

QCX
Avro
CF105
P-WT-79

(3)

FILE IN VAULT

C-105 UNCLASSIFIED EXT/P/WT/79

EXTRACT FROM P/WIND TUNNEL/79.

ANALYZED

C_M AND C_D VERSUS C_L

E.R. Fish

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
d'aéronautique
et de génie mécanique

TP
A

DATE

Report no.: QCX-AVRO-CF105- P-WT-79

has been downgraded to: _____

de-classified

by (Name): Michel W. Drapeau

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

Date: Dec. 7, 1992

M. Drapeau
Signature

QCX - CISTI
AÉRO / M.E.
LIBRARY

89- 05- 12

BIBLIOTHÈQUE
AÉRO / G.M.
CONSEIL NATIONAL DE RECHERCHES

National Research Council
MAR 14 1957
Aeronautical Library

45111

12417638

TECHNICAL DEPARTMENT (Aircraft)

REPORT No. EXT/ P/WT/79

SHEET No. 1

AIRCRAFT:

C-105

.04 SERIES III

TESTS

PREPARED BY

DATE

E. Fish

Sept. 1955

CHECKED BY

DATE

UNCLASSIFIED

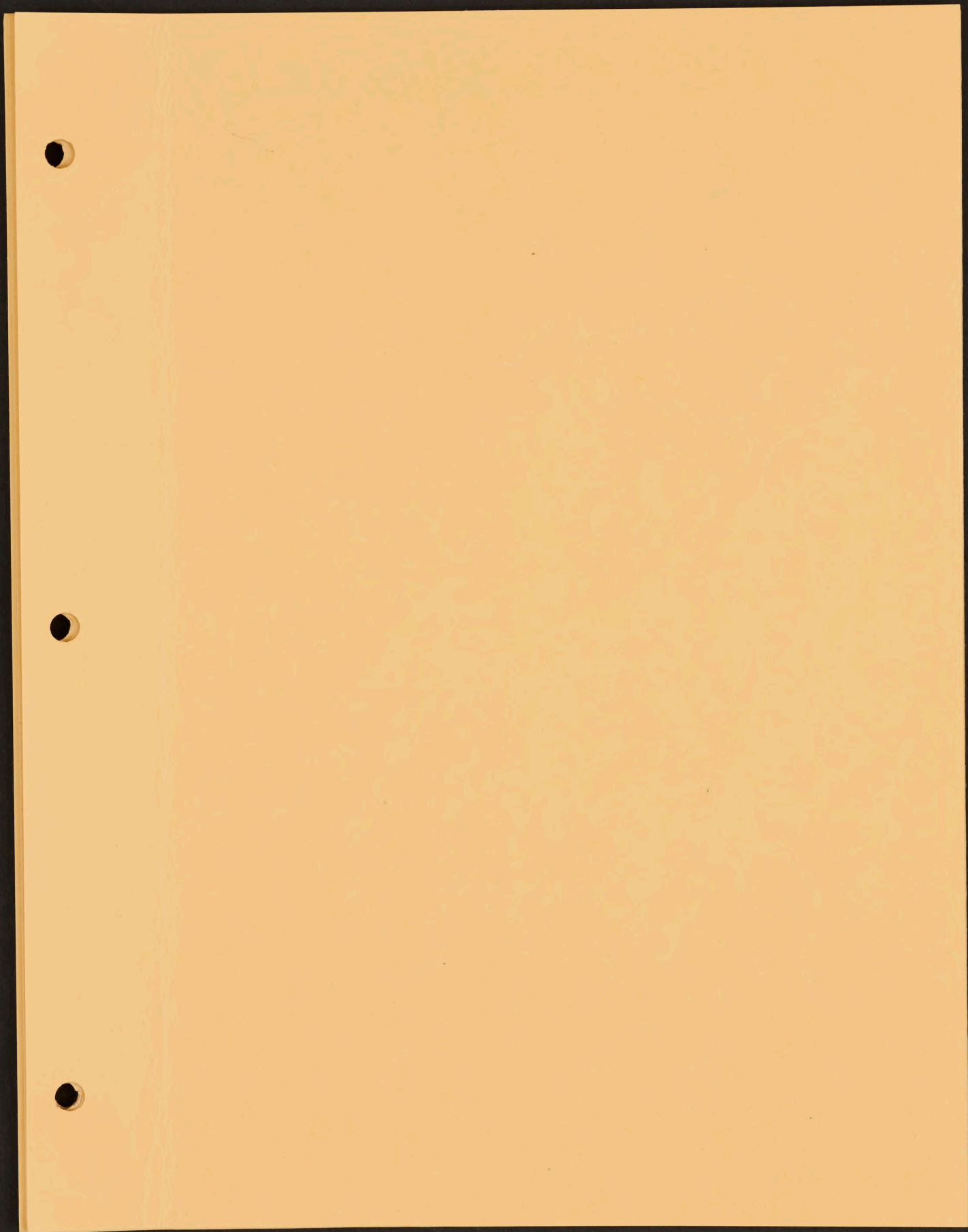
EXTRACT FROM P/WIND TUNNEL/79

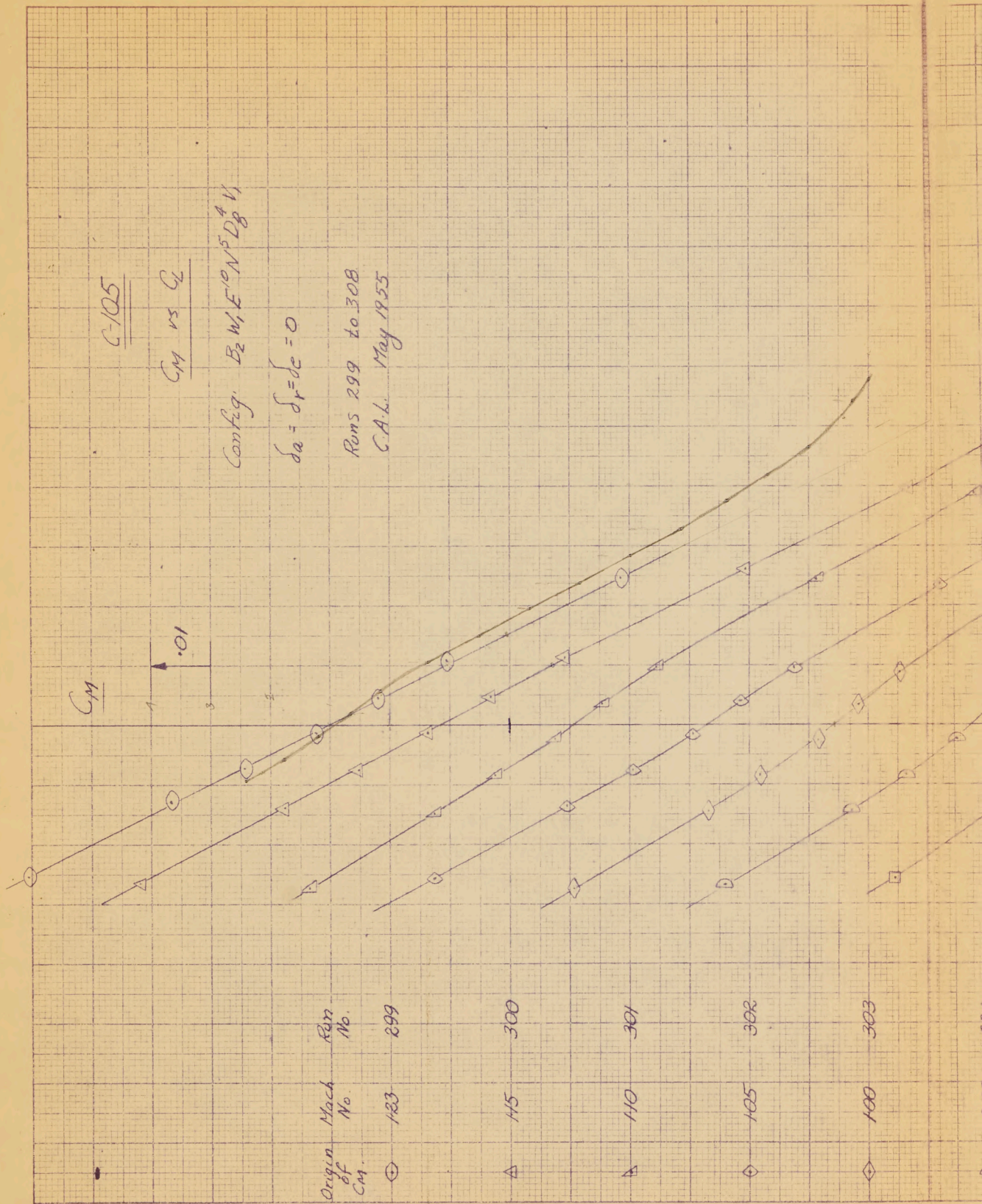
C_M AND C_D VERSUS C_L

INDEX

<u>C_M VS C_L</u>	<u>SHEET</u>
1. $\delta_e = 0^\circ$	1.1
2. $\delta_e = 10^\circ$	1.2
3. $\delta_e = -5^\circ$	1.3
4. $\delta_e = -10^\circ$	1.4
<u>C_D VS C_L</u>	
1. $\delta_e = 0^\circ$	2.1
2. $\delta_e = 10^\circ$	2.2
3. $\delta_e = -5^\circ$	2.3
4. $\delta_e = -10^\circ$	2.4

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





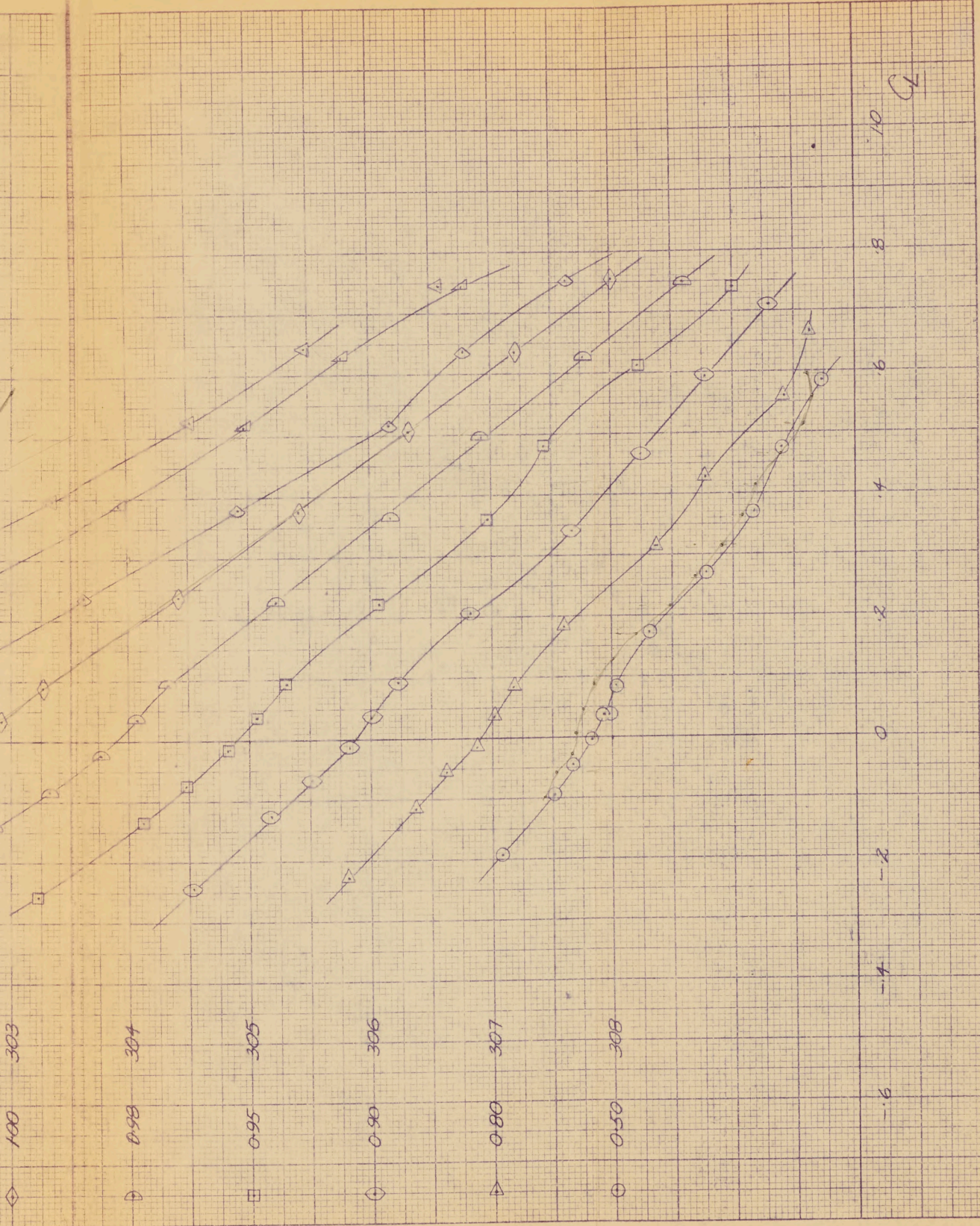
10/6/55

FW 1/19

G.A. FORD.

