C90B WEIGHT & BALANCE/PERFORMANCE

<table>
<thead>
<tr>
<th>( V_{MC} )</th>
<th>( V_{SO} )</th>
<th>( V_{1} / V_{R} / V_{2} )</th>
<th>( V_{Y} )</th>
<th>( V_{YSE} )</th>
<th>( V_{A} )</th>
<th>( V_{FE} )</th>
<th>( V_{MO} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>78</td>
<td>Computed</td>
<td>112</td>
<td>108</td>
<td>169</td>
<td>Aprch: 184</td>
<td>Full: 140</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>( V_{REF} )</th>
<th>( V_{LO} )</th>
<th>( V_{Glide} )</th>
<th>Emer. Descent</th>
<th>Sustained Ice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flaps up</td>
<td>Flaps 100%</td>
<td>Up</td>
<td>Down</td>
<td>125</td>
</tr>
<tr>
<td>115</td>
<td>101</td>
<td>163</td>
<td>182</td>
<td></td>
</tr>
</tbody>
</table>

WEIGHT AND BALANCE

<table>
<thead>
<tr>
<th>ITEM</th>
<th>WEIGHT</th>
<th>MOMENT / 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Empty Weight (N370U)</td>
<td>6845.27</td>
<td>10332.93</td>
</tr>
<tr>
<td>Pilot and Co-Pilot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passengers—FWD Club Seats</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passengers—AFT Club Seats</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAX—Aisle Facing Storage Seat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passenger—Lavatory Seat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rear Baggage Compartment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FWD Cabinet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFT Cabinet</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Equals Zero Fuel Weight

* Determine Max T/off weight to achieve Positive Single Engine Climb @ Lift-off = _________ Lbs.

Fuel [384 gallons Max. Usable]

Equals Ramp Weight (10,160 lbs)

(Start / Taxi Fuel Burn-off) -60.0 -93

Equals Take-off Weight

(Fuel Consumed in Flight) -

Total Fuel Remaining +

Zero Fuel Weight +

Equals Landing Weight

Maximum Take-off Weight: 10,100 lbs. ➔ Forward C.G. Limit: 145.0 Aft C.G. Limit: 160.0

Maximum Landing Weight: 9,600 lbs.

*Verify that both Take off and Landing Weights and Moments are Within Limits (Use POH)

Surface Weather

Wind
Visibility
Sky Condition
Temperature
Altimeter

Compute

Pressure Alt
Density Alt
X-Wind
Head Wind

Additional Weather

6000’ 
9000’ 
12000’ 
18000’ 
24000’ 

Interpolate for Cruise Alt.

ISA conversion @ Cruise

Surface Weather @ Destination

Wind
Visibility
Sky Condition
Temperature
Altimeter

Fuel = 6.7 lbs. / Gal.

Temperature Conversion:

\[ C = \left( \frac{F - 32}{9/5} \right) \]

\[ F = \left( \frac{1.8 \times C}{9/5} \right) + 32 \]

PERFORMANCE

Accelerated Stop Distance
Accelerated Go Distance
Takeoff Distance
\( V_{1} / V_{2} \) Speed
M.E. Climb Gradient/\( V_{2} \)
Rate of Climb Two Engines
S.E. Climb Gradient
Rate of Climb Single Engine
S.E. Absolute Ceiling

Single engine Service Ceiling
Rate of Climb @ TPA
To Climb Time: Fuel: Dist:

Cruise Power (Select POWER or RANGE)
Torque:
Fuel/Lbs/Hr: TAS:

One Engine Inoperative Max. Cruise Power
Torque:
Fuel/Lbs/Hr: TAS:
To Descend Time: Fuel: Dist:
Landing Distance