



FLIGHT SCHOOL

C172M

N9162H

PREFLIGHT INSPECTION

① CABIN

- 1. Pitot Tube Cover.....REMOVE
- 2. AROW Documents/Maintenance Log.....CHECK
- 3. Emergency EquipmentCHECK
- 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 DoorCHECK
- 16. Tie-DownDISCONNECT
- 17. Control Surfaces.....CHECK
- 18. Trim Tab.....CHECK
- 19. Antennas.....CHECK

③ RIGHT WING

- 20. FlapCHECK
- 21. AileronCHECK
- 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 InletsCHECK/CLEAR
- 29. Propeller and SpinnerCHECK
- 30. Air FilterCHECK
- 31. Nose Wheel Strut and Tire.....CHECK
- 32. Left Static SourceCHECK

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 EquipmentOFF
- 7. Avionics Master.....OFF
- 8. Fuel Selector Valve.....BOTH
- 9. *Prime.....AS REQUIRED
- 10. Throttle.....OPEN ¼ INCH
- 11. Mixture.....RICH
- 12. Propeller Area.....CLEAR
- 13. Beacon.....ON
- 14. Master Switch.....ON
- 15. Alternator Switch.....OFF
- 16. Ignition.....START



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AFTER START

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

BEFORE TAKE OFF

- 1. Flight Controls.....FREE/CORRECT
- 2. Fuel Quantity.....CHECK
- 3. Flight InstrumentsCHECK/SET
- 4. Mixture.....RICH
- 5. Fuel Selector Valve.....BOTH
- 6. Runup (1700 RPM)
 - Magnetos (125 Max Drop/50 Differential).....CHECK
 - Oil Pressure/Engine Instruments.....CHECK
 - Carb. HeatCHECK
- 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/Emergency Briefing.....COMPLETE

RUNWAY ITEMS

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

CLIMB

- 1. Airspeed.....V_Y 78Kts
- 2. Throttle.....FULL OPEN
- 3. Mixture.....LEAN (3turns)/EGT INCREASE
- 4. FLAPS.....UP

CRUISE

- 1. Power (2100-2600) (<75%)SET
- 2. Trim.....SET
- 3. MixtureLEAN
- 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
- 5. Fuel Selector.....BOTH
- 6. 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

SHUTDOWN

- 1. Avionics MasterOFF
- 2. Lights OFFOFF
- 3. MixtureCUTOFF
- 4. Ignition.....OFF
- 5. Master SwitchOFF

SECURING

- 1. Control Lock.....INSTALL
- 2. Fuel Selector Valve.....LEFT OR RIGHT
- 3. Pitot Cover.....INSTALL
- 4. ChocksLEFT MAIN
- 5. Tie-Downs.....SET
- 6. Paperwork/Flight Plan.....COMPLETE/CLOSED



ENGINE FAILURE DURING TAKEOFF ROLL

1. Throttle.....IDLE
2. BrakesAPPLY
3. Flaps.....RETRACT
4. Mixture.....CUTOFF
5. IgnitionOFF
6. Master Switch.....OFF

ENGINE FAILURE DURING TAKEOFF ROLL

1. Airspeed...65 KIAS (Flaps UP) 60 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.....65 KIAS
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.....65 KIAS (Flaps UP) 60 KIAS (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 Switch.....START, Continue Cranking

IF engine starts:

2. Power.....1700 RPM
3. Engine.....SHUTDOWN

IF Engine Fails to Start:

4. Throttle.....FULL OPEN
5. Mixture.....CUT OFF
6. Cranking.....CONTINUE
7. Fuel Selector Valve.....OFF (Pointed Aft)

8. 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 Selector Valve.....OFF
3. Master Switch.....OFF

4. Cabin Heat and Air.....OFF
5. Airspeed.....100 KIAS
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

After discharging an extinguisher within a closed cabin, ventilate the cabin.



PRECAUTIONARY LANDING WITH ENGINE POWER

1. Wings Flaps.....20°
2. Passenger Seat Back...MOST UPRIGHT POSITION
3. Seats and Seat Belts.....SECURE
4. Airspeed.....60 KIAS
5. Flaps.....AS REQUIRED
6. Selected Field.....FLY OVER
7. Avionics Switch and Electrical Switches.....OFF
8. Flaps.....0°(On Final Approach)
9. Airspeed.....60 KIAS
10. Master Switch.....OFF
11. Doors.....UNLATCH
12. Touchdown.....SLIGHTLY TAIL LOW
13. Ignition Switch.....OFF

DITCHING

1. Radio.....TRANSMIT MAYDAY on 121.5 MHz, giving location and intentions and SQUAWK 7700
2. Heavy Objects(baggage area) SECURE/JETTISON
3. Passenger Seat Backs.....MOST UPRIGHT POSITION
4. Seats and Seat Belts.....SECURE
5. Flaps.....20° to 30°
6. Power.....ESTABLISH 300 FT/MIN DESCENT AT 55 KIAS
If no power is available, approach at 65 KIAS with flaps up or at 60 KIAS 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.....40°
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 should 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

VACUUM SYSTEM FAILURE (VAC)

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