



PREFLIGHT CHECKLIST

FUEL/OIL

- 1. FUEL TANKS.....CHECK/SECURE
- 2. FUEL SUMPS.....DRAIN
- 3. ENGINE OIL.....CHECK/SECURE/MIN. 4 QTS

CABIN

- 1. PAPERWORK.....ARROW
- 2. FIRE EXTINGUISHER.....CHECK/SECURE
- 3. PITOT/STATIC SYSTEM.....DRAIN
- 4. ALTERNATE STATIC SOURCE.....OFF/FWD
- 5. MAGNETOS AND ALL SWITCHES.....OFF
- 6. STABILATOR/RUDDER TRIM.....NEUTRAL
- 7. TACH/HOBBS.....CONFIRM/RECORD
- 8. BATTERY MASTER SWITCH.....ON
- 9. EXTERIOR LIGHTING SWITCHES.....ON
- 10. PITOT HEAT SWITCH.....ON
- 11. FUEL GAUGES.....QUANTITY CHECK
- 12. EXTERIOR LIGHTS.....CHECK
- 13. PITOT HEAT.....CHECK
- 14. STALL WARNING HORN.....CHECK
- 15. EXTERIOR LIGHTING SWITCHES.....OFF
- 16. PITOT HEAT SWITCH.....OFF
- 17. BATTERY MASTER SWITCH.....OFF
- 18. FLAPS.....EXTEND (40°)

RIGHT WING

- 1. SURFACES/HINGES.....CHECK
- 2. STATIC WICKS.....CHECK
- 3. FUEL TANK VENT.....CLEAR
- 4. MAIN GEAR STRUT.....CHECK
- 5. MAIN WHEEL TIRE.....CHECK PRESSURE/WEAR
- 6. BRAKE, PAD AND ROTOR.....CHECK WEAR/LEAKS
- 7. TIE DOWNS/CHOCKS.....REMOVE

NOSE

- 1. WINDSHIELD.....CLEAN
- 2. PROPELLER AND SPINNER.....CHECK
- 3. AIR INLETS.....CLEAR
- 4. NOSE GEAR STRUT.....CHECK
- 5. NOSE WHEEL TIRE.....CHECK PRESSURE/WEAR
- 6. CHOCK.....REMOVE

LEFT WING (REPEAT RIGHT WING FROM ABOVE)

- 1. STALL WARNING VANE.....CHECK
- 2. PITOT/STATIC MAST.....CLEAR
- 3. OAT PROBE.....CHECK

EMPENNAGE

- 1. CONTROL SURFACES.....CHECK
- 2. TIE DOWNS.....REMOVE
- 3. ANTENNAS.....CHECK
- 4. BAGGAGE DOOR.....SECURE

BEFORE STARTING ENGINE

- 1. AIRCRAFT.....DISPATCH IN FLIGHT CIRCLE
- 2. PAX BRIEFING.....S.A.F.E.
- 3. BELTS/BRAKE/SEATS.....LOCKED/FASTENED
- 4. FUEL SELECTOR.....DESIRED TANK
- 5. OVERHEAD SWITCHES.....OFF
- 6. EMERGENCY BATTERY.....ARM
- 7. E VOLTS..... > 23.3 VOLTS
IF < 23.3 VOLTS, CHECK AGAIN AFTER RUN UP
- 8. ANNUNCIATORS.....CHECK
- 9. BATTERY MASTER.....ON
- 10. ALTERNATOR SWITCH.....ON
- 11. FIN STROBE.....ON/DOWN
- 12. CIRCUIT BREAKERS.....CHECK
- 13. ALT-AIR.....CLOSED
- 14. L/R MAGNETO SWITCHES.....ON

COLD START

- 1. THROTTLE.....OPEN 1/4 INCH
- 2. FUEL PUMP.....ON
- 3. MIXTURE.....PRIME, THEN IDLE
- 4. FUEL PUMP.....OFF
- 5. PROP.....CLEAR
- 6. STARTER.....ENGAGE (8 SECONDS MAX)
- 7. MIXTURE.....ADVANCE/RELEASE STARTER
- 8. THROTTLE.....AS REQUIRED

HOT START

- 1. THROTTLE.....FULL, THEN 1/2 INCH OPEN
- 2. FUEL PUMP.....ON
- 3. MIXTURE.....IDLE/CUT-OFF
- 4. STARTER.....ENGAGE (8 SECONDS MAX)
- 5. MIXTURE.....ADVANCE/RELEASE STARTER
- 6. THROTTLE.....AS REQUIRED

FLOODED START

- 1. THROTTLE.....OPEN FULL
- 2. FUEL PUMP.....OFF
- 3. MIXTURE.....IDLE/CUT-OFF
- 4. STARTER.....ENGAGE (8 SECONDS MAX)
- 5. MIXTURE.....ADVANCE/RELEASE STARTER
- 6. THROTTLE.....RETARD AS ENGINE STARTS

AFTER START

- 1. OIL PRESS/TEMP/ANNUNCIATORS.....CHECK
- 2. IDLE.....1000 RPM
- 3. MIXTURE.....LEAN FOR PEAK RPM
- 4. FUEL PUMP.....OFF
- 5. AVIONICS MASTER.....ON
- 6. EMERGENCY BATTERY.....VERIFY ARM
- 7. LIGHTS.....AS REQUIRED
- 8. TAXI TO RUN UP AREA.....CHECK BRAKES

RUN UP CHECK

- 1. NAV/COM.....SET
(GET ATIS / CLEARANCE / ENTER FLIGHT PLAN / SET COMS / XPDR / GPS MODE)
- 2. CIRCUIT BREAKERS.....CHECK
- 3. ALTIMETERS.....SET
- 4. FLIGHT INSTRUMENTS.....CHECK
- 5. FLIGHT CONTROLS.....FREE AND CORRECT
- 6. AUTOPILOT.....CHECK
- 7. STABILATOR/RUDDER TRIM.....SET
- 8. FUEL PUMP.....ON
- 9. FUEL SELECTOR.....SWITCH TANKS
- 10. MIXTURE.....RICH
- 11. THROTTLE.....2000 RPM
 - I. MIXTURE.....LEAN FOR 1350 EGT
 - II. L/R MAGNETO CHECK.....< 175 / 50
 - III. ENGINE INSTRUMENTS.....CHECK
 - IV. AMMETER/VOLTMETER.....CHECK
 - V. ANNUNCIATORS.....CHECK
- 12. THROTTLE.....CHECK IDLE/1000 RPM
- 13. FUEL PUMP.....OFF

IF E VOLTS BELOW 23.3 BEFORE ENGINE START

- 1. EMERGENCY BATTERY.....VERIFY ARM
- 2. AVIONICS MASTER SWITCH.....OFF
- 3. ALTERNATOR SWITCH.....OFF
- 4. BATTERY MASTER.....OFF
- 5. E VOLTS INDICATOR.....VERIFY > 23.3 VOLTS
- 6. BATTERY MASTER.....ON
- 7. ALTERNATOR SWITCH.....ON
- 8. AVIONICS MASTER SWITCH.....ON



TAXI

- 1. TAXI PLAN.....BRIEF
- 2. AREA.....CLEAR
- 3. FIRST PROTECTED TURN.....CHECK INSTRUMENTS

BEFORE TAKEOFF

- 1. PRE-TAKEOFF BRIEF.....COMPLETE
- 2. DOORS/WINDOWS.....SECURE
- 3. LIGHTS/STROBE/XPDR.....CHECK
- 4. AIR CONDITIONER.....OFF
- 5. FUEL PUMP.....ON
- 6. MIXTURE.....SET AS REQUIRED

NORMAL TAKEOFF

- 1. FLAPS.....0°
- 2. THROTTLE.....FULL
- 3. ENGINE INSTRUMENTS.....CHECK
- 4. ROTATE.....60 KIAS
- 5. CLIMB.....76 KIAS

SHORT FIELD TAKEOFF

- 1. FLAPS.....25°
- 2. BRAKES.....HOLD
- 3. THROTTLE.....FULL
- 4. ENGINE INSTRUMENTS.....CHECK
- 5. BRAKES.....RELEASE
- 6. ROTATE.....55 KIAS
- 7. CLIMB.....64 KIAS
- 8. CLEAR OF OBSTACLES.....76 KIAS
- 9. FLAPS.....RETRACT SLOWLY TO 0°

