



FLIGHT SCHOOL

C172M N21374

PREFLIGHT INSPECTION

① CABIN

- 1. Pitot Tube Cover.....REMOVE
- 2. AROW Documents/Maint Log.....CHECK
- 3. Emergency Equipment.....CHECK
- 4. Control Wheel Lock.....REMOVE
- 5. Ignition Switch.....OFF
- 6. Master Switch.....ON
- 7. Fuel Quantity.....()CHECKED
- 8. Pitot Heat.....CHECK
- 9. Lights.....Check Operation
- 10. Avionics Master Switch.....ON/OFF
- 11. Master Switch.....OFF
- 12. Alt Static Selector.....OFF
- 13. Fuel Selector Valve.....BOTH
- 14. Elevator Trim.....SET

② EMPENAGE

- 15. Baggage Door.....CHECK
- 16. Tie-Down.....DISCONNECT
- 17. Control Surfaces.....CHECK
- 18. Trim Tab.....CHECK
- 19. Antennas.....CHECK

③ RIGHT WING

- 20. Flap.....CHECK
- 21. Aileron.....CHECK
- 22. Tie-Down.....DISCONNECT
- 23. Main Wheel Tire.....CHECK
- 24. Fuel Tank Sumps(1).....DRAIN
- 25. Fuel Quantity/Caps.....CHECK/SECURE

③ NOSE

- 26. Fuel Sumps(1)DRAIN
- 27. Engine Oil (6-7 Qts).....CHECK
- 28. Engine Cooling Inlets.....CHECK/CLEAR
- 29. Propeller and Spinner.....CHECK
- 30. Air Filter.....CHECK
- 31. Nose Wheel Strut and Tire.....CHECK
- 32. Left Static Source.....CHECK

④ LEFT WING

- 33. Fuel Quantity/Caps.....CHECK/SECURE
- 34. Fuel Tank Sumps(1).....DRAIN
- 35. Pitot Tube.....CHECK
- 36. Fuel Tank Vent.....CHECK
- 37. Tie-Down.....DISCONNECT
- 38. Main Wheel Tire.....CHECK
- 39. Stall Warning.....CHECK
- 40. Aileron.....CHECK
- 41. Flap.....CHECK

BEFORE ENGINE START

- 1. Preflight Inspection.....COMPLETE
- 2. Passenger Briefing.....COMPLETE
- 3. Seats and Seat Belts.....SET
- 4. Brakes.....TEST
- 5. Circuit Breakers.....CHECK IN
- 6. Electrical Equipment.....OFF
- 7. Avionics Master.....OFF
- 8. Fuel Selector Valve.....BOTH
- 9. Throttle.....OPEN ¼ INCH
- 10. Mixture.....RICH
- 11. *Prime.....AS REQUIRED
- 12. Beacon.....ON
- 13. Master Switch.....ON
- 14. Propeller Area.....CLEAR
- 15. IgnitionSTART



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AFTER START

- 1. Oil Pressure/Engine Instruments.....CHECK
- 2. Mixture.....LEAN
- 3. Flaps.....CHECK/UP
- 4. Avionics Master.....ON
- 5. Radios.....SET/RECORD ATIS/ASOS
- 6. Brakes.....TEST

BEFORE TAKE OFF

- 1. Flight Controls.....FREE/CORRECT
- 2. Fuel Quantity.....()CHECK
- 3. Flight Instruments.....CHECK/SET
- 4. Mixture.....RICH
- 5. Fuel Selector Valve.....CHECK/BOTH
- 6. Runup (1700 RPM)
 - Magnetos (125 Max Drop/50 Differential).....CHECK
 - Oil Pressure/Engine Instruments.....CHECK
 - Carb. Heat.....CHECK
- 7. Idle.....CHECK
- 8. Power.....SET 1,000 RPM
- 9. Alternate Static.....CHECK
- 10. Elevator Trim.....SET TO TAKEOFF
- 11. Flaps.....SET AS REQUIRED
- 12. Departure-/-Emerg. Briefing.....COMPLETE

RUNWAY ITEMS

- 1. Heading Indicator.....SET TO COMPASS
- 2. Altitude XPDR.....SET TO ALT
- 3. Lights.....AS REQUIRED
- 4. Fuel.....MIX FULL RICH
- 5. Time.....RECORD

