C-105 ANALYZED P/WIND TUNNEL/20

DERIVATIVES AND ZERO VALUES

VOLUME IV

DRAG DATA

26

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TO
A

DATE
Dec. 7, 1992

Report no.: QCX - AVRO - CF105- P-WT-20 V.4

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

A. V. ROE CANADA LIMITED

MALTON - ONTARIO

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TECHNICAL DEPARTMENT (Aircraft)

AIRCRAFT: C-105

REPORT NO. P/WIND TUNNEL/20

FILE NO.

NO. OF SHEETS:

TITLE:

ANALYZED

DERIVATIVES AND ZERO VALUES

VOLUME IV

DRAG DATA

Classification ~~cancelled / changed to:~~ confirmed as UNCLASSSIFIED

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

Date: 5 Nov 1992

Signature: B. Aubrey

Unit / Rank / Appointment: DSIS 2, Secretary CRAD HQ DRP

PREPARED BY DATE

CHECKED BY DATE

SUPERVISED BY DATE

APPROVED BY DATE

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

FORM 1316A

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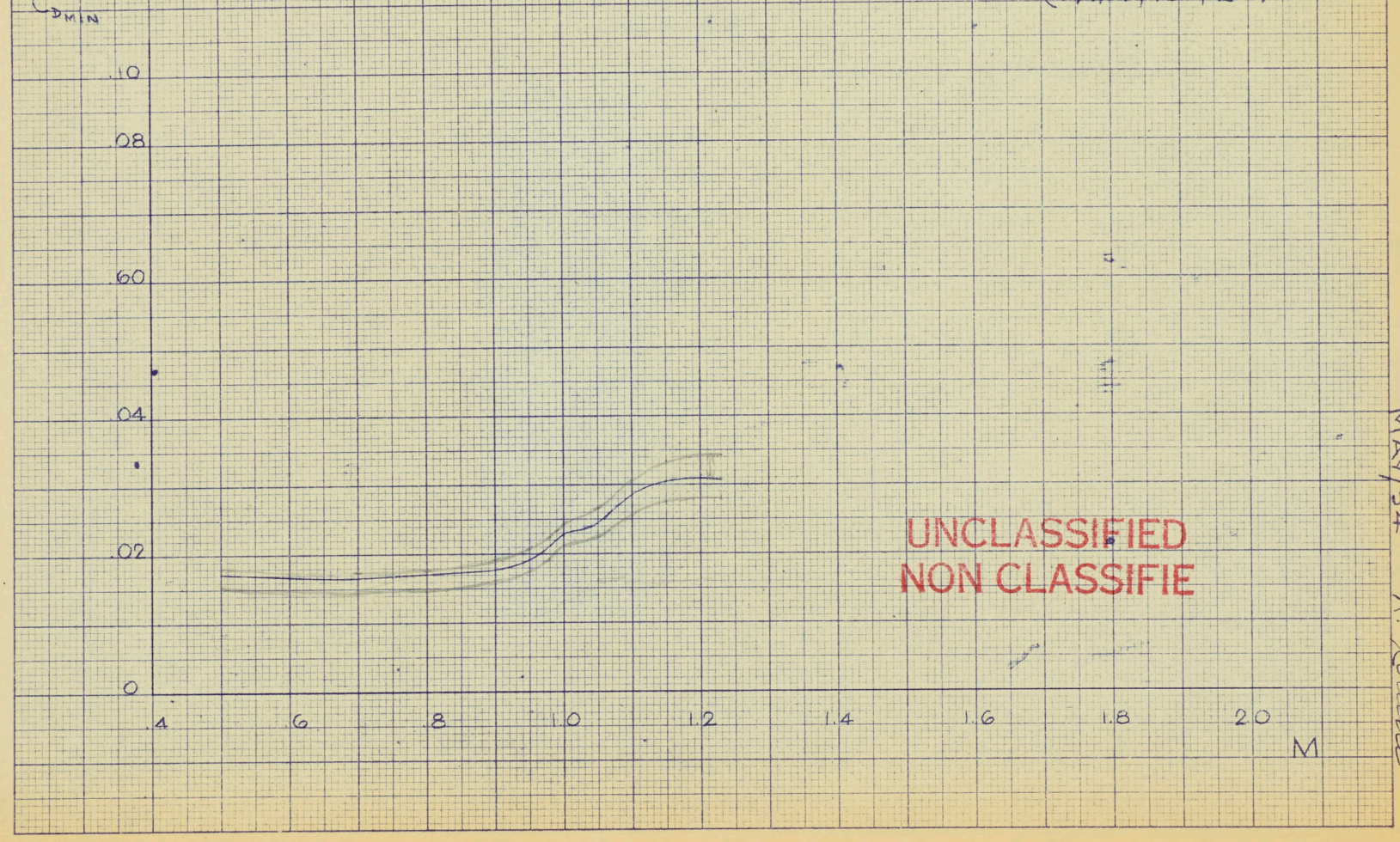
C-105

MINIMUM DRAG COEFFICIENT

$\delta = 0$

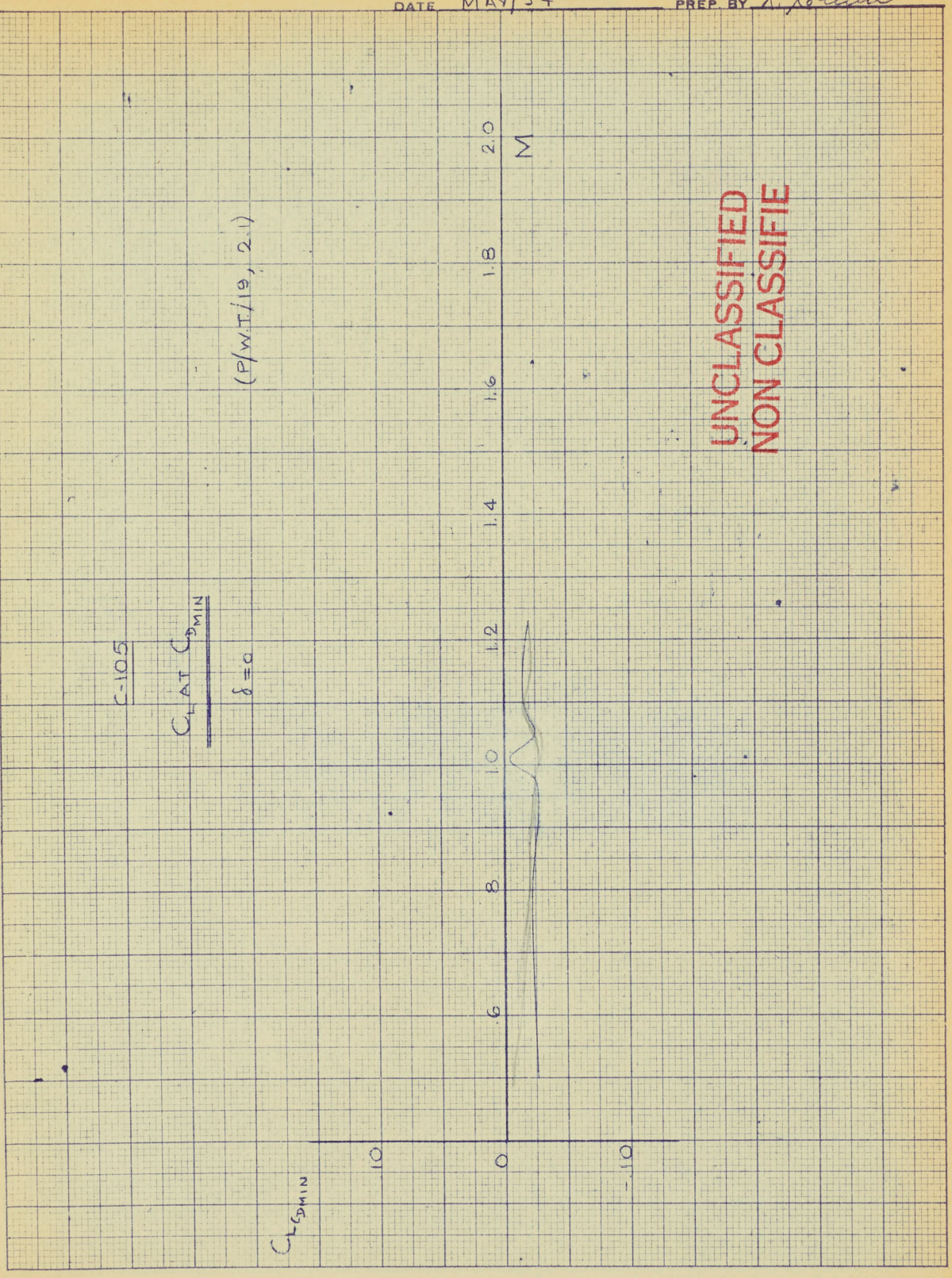
(P/W.T./19, 2.1)



1.1
MAY/54
R. Collette
P/W.T./20

AIRCRAFT C-105 COMPONENT
A.U.W.

