

**PREFLIGHT INSPECTION****CABIN**

Aircraft Documents (A.R.R.O.W.)..... ON BOARD  
 Control Lock. .... REMOVE  
 Ignition Switch..... OFF-KEY REMOVED  
 Master Switch..... ON  
 Flaps..... FULL DOWN  
 Fuel Quantity Indicators..... CHECKED  
 Master Switch..... OFF  
 Fuel Shutoff Valve..... ON

**EMPENNAGE**

Empennage Surface. .... CHECK  
 ELT Antenna. .... CHECK  
 Rudder Gust Lock. .... REMOVE  
 Tail Tie Down. .... DISCONNECT  
 Nav and Comm Antennas..... CHECK  
 Horizontal Stabilizer. .... SECURE  
 Vertical Stabilizer..... SECURE  
 Lights. .... CHECK  
 Rudder. .... CHECK  
 Elevator. .... CHECK

**RIGHT WING**

Flap. .... FREE & SECURE  
 Aileron..... FREE & SECURE  
 Lights & Wingtip..... CHECK  
 Leading Edge..... CHECK  
 Wing Tie Down. .... DISCONNECT  
 Main Wheel Tire. .... CHECK  
 Fuel Tank Sump Drain..... DRAIN & CHECK  
 Fuel Quantity. .... VISUALLY CHECK  
 Fuel Filler Cap..... SECURE

**NOSE**

Engine Oil (min 4 qts - max 6 qts) . . . . . CHECK & CAP SECURE  
 Fuel Strainer Drain . . . . . DRAIN & CHECK  
 Prop & Spinner . . . . . CHECK  
 Air Filter . . . . . CHECK  
 Landing Light . . . . . CHECK  
 Nose Strut & Tire . . . . . CHECK  
 Static Port . . . . . CHECK

**LEFT WING**

Main Wheel Tire . . . . . CHECK  
 Fuel Tank Sump Drain . . . . . DRAIN & CHECK  
 Fuel Quantity . . . . . VISUALLY CHECK  
 Fuel Filler Cap . . . . . SECURE  
 Pitot Tube . . . . . COVER REMOVE & CLEAR  
 Stall Warning . . . . . CLEAR  
 Fuel Tank Vent . . . . . CLEAR  
 Wing Tie Down . . . . . DISCONNECT  
 Leading Edge . . . . . CHECK  
 Lights & Wingtip . . . . . CHECK  
 Aileron . . . . . FREE & SECURE  
 Flap . . . . . FREE & SECURE

**AIRSPEDS FOR NORMAL OPERATION**

## Takeoff:

Normal Climb - 60-70 KIAS

Maximum Performance Takeoff, Speed At 50' - 60 KIAS

## Climb, Flaps Up:

Normal - 65-75 KIAS

V<sub>y</sub> Best Rate of Climb, Sea Level - 68 KIASV<sub>y</sub> Best Rate of Climb, 10,000 Feet - 62 KIASV<sub>x</sub> Best Angle of Climb - 56 KIAS

## Landing Approach:

Normal Approach, Flaps Up - 60 - 70 KIAS

Normal Approach, Flaps 40° - 50 - 60 KIAS

Short Field Approach, Flaps 40° - 52 KIAS

Balked Landing Transition to Maximum Power, Flaps 20° - 55 KIAS

## Maximum Recommended Turbulent Air Penetration Speed:

1600 lbs - 97 KIAS

1450 lbs - 93 KIAS

1300 lbs - 88 KIAS

Max Demonstrated Crosswind Velocity Takeoff &amp; Landing - 13 kts

**BEFORE STARTING ENGINE**

Aircraft Preflight. . . . . COMPLETE  
Control Lock. . . . . REMOVED  
Passenger. . . . . BRIEF  
Seats, Seat Belts & Shoulder Harnesses. . . . . ADJUST & LOCK  
Fuel Shutoff Valve. . . . . ON  
Parking Brake. . . . . SET  
Circuit Breakers. . . . . IN  
Panel Switches. . . . . AS REQUIRED  
Avionics. . . . . OFF  
Clock. . . . . WOUND & SET  
EFB Preflight. . . . . COMPLETE

