

956 RW

Weight and Balance		Fuel	
BEW	1167	Usable	30 Gal
CG	73.4	Fuel Burn	7 GPH
Moment	85656		
Max GW	1670	100/130	Green
Useful Load	503	100LL	Blue

	Weight	Arm	Moment	Fuel Calculations
BEW	1167	73.4	85656	Max fuel = 30 Gal
Fuel	104	75.4	7872	Fuel Burned
Pilot	200	82.3	16460	1.8 Hrs X 7 Gal = 12.6 Gal
Pass	180	82.3	14814	30 - 12.6 = 17.4 Gal
	1651.4	75.6	124802	17.4 * 6 = 104.4 Lbs

Limits			
Design Maneuvering	V_A	103 Kts (1670)	Maneuver Entry 100 Kts
Never Exceed	V_{NE}	138 Kts	Stall - 0° Flaps 53 Kts
Max Structural	V_{NO}	110 Kts	Stall - Full Flaps 49 Kts
Max Flap Extension	V_{FE}	89 Kts	Max Dem Xwind 15Kts
RPM Static		2200 - 2350	

Performance			
Best Glide			70 Kts
Best Angle		V_x	61 Kts
Best Rate		V_y	70 Kts
Final Approach - Full Flaps			67 Kts
Pattern			70 - 80 Kts
Normal Takeoff	Flaps = 0°	-53 Kts	⇒ 61 Kts/70 Kts
Short Field	Flaps = 21°	-53 Kts	⇒ 61 Kts/70 Kts
Soft Field	Flaps = 21°	-Lift Off ASAP	⇒ 61 Kts/70 Kts