



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. Lights.....(IF REQUIRED) CHECK
- 9. Avionics Master Switch.....ON/OFF
- 10. Alternate Static.....PUSHED IN OFF
- 11. Annunciators.....CHECK
- 12. Pitot Heat.....(IF REQUIRED)CHECK
- 13. Master Switch.....OFF
- 14. Elevator Trim.....SET FOR TAKEOFF

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. Landing/Taxi Lights.....CHECK
- 41. Aileron.....CHECK
- 42. 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. Propeller Area.....CLEAR
- 12. *Prime.....AS REQUIRED
- 13. Beacon.....ON
- 14. Master Switch.....ON
- 15. IgnitionSTART



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3. Mixture.....LEAN (3turns)/EGT INCREASE

AFTER START

- 1. Oil Pressure/Engine Instruments.....CHECK
- 2. Mixture.....LEAN
- 3. Flaps.....CHECK/UP
- 4. Avionics Master.....ON
- 5. Radios.....SET/RECORD ATIS
- 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. *RunupSET 1700 RPM
- 7. MagnetosCHECK
- 8. Carb Heat.....CHECK
- 9. Oil Pressure/Engine Instruments.....CHECK
- 10. Vacuum/Alternator.....CHECK
- 11. Idle.....CHECK
- 12. Power.....SET 1,000 RPM
- 13. Alternate Static.....CHECK
- 14. Elevator Trim.....SET TO TAKEOFF
- 15. Flaps.....SET AS REQUIRED
- 16. 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.....85 MPH
- 2. Throttle.....FULL OPEN

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

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

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

6. IgnitionOFF

7. Flaps.....AS REQUIRED

8. Master Switch.....OFF

9. Cabin Door.....UNLATCH



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ENGINE FAILURE DURING TAKEOFF ROLL

- 1. Trottle.....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...70 KIAS (Flaps UP) 65 KIAS (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.....78 MPH
- 2. SELECT PLACE TO LAND
- 3. Fuel Selector Valve.....BOTH
- 4. Mixture.....RICH
- 5. Throttle.....ADJUST
- 6. Carb Heat.....ON
- 7. Ignition.....BOTH
- 8. Master Switch.....ON
- 9. Primer.....IN & LOCKED
- 10. Radios.....SET 121.5
- 11. Squak.....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) 75 MPH (Flaps Down)
- 4. Mixture.....CUTOFF
- 5. Fuel Shutoff Valve.....OFF

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.....100-182 MPH
- 6. Forced Landing.....EXECUTE

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



PRECAUTIONARY LANDING WITH ENGINE POWER

1. Passenger Seat Back...MOST UPRIGHT POSSITION
2. Seats and Seat Belts.....SECURE
3. Airspeed.....75 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.....75 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 65 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.