RV-4 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.

CAUTION: The Aerobatic Gross Weight is set by structural limits. <u>AEROBATIC FLIGHT SHOULD NOT BE CONDUCTED</u> <u>AT WEIGHTS GREATER THAN 1375 LBS nor AT CG LOCATIONS OUTSIDE THE AEROBATIC CG LIMIT</u>

<u>DATUM</u>.....60 inches forward of the wing leading edge

LIMITS

Design C.G. Range......15%-30% of wing chord <u>OR</u> between 68.7-77.4 inches aft of datum.

Recommended Gross Weight......1500 lbs
Aerobatic Gross Weight......1375 lbs

Aerobatic CG Limit27.5% of chord OR 75.9" aft of datum

ARMS

Fuel	70.00" aft of datum
Pilot	82.50" aft of datum
Passenger	107.00" aft of datum
Optional Fwd Baggage	56.50" aft of datum
Rear Baggage	130.00" 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)			

