

**Before Start**

Preflight.....COMPLETE  
 Passenger Briefing .....COMPLETE  
 Seats and Seat Belts ..... ADJUST  
 ..... AND LOCK  
 Brakes ..... TEST AND SET  
 Avionics Power ..... OFF  
 Circuit Breakers ..... CHECK IN  
 Electrical Equip./Autopilot..... OFF  
 Landing Gear ..... DOWN  
 Carb. Heat .....COLD  
 Transponder .....STAND-BY  
 Cowl Flaps ..... OPEN  
 Fuel Selector ..... BOTH

**Starting Engine (Battery)**

Mixture ..... RICH  
 Propeller ..... HIGH  
 Beacon ..... ON

Propeller Area ..... CLEAR  
 Master Switch..... ON  
 Throttle ..... PUMP (1-2)  
 Throttle ..... OPEN ¼ INCH  
 Ignition Switch ..... START  
 Oil Pressure .....CHECK

**After Start**

Flaps ..... RETRACT  
 Mixture ..... LEAN FOR TAXI  
 Navigation Lights..... ON (Night)  
 Avionics Power ..... ON  
 ATIS/AWOS ..... OBTAIN  
 Clearance..... OBTAIN  
 Brakes .....CHECK

**Taxi Checks**

Instruments .....CHECK

**Runup**

Mixture..... RICH  
 Throttle ..... 1800 RPM  
 Magnetos ..... CHECK (150/50)  
 Carb. Heat .....CHECK  
 Propeller..... CYCLE  
 Suction Gauge .....CHECK  
 Engine Instruments .....CHECK  
 Ammeter .....CHECK  
 Suction.....CHECK  
 Throttle ..... 1000 RPM  
 Mixture..... LEAN FOR TAXI

**Before Takeoff**

Autopilot..... TEST  
 Flight Controls..... FREE  
 Flight Instruments ..... CHECK  
 Avionics..... SET  
 Trim ..... SET  
 Flaps ..... UP  
 Fuel ..... CHECK  
 Autopilot..... ON  
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 Window ..... LATCHED  
 Lights..... AS REQUIRED  
 Transponder ..... ALT  
 Mixture..... RICH

**Takeoff**

Power ..... FULL/2700 RPM  
 Mixture..... RICH  
 Rotate ..... 55 K  
 Climb ..... 75 K  
 Brakes..... TAP  
 Landing Gear ..... UP  
 500 AGL  
 Power ..... 25"/2500 RPM  
 Climb ..... 90 K

**Climb**

Flaps..... UP  
 Landing Gear ..... UP  
 Cowl Flaps..... AS REQUIRED  
 Lights..... AS REQUIRED

**Cruise**

Power ....15-25"/2100-27000 RPM  
 Mixture .....LEAN  
 Cowl Flaps..... AS REQUIRED

**Descent**

Mixture ..... AS REQUIRED  
 Carb. Heat..... AS REQUIRED  
 Cowl Flaps..... CLOSED  
 Fuel Selector..... BOTH  
 Lights..... AS REQUIRED  
 Flaps..... 10° <140 K  
 Landing Gear ..... < 140 K

**Before Landing**

Seats and Seat Belts..... SECURE  
 Fuel Selector..... BOTH  
 Mixture ..... AS REQUIRED  
 Propeller ..... AS REQUIRED  
 Carb. Heat..... AS REQUIRED  
 Landing Gear ..... DOWN  
 Lights..... AS REQUIRED

**Landing**

Airspeed (Flaps Up)..... 75 KIAS  
 Airspeed (Flaps Dn)..... 65 KIAS

**After Landing**

Lights..... AS REQUIRED  
 Carb. Heat..... COLD  
 Flaps..... UP  
 Transponder .....STAND-BY  
 Cowl Flaps..... AS REQUIRED  
 Mixture ..... LEAN  
 Propeller ..... HIGH

**Securing Aircraft**

Avionics Power ..... OFF  
 Electrical Equipment..... OFF  
 Panel Lights ..... OFF (NIGHT)  
 Autopilot ..... OFF  
 Mixture ..... CUT-OFF  
 Throttle..... CLOSE  
 Ignition..... OFF  
 Master ..... OFF  
 Cowl Flaps ..... CLOSE  
 Control Lock.....INSTALL  
 Fuel.....ONE TANK

**Approach Speeds**

Downwind	80 K
Flaps	70 K
Final	65 K

**Speeds**

V <sub>X</sub>	67 K
V <sub>Y</sub>	84 K
Best Glide	73 K
V <sub>A</sub>	106 K
V <sub>FE</sub>	130/100 K
V <sub>LE</sub>	164 K

**Power**

Alt	BHP	MP/RPM	FF

**Pre-Flight (Cockpit)**

Pitot Cover ..... REMOVE  
 Magnetos ..... OFF  
 Master ..... OFF  
 Alt. Static ..... OFF  
 Landing Gear ..... DOWN  
 Throttle ..... IDLE  
 Mixture ..... CUT-OFF  
 Ckt. Breakers ..... CHECK  
 Transponder ..... STAND-BY  
 ELT ..... Armed  
 Avionics Master ..... OFF  
 Master ..... ON  
 Fuel ..... CHECK  
 Lights ..... CHECK  
 Pitot Heat ..... CHECK  
 Avionics Fan ..... CHECK  
 Flaps ..... LOWER  
 Master ..... OFF  
 Elevator Trim ..... NEUTRAL  
 Rudder Trim ..... NEUTRAL  
 Controls ..... FREE

**Pre-Flight (Exterior)**

Flaps ..... CHECKED  
 Ailerons ..... CHECKED  
 Fuel ..... SAMPLED  
 Fuel Quantity ..... \_\_\_\_\_ G  
 Oil ..... CHECKED (6-8 qts)  
 Propeller ..... CHECKED  
 Engine ..... CHECKED  
 Stall Warning ..... CHECKED  
 Pitot Mast ..... CHECKED  
 Static Ports ..... CHECKED  
 Elevators ..... CHECKED  
 Rudder ..... CHECKED  
 Skins/Rivets ..... CHECKED  
 Baggage Door ..... CLOSED  
 Tie-downs ..... REMOVED  
 Chocks ..... REMOVED