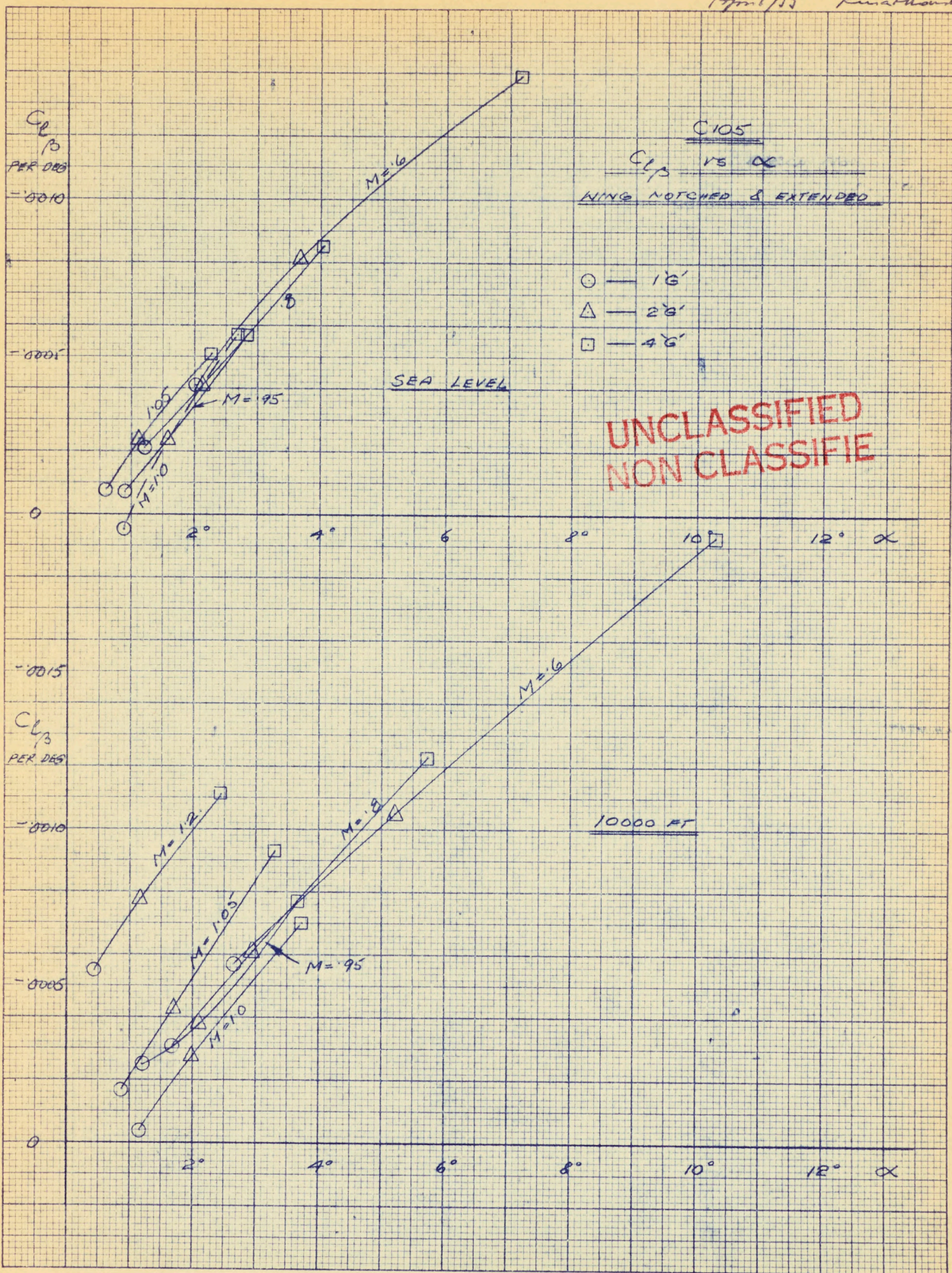
40000'

