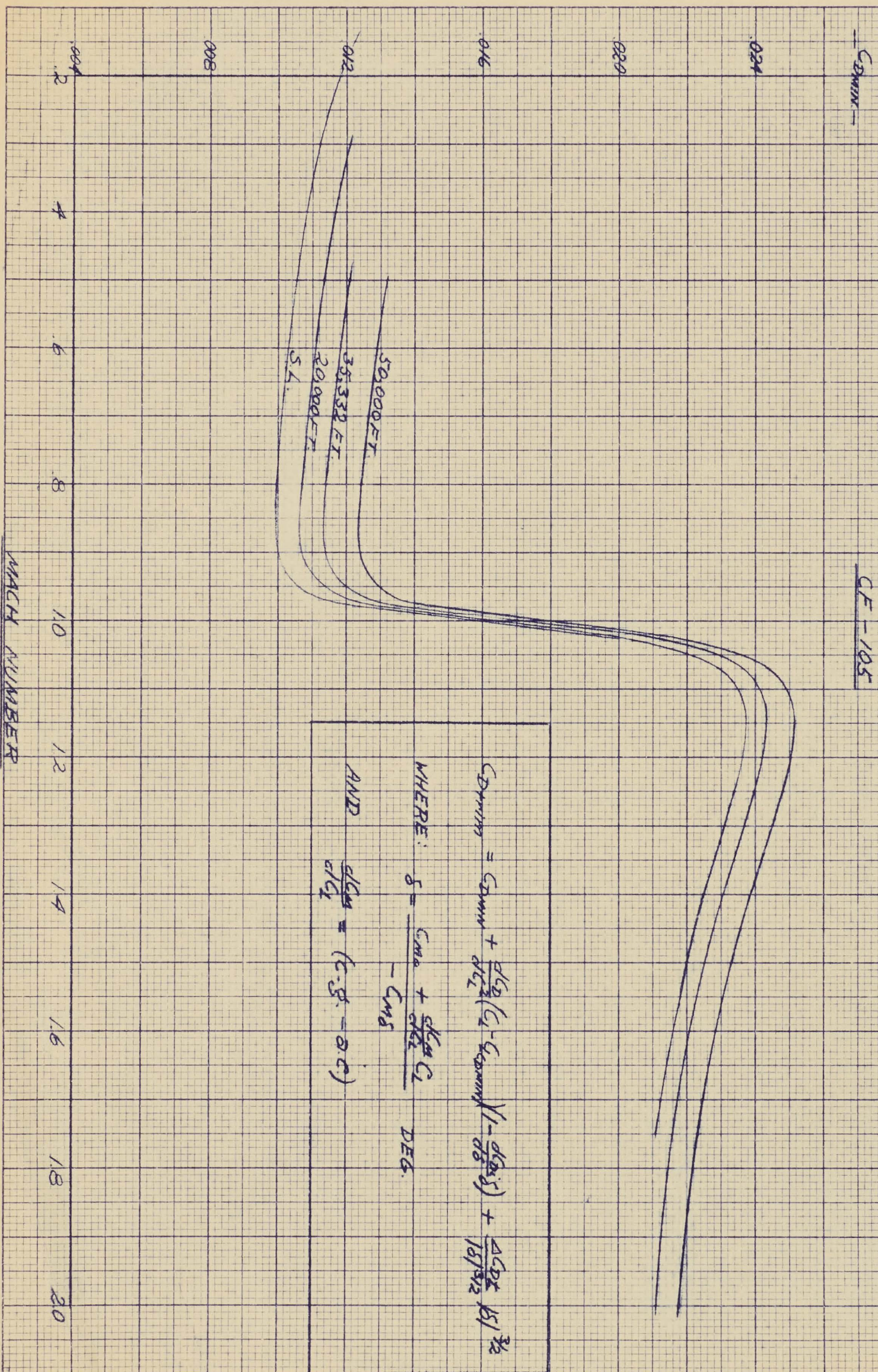


18/4/56
DEM

1.

VARIATION OF C_{Dmin} WITH MACH NUMBER AT VARIOUS ALTITUDES.