SHEET No. 12 REPORT No. P/W.T./20
DATE MAY/54 PREP. BY R. Collette

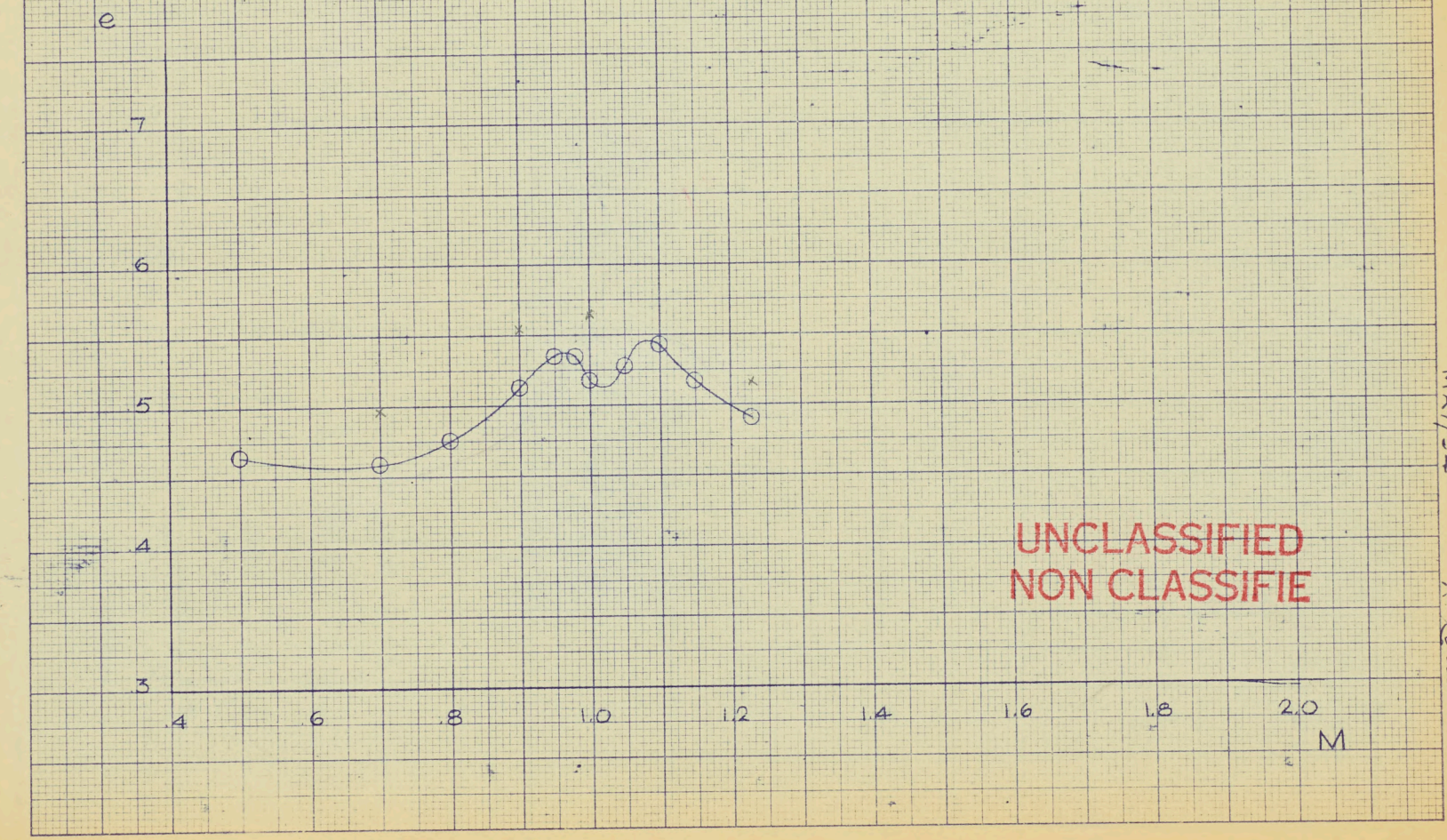


FORM 1746

C-105

AERODYNAMIC EFFICIENCY

$\delta = 0°$



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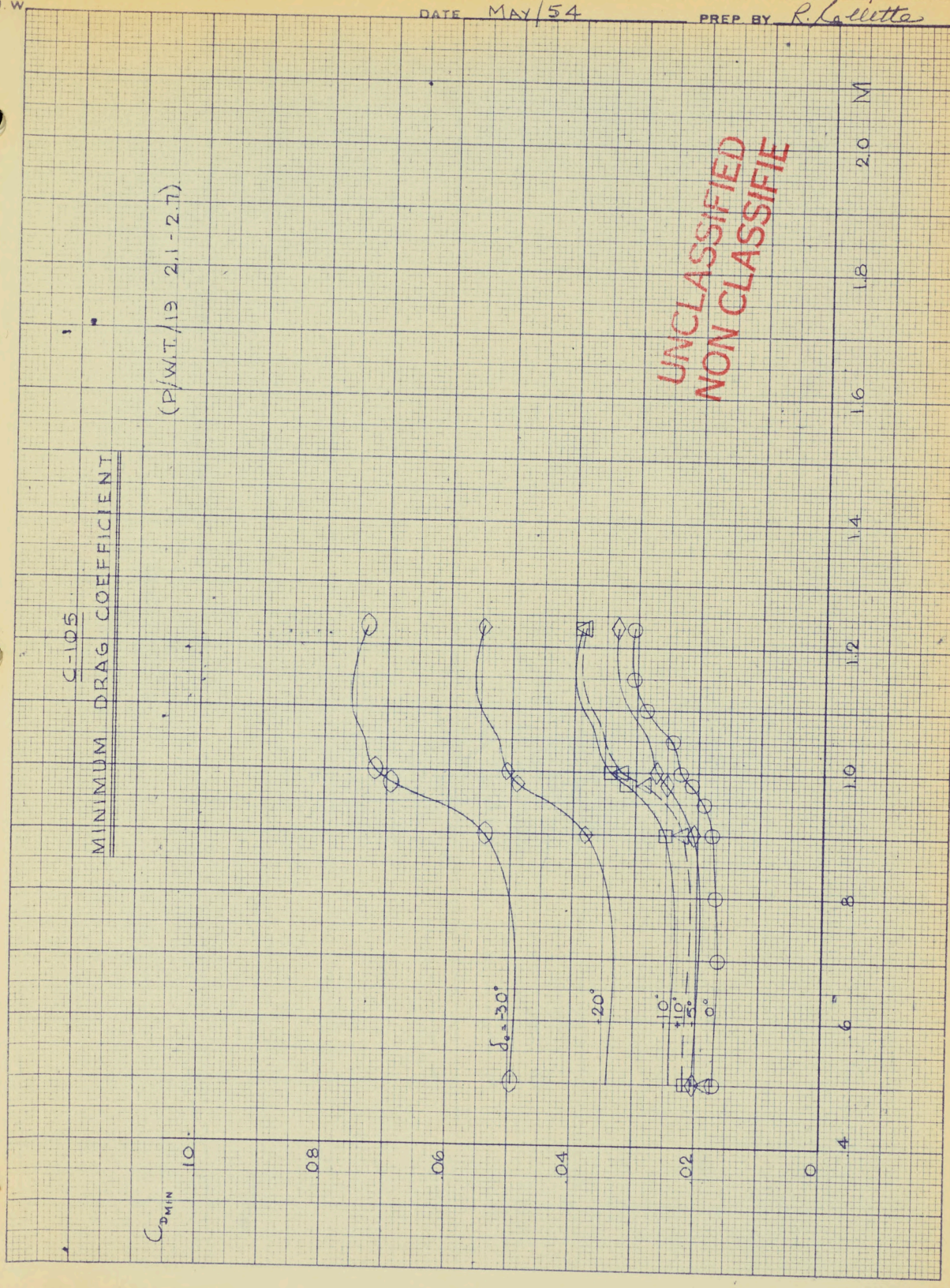
MAY/54
P/W.T./20
R Collette

