

# Systems

**Engine:** Lycoming O-360-A4A (4 Cylinder Air cooled)

- O – Horizontally opposed (Referring to the engine design)
  - Better cooling on all cylinders
  - Better visibility over the nose
- 360 – Displacement of the engine in cubic inches
- 180 horsepower
- Float Type Carburetor
  - Biggest disadvantage is icing tendency

**Propeller:** Fixed Pitch 76inch diameter 60 pitch- Not as efficient as a constant speed propeller

**Electrical System:** 12 volt alternator – 14 volt system

- Engine driven
- Takes the electrical load once engine is on
- Charges the battery
- Battery located in the compartment just aft of the baggage compartment

**Fuel:** 2 wing tanks 25 Gal Each (50 Gallons Total)

- 2 fuel pumps (Engine driven and Aux electric pump)

**Oil:** 4-8 Quarts

**Landing Gear:** Tricycle gear

- Hydraulic actuated brakes
- Steerable nose wheel
- Hydraulic shimmy dampener on the nose wheel
  - Prevents the shaking of the nose wheel at high speeds

**Flaps:** Manually operated slotted flaps - Allows high pressure air to flow through the slot into the upper surface. Decreases drag created and adds additional lift

- 10/25/40 degree settings

**Heating and Ventilating System:** Cabin heat and defrosting gathered by air flowing across the muffler attached to the exhaust system

- Amount of heat regulated by the controls located on the lower right side of instrument panel.

**Instruments:**

- Attitude Indicator/Directional Gyro/Turn and Bank indicator operated by engine driven vacuum pump
- Airspeed Indicator/Altimeter/Vertical speed use pitot-static system
  - Airspeed uses both pitot tube and static port
  - Altimeter and Vertical speed use only static port