CF - 105

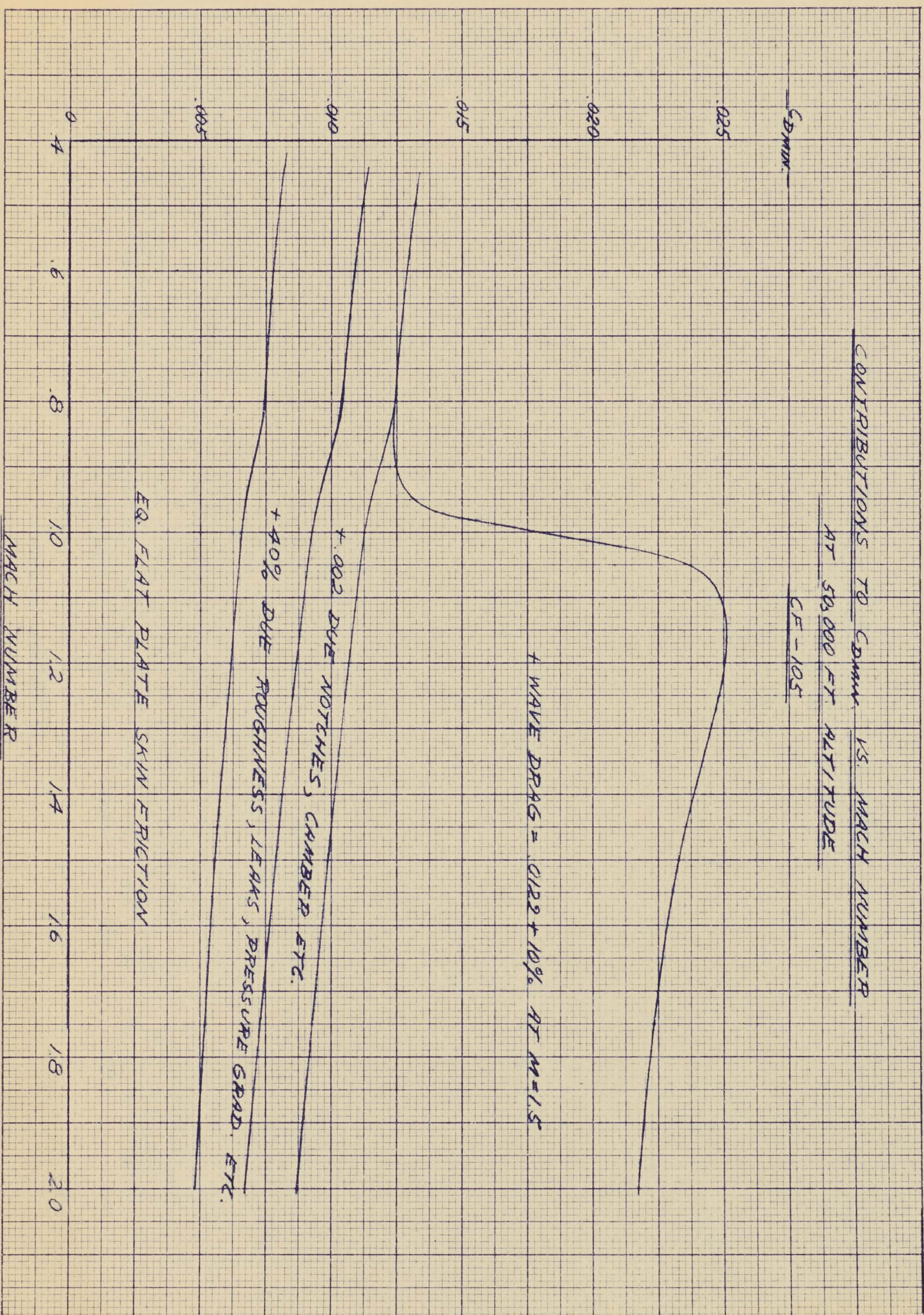


$$C_{Dmin} = C_{Dmin} + \frac{dC_D}{dC_L} (C_L - C_{Lmin}) \left(1 - \frac{dC_D}{dC_L} \right) + \frac{\Delta C_D}{10/312} \left(\frac{1}{2} \right)$$

WHERE: $\delta = \frac{C_{Dmin} + \frac{dC_D}{dC_L} C_L}{-C_{Dmin}} \text{ DEG.}$

