

Aircraft Weight and Balance Worksheet

A/C make: Stinson Reliant Model SR5E

Date: Jan. 11, 2003

Wt./ Balance Performed By: Steve D. Adams A&P #2354185

Empty weight CG calculation

Item	Gross Wt.	tare	Net Wt.	Arm	-moment	+ moment
LMG	1299	1	1298	2.94		1316.12
RMG	1271	1	1270	2.94		3733.8
Aux.	217	1	216	236.5		51084
Fuel*			274.5	30.75	8440.875	
Totals	2788	3	2509.5	19.00		47693.045

Empty Wt: 2509.5 Lbs. EW CG= 19.00" aft of datum

% of MAC 23.75

Datum is Leading edge Design gross wt.* 3325 lbs.

*Note 1: Aircraft weighed with Full Fuel (50 gal.)

Note 2: Unuseable fuel 4.25 gallons (25.5 lbs.)

Note 3 Leading edge to Main spar is 11.5" aft of Datum

Note 4: wing chord measures: 80"

Note 4: METO 20 gallons/2 (60 lbs)

Note 5: Max gross wt. 3325

Note 6: Max Baggage is 65 lbs

Note 7: min oil 2.5 gal at sta. -21.0

Max forward CG calculation

Item	Net Wt.	Arm	-moment	+ moment
EW/CG	2509.5	19.00		47693.045
Front pilot/pax	340	16		5440
Rear Pax (2)	0			
Fuel/METO/2	60	30.75		1845
Baggage	0	83.5		
Totals	2909.5	18.98		55248.045

% of MAC 23.72

Max Aft CG calculation

Item	Net Wt.	Arm	-moment	+ moment
EW/CG	2509.5	19.00		47693.045
Front pilot/pax	170	16		2720
Rear Pax (2)	340	55		18700
Oil min.*	18.75	-21.0	393.75	
Fuel (37 gals)	221.75	30.75		6818.812
Baggage	65.0	83.5		5427.5
Totals	3325*	24.35		80965.607

% of MAC 30.4

Figures based on Weight and Balance control Info; Aero Publishers Publication Cir. 1963

CautionNote:

Gross weight and CG can be exceeded in max aft configuration