1.1

8



UNCLASSIFIED
NON CLASSIFIE

MACH

1.23 ◯
1.15 △
1.10 ◐
1.05 ◻
1.00 ◑
.98 ◊
.95 ◊
.90 ▽
.80 ◊
.50 ◊

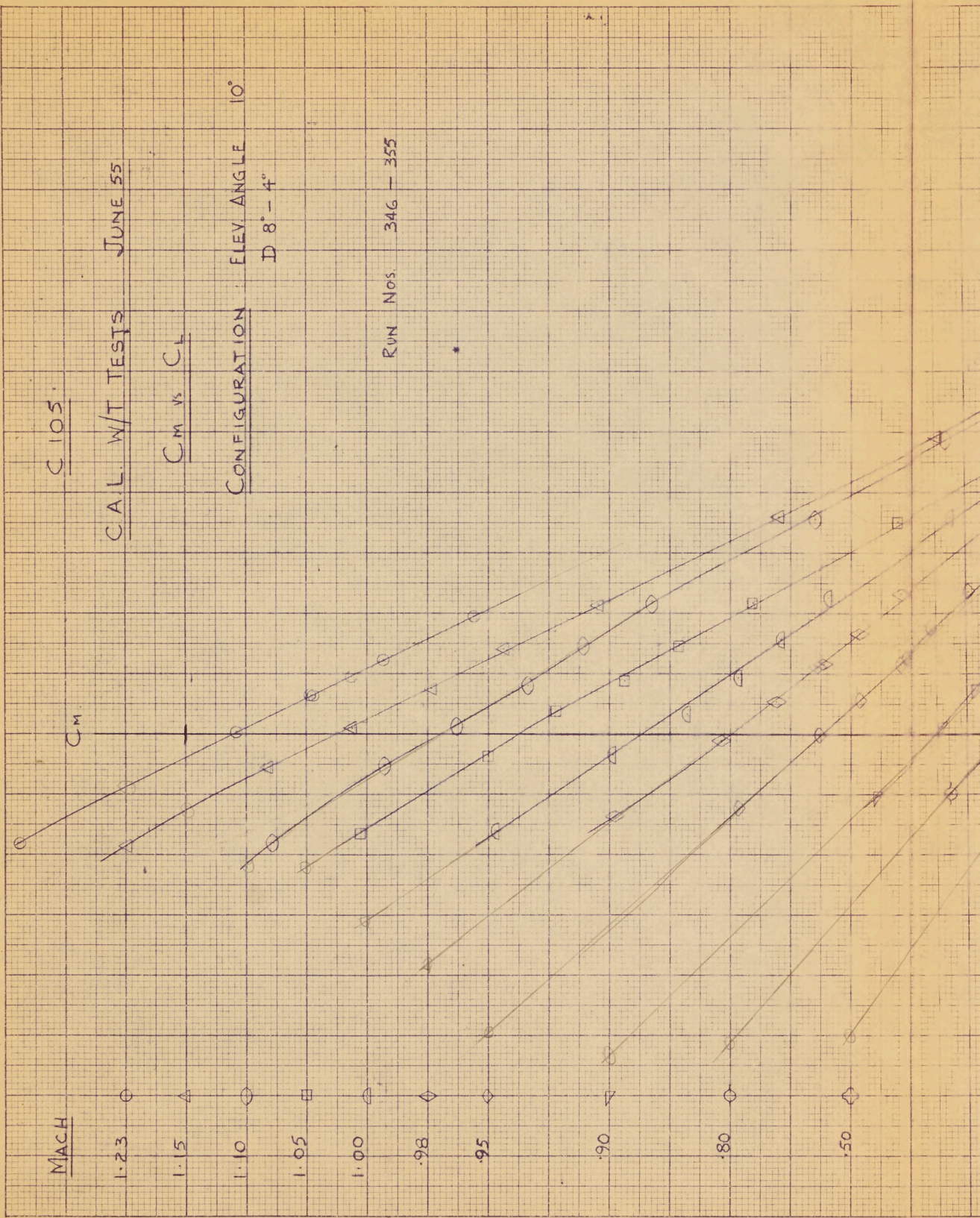
C105.