CLIMB

- 1. Airspeed.....90 MPH
- 2. Throttle.....FULL OPEN
- 3. Mixture.....LEAN (3turns)/EGT INCREASE

CRUISE

- 1. Power (2100-2600) (<75%).....()SET
- 2. Trim.....SET
- 3. Mixture (Peak-75°).....LEAN
- 4. Engine Instruments.....CHECK
- 5. Heading.....SET TO COMPASS

DESCENT

- 1. ATIS/ASOS.....ACQUIRE
- 2. POWER.....CRUISE DESCENT SET(2000RPM)
- 3. Carb Heat.....AS REQUIRED
- 4. Mixture.....SET
- 5. Altimeter.....()SET
- 4. Fuel Selector.....BOTH
- 5. Approach Briefing.....COMPLETE

BEFORE LANDING

- 1. Lights.....SET
- 2. Mixture.....RICH
- 3. Fuel Selector.....BOTH
- 4. Carb Heat.....ON

AFTER LANDING

- 1. Lights.....SET
- 2. Carb Heat.....OFF
- 3. Flaps.....UP
- 4. Mixture.....LEAN
- 5. Radios.....SET

SHUTDOWN

- 1. Avionics Master.....OFF
- 2. Lights OFF.....OFF
- 3. Mixture.....CUTOFF
- 4. Ignition.....OFF
- 5. Master Switch.....OFF

SECURING

- 1. Control Lock.....INSTALL
- 2. Fuel Selector Valve.....LEFT OR RIGHT
- 3. Pitot Cover.....INSTALL
- 4. Chocks.....LEFT MAIN
- 5. Tie-Downs.....SET

6. Paperwork/Flight Plan.....COMPLETE/CLOSED



ENGINE FAILURE DURING TAKEOFF ROLL

- 1. Throttle.....IDLE
- 2. Brakes.....MAXIMUM(OR AS REQUIRED)
- 3. Flaps.....RETRACT
- 4. Mixture.....CUTOFF
- 5. IgnitionOFF
- 6. Master Switch.....OFF

ENGINE FAILURE DURING TAKEOFF ROLL

- 1. Airspeed...75 MPH (Flaps UP) 70 MPH (Flaps Down)
- 2. Mixture.....CUTOFF
- 3. Fuel Shutoff Valve.....OFF
- 4. IgnitionOFF
- 5. Flaps.....AS REQUIRED
- 6. Master Switch.....OFF
- 7. Cabin Door.....UNLATCH
- 8. Land.....STRAIGHT AHEAD

ENGINE FAILURE DURING FLIGHT

- 1. Airspeed.....80 MPH
- 2. Carb. Heat.....ON
- 3. Fuel Selector Valve.....BOTH
- 4. Mixture.....RICH
- 5. IgnitionBOTH (or START if propeller is stopped)
- 6. Primer.....In and Locked
- 7. Radios.....SET 121.5
- 8. Squawk.....7700

EMERGENCY LANDING WITHOUT ENGINE POWER

- 1. Passenger Seat Backs.....MOST UPRIGHT POSITION
- 2. Seats and Seat Belts.....SECURE
- 3. Airspeed...80 MPH (Flaps UP) 70 MPH (Flaps Down)
- 4. Mixture.....CUTOFF
- 5. Fuel Shutoff Valve.....OFF
- 6. IgnitionOFF
- 7. Flaps.....AS REQUIRED
- 8. Master Switch.....OFF
- 9. Cabin Door.....UNLATCH

ENGINE FIRE DURING START

- 1. Ignition SwitchSTART, Continue Cranking
- 2. Mixture.....FUEL CUTOFF

If engine starts:

- 3. Power.....1800 RPM
- 4. Engine.....SHUTDOWN

If engine fails to start

- 5. Throttle.....FULL OPEN
- 6. MIXTURE.....CUT OFF
- 7. Cranking.....CONTINUE
- 8. Fuel Shutoff Valve.....OFF (Pull Full Out)
- 9. Auxiliary Fuel Pump.....OFF

