**SECURING AIRPLANE**

1. Parking Brake — **SET**

 2. Avionics Master Switch — **OFF**

 3. Electrical Equipment / Autopilot— **OFF**

 4. Mixture — **IDLE CUTOFF**

 5. Ignition Switch — **OFF**

 6. Master Switch — **OFF**

 7. Control Lock — **INSTALL**

 8. Postflight Inspection -- **COMPLETE**

9. **CLOSE FLIGHT PLAN**

**HOLDING PROCEDURES**

 **THROTTLE BACK TO HOLD SPEED**

 **TURN TO OUTBOUND COURSE**

 **TIME OUTBOUND LEG**

 **TALK TO ATC**

 **TWIST OBS TO INBOUND COURSE**

 **IFR APPROACH CHECKLIST**

 **ATIS — VERIFY**

 **INSERT/LOAD APPROACH DATA**

 **TUNE/IDENTIFY NAV RADIOS**

 **BRIEF APPROACH AND MISSED APP.**

**WHEN CLEARED FOR APPROACH**

**SLOW TO APPROACH SPEED (90 MPH) ACTIVATE APPROACH IN GPS**

**VERIFY PROCEDURE TURN**

**DESCEND TO FINAL APPROACH ALT.**

**AT FAF BEGIN DESCENT (START TIME)**

**CONFIGURE AIRCRAFT PRIOR TO FAF**

**COMPLETE LANDING CHECKLIST**

**PRE-MANEUVER CHECK**

 **ENGINE INSTRUMENTS — CHECK**

 **MIXTURE — RICH**

 **MINIMUM SAFE ALTITUDE — VERIFY**

 **PRACTICE AREA — CLEAR**

 **LANDING SITE -- SELECT**

**POST MANEUVER CHECK**

 **MIXTURE — LEANED**

 **ENGINE INSTRUMENTS — CHECK**

**RIGHT WING**

1. Wing Tip – **CHECK CONDITION**

2. Leading Edge – **CHECK CONDITION**

 3. Wing Tie-Down — **DISCONNECT**

 4. Main Wheel Tire — **CHECK**

 5. Fuel Tank Quick Drain Valves —

 **DRAIN**

 6. Fuel Quantity — **CHECK VISUALLY**

 7. Fuel Filler Cap — **SECURE**

**NOSE**

 1. Right Static Source – **CHECK CLEAR**

 2. Fuel Strainer Valve — **DRAIN**

 3. Engine Oil Dipstick/Filler Cap —

 **CHECK LEVEL AND SECURITY**

 4. Engine Cooling Air Inlets — **CLEAR**

 5. Propeller and Spinner — **CHECK**

6. Alternator Belt -- **CHECK**

 7. Air Filter — **CHECK**

 8. Nose Wheel Strut and Tire —

 **CHECK**

 7. Left Static Source Opening —

 **CHECK**

**LEFT WING**

 1. Fuel Quantity — **CHECK VISUALLY**

2. Fuel Filler Cap — **SECURE AND**

 **VENT UNOBSTRUCTED**

3. Fuel Tank Quick Drain Valve —

 **DRAIN**

4. Main Wheel Tire — **CHECK**

**LEFT WING LEADING EDGE**

1. Fuel Tank Vent Opening — **CHECK**

2. Stall Warning Opening — **CHECK**

3. Wing Tie-Down — **DISCONNECT**

4. Landing/Taxi Lights — **CHECK FOR**

 **CONDITION**

5. Wing Tip – **CHECK CONDITION**

 **LEFT WING TRAILING EDGE**

1. Aileron — **CHECK**

2. Flap — **CHECK**

**CABIN**

1. Documents — **CHECK ON BOARD**

2. Pitot Tube Cover — **REMOVE**

 3. Pilot’s Operating Handbook — **ON**

 **BOARD**

 4. Airplane Weight and Balance —

 C**HECKED**

 5. Parking Brake — **SET**

 6. Control Wheel Lock — **REMOVE**

 7. Ignition Switch — **OFF**

 8. Avionics Master Switch — **OFF**

 9. Master Switch — **ON**

 10. Fuel Quantity Indicators **CHECK QTY.**

 11. Alternate Static Source Valve — **OFF**

12. Fuel Selector Valve — **BOTH**

13. Flaps — **EXTEND**

14. Pitot Heat — **ON (check hot)**

15. Pitot Heat — **OFF**

16. Nav/Beacon/Landing/Taxi Lights —

 **CHECK FOR OPERATION**

23. Master Switch — **OFF**