**ENGINE START**

Cabin Doors. . . . . CLOSE  
Nav Lights. . . . . AS REQUIRED  
Mixture. . . . . RICH  
Carb Heat. . . . . COLD  
Master Switch. . . . . ON  
Beacon. . . . . ON  
Prime. . . . . AS REQUIRED  
Throttle. . . . . OPEN 1/8"  
Prop Area. . . . . CLEAR  
Engine. . . . . START

**BEFORE TAXI**

Oil Pressure & Engine Instruments. . . . . CHECKED  
Avionics. . . . . ON  
Brakes. . . . . CHECKED  
Flaps. . . . . UP  
Trim. . . . . SET  
Radios. . . . . ON & SET  
GPS/VOR Selector Switch. . . . . CHECK  
Transponder. . . . . ON ALT  
EFB. . . . . CHECKED & SET

**RUN-UP**

Cabin Doors. . . . . CLOSE  
 Parking Brake. . . . . SET  
 Flight Controls. . . . . FREE & CORRECT  
 Flight Instruments. . . . . CHECK  
 Fuel Shutoff Valve. . . . . ON  
 Mixture. . . . . RICH  
 Throttle. . . . . 1700 RPM  
 Mags (150 RPM max drop and less than 75 RPM diff.). . . . . CHECK  
 Carb Heat. . . . . CHECK  
 Engine Instruments. . . . . CHECK  
 Ammeter. . . . . CHECK  
 Suction. . . . . CHECK  
 Throttle. . . . . IDLE & FRICTION ADJUST  
 Parking Brake. . . . . RELEASE  
 Taxi Light. . . . . AS REQUIRED

**TAKEOFF**

Flaps. . . . . UP  
 Mixture. . . . . RICH  
 Carb Heat. . . . . COLD  
 Landing & Taxi Lights. . . . . AS REQUIRED  
 Pitot Heat. . . . . AS REQUIRED  
 Heading. . . . . CHECKED

**NORMAL**

Throttle. . . . . FULL OPEN  
 Elevator. . . . . LIFT NOSEWHEEL AT 50 KIAS  
 Climb Speed. . . . . 60-70 KIAS

**MAXIMUM PERFORMANCE**

Brakes. . . . . APPLY  
 Throttle. . . . . FULL OPEN  
 Brakes. . . . . RELEASE  
 Elevator. . . . . SLIGHTLY TAIL LOW  
 Climb Speed. . . . . 60 KIAS UNTIL CLEAR OF OBSTACLES

**AFTER TAKEOFF**

Climb Speed..... 65-75 KIAS  
 Landing & Taxi Lights..... OFF

**CRUISE**

Power..... SET  
 Mixture..... SET  
 Fuel Quantity..... MONITOR

**APPROACH**

(\* items for instrument operations only)

\*EFB..... CONFIGURE  
 \*Approach..... REVIEW  
 \*Radios..... SET/TUNE AND IDENTIFY  
 \*GPS/VOR Selector Switch..... AS REQUIRED  
 Fuel Shutoff Valve..... ON  
 Fuel Quantity..... CHECK  
 Mixture..... RICH

**BEFORE LANDING**

Seat Belts & Shoulder Harnesses..... FASTEN  
 Landing Light..... AS REQUIRED  
 Mixture..... FULL RICH  
 Carb Heat..... ON  
 Flaps..... AS REQUIRED

**GO AROUND/MISSED APPROACH**

Power..... SET TO CLIMB  
 Flaps..... REDUCE  
 Landing & Taxi Lights..... OFF  
 Flaps..... UP

**AFTER LANDING**

Landing Light..... OFF  
Ice Protection..... OFF  
Mixture..... FULL RICH  
EFB..... AS REQUIRED  
Flaps..... UP  
Trim..... RESET

**SHUTDOWN**

Engine..... IDLE AT 1000 RPM  
Taxi Light..... OFF  
Avionics..... OFF  
Mags..... GROUND TEST  
Mixture..... IDLE CUTOFF  
Mags..... OFF  
Beacon & Nav Lights..... OFF  
Master Switch..... OFF  
Control Lock..... INSTALLED  
Baggage Compartment..... CHECKED