- 10. Engine.....SECURE
 - a. Master Switch...OFF
 - b. Ignition Switch...OFF
- 10. Airplane.....EVACUATE
- 11. Fire.....EXTINGUISH

ENGINE FIRE IN FLIGHT

- 1. Mixture.....CUT OFF
- 2. Fuel Shutoff Valve.....OFF
- 3. Master Switch.....OFF
- 4. Cabin Heat and Air.....OFF
- 5. Airspeed.....120-182 MPH
- 6. Forced Landing.....EXCECUTE

ELECTRICAL FIRE IN FLIGHT

- 1. Master Switch.....OFF
- 2. Vents, Cabin Air, Heat.....CLOSED
- 3. Fire Extinguisher.....ACTIVATE
- 4. Avionics.....OFF
- 5. All other switches (except ignition switch).....OFF

CABIN FIRE

- 1. Master Switch.....OFF
- 2. Vents, Cabin Air, Heat.....CLOSED
- 3. Fire Extinguisher.....ACTIVATE



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PRECAUTIONARY LANDING WITH ENGINE POWER

1. Passenger Seat Back...**MOST UPRIGHT POSSITION**
2. Seats and Seat Belts.....**SECURE**
3. Airspeed.....**70 MPH**
4. Flaps.....**AS REQUIRED**
5. Selected Field.....**FLY OVER**
6. Avionics Master Switch and Electrical Switches.
OFF
7. Flaps.....**30° (on final approach)**
8. Airspeed.....**70 MPH**
9. Master Switch.....**OFF**
10. Doors.....**UNLATCH**
11. Touchdown.....**SLIGHTLY TAIL LOW**
12. Ignition Switch.....**OFF**

DITCHING

1. Radio.....**TRANSMIT MAYDAY on 121.5 MHz, giving location and intentions and SQWAK 7700**
2. Heavy Objects (in baggage area).....**SECURE OR JETTISON**
3. Passenger Seat Backs..**MOST UPRIGHT POSSITION**
4. Seats and Seat Belts.....**SECURE**
5. Flaps.....**20° to 30°**
6. Power..**ESTABLISH 300 FT/MIN DESSCENT AT 70 MPH**
If no power is available, approach at 80 MPH with flaps up or at 75 MPH with 10° flaps
7. Cabin
Doors.....**UNLATCH**
8. Touchdown.....**LEVEL ATTITUDE**
9. Face.....**CUSHION**
10. ELT.....**ACTIVATE**
11. Airplane.....**EVACUATE**
If necessary open window to flood cabin to equalize pressure so doors can be opened.
13. Life Vests and Raft.....**INFLATE WHEN CLEAR OF AIRPLANE**

LANDING WITH A FLAT MAIN TIRE

1. Approach.....**NORMAL**
2. Flaps.....**30°**
3. Touch Down.....**GOOD MAIN TIRE FIRST, hold airplane off flat tire as long as possible with aileron control**
4. Directional Control.....**MAINTAIN**

LANDING WITH A FLAT NOSE TIRE

1. Approach.....**NORMAL**
2. Flaps.....**30°**
3. Touch Down.....**ON MAINS, hold nose wheel off the ground as long as possible, when nose wheel touches the ground maintain full up elevator.**
4. Directional Control.....**MAINTAIN**

AMMETER – EXCESSIVE RATE OF CHARGE

1. Alternator.....**OFF**

LOW VOLTAGE (VOLTS) DURING FLIGHT

May occur during low RPM, Annunciator will go out at higher RPM

1. Avionics Master.....**OFF**
 2. Alternator Circuit Breaker (ALT FLD).....**CHECK IN**
 3. Master Switch.....**OFF (both sides)**
 4. Master Switch.....**ON**
 5. Low Voltage Annunciator (VOLTS).....**CHECK OFF**
 6. Avionics Master.....**ON**
- If low voltage annunciator (VOLTS) illuminates again:
7. Alternator.....**OFF**
 8. Nonessential Radio and Electrical Equipment.....**OFF**
 9. Flight.....**TERMINATE as soon as practical**

VACCUM SYSTEM FAILURE (VAC)

1. Vacuum Gauge.....**CHECK**
If vacuum is not within normal limits partial panel procedures maybe required.