AIRCRAFT C-105 COMPONENT SHEET No. 1.4.1 REPORT No. P/W.T./20
A.U.W. DATE MAY/54 PREP. BY R. Lalletta

C-105

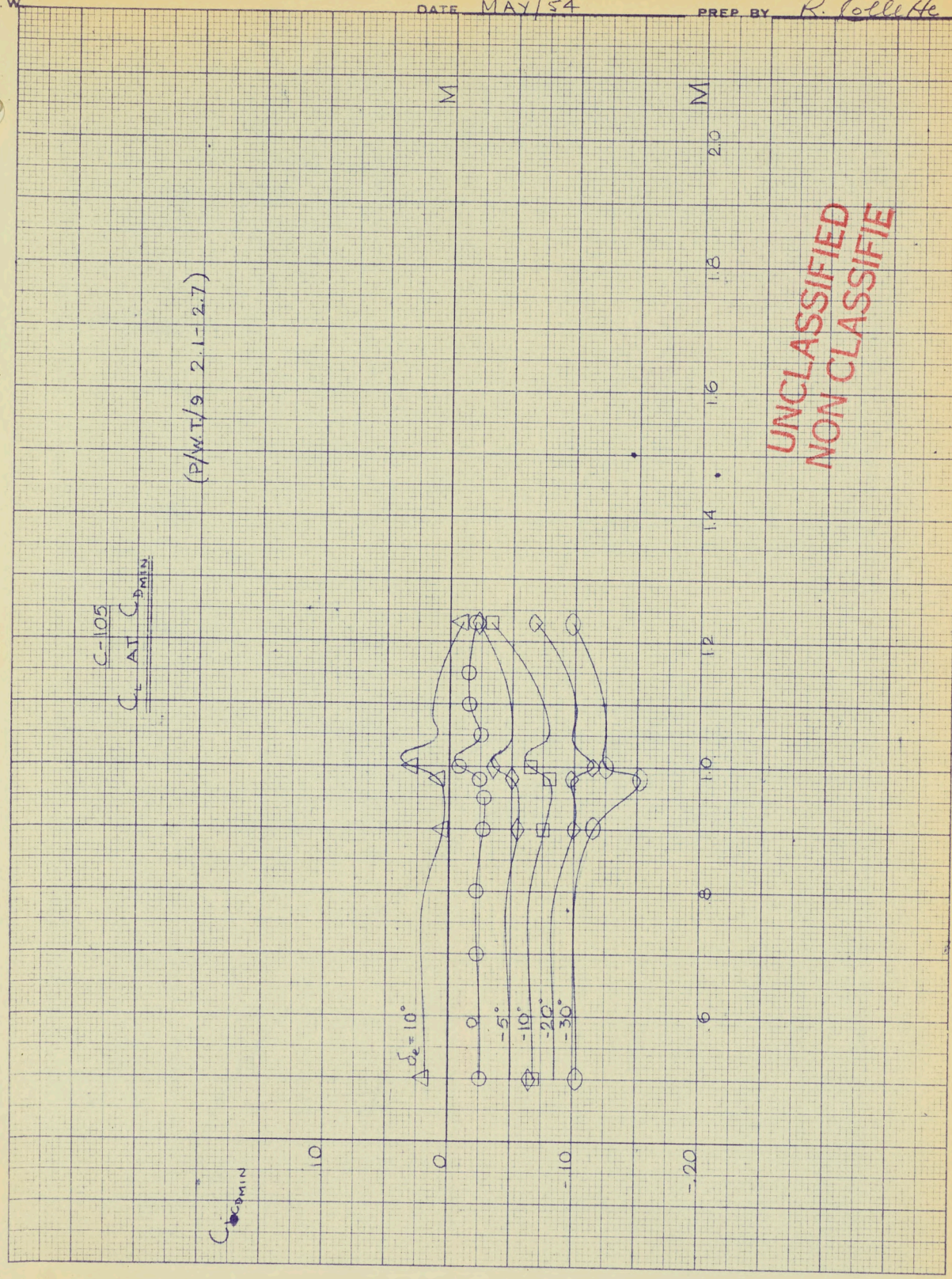
MINIMUM DRAG COEFFICIENT

(P/W.T./13 2.1-2.7)



AIRCRAFT C-105 COMPONENT
A. U. W.

SHEET No. 1.4.2 REPORT No. P/W.T/20
DATE MAY/54 PREP. BY R. Collette



C-105
C_L AT $C_{D_{MIN}}$

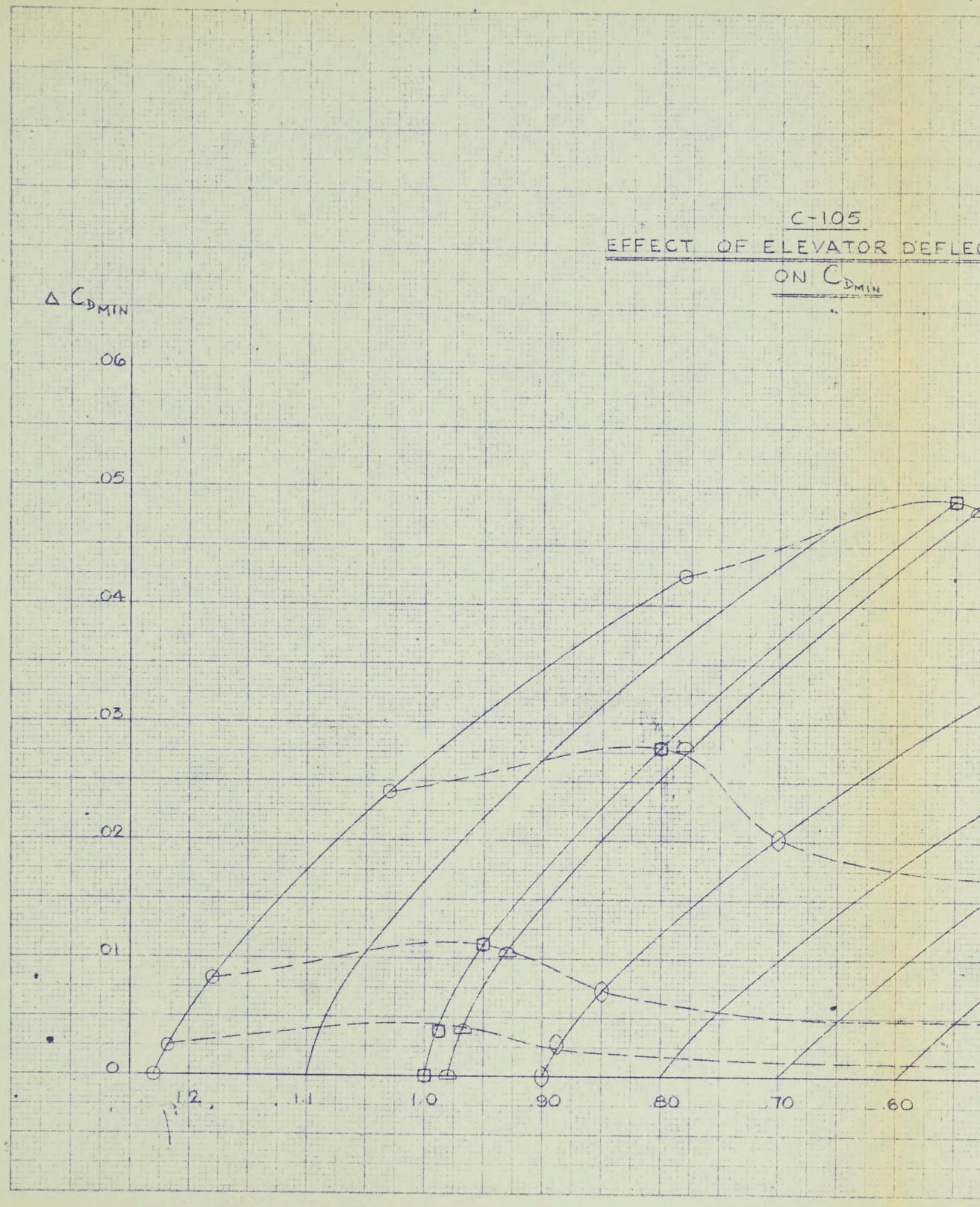
(P/W.T/9 2.1-2.7)