C.A.L. W/T TESTS JUNE 55

C_M vs C_L

CONFIGURATION : ELEV. ANGLE 10°
D 8° - 4°

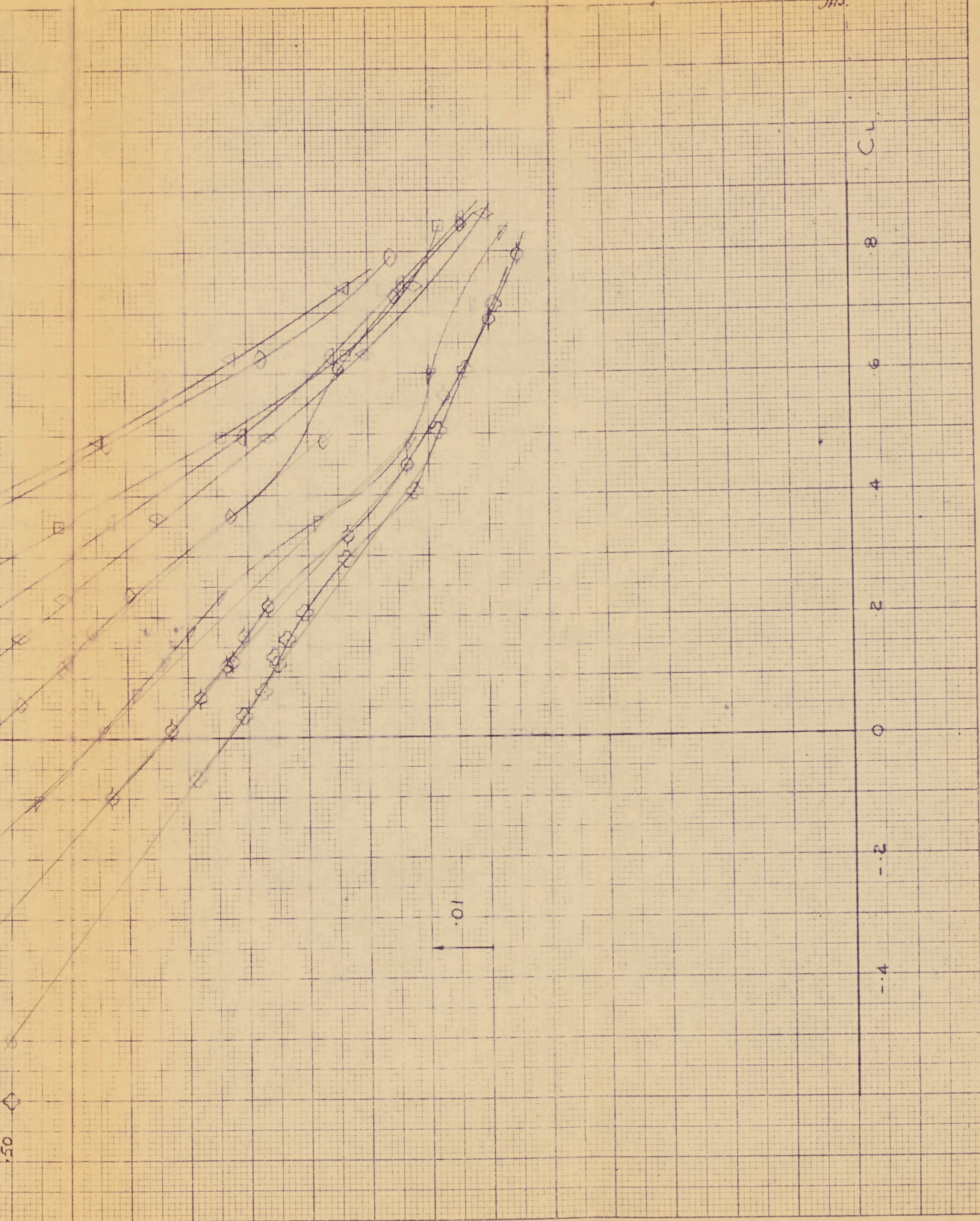
RUN Nos. 346 - 355



P/WT/79

JHB

1.2



UNCLASSIFIED
NON CLASSIFIE

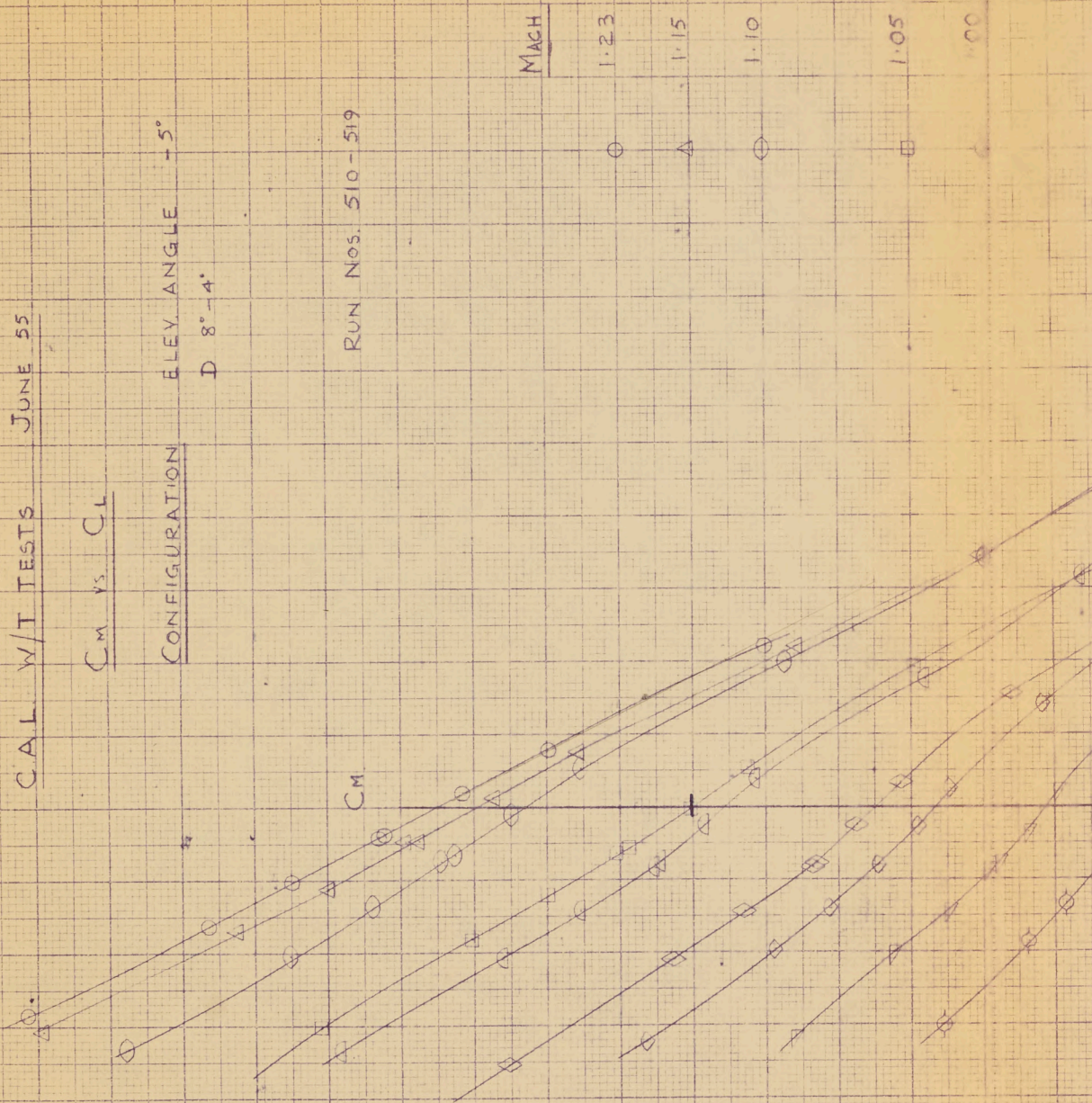
C105

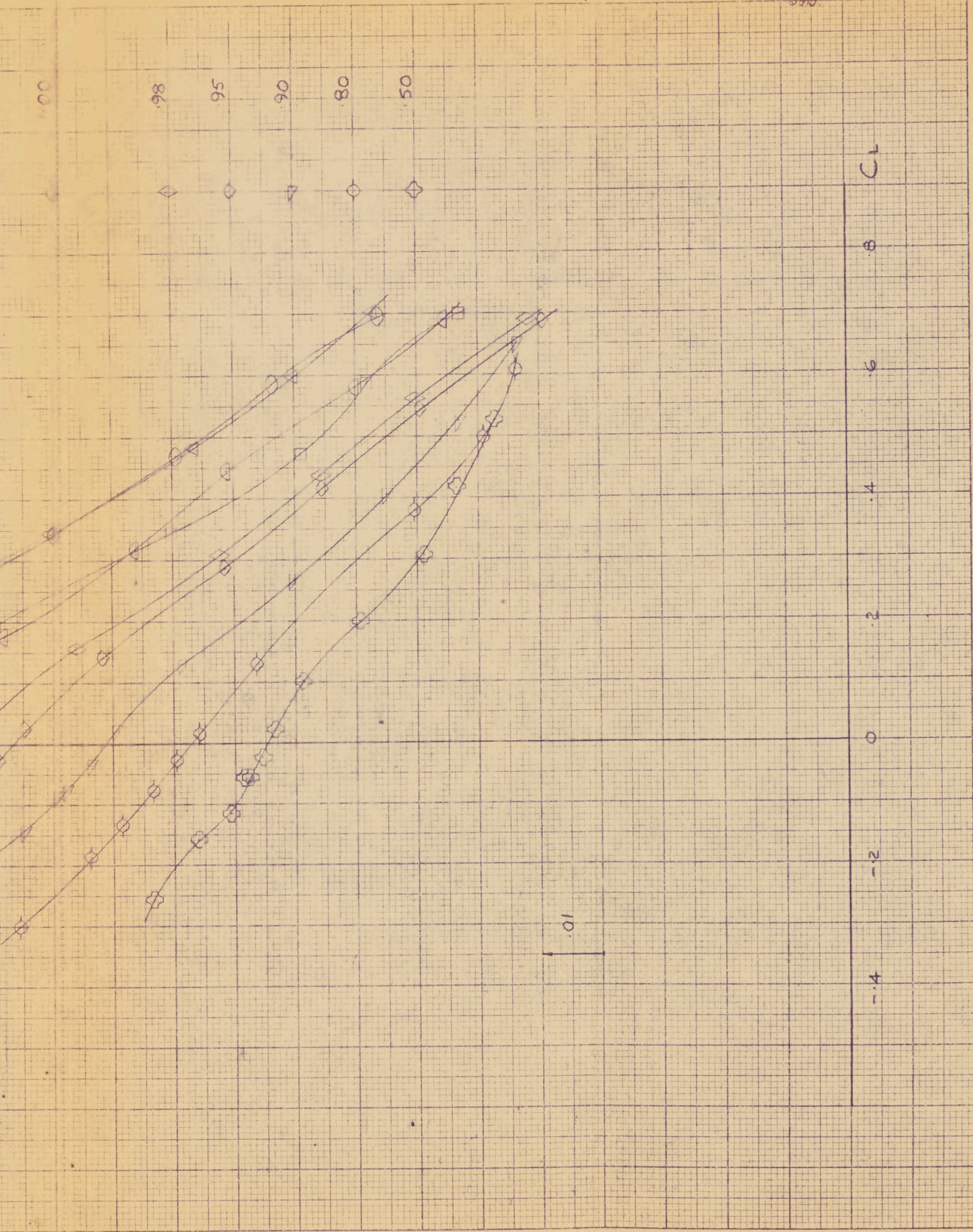
C.A.L. W/T TESTS JUNE 55

C_m vs. C_L

CONFIGURATION ELEV. ANGLE -5°
D 8°-4'

RUN Nos. 510-519





UNCLASSIFIED
 UNCLASSIFIED
 NON CLASSIFIE

C 105

CAL W/T TESTS JUNE 55

C_M vs C_L

CONFIGURATION

ELEV. ANGLE -10°
D 8°-4'