AND $\frac{dC_D}{dC_L} = (C_L - C_{Dmin})$

2



CMS AT CONSTANT C_L VS. MACH NUMBER

CE-105

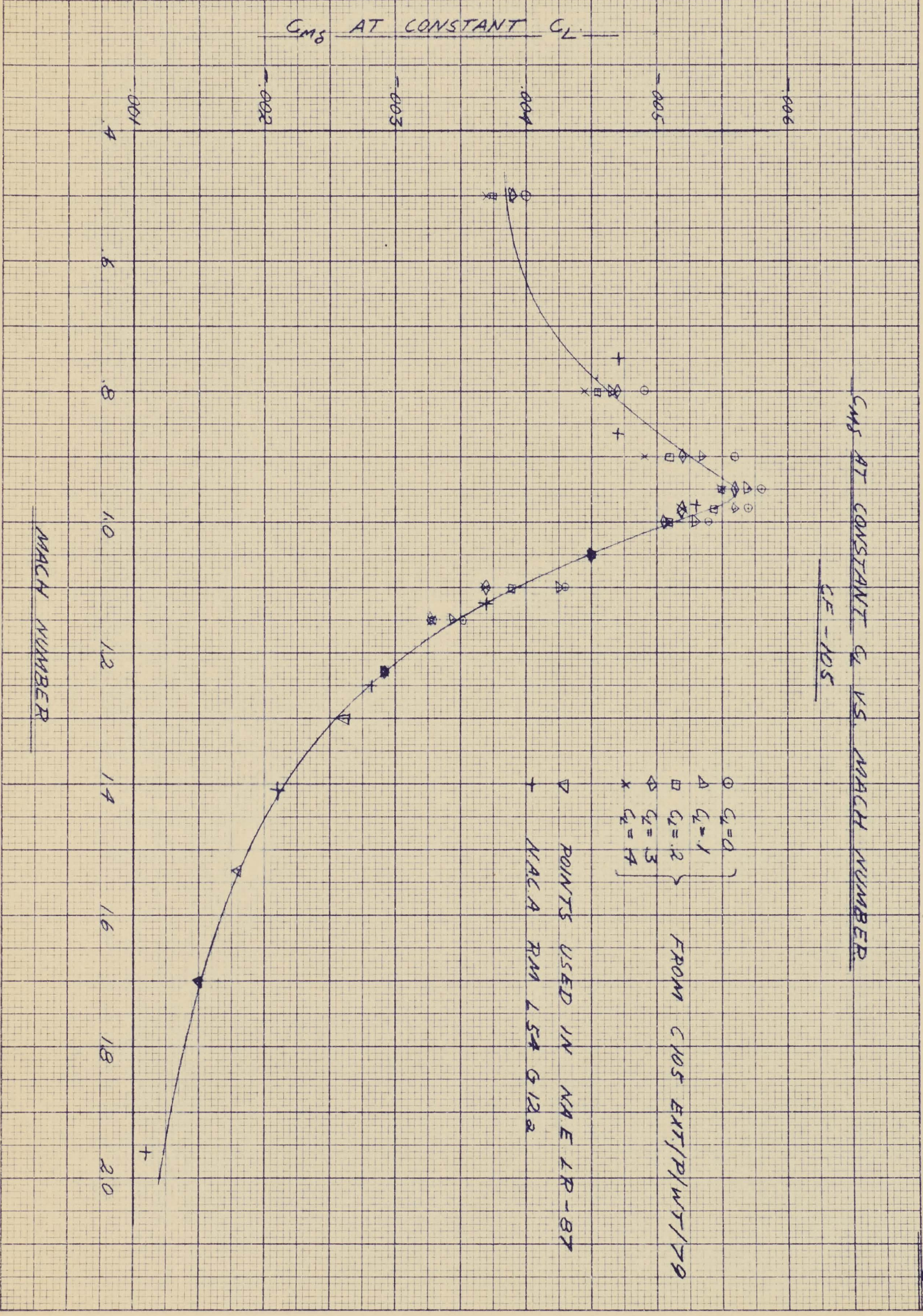
- $C_L = 0$
- △ $C_L = .1$
- $C_L = .2$
- ◇ $C_L = .3$
- × $C_L = .4$

