N264PC Performance Calculations

Airport elevation: 6691 ft

Winds calm

Pressure altitude: 6201 ft

Density altitude: 7128 ft

Temperature 10°C, Dew Point -16°C

Altimeter 30.41" Hg

POH - Pilot's Operating Handbook

<u>Takeoff Distance – Flaps Up</u>

Calculated per POH:

Takeoff distance with 0 ft obstacle: 2200 ft
Takeoff distance with 50 ft obstacle: 4000 ft

Adjustment after referencing STC SA02722CH POH supplement (increase by 11%)

Takeoff distance with 0 ft obstacle: 2442 ft
 Takeoff distance with 50 ft obstacle: 4440 ft

Rate of Climb

Calculated per POH:

• 780 ft/min

Required corrections per POH (decrease rate of climb by 75 ft/min):

• 705 ft/min

Adjustment after referencing STC SA02722CH POH supplement (decrease by 5%)

• 670 ft/min

Time and Distance Traveled

Distance from end of runway to accident site: 0.4 miles = 2112 ft

Pilot's reported airspeed: 80 knots = 8101 ft/min

Time calculated to tree: 15.6 seconds Calculated gained altitude: 174 ft

Tree: 6716 ft mean sea level (msl) + 40 ft above ground = 6756 ft msl Calculated altitude of airplane: 6691 msl + 174 ft gained = 6865 ft msl

Margin of error: 109 ft