FORM 1746

C-105

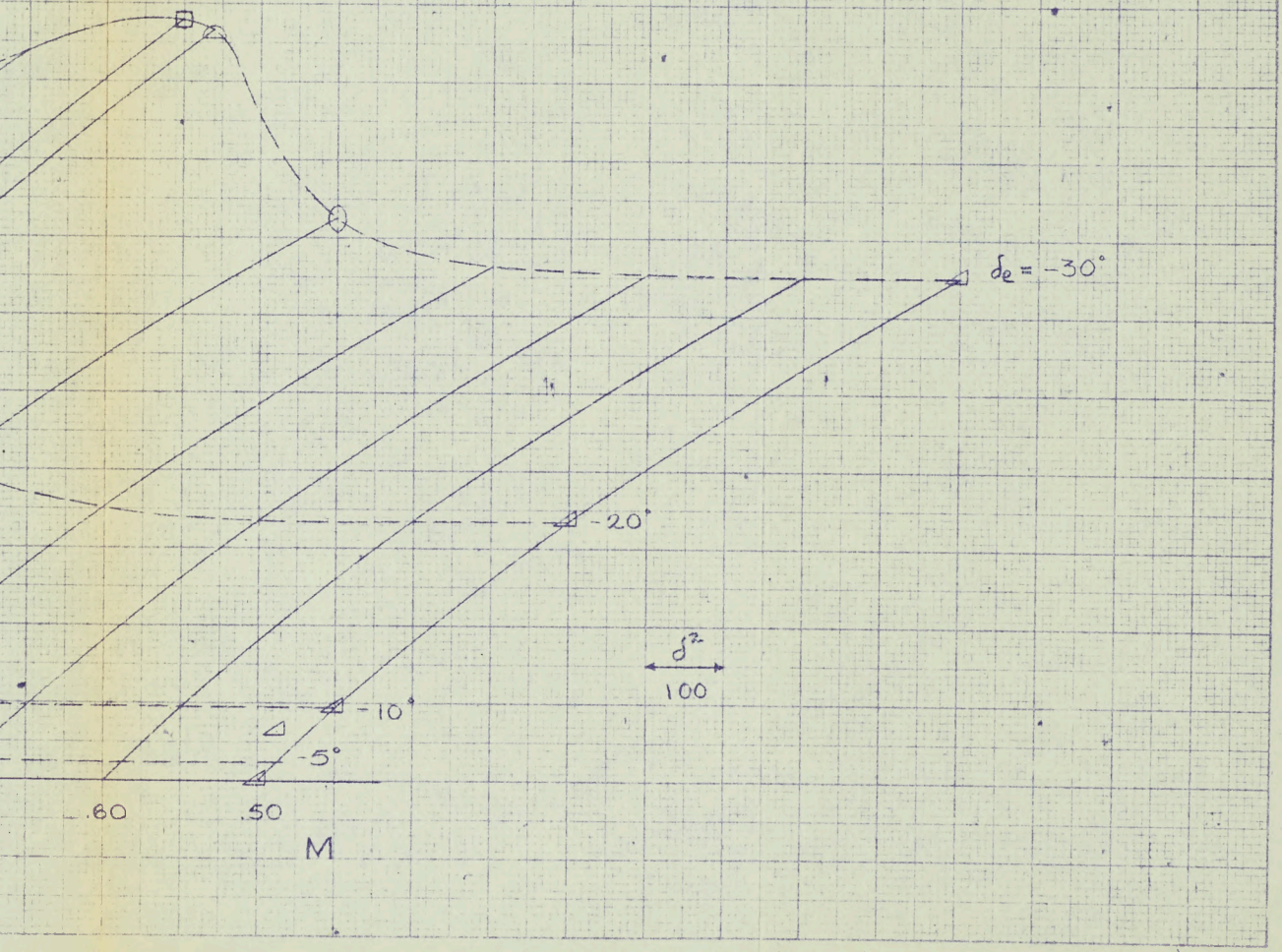
EFFECT OF ELEVATOR DEFLE

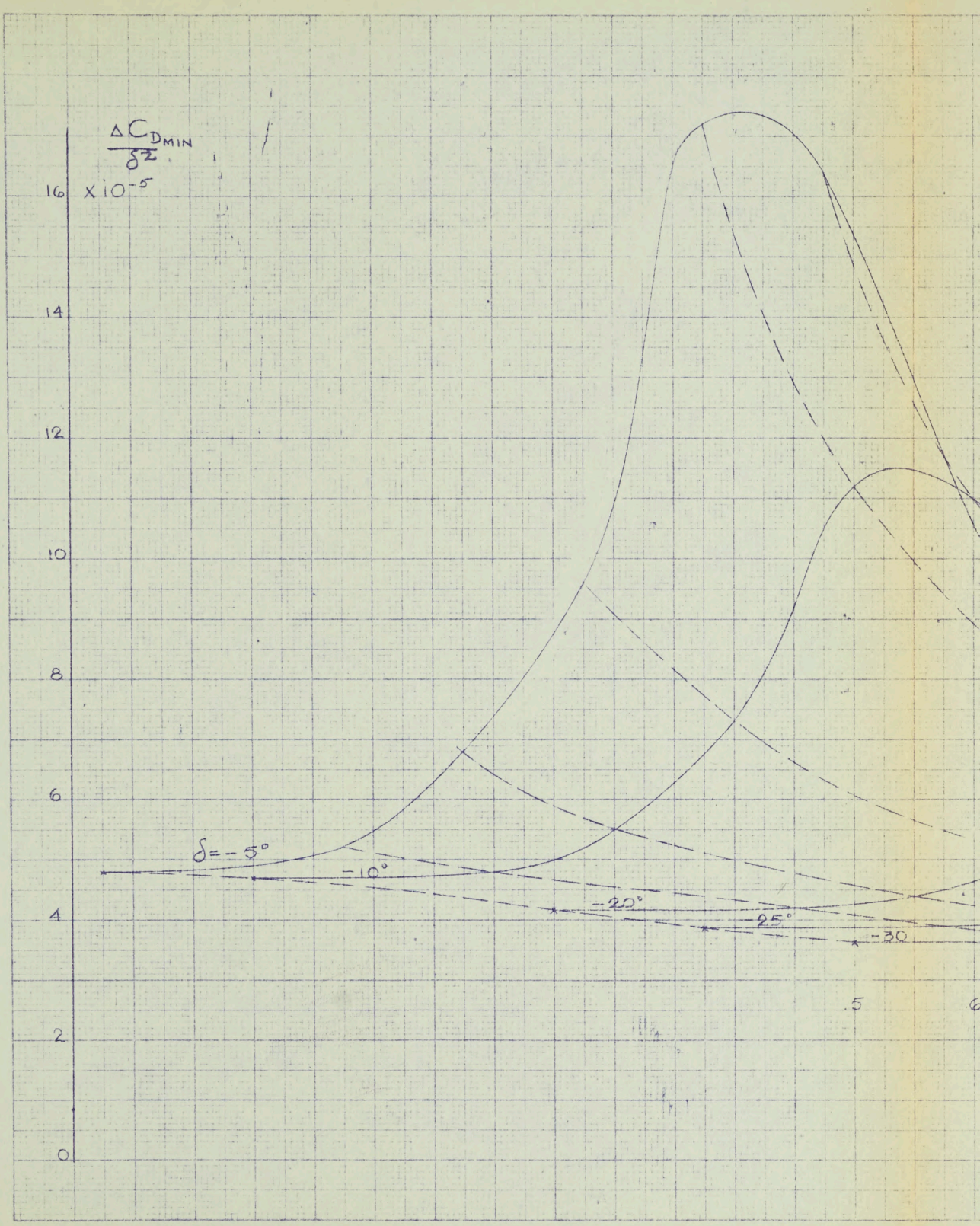
ON $C_{D_{MIN}}$



1.4.3 P/W.T./20 1.43
MAY/54 R. Collette