P/A0156

4.1.1

P/STAB/R 5.15

April/55 Kunathank

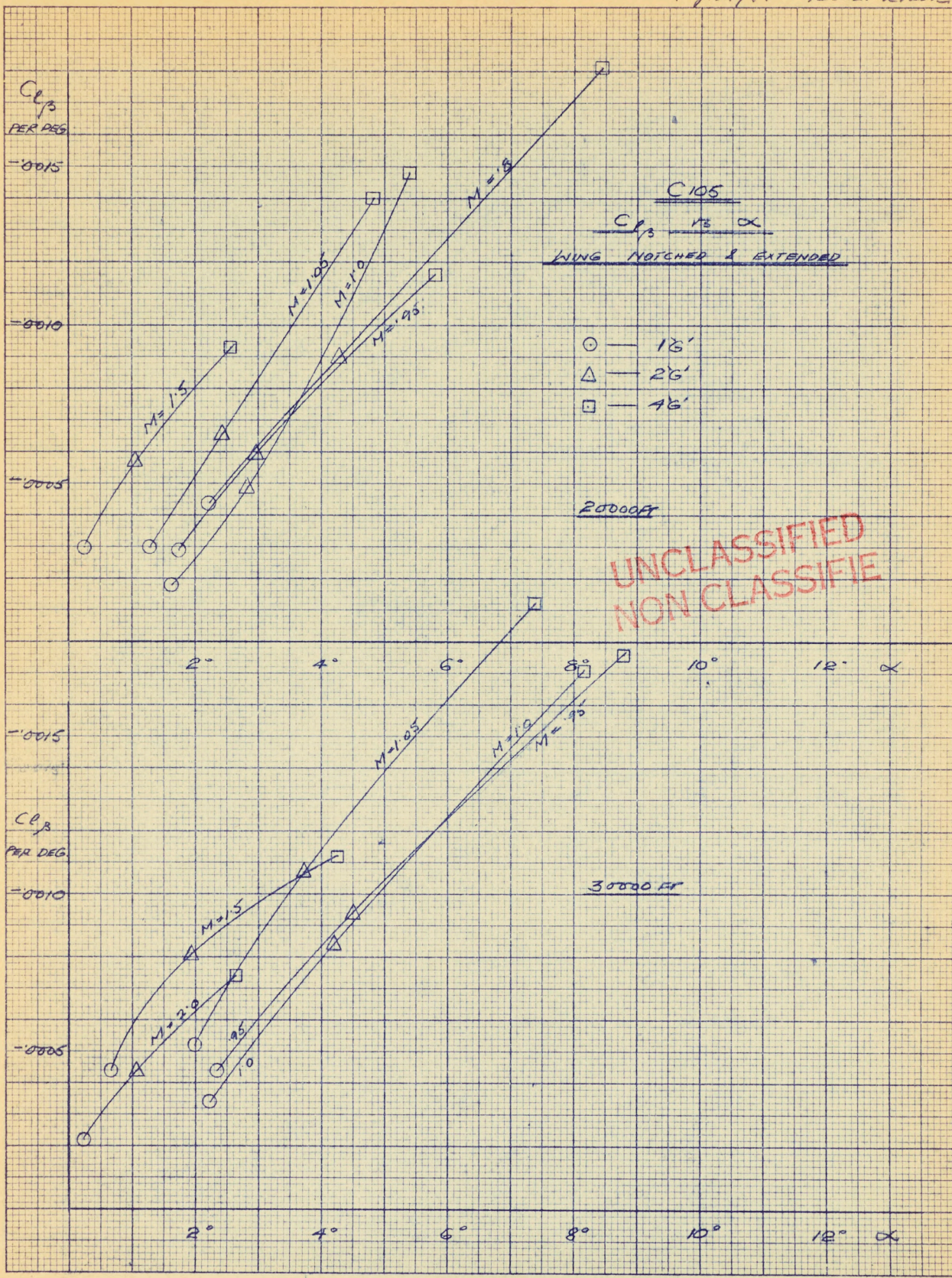


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P/AD/56

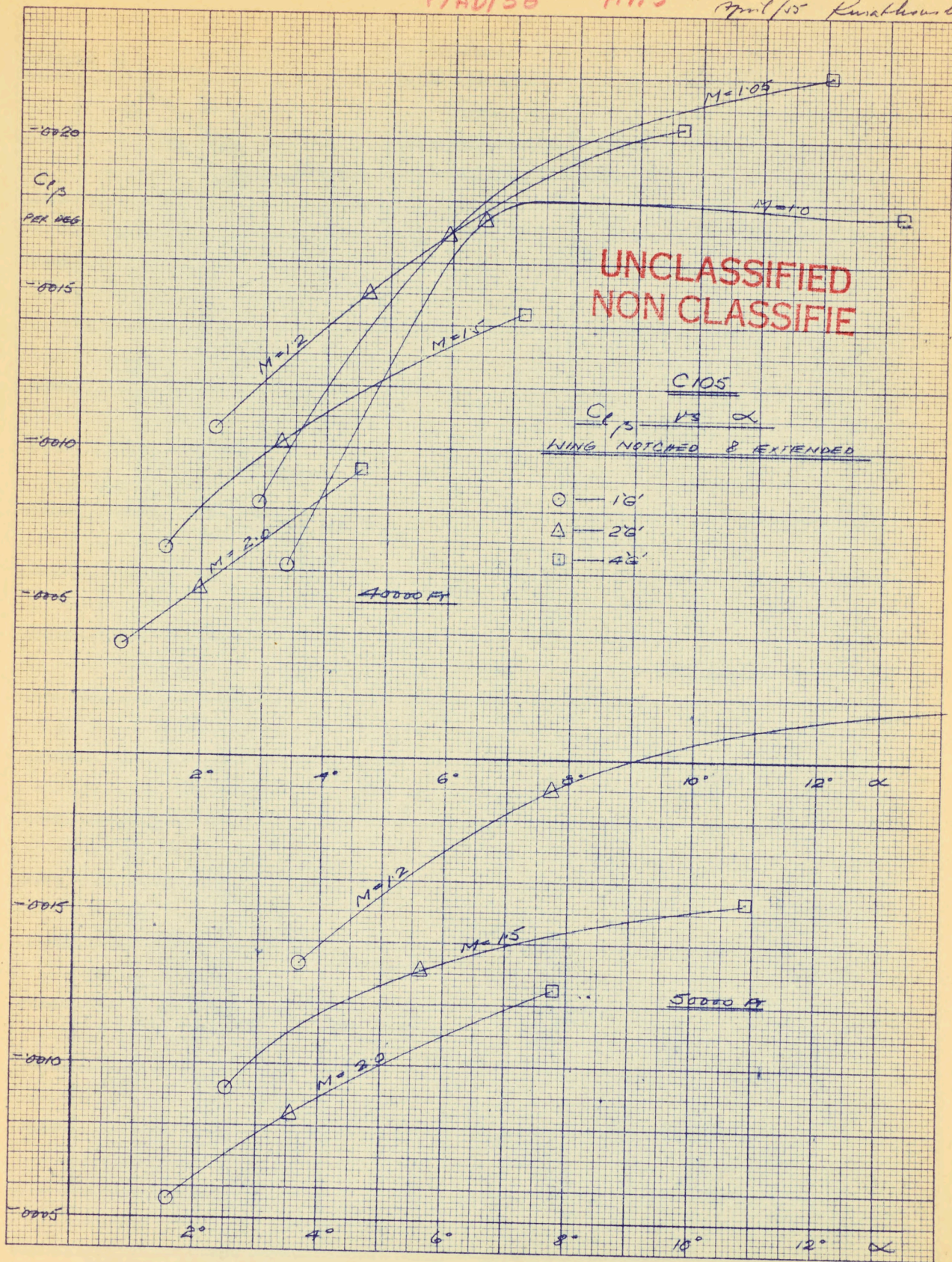
4.1.2.

