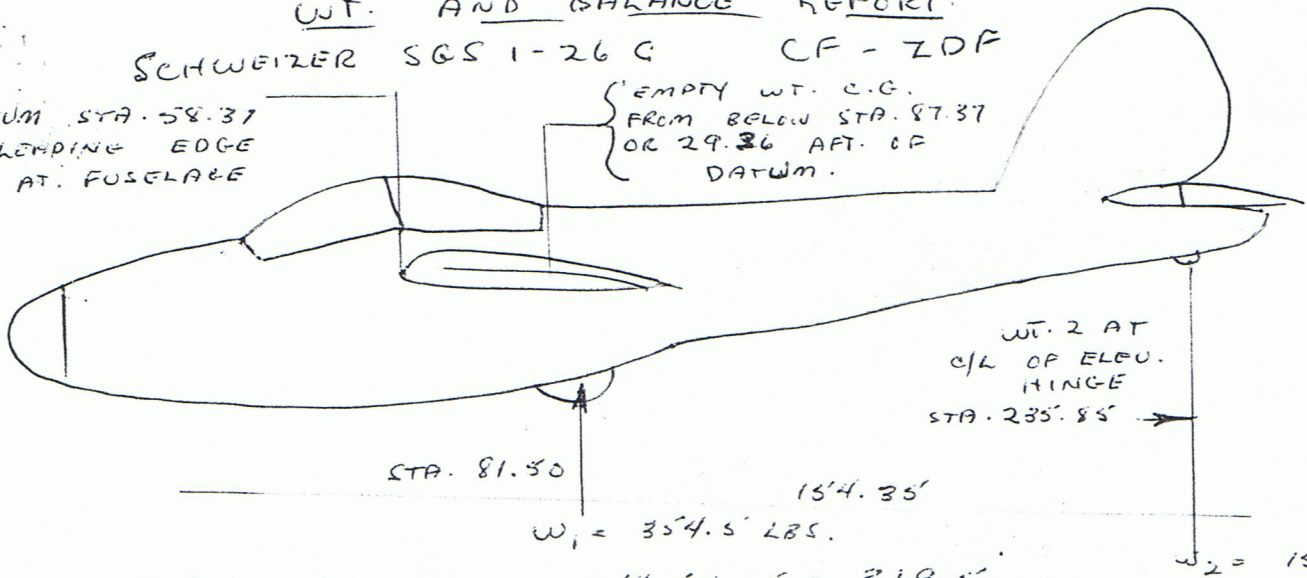


WT. AND BALANCE REPORT.

SCHWEIZER SGS 1-26 C CF - ZDF

DATUM STA. 58.37
LEADING EDGE
AT FUSELAGE

EMPTY WT. C.G.
FROM BELOW STA. 87.37
OR 29.36 AFT. OF
DATUM.



TOTAL EMPTY WT. = 354.5 + 15 = 369.5 LBS

C.G. EMPTY.

$$C.G. \text{ EMPTY} = 81.50 + \left(\frac{W_2 (154.35)}{W_1 + W_2} \right) = \frac{2315.25}{369.5} + 81.50$$

C.G. EMPTY STA. = 87.73 (INS.)

MINIMUM WT. PILOT.

$$\begin{aligned} \text{MIN. WT. PILOT} &= \frac{(C.G. \text{ EMPTY} - 78.37)(\text{EMPTY WT.})}{24.37} \\ &= \frac{(9.36)(369.5)}{24.37} = \boxed{141. \text{ LBS.}} \end{aligned}$$

MAX. WT. PILOT.

$$\begin{aligned} \text{MAX. WT. PILOT} &= \frac{(C.G. \text{ EMPTY} - 73.97)(\text{EMPTY WT.})}{19.97} \\ &= \frac{(13.76)(369.5)}{19.97} = 249. \text{ LBS.} \end{aligned}$$

Most forward C.G. allows for 249 lb. pilot which exceeds gross wt. of aircraft. Therefore :-

$$\begin{aligned} \text{MAX. WT. PILOT} &= \text{GROSS WT.} - \text{EMPTY WT.} \\ &= 600 - 369.5 \\ &= \boxed{230.5 \text{ LBS.}} \end{aligned}$$

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WBM 112