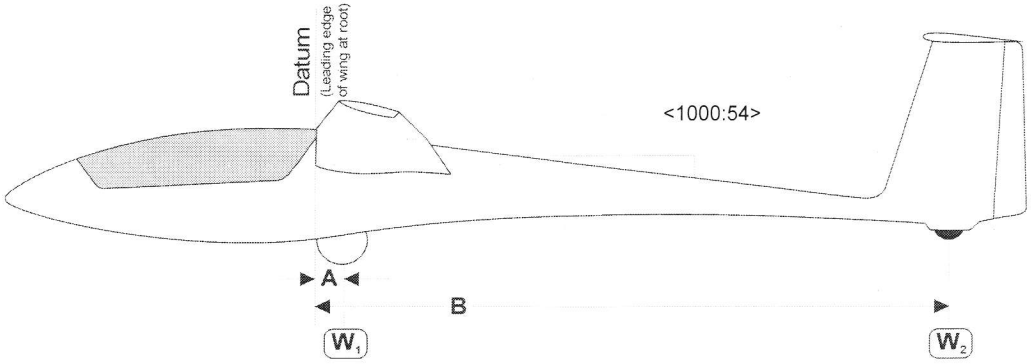
STATEMENT OF WEIGHT AND BALANCE



Aircraft Information

Manufacturer /Type: **Grob 103C Twin III** N **41KP** S/N **34176**

Date Recorded: 9/29/2010 By: Brett R. Mayes
A&P 569452428

Installed Equipment:

See List dated 2/20/99

Limits:

Forward CG Limit:	**10.63 in.**
Aft CG Limit:	**18.90 in.**
Max Gross Weight	**1323 Lbs.**

Weights / Wing Loading:

Wing Area	**191.6 Sq. Ft**
Empty Weight	**969.3 Lbs.**
As Flown Wt.	**1323.3 Lbs.**
Empty	**5.06 Lbs/Sq. Ft.**
As Flown	**6.91 Lbs/Sq. Ft.**

Measured Data:

A = **21.25 in.** datum to main gear
B = **192.00 in.** datum to tail wheel
W_1 (Empty) = **927.0 Lbs.** W_1 (As Flown) =
W_2 (Empty) = **42.3 Lbs.** W_2 (As Flown) =

Center of Gravity:

$$CG = \frac{(W_1*A)+(W_2*B)}{(W_1+W_2)}$$

CG (Empty) = **28.69 in.**
CG (As Flown) = **16.04 in.** = **65.4%** of allowable aft limit

Reference Data:

	Weight	Arm	Moment
Glider - Empty	969.3 Lbs.	28.69 in.	27,811 in./Lbs.
As Flown	1323.3 Lbs.	16.04 in.	21,223 in./Lbs.
Front pilot	154.0 Lbs.	-44.57 in.	-6,864 in./Lbs.
Rear Pilot	200.0 Lbs.	1.38 in.	276 in./Lbs.
Baggage		31.89 in.	