

Skyview Aviation

N755RP

ALTITUDE LIMITATIONS AT 4,00 lbs	
Two Engine Service Ceiling	Single Engine Service Ceiling
18,100' (100 fpm)	4,400' (50 fpm)

Engines
Specs: 2 x Lycoming O-360 B1B 4-cyl horizontally opposed, carbureted, air cooled, naturally aspirated, Max 28.5" 2 x 180 hp each = Total 360 hp Oil capacity: 6-8 qts per engine (5 qt min) Fuel burn: 10 gals / hr per side

Propellers
Specs: Two-bladed Hartzell constant speed, full feathering props. Maximum 2700 RPM Maintains constant RPM: With oil pressure through the prop governor (speeder springs / flyweights / pilot valve) Nitrogen unfeathering accumulator: Brings prop out of feather Locking pins: Prevents props from feathering when engine is < 800 RPM. Saves wear and tear on starters.

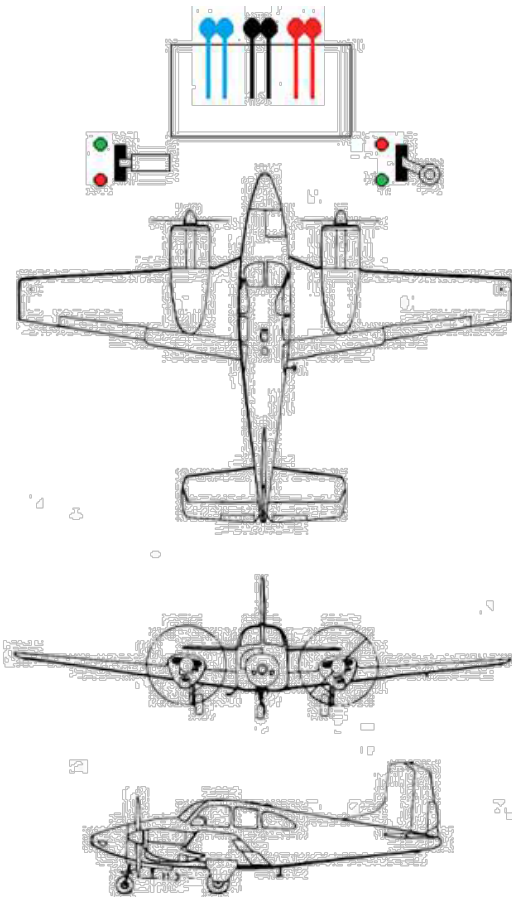
Fuel System
Fuel Capacity: 112 total (106 useable) 4 Tanks: Two MAIN: 25 gal ea (22 usable) Two AUX: 31 gal ea (all usable) 4 fuel pumps: 2 eng drive & 2 elec boost 9 fuel sumps: 4 ea wing and 1 under nose Fuel grade: 100LL (blue dyed & 6 lbs/gal) X-Feed: Emergency Only Fuel Limitations: <ol style="list-style-type: none"> 1. ALWAYS T/O & LAND on MAINS. 2. NEVER T/O with < 10 gals (yellow arc). 3. WAIT 30s before t/o after high-speed taxi.

Heater
Janitrol 35,000 BTU Combustion Heater: Located in the nose compartment. Self-contained system. Draws fuel from left main tank and ignites in the nose. Blower then circulates hot air throughout the cabin.

Electrical
28V system: 2 x 12V battery (series) 2 x 28V alternators – 60 amps Circuit breakers: Protects the system Voltage regulator: Parallels Loads Gear and Flaps System: 100% electrical

Landing Gear
Sungear system: Uses a torque motor to rotate a circular disk, which is connected to push pull rods attached to the landing gear. The push pull rods push the gear and doors out and pulls them in. 'WOW' or Squat switch: On L Main Gear. Prevents the gear from retracting on ground. Other safety systems: Gear warning horn, nose gear indicator and nose gear mirror Gear hand crank: For emergency use (roughly 50 turns counterclockwise) Landing checks: "Down & Green" (verified twice and one in the mirror) Locks: Mechanical Up-Locks, and over-center linkage w/ spring locks gear down

Flaps
Micro switch: Up, Off, or Down position Full flaps: 30° (10 / 20° marks on L Flap) Flaps: Uses electric motor connected to flexible torsion cables which drive flaps down with jackscrews



Oral Exam Prep**Vmc**

A thorough knowledge of Vmc is probably the most important subject on the oral exam.

1. Be able to define Vmc.
2. How does the manufacturer determine Vmc speed?
3. What happens to Vmc if the aircraft is loaded aft of the CG limit?
4. How is Vmc determined?
5. What factors affect Vmc?

Critical Engine

1. Define a critical engine?
2. What determines a critical engine?
3. Why do some airplanes have a critical engine and some don't?
4. Does the Travel Air have a critical engine?

Weight and Balance

Complete your weight & balance!

Be able to use the charts and graphs in the POH.

Explain zero fuel weight.

Aircraft Systems**Know your systems!**

Fuel system

Landing gear

Electrical system

Constant speed; full feathering props

Heater system

Pressure system

Airspeeds

Red line / Vmc

Blue line / Vyse

Vy, Vx, Vyse, Vxse, Vmc, Va, Vlo,

Vle, Vso, Vsse, Vno, Vne

Performance Charts**Know your performance!**

1. Takeoff distance
2. Accelerate-stop distance
3. Accelerate-go distance
4. Takeoff weight to achieve single engine climb
5. Climb performance: 2 eng, 1 eng
6. Cruise chart: TAS, fuel flow, range
7. Single engine service ceiling
8. Landing distance: flaps up, flaps down