Plattner 516
April/55 Kuntkowski



P/A0156 4.1.3

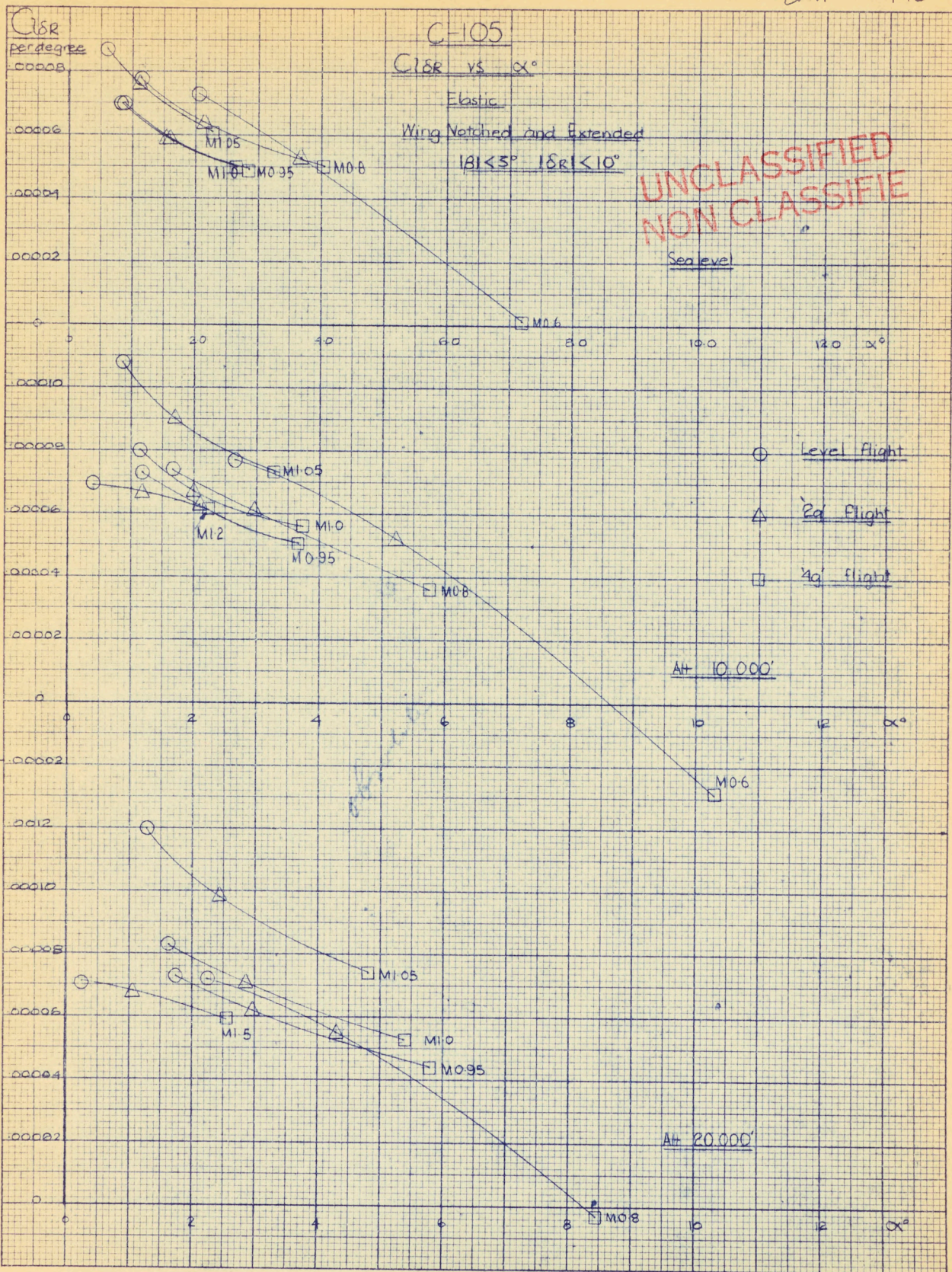
P/SIAR/75 547
April/15 Kuntkowski



P110/56

R/S 10/75 5.1.1.

