



C172M N724TX

**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. Propeller Area.....CLEAR
- 12. \*Prime.....AS REQUIRED
- 13. Beacon.....ON
- 14. Master Switch.....ON
- 15. Ignition .....START



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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



FLIGHT SCHOOL  
C172M N724TX

**ENGINE FAILURE DURING TAKEOFF ROLL**

1. Throttle.....IDLE
2. Brakes.....MAXIMUM(OR AS REQUIRED)
3. Flaps.....RETRACT
4. Mixture.....CUTOFF
5. Ignition .....OFF
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. Ignition .....OFF
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. Ignition .....BOTH (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. Ignition .....OFF
7. Flaps.....AS REQUIRED
8. Master Switch.....OFF
9. Cabin Door.....UNLATCH

**ENGINE FIRE DURING START**

1. Ignition Switch .....START, 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.....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

**CABIN FIRE**

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



**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.