105
VATOR DEFLECTION
$C_{D_{MIN}}$

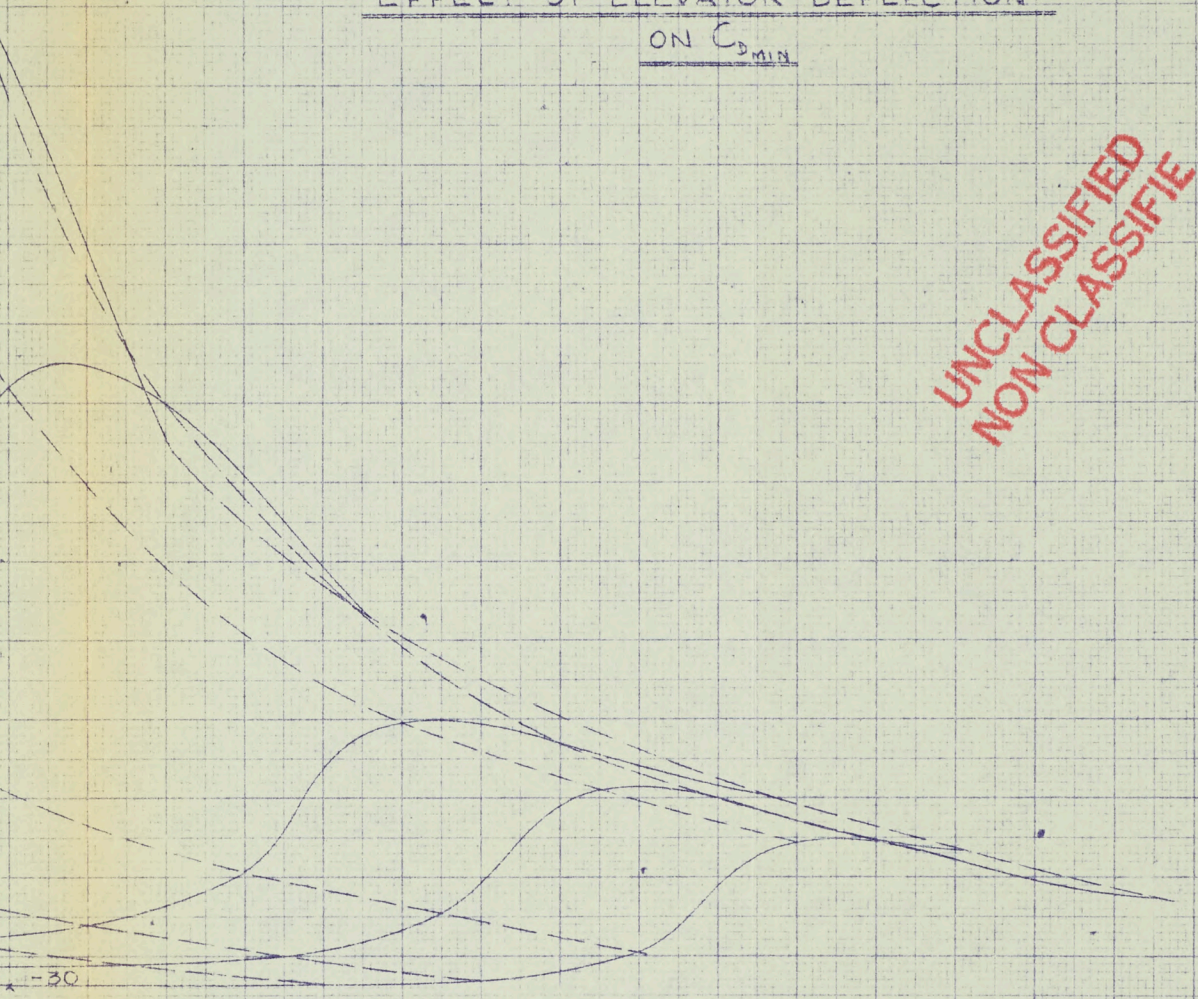



$\frac{\Delta C_{D_{MIN}}}{\delta^2}$
x10⁻⁵
16
14
12
10
8
6
4
2
0
δ = -5°
-10°
-20°
-25°
-30
5
6