Run Nos. 357, 359, 361 - 368

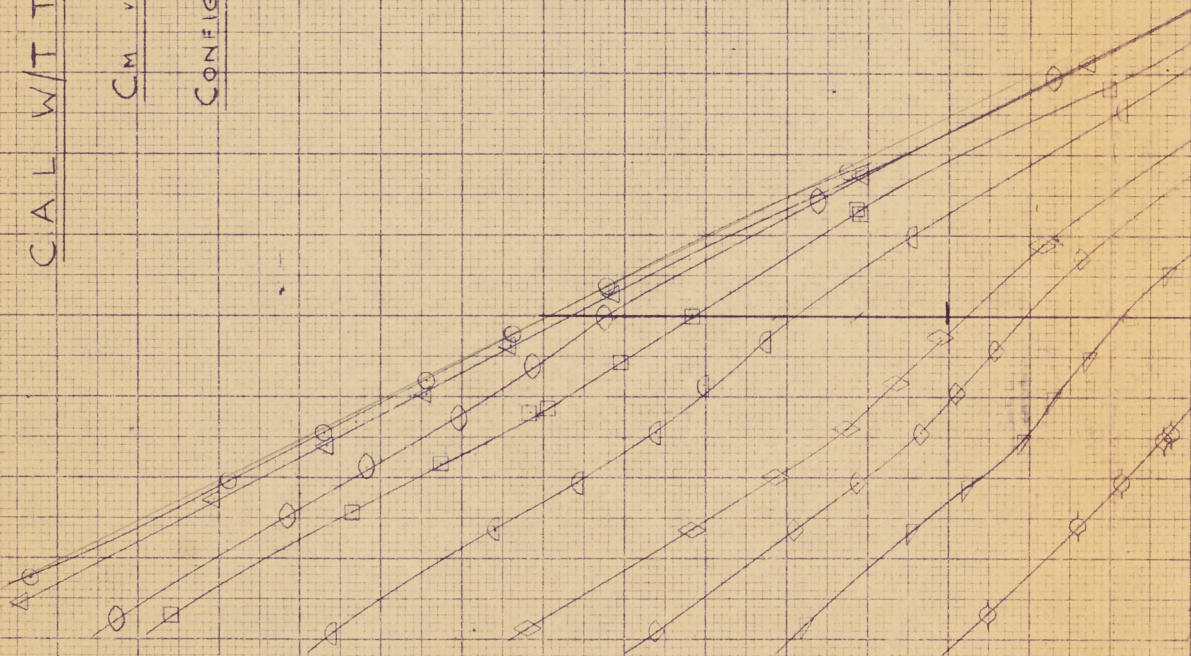
MACH

1.23

1.15

1.10

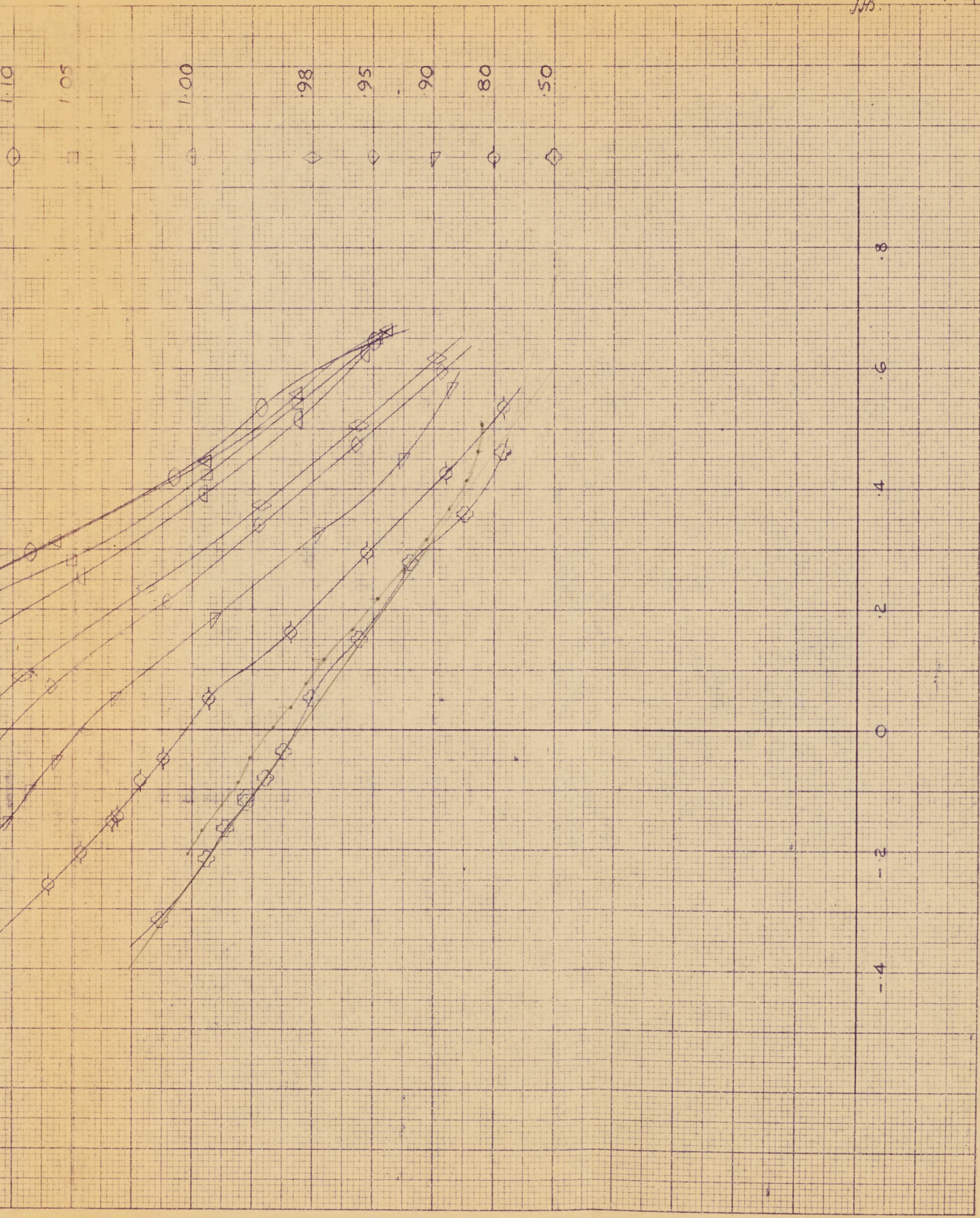
1.05



P/WT/79

JFB.

