

PHASE II AMATEUR BUILT OPERATING LIMITATIONS

Regis. No. N134JB Aircraft Builder Jim Bengston Model RV-6  
S/N 20999 Engine Make Lycoming Model 0-320 Date 8/13/94

This aircraft has been certificated under the provisions of FAR 21.191, as an amateur-built experimental aircraft. The following operating limitations apply:

1. No person may operate this aircraft for other than the purpose for which the special airworthiness certificate was issued. Additionally, the aircraft shall be operated in accordance with applicable Air Traffic and general operating rules of FAR 91 and all additional limitations herein prescribed under the provisions of FAR 91.319.
2. The pilot-in-command of this aircraft must hold an appropriate category/class rating.
3. Unless appropriately equipped for night and/or instrument flight in accordance with FAR 91.205, this aircraft must be operated day VFR only.
4. This aircraft shall contain the placards, marking, etc. required by FAR 91.9.
5. Only those acrobatics/maneuvers which have been satisfactorily accomplished and recorded in the aircraft records during the flight test period are permitted.
6. The cognizant FAA Flight Standards Office must be notified and their response received in writing, prior to flying this aircraft after incorporating a major change as defined by FAR 21.93.
7. This aircraft shall not be operated for glider towing or parachute jumping operations.
8. No person shall operate this aircraft unless within the preceding 12 calendar months it has had a condition inspection performed in accordance with Appendix D of Part 43 and found to be in a condition for safe operation. Additionally, the inspection shall be recorded in accordance with limitation 10 listed below.
9. Only certificated repairman Jim Bengston, FAA certificated mechanics holding an airframe and powerplant rating and appropriately rated repair stations may perform condition inspections in accordance with Appendix D of Part 43.
10. Condition inspections shall be recorded in the aircraft maintenance records showing the following or similarly worded statement: "I certify that this aircraft has been inspected on \_\_\_\_\_ in accordance with the scope and detail of Appendix D of Part 43 and found to be in a condition for safe operation." The entry will include the aircraft total time in service, name, signature and certificate type and number of the person performing the inspection.
11. Other limitations: None

  
TERRY E. EDWARDS, DAR-1-FS-NM

# WEIGHT & BALANCE DATA FOR:

MAKE Benetton MODEL: RL-6 SERIAL: 20999 REGISTRATION N134JB

Datum= 60 inches forward of wing leading edge. (L.E.)  
Design C.G. Range = 15% to 29% of wing cord, or 8.7" to 16.8 inches from L.E.,  
or 68.7 to 76.8 inches aft of Datum.

Wing L.E. = 60 inches aft of datum.

Main wheel, right = 59.5 in. aft of datum.

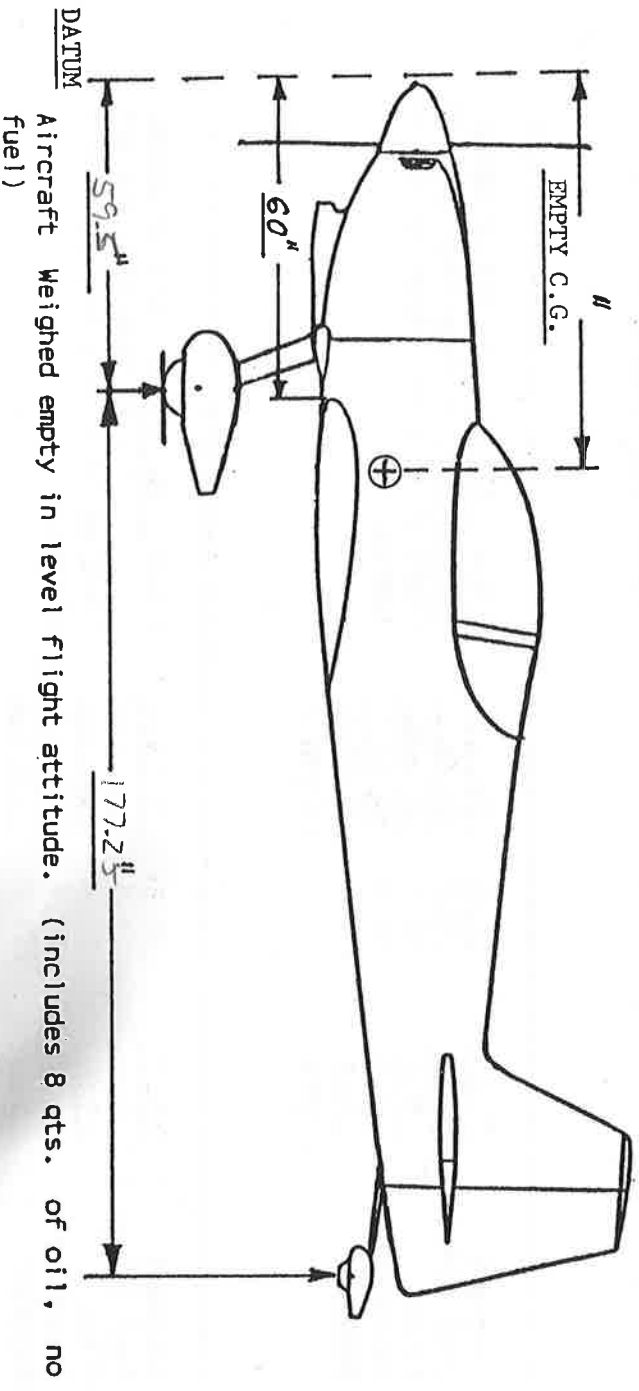
Main wheel, left = 59.25 in. aft of datum.