24. Baggage Door — **CHECK LOCKED**

**EMPENNAGE**

1. Rudder/Gust Lock — **REMOVE**

 2. Tail Tie-Down — **DISCONNECT**

 3. Control Surfaces — **CHECK**

 4. Trim Tab — **CHECK SECURITY**

 5. Antennas — **CHECK FOR**

 **CONDITION**

**RIGHT WING TRAILING EDGE**

 1. Aileron — **CHECK**

 2. Flap — **CHECK**

**CRUISE**

 1. Throttle — **2200—2700 RPM**

 3. Elevator Trim — **ADJUST**

 3. Mixture — **LEAN**

**DESCENT**

 1. Mixture — **ADJUST**

 2. Power — **AS DESIRED**

3. Fuel Selector Valve — **BOTH**

4. ATIS **— VERIFY**

5. Radios **— TUNED FOR ARRIVAL**

6. Seats, Seatbelts, Harnesses -- **SET**

**BEFORE LANDING**

 1. Misture -- **RICH**

2. Carburetor Heat -- **ON**

 3. Landing/Taxi Lights -- **ON**

 4. Flaps – **AS REQUIRED**

5. Landing Clearance -- **RECEIVED**

**LANDING (NORMAL)**

 1. Airspeed — **70-80 MPH (Flaps Up)**

 2. Wing Flaps — **AS DESIRED**

 3. Airspeed — **65-75 MPH (Flaps DN.)**

**LANDING (SHORT FIELD)**

 1. Airspeed — **65-75 MPH (Flaps Up)**

 2. Flaps — **FULL DOWN (40 Deg.)**

 3. Airspeed — **70 MPH (until flare)**

 4. Power — **REDUCE**

 6. Brakes — **APPLY HEAVILY**

 7. Wing Flaps — **RETRACT**

**GO AROUND/BALKED LANDING**

 1. Throttle — **FULL OPEN**

 2. Wing Flaps — **20 DEG.**

 3. Climb Speed — **65-75 MPH**

 4. Wing Flaps — **10 Deg. (until**

 **obstacles cleared then retract after**

 **safe altitude and 70 MPH)**

**AFTER LANDING/Clearing Runway**

 1. Wing Flaps — **UP**

**AFTER CLEARING RUNWAY**

1. Wing Flaps -- **UP**

 2. Strobe / Landing Lights — **OFF**

3. Pitot Heat **— OFF**

4. Transponder — **ALT (1200)**

5. Carburetor Heat **-- COLD**

**CESSNA 172M PREFLIGHT CHECKLIST**

**CESSNA 172M CHECKLIST**

**V SPEEDS**

**Vso:**

**Vsi:**

**Vfe:**

**Vr:**

**Vx:**

**Vy:**

**Va:**

**Vno:**

**Vne:**

**NORMAL APPROACH 65-75 MPH**

**SHORT APPROACH 70 MPH**

**BEST GLIDE 80 MPH**

**FIRE DURING START ON GROUND**

 1. Cranking — **CONTINUE IF ENG. STARTS**

2. Throttle — **1800 RPM (2 Min.)**

 3. Engine — **SHUTDOWN IF NO START**

 **Fails To Start**

 4. Throttle — **FULL OPEN**

 5. Mixture — **IDLE CUTOFF**

 6. Cranking — **CONTINUE**

7. Fuel Shutoff Valve —**OFF**

 8. Fire Extinguisher — **ACTIVATE**

 9. Engine — **SECURE**

 a. Master Switch — **OFF**

 b. Ignition Switch — **OFF**

 10. Parking Brake — **SET**

11. Airplane — **EVACUATE**

12. Fire — **EXTINGUISH**

 34. Fire Damage — **INSPECT**

**ENGINE FIRE IN FLIGHT**

 1. Mixture — **IDLE CUTOFF**

 2. Fuel Selector Valve — **OFF**

 4. Master Switch — **OFF**

 5. Cabin Air/Heat — **OFF**

 6. Airspeed — **100 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 Master Switch — **OFF**

 5. All Other Switches (except ign. switch) —

 **OFF**

**IF FIRE EXTINGUISHED**

 6. Master Switch — **ON**

 7. Circuit Breakers — **CHECK IN (no reset**)

 8. Radio Switches — **OFF**

 9. Avionics Master Switch — **ON**

10. Radio/Electrical Switches — **ON (1 at a**