GSH 418



359-12
MAZUR S.A.

10 X 10 TO THE 1/2 INCH
KEUFFEL & ESSER CO.

K&E

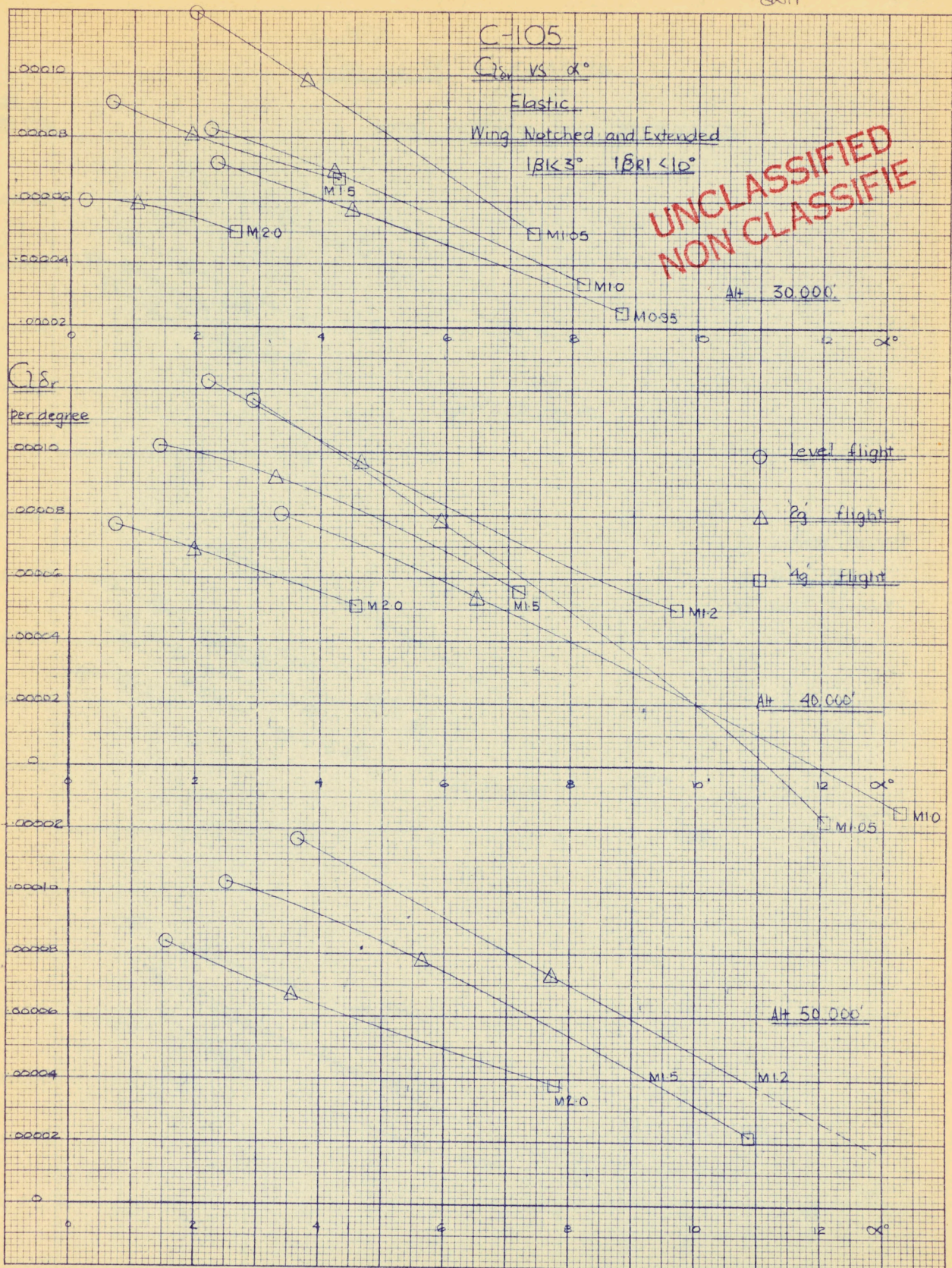
PIA0156

P15tab175

5.1.2

GLTH

4.10



P/A0/56

5.2.1

4.15

P/STAB/75

April 1955

J. Papir.

