

Schweizer Aircraft Corp.
Elmira, NY 14902
Form I-4606, 4/73

Model No: SGS 2-33A
Ser. No: 567
Reg. No: N-3616Q

CALCULATED WEIGHT AND BALANCE
(Basic Aircraft)

	<u>WEIGHT</u>	<u>STATION</u>	<u>MOMENT</u>
Empty Weight (from Wt. & Bal. dated <u>4-7-81</u>)	637.0	94.91	60,458
Optional Equipment item removed:			
a. Radio (Mentor TR-12)	- 2.0	20.00	- 40
	635.0	95.15	60,418

MAX. WT., AFT PILOT, WITH 220# FWD PILOT:

$$\text{Max. Gross Wt.} = (\text{Empty wt.} + 220) = 1040 \quad \left(\frac{635}{11.40} + 220 \right) = \underline{185} \text{ lbs.}$$

MIN. WT., AFT PILOT WITH 100# FWD PILOT:

$$\frac{\text{Empty Wt.} \times (\text{C.G. Empty} - 86.10) - 372}{11.40} = \frac{635 \times 9.05 - 372}{11.40} = \underline{133} \text{ lbs.}$$

MIN. WT. FWD PILOT - SOLO:

$$\frac{\text{Empty Wt.} \times (\text{C.G. Empty} - 86.10)}{42.30} = \frac{635 \times 9.05}{42.30} = \underline{136} \text{ lbs.}$$

Calculated by M. Courtright 10-23-81
Date
Checked by (Computer) ve 10-23-81
Date

Schweizer Aircraft Corp.
Elmira, N.Y. 14902
Form I-4606 RB, 4/74

Model No.: SGS 2-33A
Ser. No.: 567
Reg. No.: N-3616Q

Calculated Weight and Balance
(Removable Ballast)

	Calculated	Weight	Station	Moment
Empty Weight (from/wt. & bal. dated <u>10-23-81</u>)		635.0	95.15	60,421
Optional Equipment Added:				
a. P/N 33011D, Removable Ballast Installation:		+ 26.0	14.75	+ 383
		<u>661.0</u>	91.99	<u>60,804</u>

$$\frac{\text{Moment}}{\text{Empty Wt.}} = \text{Empty C.G.} = \frac{60,804}{661} = 91.99$$

MAX. WT., AFT PILOT, WITH 220# FWD PILOT:

$$\text{Max. Gross Wt.} - (\text{Empty wt.} + 220) = 1040 - (661 + 220) = \underline{159} \text{ lbs.}$$

MIN. WT., ^{AFT} PILOT WITH 100# FWD PILOT:

$$\frac{\text{Empty Wt.} \times (\text{C.G. Empty} - 86.10)}{11.40} - 372 = \frac{661 \times 5.89}{11.40} - 372 = \underline{0} \text{ lbs}$$

MIN. WT., FWD PILOT - SOLO:

$$\frac{\text{Empty Wt.} \times (\text{C.G. Empty} - 86.10)}{42.30} = \frac{661 \times 5.89}{42.30} = \underline{93} \text{ lbs.}$$

NOTE: The above minimum and maximum pilot weights are
VALID ONLY when the removable ballast weight is in place.

Calculated by M. Courtright 10-24-81
Date

Checked by (Computer) me 10-24-81
Date

