

# RV-9A WEIGHT AND BALANCE DATA QUICK REFERENCE

*NOTE: this quick reference chart is NOT a substitute for the complete Weight and Balance information contained in Section 14 of the Builder's Manual.*

*CAUTION: the Gross Weight is established by the builder, who is considered the manufacturer.*

DATUM.....70 inches forward of the wing leading edge

LIMITS

*Design C.G. Range*..... 15%-28% of wing chord OR between 77.95- 84.84 inches aft of datum

*Utility Category Aft CG Limit*.....24% of chord OR 82.72" aft of datum

*Recommended Gross Weight* ..... 1750 lbs

*Maximum Utility Category Weight* ..... 1600 lbs

ARMS

*Fuel* ..... 76.75" aft of datum

*Pilot/Passenger*..... 92.70" aft of datum

*Baggage* ..... 122.00" aft of datum

DETERMINING EMPTY CG

*Level the aircraft longitudinally and laterally using the longerons in the cabin area as the level reference. Weigh the airplane with the canopy closed, full oil and the fuel tanks empty. Enter the weights and distances from the datum (arm) in the chart below. Multiply weight by arm to obtain moment. Divide the total moment by the weight to determine the empty CG.*

|                               | Weight | Arm | Moment |
|-------------------------------|--------|-----|--------|
| Right Wheel                   |        |     |        |
| Left Wheel                    |        |     |        |
| Nose/Tail Wheel               |        |     |        |
| Total                         |        |     |        |
| CG (moment divided by weight) |        |     |        |