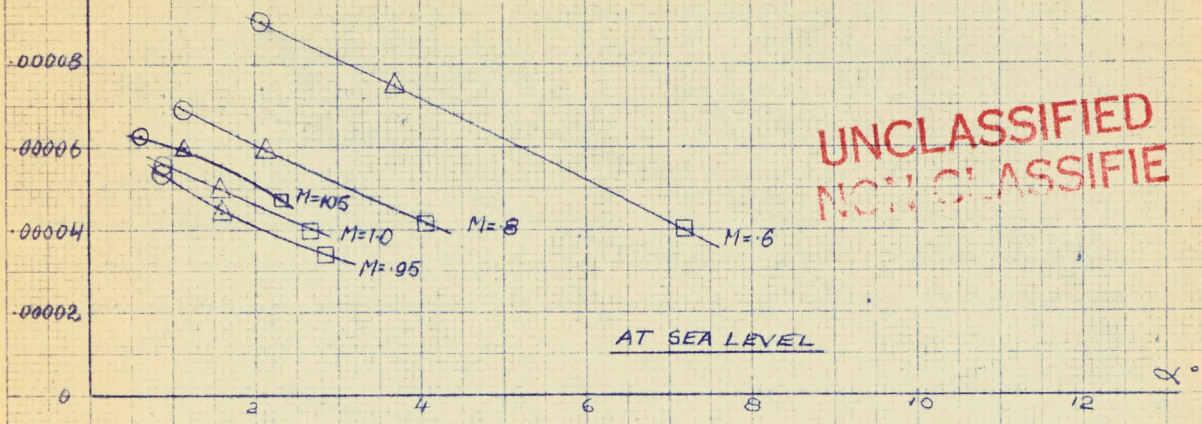
C105

$C_{L\alpha}$ vs α° - ELASTIC

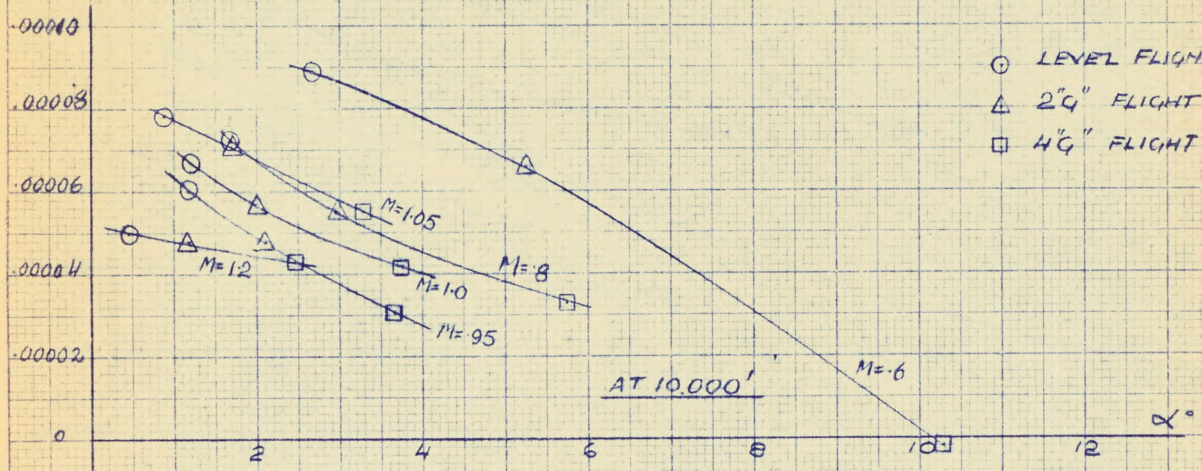
$|\beta| > 3^\circ$

WING NOTCHED AND EXTENDED

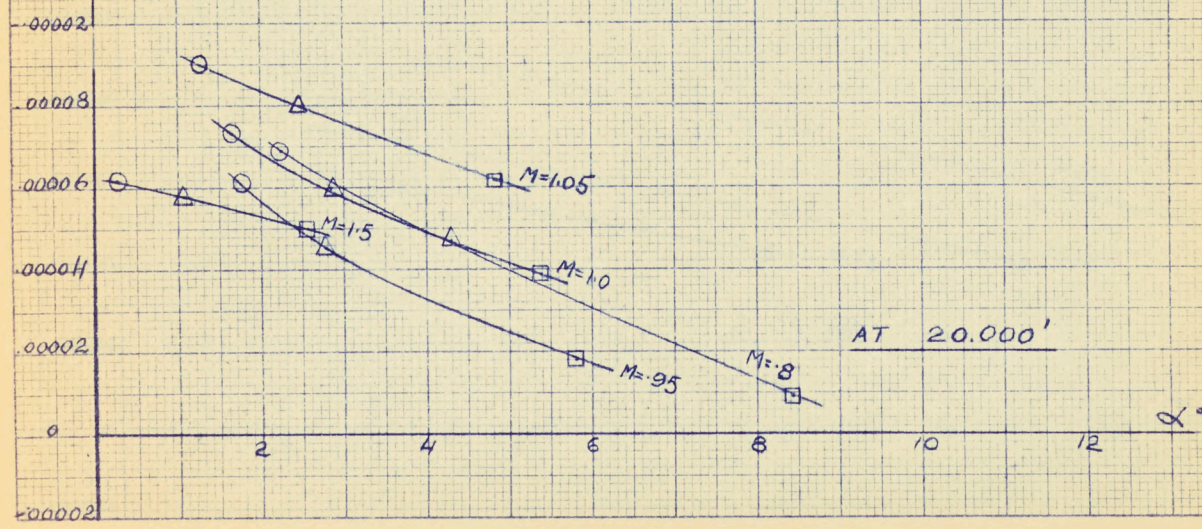
$C_{L\alpha}$ E
PER DEG.