1.4.4 MAY/54 D/WT/20 R. Collette 1.4.4

C-105

EFFECT OF ELEVATOR DEFLECTION ON $C_{D_{MIN}}$



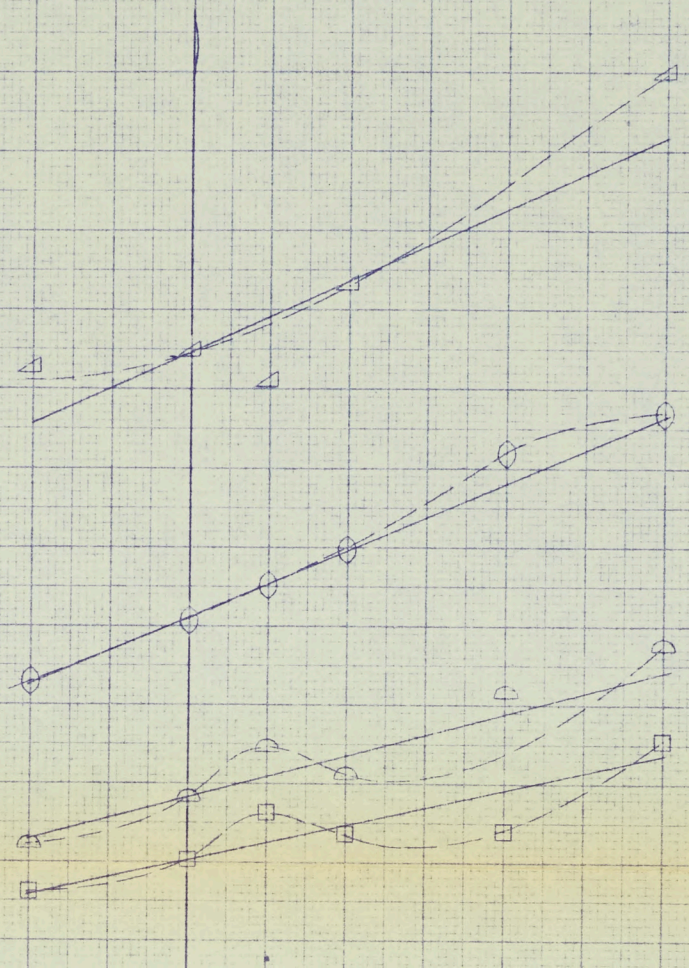
1.23

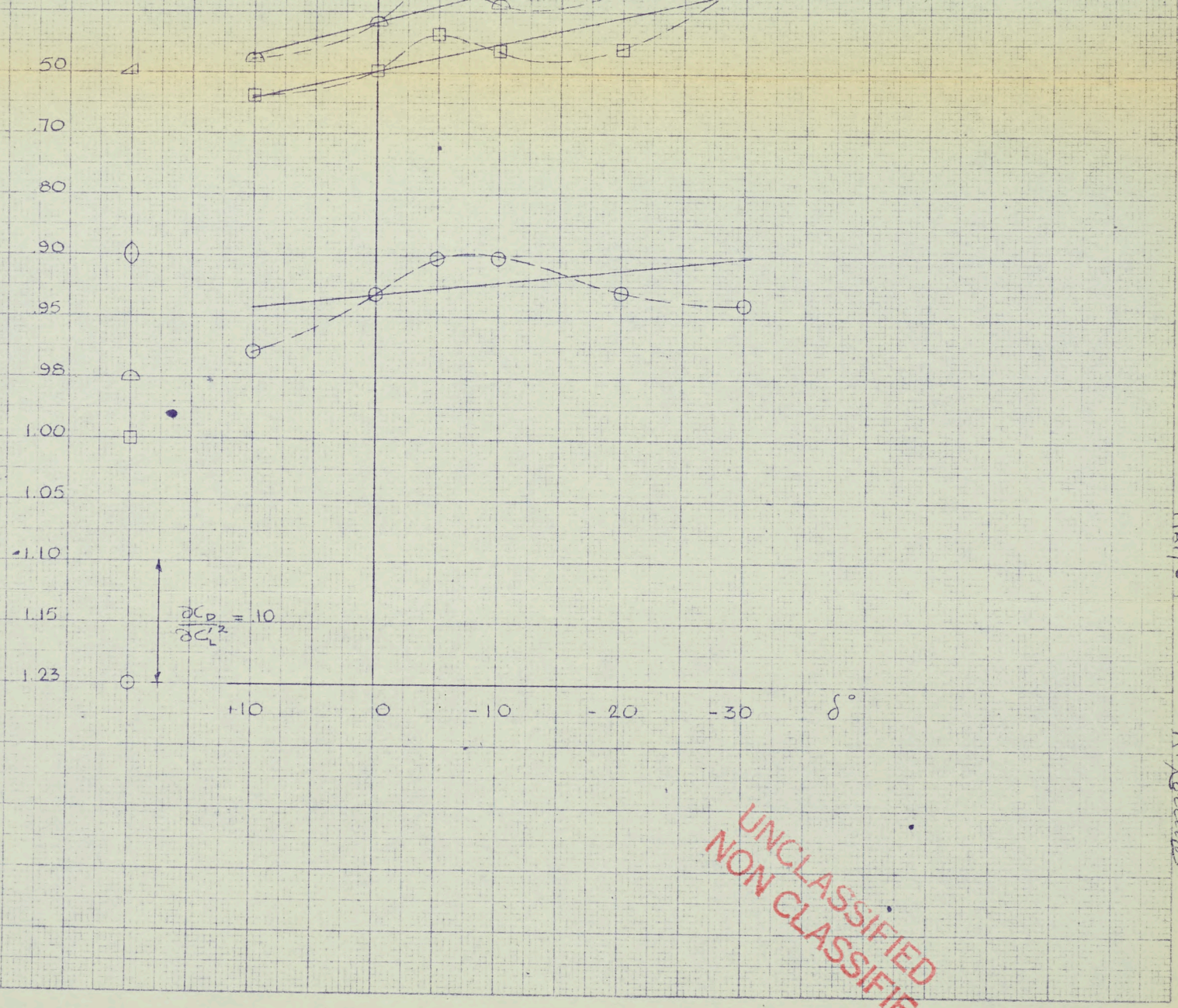
.5 .6 .7 .8 .9 1.0 1.1 1.2

M

C-105

$\frac{\partial C_D}{\partial C_L^2} \sim \delta$





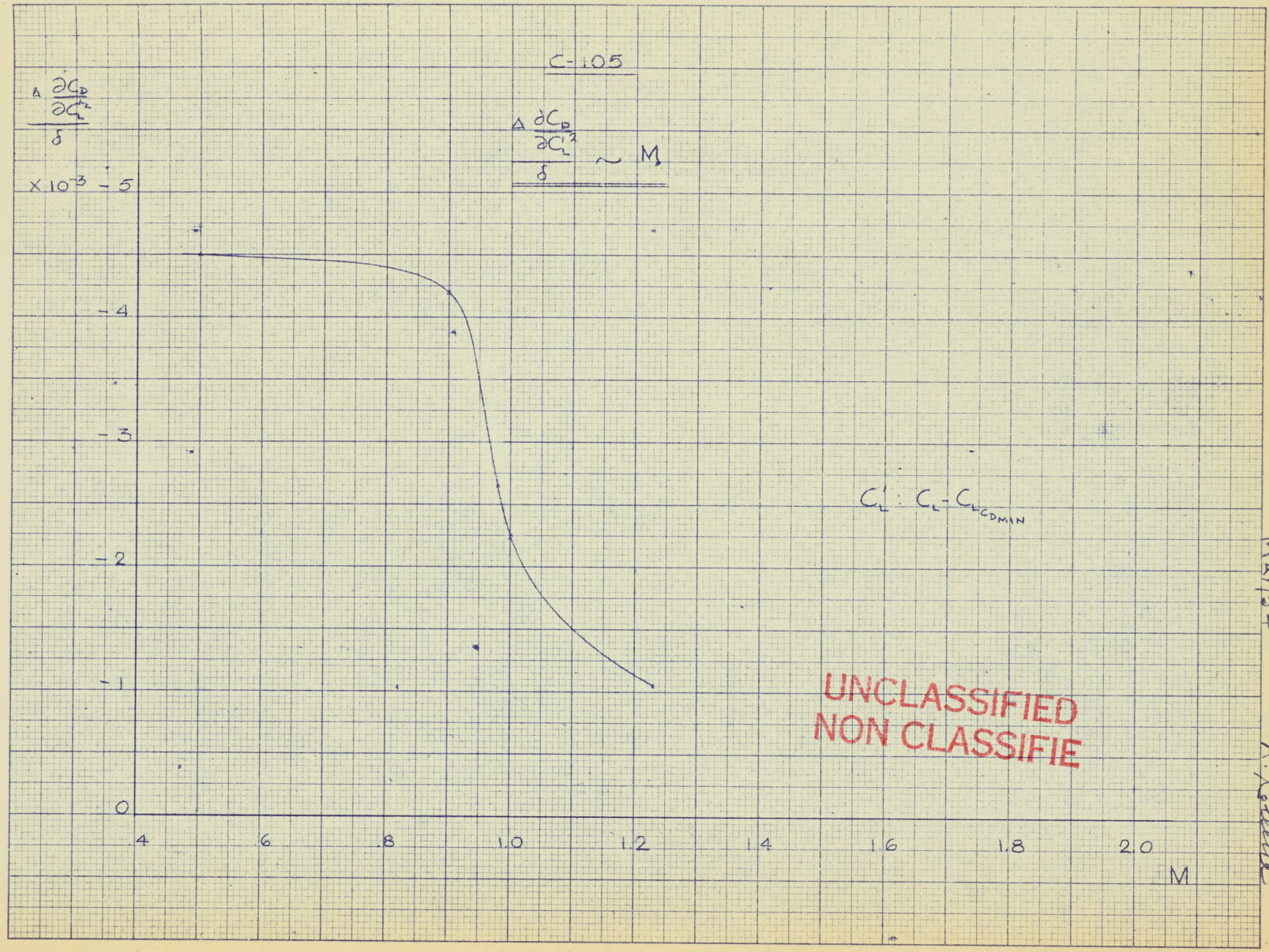
1.4.5
MAY/54

T/W.T/20
R. Gillette

1.4.5

C-105

$\frac{\Delta \frac{\partial C_D}{\partial C_L'^2}}{\delta} \sim M$

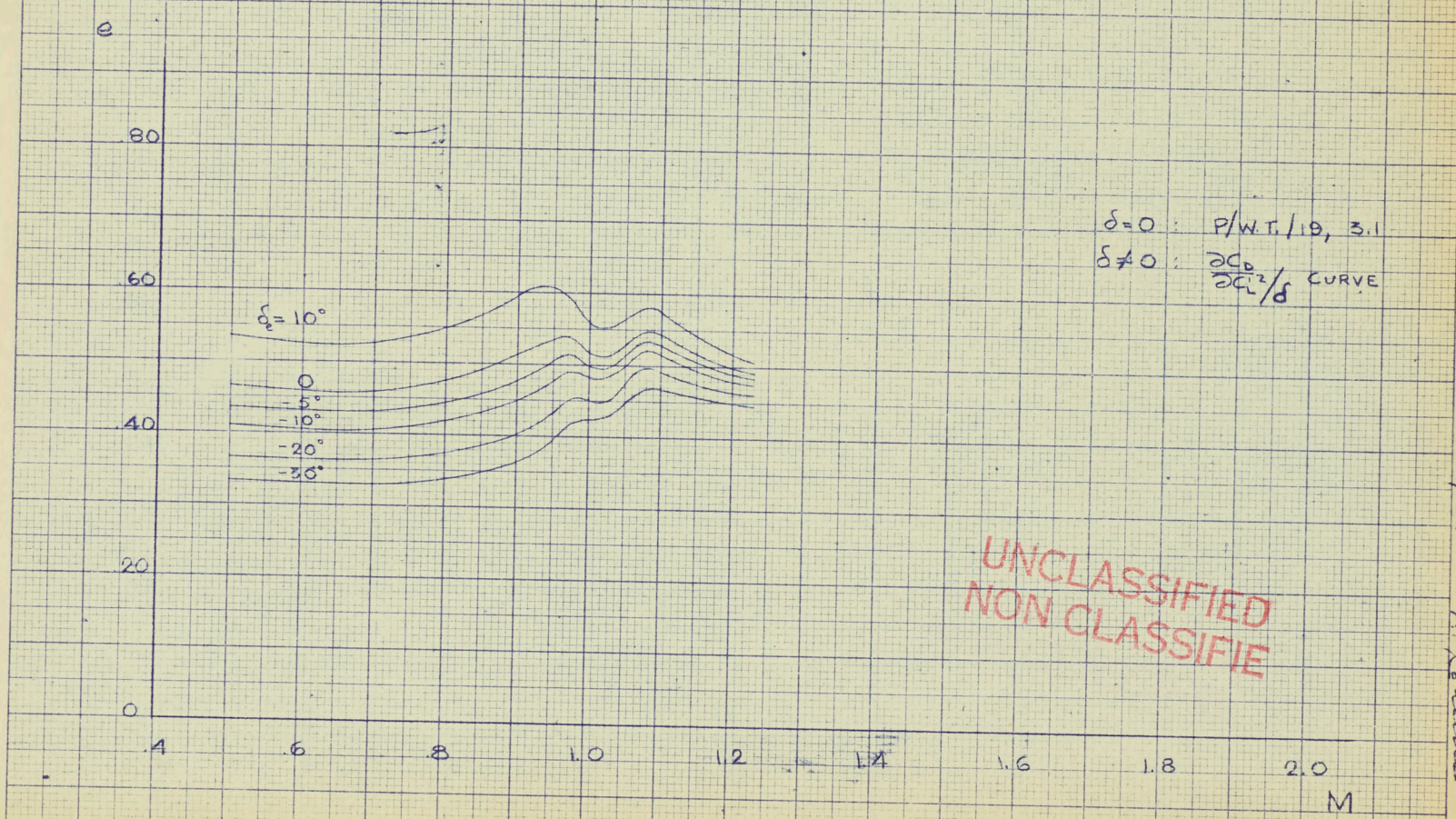


