

PREFLIGHT INSPECTION

1. Pitot Tube Cover.....REMOVE
2. Pilot's Operating Handbook.....(Accessible to Pilot)
3. Airplane Weight and Balance.....CHECKED
4. Control Wheel Lock.....REMOVE

WARNING

WHEN THE MASTER SWITCH IS ON, USING AN EXTERNAL POWER SOURCE, OR MANUALLY ROTATING THE PROPELLER, TREAT THE PROPELLER AS IF THE MAGNETOS SWITCH ARE ON. DO NOT STAND, NOR ALLOW ANYONE ELSE TO STAND, WITHIN THE ARC OF THE PROPELLER SINCE A LOOSE OR BROKEN WIRE, OR A COMPONANT MALFUNCTION COULD CAUSE THE ENGINE TO START

5. MAGNETOS Switch.....OFF
6. AVIONICS Switch (BUS 1 and BUS 2).....OFF
7. MASTER Switch (ALT and BAT).....ON
8. Primary Flight Display (PFD).....CHECK
9. FUEL QTY (Land R).....CHECK
10. LOW FUEL L and LOW FUEL R Annunciators.....CHECK
(Verify annunciators are not shown on PFD)
11. OIL PRESSURE Annunciator.....CHECK
12. LOW VACUUM Annunciator.....CHECK
13. AVIONICS Switch (BUS 1).....ON
14. Forward Avionics Fan.....CHECK
(Verify fan is heard)
15. AVIONICS Switch (BUS 1).....OFF
16. AVIONICS Switch (BUS 2).....ON

17. Aft Avionics Fan.....CHECK
(Verify fan is heard)
18. AVIONICS Switch (BUS 2).....OFF
19. PITOT HEAT Switch.....ON
(Carefully check that the pitot tube is warm to the touch within 30 seconds)
20. PITOT Heat Switch.....OFF
21. Stall Warning System.....CHECK
(Gently move the stall vane upward and verify that the stall warning horn is heard)
22. PITOT HEAD Switch.....ON
23. LOW VOLTS Annunciator.....CHECK
(Verify annunciator is shown)
24. **MASTER Switch (ALT and BAT)**.....ON
25. Elevator and Rudder Trim Controls.....TAKEOFF position
26. FUEL SELECTOR Valve.....BOTH
27. Rudder Gust Lock (if installed)REMOVE
28. FUEL LEVEL.....CHECK

BEFORE STARTING ENGINE

1. Preflight Inspection.....COMPLETE
2. Passenger Briefing.....COMPLETE
3. Seats and Seat Belts.....ADJUST and LOCK
4. Brakes.....TEST and SET
5. Circuit Breakers.....CHECK IN
6. Electrical Equipment.....OFF
7. **AVIONICS switch (BUS 1 and BUS 2)**.....**OFF**
8. Cowl Flaps.....OPEN
9. Fuel Selector Valve.....BOTH
10. Throttle Control.....OPEN $\frac{1}{4}$ INCH
11. Propeller Control.....HIGH RPM (push full in)
12. Mixture Control.....IDLE CUT OFF (pull full out)
13. STBY BATT Switch: TEST + ARM (20 seconds)
14. Engine Indicating System.....CHECK PARAMETERS
(Verify no red X's through ENGINE page indicators)
15. BUS E Volts.....CHECK
(Verify 24 VOLTS minimum shown)
16. M BUS Volts.....CHECK
(Verify 1.5 VOLTS or less shown)
17. BATT S Amps.....CHECK
(Verify discharge shown (negative))
18. STBY BATT Annunciator.....CHECK
(Verify annunciator is shown)

19. MASTER Switch (ALT and BAT).....ON
20. BEACON Light Switch.....ON
21. FUEL PUMP Switch.....ON
22. Mixture Control.....SET to FULL RICH full forward)
(Full rich until stable fuel flow is indicated (approximately
3 to 5 seconds), then set to IDLE CUTOFF (full aft) position)
23. **Propeller Area**.....**CLEAR**
24. FUEL PUMP Switch.....OFF
25. MAGNETOS Switch.....START
(Release when engine starts)
26. Mixture Control.....ADVANCE smoothly to RICH
(when engine starts)

NOTE

If the engine is primed too much (flooded), place the mixture control in the IDLE CUTOFF position, open the throttle control $\frac{1}{2}$ to full, and engage the starter motor (START). When the engine starts, advance the mixture control to the FULL RICH position and retard the throttle control promptly.