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- LEVEL FLIGHT
- Δ 2" G" FLIGHT
- 4" G" FLIGHT



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

P110156

5.2.12

416- DISTANCE
April 1955 J. Pappis

C 105

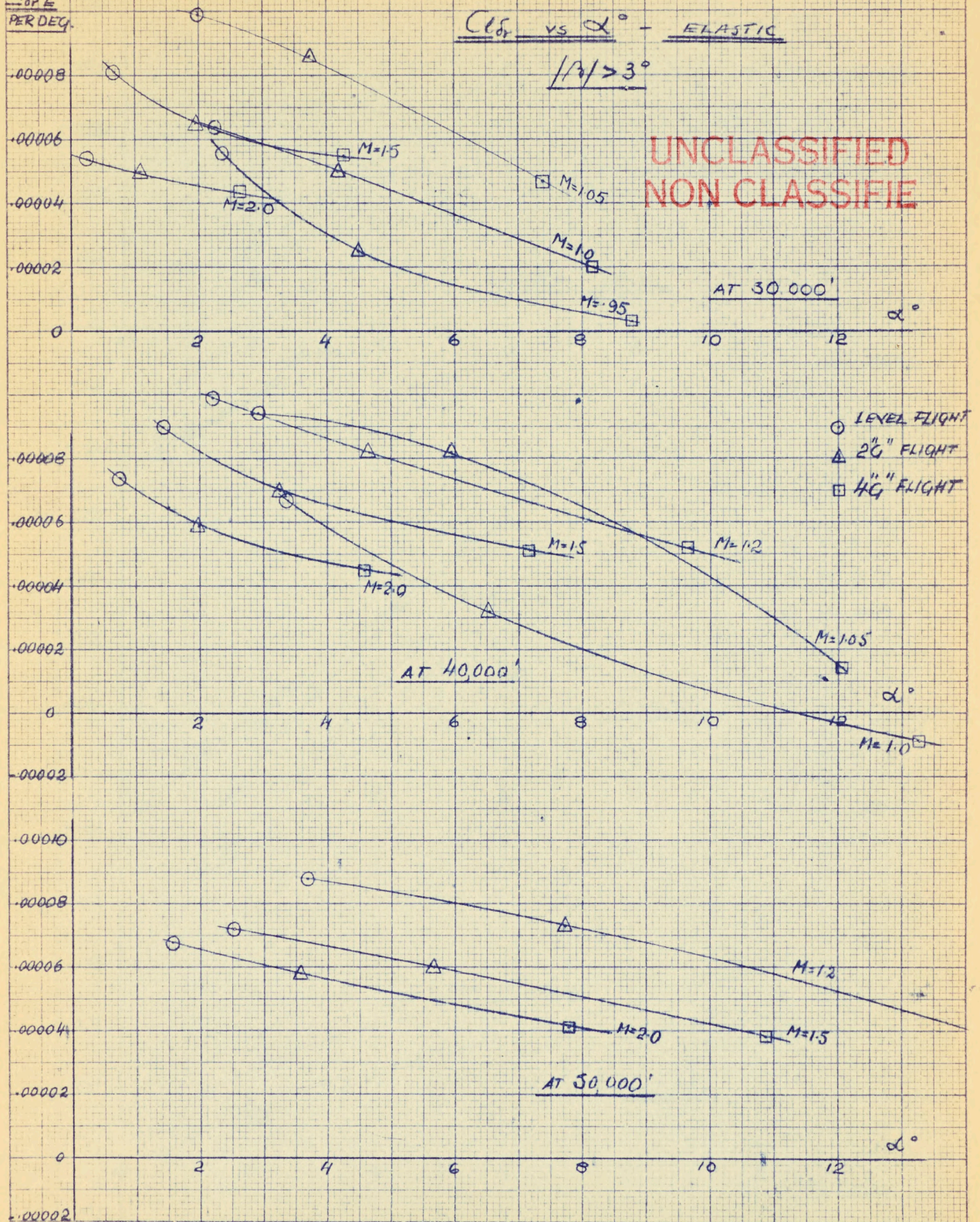
WING NOTCHED AND EXTENDED

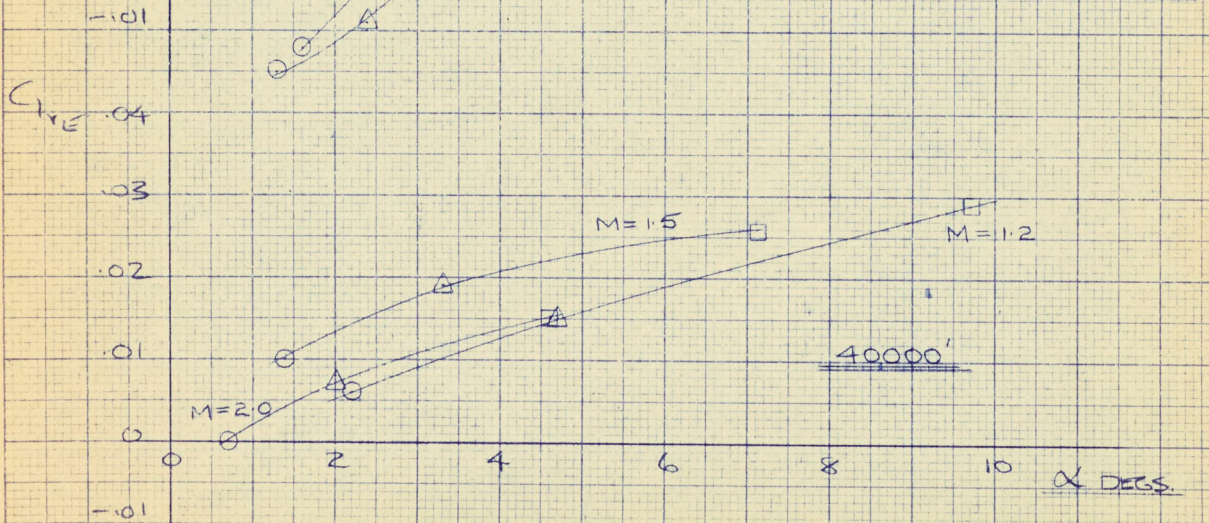
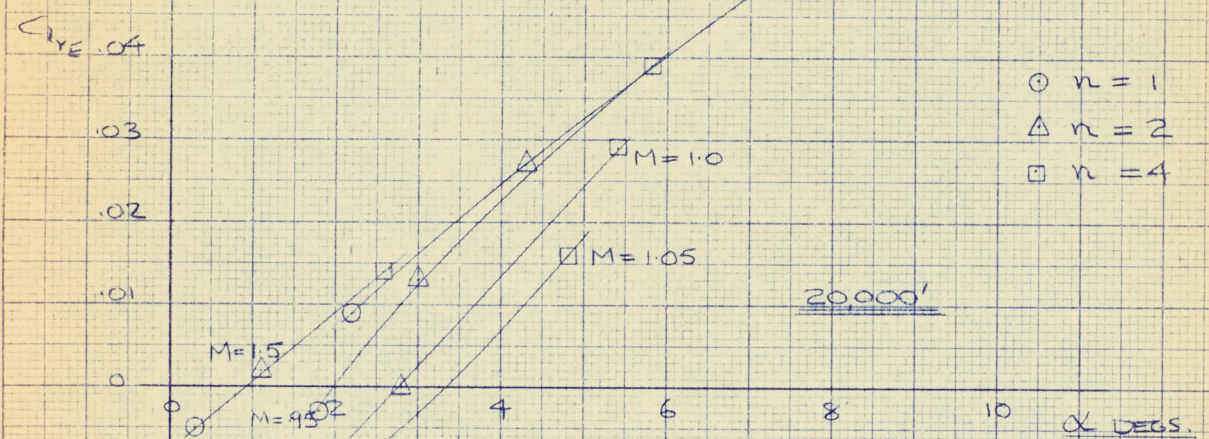
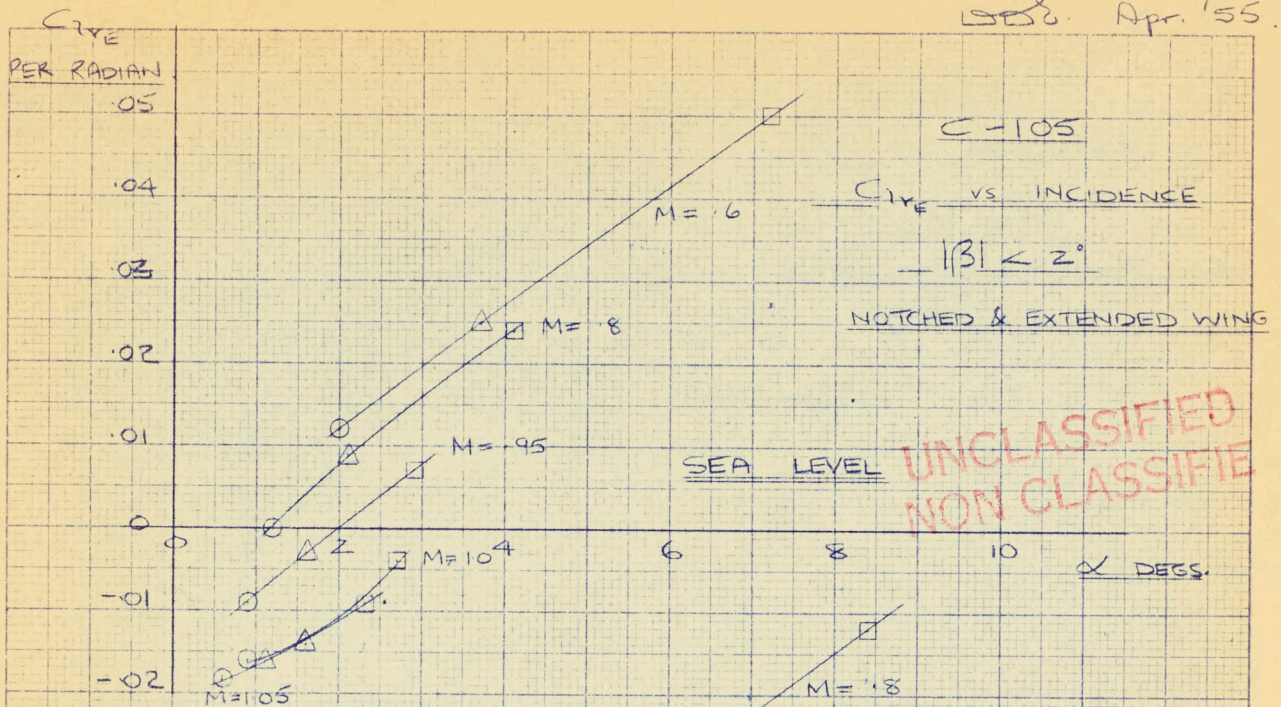
$C_{L\alpha}$
PER DEG.

