

WEIGHING RECORD - TANDEM TWO SEATERS

Glider Type: BGA CofA No: Serial No:

LEADING PARTICULARS EXTRACT

Datum Point :
 Levelling Means :

Fwd CofG Limit (Xfl) : mm aft. Max All Up Weight (Dry) (Wd) : Kg
 Aft CofG Limit (Xal) : mm aft. Max All Up Weight (Wet) (Ww) : Kg
 Front Pilot CofG (Xp1) : mm fwd. Max Weight Non-Lift Parts (Wn) : Kg
 Rear Pilot CofG (Xp2) : mm fwd. Max Baggage Weight (Wb) : Kg
 Baggage CofG (Xb) : mm aft.

EMPTY WEIGHT AND C OF G POSITION

Weight on Front Support (Wf) = kg
 Weight on Rear Support (Wr) = kg
 Weight of Port Wing (Wp) = kg
 Weight of Starboard Wing (Ws) = kg

Empty Glider Weight (We) = Wf + Wr = kg
 Weight Non-Lifting Parts (Wnl) = We - Wp - Ws = kg

Displacement of Front Support (Xfs) = mm fwd (-ve if aft of datum)
 Displacement of Rear Support (Xrs) = mm aft

Empty Glider CofG Displacement (Xe) = $\frac{(Wf \times Xfs) - (Wr \times Xrs)}{We}$
 =
 = mm aft

MINIMUM AND MAXIMUM COCKPIT LOADS

Minimum Front Cockpit Load

CofG Based: $\frac{We(Xe - Xa1)}{(Xp1 + Xa1)} + \frac{Wb(Xb - Xa1)}{(Xp1 + Xa1)} - \frac{Pr(Xp2 + Xa1)}{(Xp1 + Xa1)}$
 = kg (lb)

- a. With rear cockpit empty = kg
- b. With max rear cockpit load of kg = kg

The placard figure is the GREATEST value of a. or b.

Maximum Front Cockpit Load (Dry)

- a. CofG Based: $\frac{W_e(X_e - X_{f1})}{(X_{p1} + X_{f1})} + \frac{W_b(X_b - X_{f1})}{(X_{p1} + X_{f1})} - \frac{Pr(X_{p2} + X_{f1})}{(X_{p1} + X_{f1})}$
 = kg
- b. Max AUW Based: $W_d - W_e - W_b - Pr$
 = kg
- c. Max Non-Lift Based: $W_n - W_{hl} - W_b - Pr$
 = kg
- d. Flight Manual Limitation: Front Cockpit = kg
 Rear Cockpit = kg

The Max (Dry) Front Cockpit Weight is the LEAST value of a. to d.

= kg

Maximum Total Loading - Wet

Total weight of pilot(s) plus water must not exceed:

$W_w - W_e - W_b$ = kg

Loading Table

Rear Cockpit	Front Cockpit	Max Total
kg (lb)	Max (Dry)	Load (Wet)
kg (lb)	kg (lb)	kg (lb)
60 (132)		
70 (154)		Pilot(s) plus water
80 (176)		not to exceed
90 (198)	 kg
100 (220)		
110 (242)		

NOTES:

Date: Name: Signature: BGA Insp Auth: