

PREFLIGHT INSPECTION

1. CABIN

- 1) Aircraft Key.....IN HAND
- 2) Documentation.....ARROW
- 3) Charts.....CHECK
- 4) Control Stick Lock...RELEASE
- 5) Ignition SwitchOFF
- 6) Avionics.....OFF
- 7) Master Switch.....ON
- 8) Engine gauges.....ON
- 9) Engine tach time.....CHECK
- 10) Fuel Quantity.....CHECK
- 11) Flaps.....DOWN
- 12) Master SwitchOFF
- 13) Carb Heat.....COLD

2. EMPENNAGE

- 1) Tail Tie-Down.....DISCONNECT
- 2) Control Surfaces...CHECK
.....freedom of movement and security
- 3) Static Source (2)...CHECK
- 4) Tail and Strobe.....CHECK

3. RIGHT WING

- 1) Aileron.....CHECK
.....freedom of movement and security
- 2) Flap.....CHECK
- 3) Nav and Strobe.....CHECK
- 4) Right Landing LightCHECK
- 5) Wing Tie-Down.....DISCONNECT
- 6) Main Wheel Tire.....CHECK for proper inflation
- 7) Chock.....REMOVE
- 8) Right Wing Tank...SUMP
- 9) Fuel Quantity.....CHECK
- 10) Fuel Filler Cap.....SECURE

5. NOSE

- 1) Engine Oil Level.....6 quarts MIN
- 2) Dipstick.....SECURE
- 3) Propeller.....CHECK for nicks and security
- 4) Cowl Hinge Pins.....CHECK for security
- 5) Air Inlet.....CHECK for restrictions
- 6) Nose Wheel Tire.....CHECK for proper inflation
- 7) Chock.....REMOVE
- 8) Fuel Tank Vents.....CHECK for blockage

6. LEFT WING

- 1) Wing Tie-Down.....DISCONNECT
- 2) Main Wheel Tire....CHECK for proper inflation
- 3) Chock.....REMOVE
- 4) Left Wing Tank.....SUMP
- 5) Fuel QuantityCHECK
- 6) Fuel Filler Cap.....SECURE
- 7) Pitot Tube Cover...REMOVE and check for blockage
- 8) Left Landing Light..CHECK
- 9) Nav and Strobe...CHECK
- 10) Aileron.....CHECK
.....freedom of movement and security
- 11) Flap.....CHECK

7. BAGGAGE / PASSENGERS

- 1) Seatbelts/Seats.....SECURE
- 2) Airvents.....LOCATION
- 3) FIRE Extinguisher...LOCATION
- 4) Emergency Egress...BRIEF
- 5) Talking.....WHEN
- 6) Your Questions.....?

EMERGENCY PROCEDURES

ELECTRICAL / ALTERNATOR FAILURE

1. Circuit Breaker.....CHECK
 2. Avionics.....OFF
 3. Master Switch.....OFF
 4. Alt FieldOFF
 5. Master Switch.....ON
- IF ALTERNATOR IS STILL OFF-LINE:
6. Master Switch.....ON
 7. Electrical Switches.....OFF
 8. Alternator Field.....OFF
 9. Avionics (as required).....ON
 10. Electrical (as required).....ON
 11. Flight.....LAND

ENGINE FAILURES

ENGINE FAILURE - TAKEOFF RUN

1. Throttle.....IDLE
2. Brakes.....APPLY
3. Wing Flaps.....RETRACT
4. Mixture.....CUT-OFF
5. Ignition Switch.....OFF
6. Master Switch.....OFF

ENGINE FAILURE (RESTART)

1. Airspeed.....**90 mph**
2. Landing Site.....SELECT
3. Boost Pump.....ON
4. Fuel Selector.....SWITCH TANKS
5. Mixture.....RICH
6. Ignition Switch.....CHECK (R/L)
7. Transponder.....7700
8. Radio.....121.5

ENGINE FAILURE (SECURING)

1. Airspeed.....**90 mph**
2. Mixture.....CUT-OFF
3. Prop.....LOW RPM
4. Fuel Selector Valve...OFF
5. Ignition Switch.....OFF
6. Wing Flaps.....SET
7. Master Switch.....OFF
8. Canopy.....UNLATCH
9. Seat Belts.....SECURE

AIRCRAFT FIRES

DURING START ON GROUND

1. Cranking.....CONTINUE

If engine starts:

2. Power.....1700 RPM (2min)
3. Engine.....SHUTDOWN

If engine fails to start:

4. Throttle.....FULL OPEN
5. Mixture.....IDLE CUT-OFF
6. Cranking.....CONTINUE
7. Fire Extinguisher...OBTAIN
8. Engine.....SECURE

ENGINE FIRE IN FLIGHT

1. Mixture.....CUT-OFF
2. Fuel Selector Valve...OFF
3. Ignition.....OFF
4. Master Switch.....OFF
5. Cabin Heat and Air...OFF

ELECTRICAL FIRE IN FLIGHT

1. Master Switch.....OFF
2. Avionics.....OFF
3. All Electrical.....CLOSED
4. Vents.....CLOSED
5. Fire Extinguisher.....ACTIVATE

CABIN FIRE

1. Master Switch.....OFF
2. Vents/ Cabin Heat...CLOSED
3. Fire Extinguisher.....ACTIVATE

WING FIRE

1. Nav & Strobe Lights...OFF
2. Landing Light.....OFF

BEFORE STARTING ENGINE

- 1) Preflight.....COMPLETE
- 2) Seat Belts.....SECURE
- 3) Fuel Selector.....FULL TANK
- 4) Avionics/Electrical...OFF
- 5) Brakes.....SET
- 6) Circuit Breakers.....CHECK IN
- 7) Canopy.....ADJUST
- 8) Battery Master.....ON