$C_{L\alpha}$ vs α° - ELASTIC

$|\alpha| > 3^\circ$

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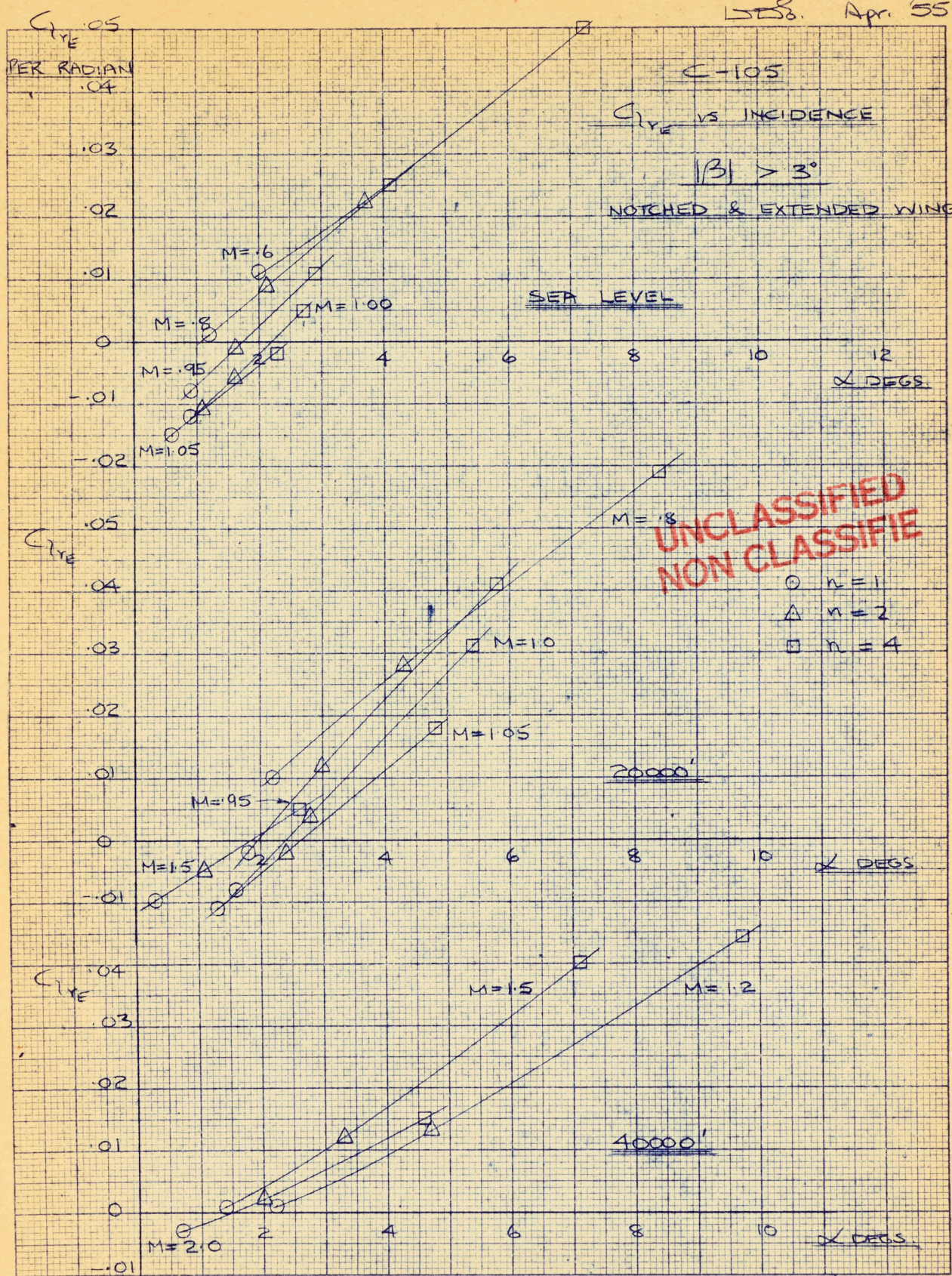




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R/Stab/70 612.100
LDSB. Apr. 55



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



11197A.46
3553
MADE IN U.S.A.