1.4

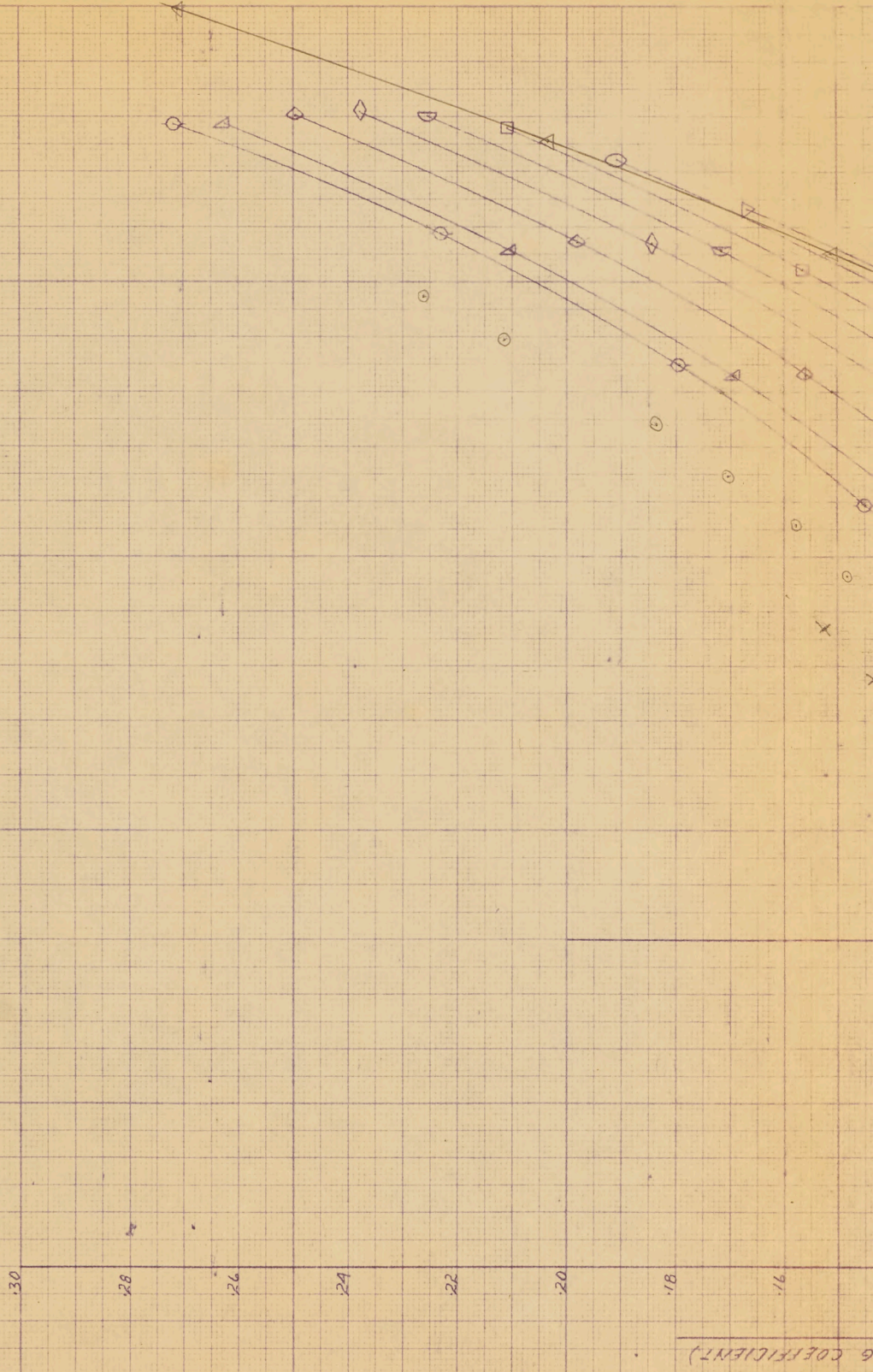


UNCLASSIFIED
NON CLASSIFIE

C.P.L. WIND TUNNEL TESTS (JUNE 1955)
C105 ~ C_D vs. C_L AT VARIOUS MACH NO

$$\delta_E = 0^\circ$$

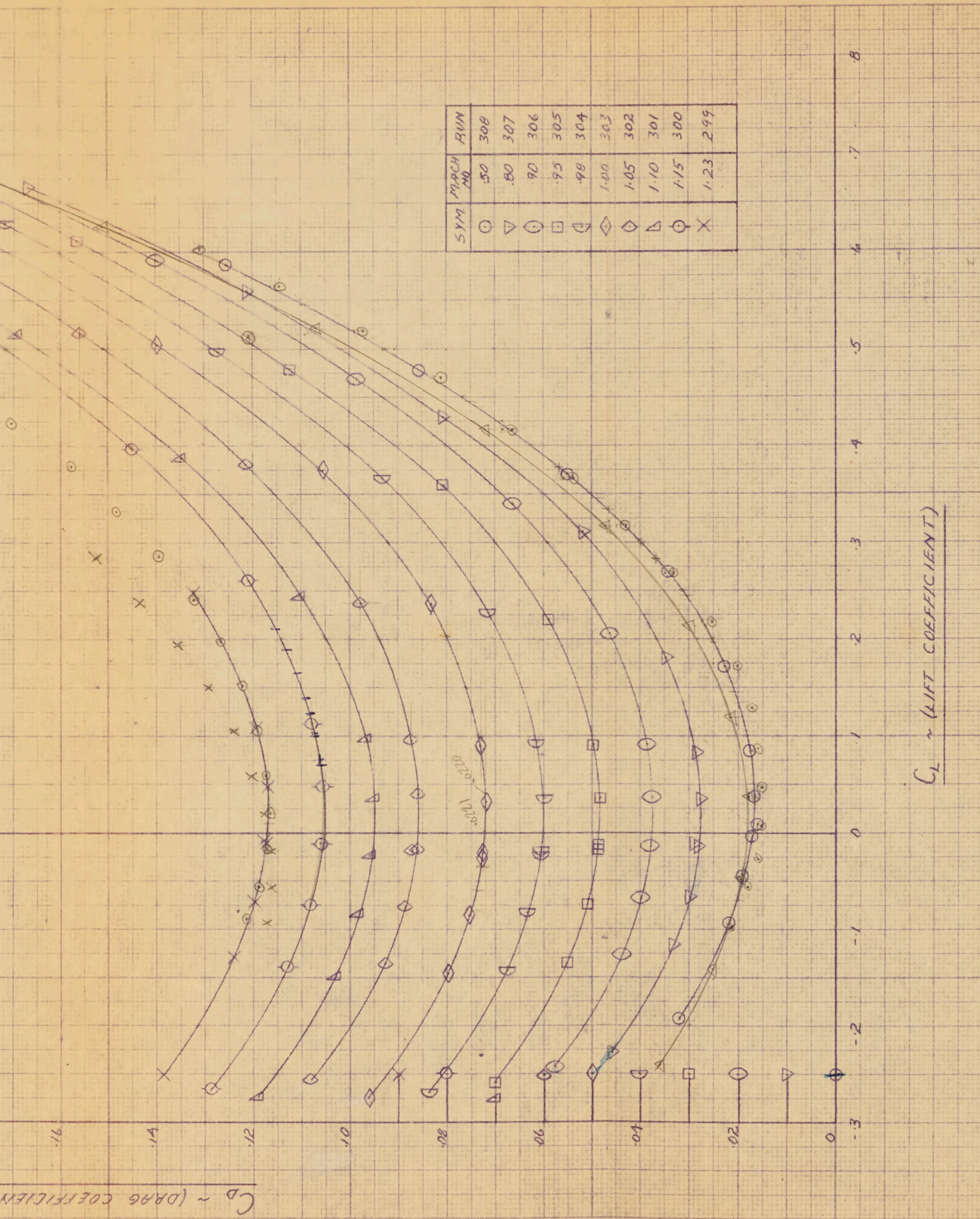
(NO C_D CORRECTION)



SHT. ~ 2-1

P/W.T./79

R. SKULSKY



1.4 vs. $2.68 \times \frac{2}{3} = 1.30$

UNCLASSIFIED
NON CLASSIFIE

C.A.I. WIND TUNNEL TESTS (JUNE 1955)
C105 ~ C_D vs. C_L AT VARIOUS MACH NO

$$\delta_E = 10^\circ$$

(NO C_p CORRECTION)

