

# Honolulu Soaring

## SGS 2-33 --- Weight and Balance

### Weight and Balance Data

For all SGS 2-33's:		Varies with each SGS 2-33:
Gross Weight:	1,040 lbs.	Empty c.g.: _____
Forward Pilot Arm:	43.8"	Empty moment: _____
Aft Pilot Arm:	74.7"	Empty weight: _____
Trim Ballast Arm:	14.7"	
Ballast Bar	20 lbs.	
C.G. Range:	72.8 – 86.1"	

### Weight and Balance Calculations

**Moment = Weight X Arm**

**C.G. Location = Total Moments ÷ Total Weight**

### Example of a Weight and Balance Calculation

	<u>Weight</u>	<u>Arm</u>	<u>Moment</u>
Plane	612	96.16	58,850.
Forward Pilot	150	43.8	6,570
Aft Pilot	<u>170</u>	74.7	<u>12,699</u>
Total Weight.....	932	Total Moments.....	78,119
C.G. Location	<u>83.81</u>		

Is the total weight less than the gross weight? Yes

Is the c.g. within the c.g. range? Yes