SOFT FIELD TAKEOFF

- 1. FLAPS.....25°
- 2. BACK PRESSURE.....FULL AFT
- 3. THROTTLE.....SMOOTHLY APPLY FULL
- 4. ENGINE INSTRUMENTS.....CHECK
- 5. LIFT OFF.....LOWEST POSSIBLE AIRSPEED
- 6. ACCELERATE IN GROUND EFFECT.....64 KIAS
- 7. CLIMB.....64 KIAS
- 8. CLEAR OF OBSTACLES.....76 KIAS
- 9. FLAPS.....RETRACT SLOWLY TO 0°

AFTER TAKEOFF / CLIMB

- 1. AIRSPEED.....90 KIAS
- 2. FLAPS.....0°
- 3. LANDING LIGHT.....OFF
- 4. MIXTURE.....SET/MONITOR EGT 1475 °F MAX
- 5. FUEL PUMP.....OFF/CHECK FF

CRUISE

- 1. POWER.....SET PER TABLE
- 2. MIXTURE.....LEAN AS REQUIRED
- 3. FUEL SELECTOR.....ALTERNATE PER SCHEDULE

CRUISE PERFORMANCE - 65% POWER (ISA) / 9.5 GPH

| PRESS ALT (FT.) | RPM | TAS |
|-----------------|------|----------|
| SEA LEVEL | 2405 | 113 KTAS |
| 2,000 | 2425 | 114 KTAS |
| 4,000 | 2450 | 115 KTAS |
| 6,000 | 2470 | 116 KTAS |
| 8,000 | 2495 | 117 KTAS |
| 9,000 | 2505 | 118 KTAS |
| 10,000 | 2515 | 119 KTAS |

APPROACH

- 1. SEATS/SEAT BELTS.....SET/FASTENED
- 2. LIGHTS.....SET AS REQUIRED
- 3. FUEL PUMP.....ON
- 4. FUEL SELECTOR.....FULLEST TANK
- 5. MIXTURE.....SET AS REQUIRED
- 6. AIR CONDITIONER.....OFF

LANDING

- 1. APPROACH.....90 KIAS
- 2. MIXTURE.....SET AS REQUIRED
- 3. FLAPS.....SET (102 KIAS MAX)
- 4. AIRSPEED.....66 - 75 KIAS

AFTER LANDING

- 1. FLAPS.....RETRACT
- 2. BRAKES.....AS REQUIRED
- 3. FUEL PUMP.....OFF
- 4. LIGHTS.....AS REQUIRED
- 5. THROTTLE.....1000 RPM
- 6. MIXTURE.....LEAN FOR GROUND OPS

SECURING

- 1. SQUAWK.....1200
- 2. LIGHTS/DIM SWITCHES.....OFF
- 3. AVIONICS MASTER.....OFF
- 4. EMERGENCY BATTERY.....OFF
- 5. AIR CONDITIONER.....OFF
- 6. ELECTRICAL SWITCHES.....OFF
- 7. THROTTLE.....IDLE
- 8. MIXTURE.....CUT-OFF
- 9. L/R MAGNETO SWITCHES.....OFF
- 10. TACH/HOBBS.....RECORD
- 11. ALTERNATOR SWITCH.....OFF
- 12. BATTERY MASTER.....OFF
- 13. STANDBY INSTRUMENTS.....VERIFY SHUTDOWN
- 14. TIE DOWNS/CHOCKS.....SECURE
- 15. INTERIOR.....CLEAN/REMOVE TRASH
- 16. WINDSHIELD/LEADING EDGES.....CLEAN
- 17. EXTERIOR COVER.....SECURE
- 18. CHECK IN FLIGHT CIRCLE.....COMPLETE

V-SPEEDS @ MAX GROSS WEIGHT

- Vso.....45 KIAS
- Vs.....50 KIAS
- Vr.....60 KIAS
- Vx.....64 KIAS
- Vy.....76 KIAS
- Vg.....76 KIAS
- Vfe.....102 KIAS
- Vno.....125 KIAS
- Vne.....154 KIAS
- Vo (2550 lbs.).....113 KIAS
- Vo (1917 lbs.).....98 KIAS
- MAX DEMONSTRATED CROSSWIND - 17 KTS