30

28

26

24

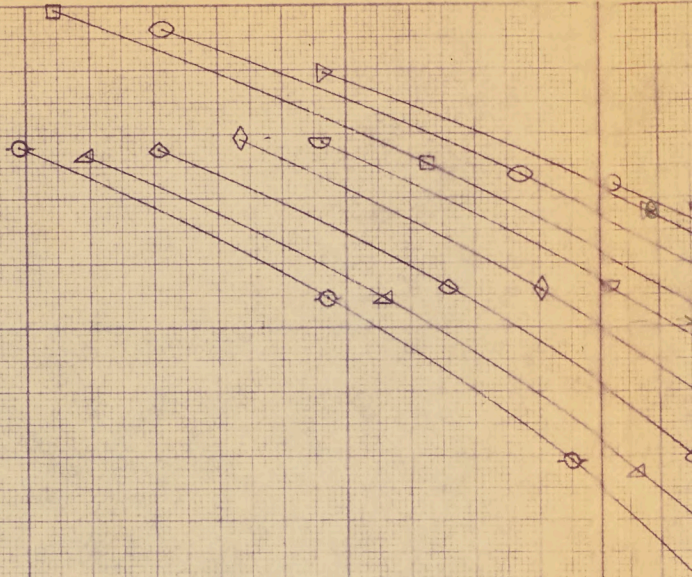
22

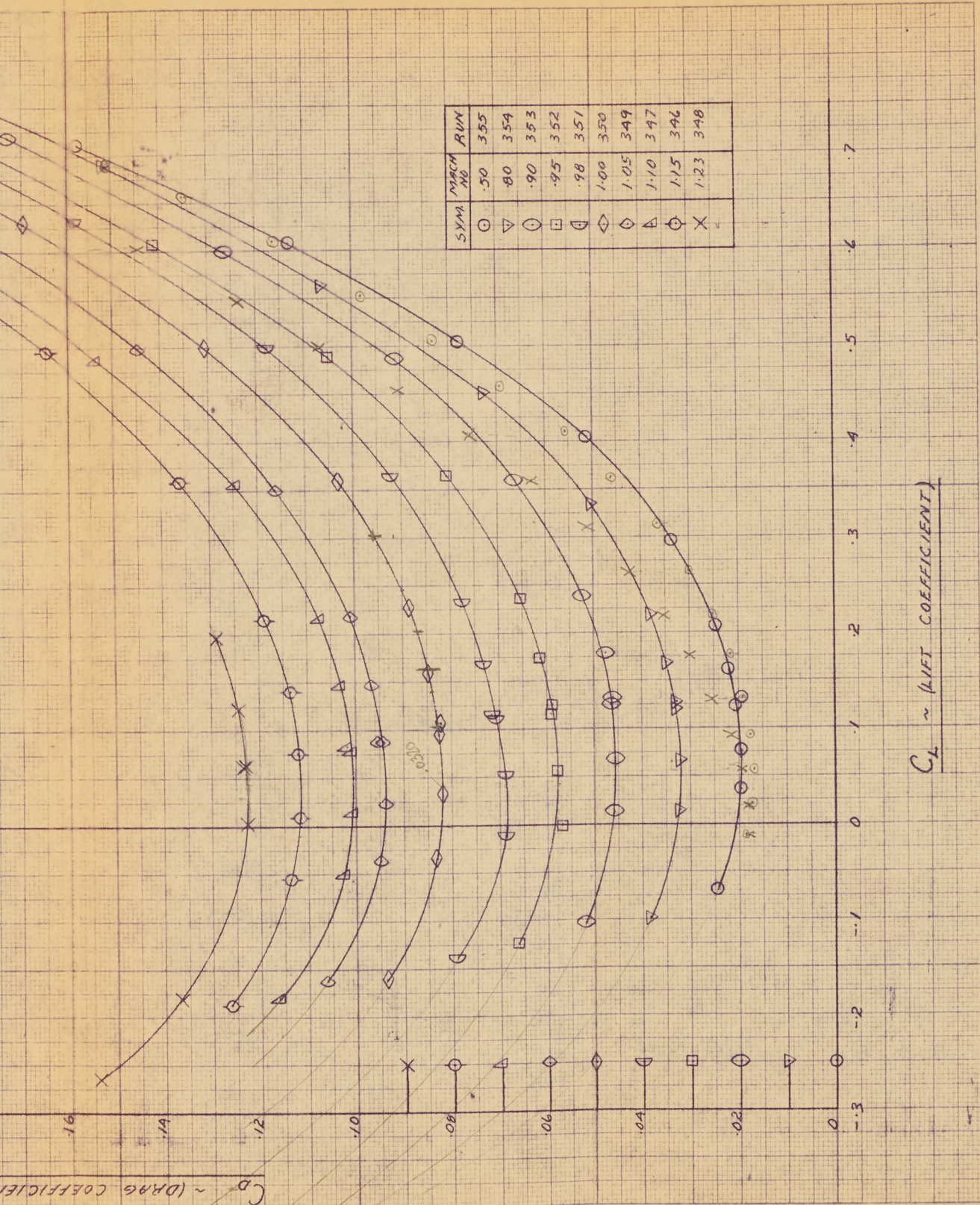
20

18

16

G COEFFICIENT





C_L ~ (LIFT COEFFICIENT)

UNCLASSIFIED
NON CLASSIFIED

C.A.L. WIND TUNNEL TESTS (JUNE 1955)
C105 ~ C_D vs. C_L AT VARIOUS MACH NO

$$\delta_F = -5^\circ$$

(NO C_p CORRECTION)

