

WEIGHT AND BALANCE CALCULATIONS

SGS 2-33 or 2-33A

Example Sailplane Serial Number 369
(See Form I 4427 on next page)

My Sailplane - Serial Number _____
(Refer to Form I-4427 for your aircraft)

ITEM	WEIGHT	ARM	MOMENT	WEIGHT	ARM	MOMENT
Sailplane empty weight & empty C.G.	612	96.12	58,825	_____	_____	_____
Front Pilot Weight	170	43.80	7,446	_____	43.80	_____
Rear Pilot Weight	150	74.70	11,205	_____	74.70	_____
Ballast, if used	0	14.75	- 0 -	_____	14.75	_____
Total Moment			<u>77,476</u>			
Total Weight	<u>932</u>					
<u>Total Moment</u> / <u>Total Weight</u> =	<u>77,476</u> / <u>932</u> =	<u>83.13</u>	Actual flying CG	<u>Total Moment</u> / <u>Total Weight</u> =		Actual flying CG

This CG is between the limits of Sta. 78.20 and 86.10, and gross weight is less than 1,040 lbs., so this sailplane has a proper flight weight and balance loading.

1. Is this between the CG limits?
2. Is total weight less than 1,040 lbs.?

