

Weight & Balance, R44

Basic Empty Weight, Center of Gravity.

Basic Empty Weight 1576.4 lb Longitudinal CG 106.5 in Longitudinal Moment 167936 in-lb

Loading

			Location (in)	Moment (in-lb)
<u>Occupants</u>				
Right Front Seat	<u>178</u>	lb	<u>49.5</u>	<u>8811</u>
Left Front Seat	<u>170</u>	lb	<u>49.5</u>	<u>8415</u>
Right Rear Seat	<u>0</u>	lb	<u>79.5</u>	<u>0</u>
Left Rear Seat	<u>0</u>	lb	<u>79.5</u>	<u>0</u>

Cargo

(Sprayer w/ 50gals
water)

Right Front Seat	<u>0</u>	lb	<u>44</u>	<u>0</u>
Left Front Seat	<u>0</u>	lb	<u>44</u>	<u>0</u>
Right Rear Seat	<u>283.5</u>	lb	<u>79.5</u>	<u>22538.25</u>
Left Rear Seat	<u>283.5</u>	lb	<u>79.5</u>	<u>22538.25</u>

Fuel at Takeoff

(Full w/o bladders

Main Fuel	<u>30.6</u>	gallons @ 6 lb/gallon =	<u>184</u> lbs	<u>106</u>	<u>19461.6</u>
Auxiliary Fuel	<u>18.3</u>	gallons @ 6 lb/gallon =	<u>110</u> lbs	<u>102</u>	<u>11199.6</u>

Fuel at Time of Accident

(Half w/o bladders

Main Fuel	<u>17</u>	gallons @ 6 lb/gallon =	<u>102</u> lbs	<u>106</u>	<u>10812</u>
Auxiliary Fuel	<u>8</u>	gallons @ 6 lb/gallon =	<u>48</u> lbs	<u>102</u>	<u>4896</u>

Total Weight, CG, Moment: Takeoff

Total Weight 2784.8 lb Longitudinal CG 93.69 in Longitudinal Moment 260899.7 in-lb

Total Weight, CG, Moment: Time of Accident

Total Weight 2641.4 lb Longitudinal CG 93.11 in Longitudinal Moment 245946.5 in-lb

Maximum gross weight for the Raven II is 2500 lbs.
Spray equipment 150lb - Location is an estimate.
50 gallons of water @ 8.34 lbs per gallon = 417lbs