$C_L' = C_L - C_{L_{CDMIN}}$

1.4.6
MAY/54
P/W.T./20
R. Collette

C-105

AERODYNAMIC EFFICIENCY



$\delta = 0$: P/W.T./19, 3.1

$\delta \neq 0$: $\frac{\partial C_D}{\partial C_L^2}/\delta$ CURVE

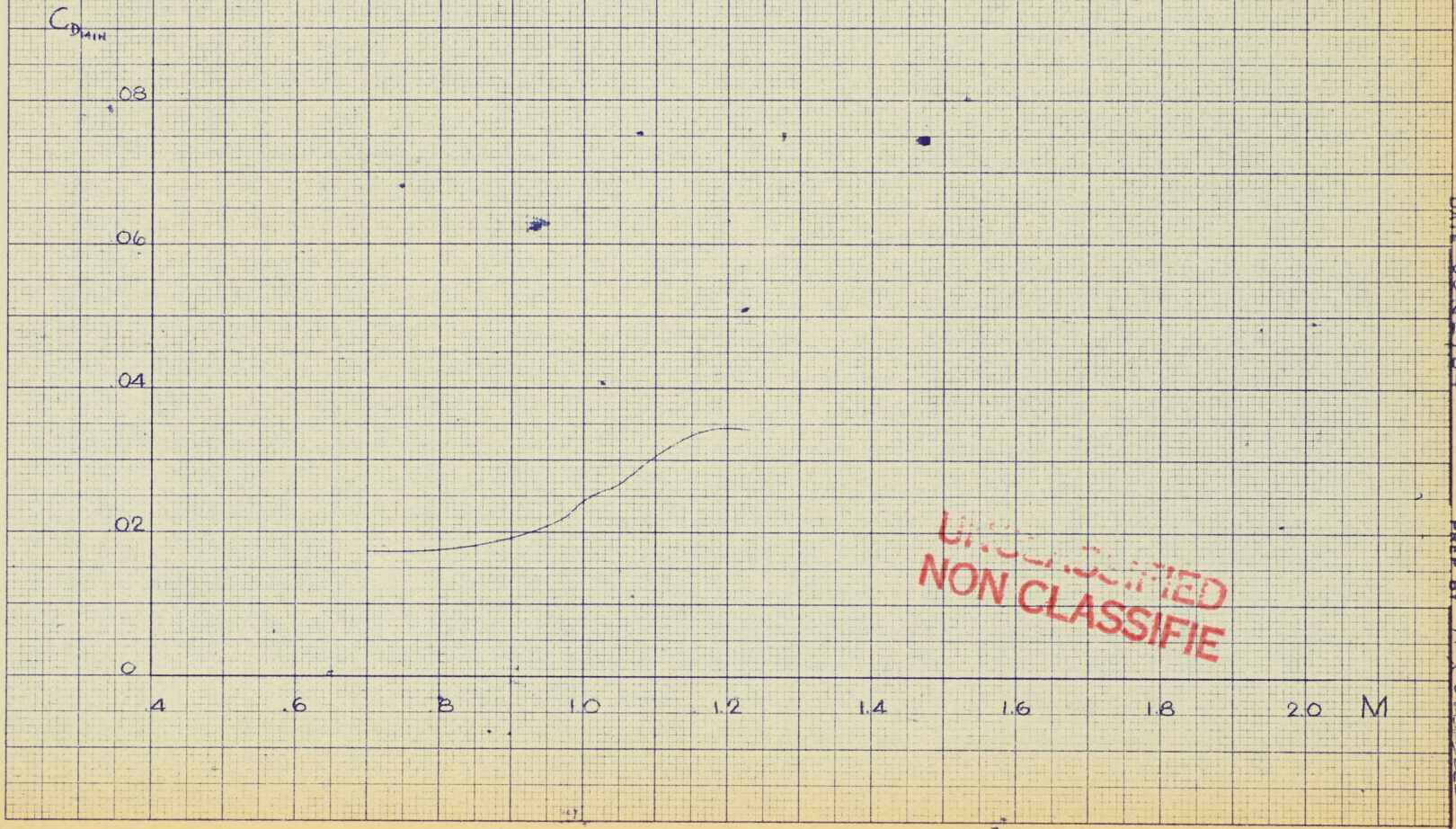
1.47
MAY/54
P/W.T./20
R. G. Lutte.

AIRCRAFT C-105 COMPONENT SHEET NO. 21 REPORT NO RM-T-20
A.U.W. DATE JUNE/54 PREP BY R. Collette

C-105

MINIMUM DRAG COEFFICIENT

(WITH TANK)



FORM 1746

AIRCRAFT C-105 COMPONENT

A.U.W.

