

N 787NV



Performance

Cruise Performance at 8,000':

KNOTS	RPM	MAP	Fuel Flow	% Power
171	2450	23"	10.5 GPH	75%
163	2350	22"	9.5 GPH	65%
154	2250	21"	8.5 GPH	55%

No Wind Range at 8,000':

- * All range calculations include 3 gal. for engine start, taxi, takeoff and climb.
- * Engine is leaned for best economy.

One hour (10.5 gal.) Reserve:

75% Power	500 sm
65% Power	590 sm
55% Power	680 sm

No Reserve:

75% Power	700 sm
65% Power	790 sm
55% Power	880 sm



WEIGHT AND BALANCE DATA

Make: Moynihan, Richard Model: RV-7A

Serial: 72097

Registration: N787NV

Maximum Weights:

Aerobatic Category 1600 Lbs

Utility Category 1700 Lbs

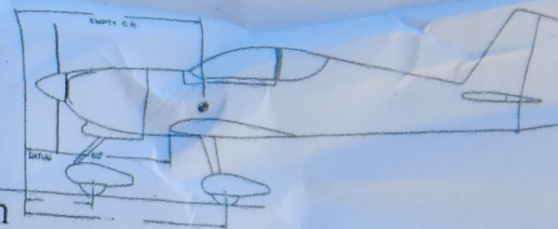
Normal Category 1900 Lbs

Datum = 70 inches forward of wing leading edge (L.E.)

Design C.G. Range = 15% to 29% of wing chord
8.7" to 16.82" from L.E.
78.7" to 86.82" aft of Datum

Wing L.E. = 70 inches aft of datum
Main wheel right = 93.96" aft of datum
Main wheel left = 93.96" aft of datum
Nose wheel = 39.11" aft of datum

Fuel 80" aft of datum
Pilot and Passenger 97.48" aft of datum
Baggage 126.78" aft of datum
Oil 43.75" aft of datum



Aircraft weighed empty in level flight attitude.
(no fuel)

Sample:

	Weight	Arm	Moment
Aircraft	<u>1160</u>	<u>81.49</u>	<u>93.361</u>
Fuel (6lbs/gal)	<u>252</u>	<u>80</u>	<u>20.160</u>
Pilot	<u>170</u>	<u>97.48</u>	<u>16.572</u>
Passenger	<u>170</u>	<u>97.48</u>	<u>16.572</u>
Baggage	<u>100</u>	<u>126.78</u>	<u>12678</u>
Total	<u>1852</u>		<u>159343</u>

CG = Total Moment / Total Weight

CG = 86.03 in. aft of datum

CG Range = 78.7 to 86.82 inches aft of datum

Empty CG = 80.48

Empty Weight = 1160 lbs.

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*All CG ranges for possible flight conditions are within design limits

WEIGHT AND BALANCE DATA

Weight	Left Main	Rt. Main	Nose	Total
	438	437	285	1160
Component	Weight	Arm	=	Moment
L main	437	93.96		41154
R main	438	93.96		41061
Nose	285	39.11		11146
sub total	1160			93361

CG Range 78.7 to 86.82 in aft of datum
Empty C.G 80.48

Max. Gross Weight			
Item	Weight	Arm	Moment
Aircraft	1,160		93361
Fuel (6 lbs/gal)	252	80	20160
Pilot	170	97.48	16571.6
Passenger	170	97.48	16571.6
Baggage	100	126.78	12678
Total	1,852		159,343
CG	86.03		
Min Fuel(5g) CG	85.53		

Pilot, Pax, No Baggage			
Item	Weight	Arm	Moment
Aircraft	1,160		93361.52*
Fuel (6 lbs/gal)	252	80	20160
Pilot	170	97.48	16571.6
Passenger	170	97.48	16571.6
Baggage	0		0
Total	1,752		146,664
CG	83.71		
Min Fuel(5g) CG	84.25		