27. OIL Pressure.....CHECK
(Verify that the oil pressure increases into the GREEN ARC
range in 30 to 60 seconds)
28. AMPS (M BATT and BATT S).....CHECK charge (positive)
29. LOW VOLTS Annunciator.....CHECK
(Verify annunciator is not shown)
30. NAV Lights Switch.....ON as required
31. AVIONICS Switch (BUS 1 and BUS 2).....ON

BEFORE TAKE OFF

1. Parking Brake.....SET
2. Pilot and Passenger Seat Backs.....MOST UPRIGHT POSITION
3. Seats and Seat Belts.....CHECK SECURE
4. Cabin Doors.....CLOSED and LOCKED
5. Flight Controls.....FREE and CORRECT
6. Flight Instruments (PFD).....CHECK (no red X's)
7. Altimeters:
 - a. PFD (BARO).....SET
 - b. Standby Altimeter.....SET
 - c. KAP 140 Autopilot (BARO).....SET
8. G1000 ALT SEL.....SET
9. KAP 140 Altitude Preselect.....SET
10. Standby Flight Instruments.....CHECK
11. Fuel Quantity.....CHECK
12. Mixture Control.....RICH
13. FUEL SELECTOR Valve.....SET BOTH
14. Elevator and Rudder Trim Controls.....SET FOR TAKEOFF
15. Manual Electric Trim Control.....CHECK
16. Throttle Control.....1800 RPM
 - a. MAGNETOS Switch.....RICH
(RPM drop should not exceed 175 RPM on either magneto or 50 RPM differential between magnetos)
 - b. Propeller Control.....CYCLE from high RPM (fullin))

- c.VAC Indicator.....CHECK
- d.Engine Indicators.....CHECK
- e.Ammeters and Voltmeters.....CHECK
- 17. Annunciators.....CHECK
(Verify no annunciators are shown)
- 18. Throttle Control.....CHECK IDLE
- 19. Throttle Control.....1000 RPM or LESS
- 20. Throttle Control Friction Lock.....ADJUST
- 21. COM Frequency(s).....SET
- 22. NAV Frequency(s).....SET
- 23. FMS/GPS Flight Plan.....AS DESIRED

NOTE

Check GPS availability on AUX-GPS STATUS page. No annunciation is provided for loss of GPS2.

- 24. XPDR (TRANSPORTER).....SET
- 25. CDI Softkey.....SELECT NAV Source

- 26. Autopilot.....OFF
- 27. CABIN PWR 12V Switch.....OFF (if installed)
- 28. Wing Flaps.....UP - 20° (10° preferred)
- 29. Cowl Flaps.....OPEN
- 30. Cabin Windows.....CLOSED and LOCKED
- 31. STROBE Lights Switch.....ON
- 32. Brakes.....RELEASE

AFTER LANDING

1. Wing Flaps.....UP
2. Cowl Flaps.....OPEN
3. STROBE.....OFF

SECURING PLANE

1. Parking Brake.....SET
2. Throttle Control.....IDLE (pull full out)
3. Electrical Equipment.....OFF
4. AVIONICS Switch (BUS 1 and BUS 2).....OFF
5. Mixture Control.....IDLE CUT OFF (pull full out)
6. MAGNETOS Switch.....OFF
7. MASTER Switch (ALT and BAT).....OFF
8. STBY BATT Switch.....OFF
9. Control Lock.....INSTALL
10. FUEL SELECTOR Valve.....LEFT or RIGHT
 (To prevent crossfeeding between tanks)