SHEET NO. 2.2

DATE JUNE/54

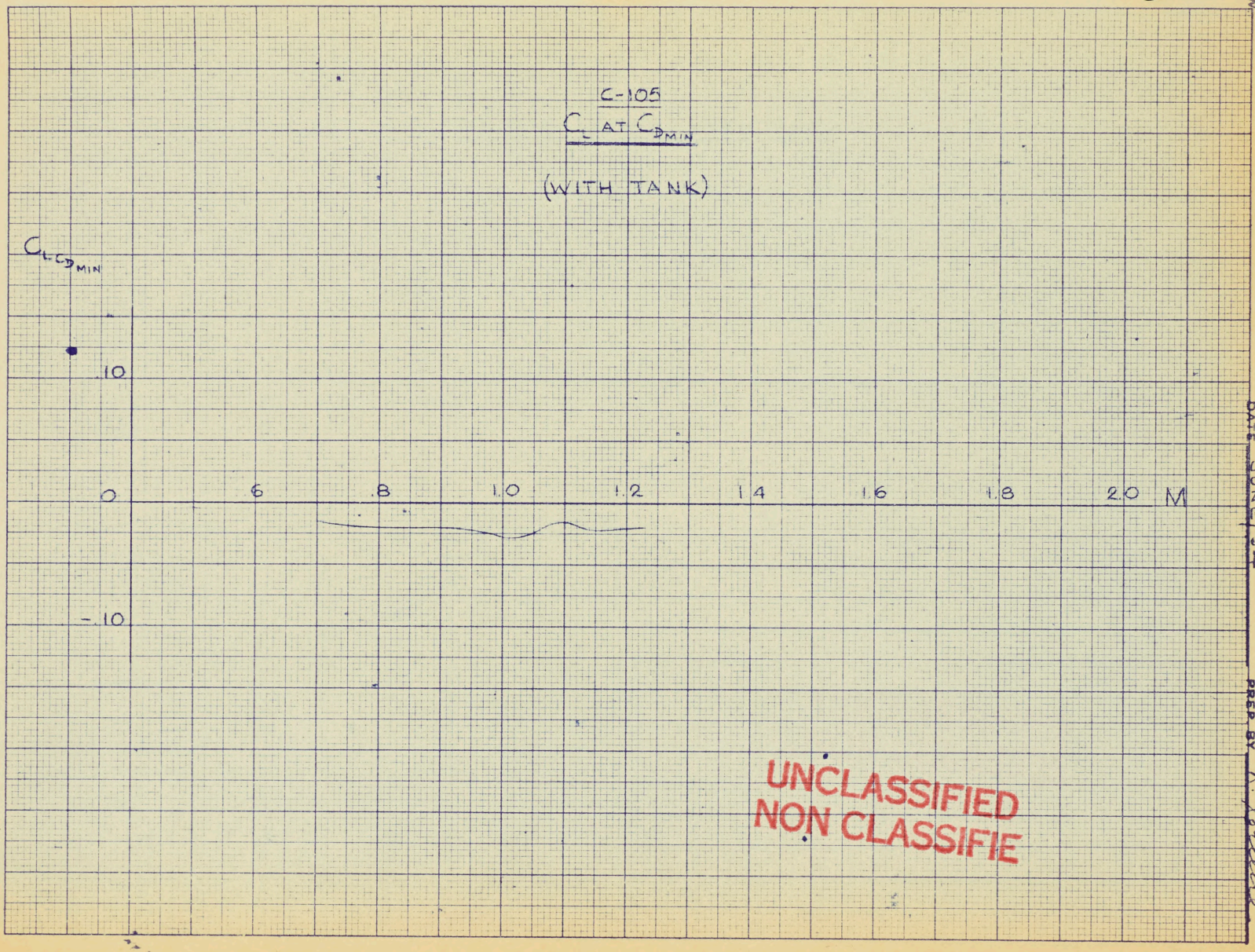
REPORT NO. P.W.T./20

PREP. BY R. Collette

C-105

C_L AT $C_{D_{MIN}}$

(WITH TANK)



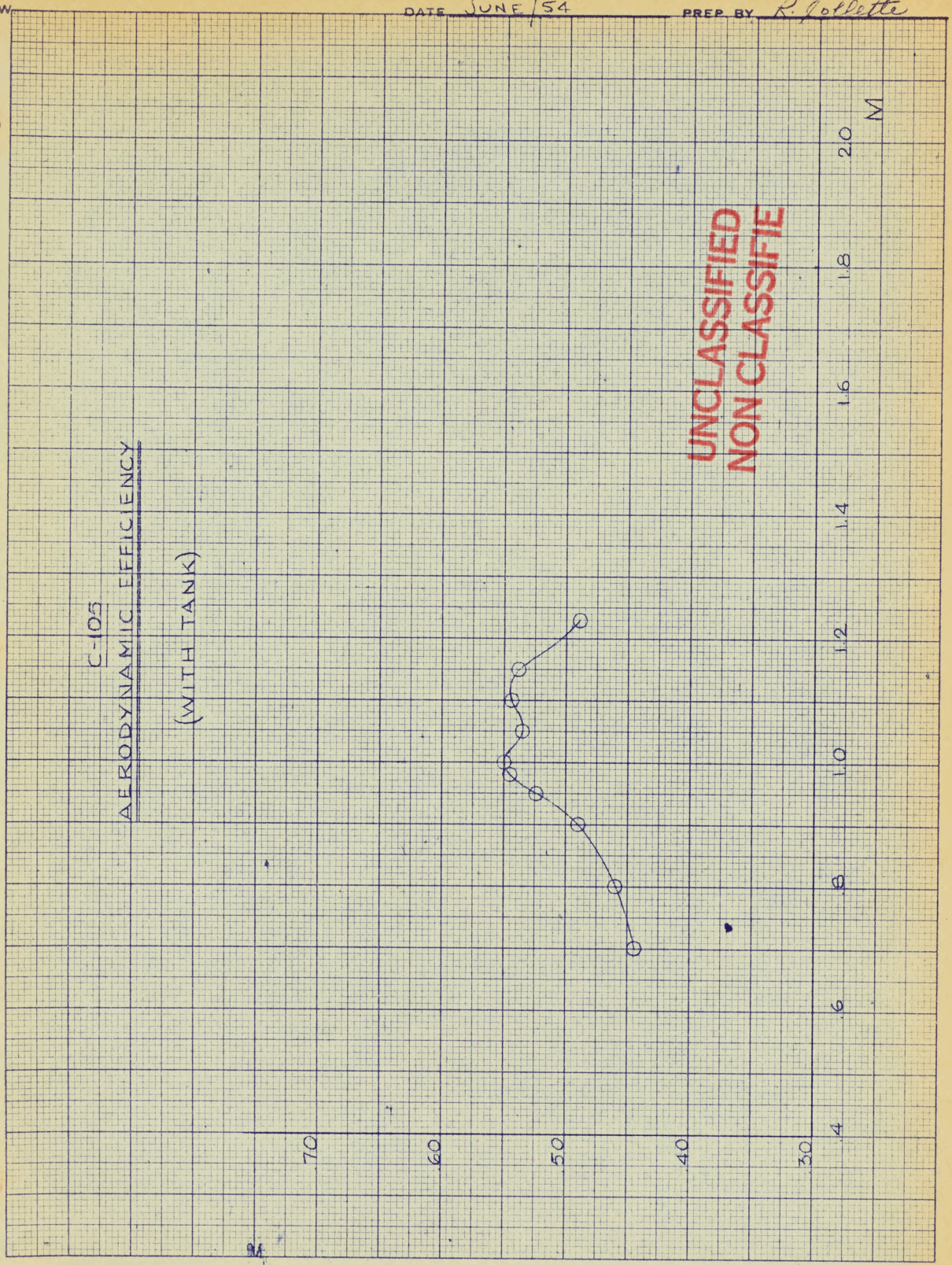
FORM 1746

AIRCRAFT C-105 COMPONENT

A.U.W.

SHEET No. 2.3 REPORT No. P/W.T./20

DATE JUNE/54 PREP BY R. Collette



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