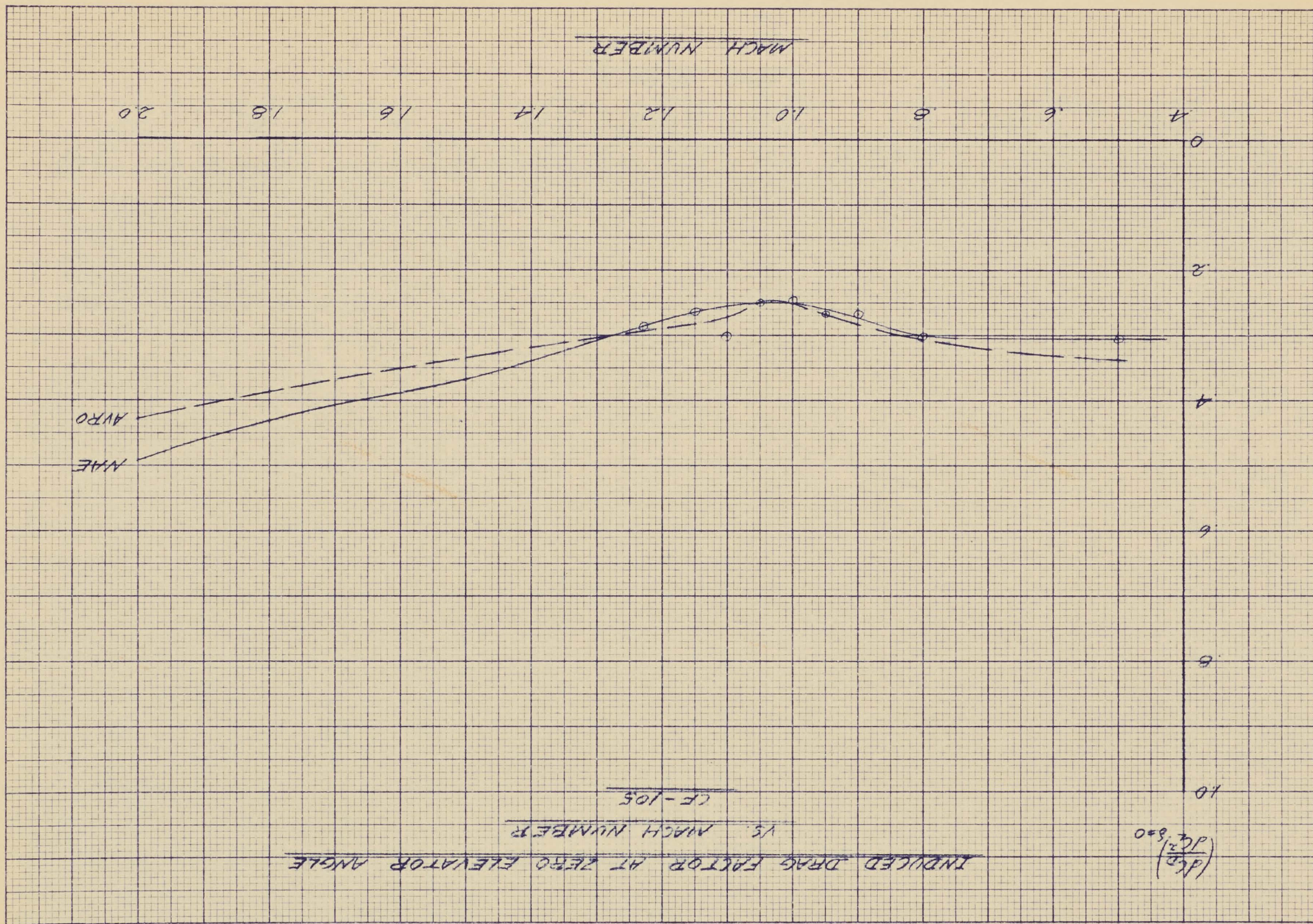
FROM C105 EXT/P/W/79

▽ POINTS USED IN NAE LR-87
+ NACA RM L54 G122

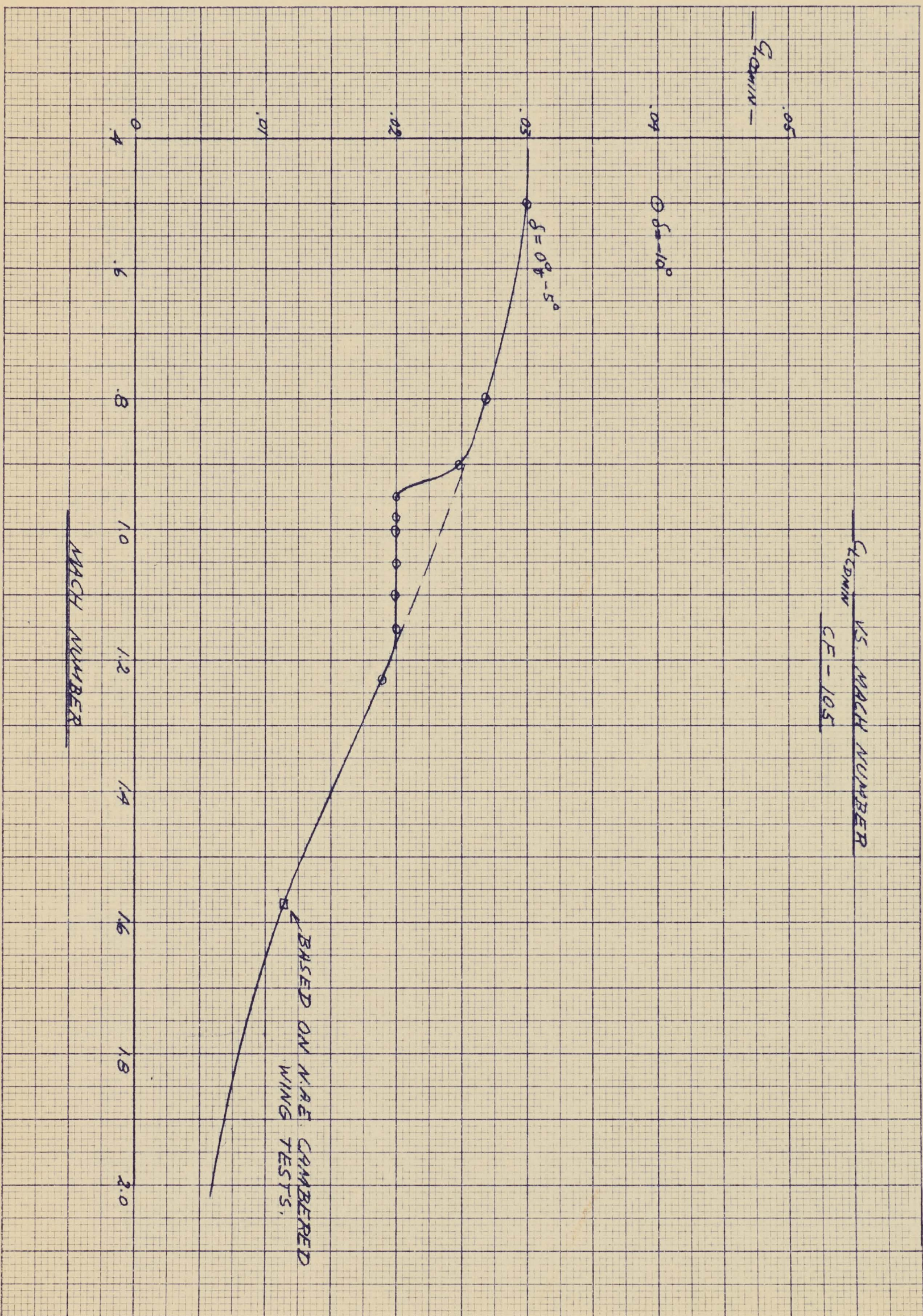
CMS AT CONSTANT C_L

MACH NUMBER





#6





#9

TRIM DRAG FACTOR VS. MACH NUMBER

CE - 105

$\frac{\Delta C_{Df}}{C_{Df}} \times 10^4$
15.42

MACH NUMBER

BASED ON N.A.E. CAMBERED
WING TESTS.