.30

.28

.26

.24

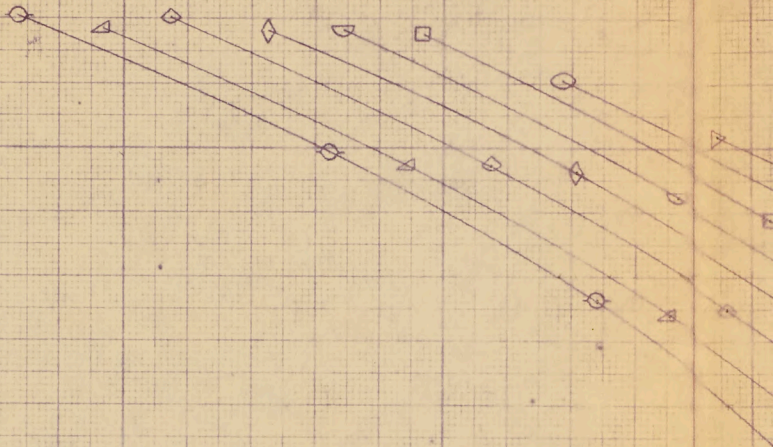
.22

.20

.18

.16

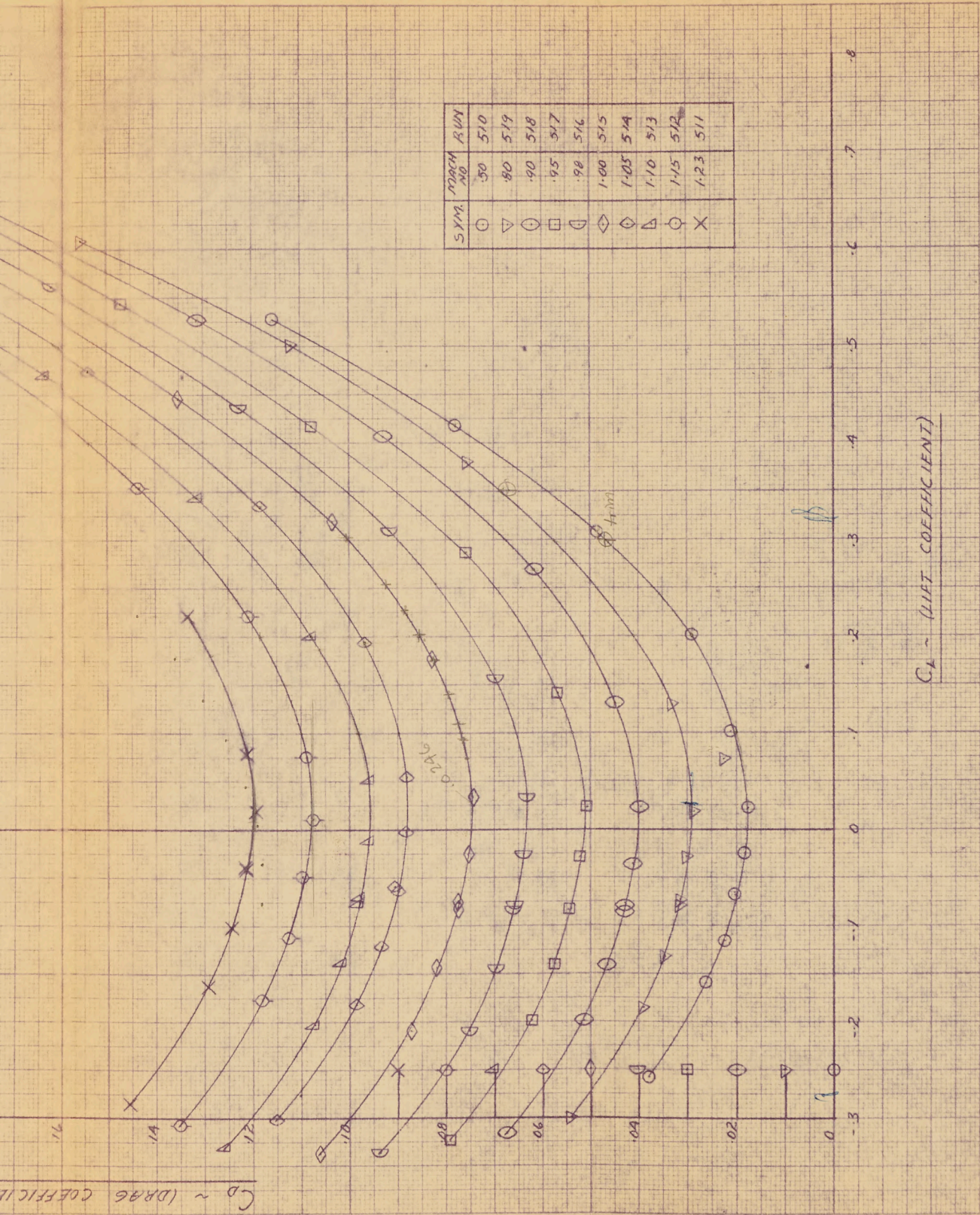
COEFFICIENT



SHT. ~ 2-3

P/WIND TUNNEL/79

R. SKULSKY



UNCLASSIFIED
NON CLASSIFIE

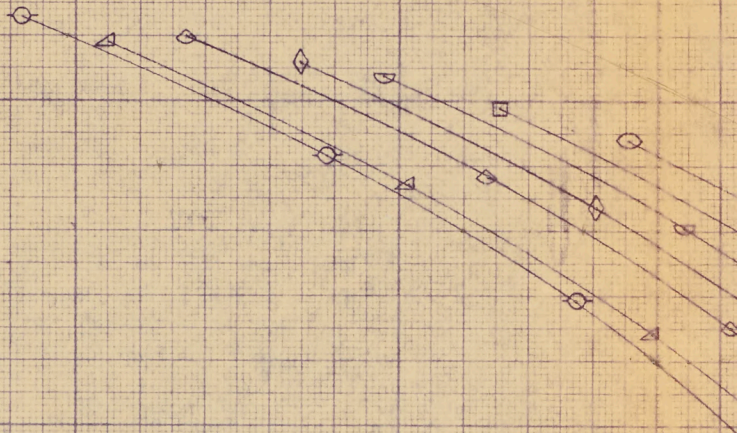
C.P.L. WIND TUNNEL TESTS (JUNE 1955)
C105 ~ C_D vs. C_L AT VARIOUS MACH NO

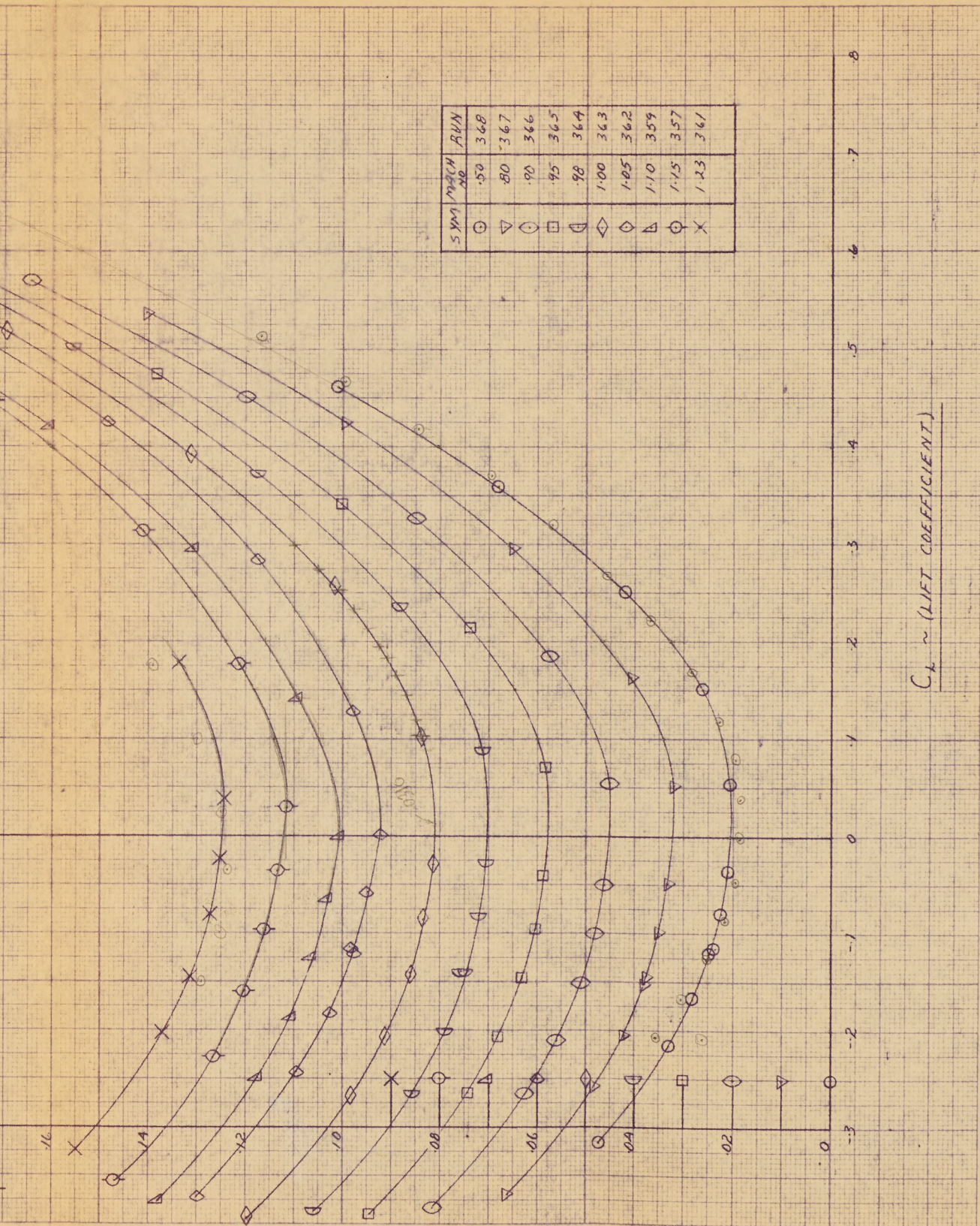
$$\delta_E = -10^\circ$$

(NO C_L CORRECTION)

C_D ~ (DRAG COEFFICIENT)

30
28
26
24
22
20
18
16





SYMBOL	MACH NO	RUN
○	.50	368
▽	.80	367
◇	.90	366
□	.95	365
◐	.98	364
◑	1.00	363
◒	1.05	362
◓	1.10	359
⊗	1.15	357
×	1.23	361

C_L ~ (LIFT COEFFICIENT)

UNCLASSIFIED
NON CLASSIFIED