Tail wheel,          in. aft of datum.

Fuel = 70 in. aft of datum.

Pilot & Passenger = 87.4 in. aft of datum.

Baggage = 117 in. aft of datum.



Aircraft Weighed empty in level flight attitude. (includes 8 qts. of oil, no fuel)

	Weight	Arm	Moment	
Right wheel -	<u>454</u>	<u>59.5</u> in.	<u>27,013</u>	in. lbs.
Left wheel -	<u>478</u>	<u>59.25</u>	<u>28,560</u>	
Tail wheel -	<u>63</u>	<u>236.75</u>	<u>14,915</u>	C.G. = <u>70.84</u> in. aft of datum.
	<u>995</u>		<u>70,488</u>	

	Wt.	Arm	Moment	
Aircraft	<u>995</u>	<u>70.84</u>	<u>70,488</u>	
Fuel (38 Gal.)	<u>228</u>	<u>70.0</u>	<u>15,960</u>	Gross C.G. = <u>76.4</u> in. aft of datum.
Pilot	<u>208</u>	<u>87.4</u>	<u>18,179</u>	in. is less than the limit of 76.8 in., thus is within the limit for aft C.G.
Passenger	<u>208</u>	<u>87.4</u>	<u>18,179</u>	
Baggage	<u>61</u>	<u>117.0</u>	<u>7,137</u>	
	<u>1700</u>		<u>129,941</u>	

MOST AFT C.G. for standard loading. (Gross wt. minus fuel burn to minimum fuel)

	Weight	Arm	Moment	
Aircraft	<u>995</u>	<u>70.84</u>	<u>70,488</u>	
Fuel (5 gal.)	<u>30</u>	<u>70.0</u>	<u>2,100</u>	C.G. = <u>77.3</u> in. aft of datum.
Pilot	<u>208</u>	<u>87.4</u>	<u>18,179</u>	in. is less than the limit of 76.8 in., thus is within the limit for aft C.G.
Passenger	<u>208</u>	<u>87.4</u>	<u>18,179</u>	
Baggage	<u>61</u>	<u>117.0</u>	<u>7,137</u>	
	<u>1501</u>		<u>116,031</u>	

MOST FORWARD C.G. (STD PILOT WT.)

Aircraft	<u>995</u>	<u>70.84</u>	<u>70,486</u>
Fuel (38 Gal.)	<u>228</u>	<u>70.0</u>	<u>15,960</u>
Pilot	<u>190</u>	<u>87.4</u>	<u>16,606</u>
			<u>103,052</u>

C.G. = 72.9 in. aft of datum.  
in. is greater than the  
 forward limit of 68.7, thus is  
 within the forward limit.

MOST FORWARD C.G. (MIN. PILOT WT.)

Aircraft	<u>995</u>	<u>70.84</u>	<u>70,486</u>
Fuel (38 Gal.)	<u>30</u>	<u>70.0</u>	<u>2,100</u>
Pilot	<u>190</u>	<u>87.4</u>	<u>16,606</u>
			<u>89,192</u>

C.G. = 73.4 in. aft of datum.  
in. is greater than the  
 forward limit of 68.7, thus is  
 within the forward limit.

Aircraft	<u>995</u>	<u>70.84</u>	<u>70,486</u>
Fuel (38 Gal.)	<u>228</u>	<u>70.0</u>	<u>15,960</u>
Pilot	<u>190</u>	<u>87.4</u>	<u>16,606</u>
Passenger	<u>120</u>	<u>87.4</u>	<u>10,488</u>
Baggage	<u>60</u>	<u>117.0</u>	<u>7,020</u>
			<u>129,560</u>

C.G. = 75.7 in. aft of datum.  
in. is less than the aft  
 limit of 76.8 in., thus is within  
 limits.

Aircraft	<u>995</u>	<u>70.84</u>	<u>70,486</u>
Fuel (10 gal)	<u>60</u>	<u>70.0</u>	<u>4,200</u>
Pilot	<u>190</u>	<u>87.4</u>	<u>16,606</u>
Passenger	<u>120</u>	<u>87.4</u>	<u>10,488</u>
Baggage	<u>60</u>	<u>117.0</u>	<u>7,020</u>
			<u>108,800</u>

C.G. = 76.35 in. aft of datum.  
in. is less than the aft  
 limit of 76.8 in., thus is within  
 limits.

Aircraft	<u>      </u>	<u>70.0</u>	<u>      </u>
Fuel (gal)	<u>      </u>	<u>87.4</u>	<u>      </u>
Pilot	<u>      </u>	<u>87.4</u>	<u>      </u>
Passenger	<u>      </u>	<u>87.4</u>	<u>      </u>
Baggage	<u>      </u>	<u>117.0</u>	<u>      </u>

C.G. =        in. aft of datum.  
in. is less than the aft  
 limit of 76.8 in., thus is within  
 limits.

N134JB RV-6

EQUIPMENT LIST

<u>Part</u>	<u>Manufacturer</u>	<u>Serial #</u>
Spinner	Van's Aircraft	N.A.
Wheel Pants	Van's Aircraft	N.A.
Intercom	Flightcom	115X
GPS	Garmin GPS 100	92605100
Comm Radio	King KT97A	11019
Transponder	King KT76A	91409
Encoder	ACK A-30	41437
ELT	ACK E-01	005483