STARTING ENGINE (COLD)

- 1) Mixture.....IDLE CUT
- 2) Prop.....HIGH RPM
- 3) Beacon.....ON
- 4) Throttle.....1/8 OPEN
- 5) Fuel Boost Pump...ON
- 6) Mixture.....FULL RICH
- 7) Fuel Flow.....4-6 GPH
- 8) Mixture.....IDLE CUT
- 9) Fuel Boost Pump...OFF
- 10) Propeller Area....CLEAR
- 11) Ignition Switch...START
- 12) Mixture.....RICHEN
- 13) Oil Pressure....CHECK
- 14) Mixture.....LEAN
- 15) Alternator Master...ON
- 16) Avionics.....ON
- 17) Flaps.....UP

STARTING ENGINE (HOT)

- 1) Mixture.....IDLE CUT
- 2) Prop.....HIGH RPM
- 3) Beacon.....ON
- 4) Throttle.....1/8 OPEN
- 5) Propeller Area....CLEAR
- 6) Ignition Switch...START
- 7) Mixture.....RICHEN
- 8) Oil Pressure....CHECK
- 9) Mixture.....LEAN
- 10) Alternator Master...ON
- 11) Avionics.....ON
- 12) Flaps.....UP

STARTING ENGINE (FLOODED)

- 1) Mixture.....IDLE CUT
- 2) Throttle.....FULL OPEN
- 3) Ignition Switch...START
- 4) Mixture.....RICHEN
-Resume From #8 ABOVE.....

TAXI

- 1) Brakes.....TEST
- 2) Turn Instruments....CHECK

BEFORE TAKEOFF

- 1) Brakes.....SET
- 2) Seat Belts.....ON
- 3) Flight Controls....FREE and CORRECT
- 4) Flight Instruments....SET
- Airspeed.....ZERO
- Art Horiz.....ALIGNED/SET
- Altimeter.....CORRECT BARO
- Compass.....CHECK HEADING
- Turn Coor...CHECK / NO FLAG
- Autopilot...ON/ DISCONNECT
- GPS.....ON

- 5) Fuel Selector Valve.....SELECT
- 6) Mixture.....SET / RICH
- 7) Trim (Aileron/Elevator)....SET
- 8) Throttle.....1900 RPM

- a) Magnetos....CHECK (125 max drop, 50 diff. max)
- b) Prop.....CYCLE
- c) Engine Inst....CHECK
- d) Fuel Gauge....CHECK
- e) Voltmeter....CHECK
- f) Throttle.....IDLE

- 9) Flaps.....UP
- 10) Radios/GPS/Departure....SET
- 11) Canopy.....SECURE
- 12) Lights.....ON
- 13) Transponder.....ALT
- 14) Mixture.....RICH
- 15) Fuel Boost Pump.....ON
- 16) Time Off.....RECORD

NORMAL TAKEOFF

- 1) Wing Flaps.....UP
- 2) Prop.....HIGH RPM
- 3) Mixture.....SET
- 4) Throttle.....FULL OPEN
- 5) Rotate.....65 MPH
- 6) Climb Speed.....110 MPH (Vy)

SHORT FIELD TAKEOFF

- 1) Wing Flaps.....10 Deg
- 2) Prop.....HIGH RPM
- 3) Mixture.....SET
- 4) Brakes.....APPLY
- 5) Throttle.....FULL OPEN
- 6) Brakes.....RELEASE
- 7) Rotate.....65 MPH
- 8) Climb Speed80 MPH (Vx)

ENROUTE CLIMB

- 1) Airspeed.....125-150 MPH
- 2) Boost Pump.....OFF (1000')
- 3) Throttle.....25 in Hg
- 4) Prop.....2500 RPM
- 5) Fuel Pressure....CHECK
- 6) Engine Temp.....MONITOR
- 7) Mixture.....LEAN > 4000'

CRUISE

- 1) Throttle.....23" or per POH
- 2) Prop.....2300rpm or POH
- 3) Trim.....ADJUST
- 4) Lights.....OFF
- 5) Mixture.....LEAN(8-9 gal/hr)
- 6) Fuel Load.....MANAGE

DESCENT

- 1) Throttle/Prop.....SET
- 2) Mixture.....RICHEN
- 3) Fuel Selector.....FULLEST
- 4) Lights.....ON
- 5) Seat Belts.....ON

LANDING

- 1) Fuel Selector.....FULLEST
- 2) Boost Pump.....ON
- 3) Mixture.....RICH
- 4) Prop control.....FULL
- 5) Flaps 20 deg.....110 MPH
- 6) Flaps 20-40 deg.....100 MPH
- 7) Approach.....80 MPH
- 8) Approach (No Flap).. 85 MPH

AFTER LANDING

- 1) Mixture.....LEAN
- 2) Boost Pump.....OFF
- 3) Transponder.....ALT
- 4) Lights.....OFF
- 5) Wing Flaps.....UP
- 6) Radio.....GROUND

ENGINE SHUTDOWN

- 1) Flaps.....DOWN
- 2) Throttle.....IDLE
- 3) Instruments.....OFF
- 4) Avionics.....OFF
- 5) Ignition.....CHECK
- 6) Mixture.....CUT-OFF
- 7) Ignition.....OFF
- 8) Master.....OFF

SECURING AIRCRAFT

- 1) Wheels.....CHOCKED
- 2) Wing & Tail.....SECURE
- 3) Ignition Key.....REMOVE
- 4) Switches.....OFF
- 5) Controls.....SECURE
- 6) Canopy.....LOCKED