 **time)**

 11. Vents / Cabin Air / Heat — **OPEN**

**CABIN FIRE**

 1. Master Switch — **OFF**

 2. Vents / Cabin Air / Heat — **CLOSED**

 3. Fire Extinguisher — **ACTIVATE**

 4. **LAND AS SOON AS PRACTICAL**

**WING FIRE**

 1. Nav, Landing/Taxi Light Switches — **OFF**

 2. Pitot Heat — **OFF**

 3. Strobe Lights — **OFF**

**LOW VOLTAGE ANNUNCIATOR**

 1. Avionics Master Switch — **OFF**

 2. Alternator Circuit Breaker — **CHECK IN**

3. Master Switch — **OFF (both sides)**

 4. Master Switch — **ON (Check Ammeter)**

 14. Throttle Friction Lock — **ADJUST**

 15. Radios And Avionics — **SET**

 16. NAV/GPS Switch — **SET**

 17. Wing Flaps – **SET FOR TAKEOFF**

 18. Parking Brake -- **RELEASED**

**CLEARED FOR TAKEOFF**

 18. Strobe / Landing Lights **— ON**

 19. Transponder **— Verify ALT**

20. Brakes **— RELEASED**

21. Time **— NOTE**

**TAKEOFF (NORMAL)**

 1. Wing Flaps — **UP**

2. Mixture — **RICH (Lean above 3000”)**

3. Throttle — **FULL OPEN**

 4. Rotate — **60 MPH**

5. Engine Instruments**—CHECK**

**TAKEOFF (SHORT FIELD)**

 1. Wing Flaps — **UP**

 2. Brakes — **APPLY**

 3. Throttle — **FULL OPEN**

 4. Mixture — **RICH** **(Lean Above 3000')**

 5. Brakes — **RELEASE**

 6. Rotate – **60 MPH**

 7. Climb Speed **— 68 MPH** (until

 obstacle cleared)

**AFTER TAKEOFF / CLIMB**

 1. Airspeed — **80-90 MPH**

 2. Throttle — **FULL OPEN**

3. Mixture — **LEAN ABOVE 3000’**

4. Landing Lights — **AS REQUIRED**

 5. Engine Instruments -- **CHECK**

**49 MPH**

**57 MPH**

**100 MPH**

**60 MPH**

**75 MPH (50’)**

**91 MPH**

**112 MPH (Sea Level)**

**145 MPH**

**182 MPH**

**163 KIAS**

**ENGINE FAILURE IMMEDIATELY AFTER**

 **TAKEOFF**

1. Airspeed — **75 MPH (Flaps Up)**

 **70 MPH (Flaps Down)**

 2. Mixture — **IDLE CUTOFF**

 3. Fuel Selector Valve — **OFF**

 4. Ignition Switch — **OFF**

 5. Wing Flaps — **AS REQUIRED**

 6. Master Switch — **OFF**

7. Cabin Door — **UNLATCH**

8. Land — **STRAIGHT AHEAD**

**ENGINE FAILURE DURING FLIGHT**

 1. Airspeed — **80 MPH**

 2. Fuel Selector Valve — **BOTH**

3. Mixture -- RICH

4. Carburetor Heat -- ON

 5. Ignition Switch — **BOTH (or start if**

 **propeller is stopped)**

 **6. Primer – IN AND LOCKED**

**EMERGENCY LANDING WITHOUT POWER**

 1. Airspeed — **70-75 MPH (Flaps Up)**

 2. Mixture — **IDLE CUTOFF**

 3. Fule Selector Valve — **OFF**

 4. Ignition Switch — **OFF**

 5. Wing Flaps — **AS REQUIRED**

 6. Doors — **UNLATCHED**

7. Transmit — **121.5**

8. Squawk **— 7700**

9. Master Switch**—OFF**

10. Passenger Seats and Seatbelts —

 **SECURE**

 11. Touchdown — **SLIGHTLY TAIL LOW**

 12. Brakes — **APPLY HEAVILY**

**PRECAUTIONARY LANDING WITH POWER**

1. Wing Flaps — **20 DEGREES**

 2. Airspeed — **70 MPH**

 3. Selected Field — **FLY OVER**

 4. Avionics and Electrical Switches — **OFF**

 5. Flaps — **40 DEGREES (final approach)**

 7. Airspeed — **70 MPH**

 8. Master Switch — **OFF**

 9. Doors — **UNLATCHED**

 10. Touchdown — **SLIGHTLY TAIL LOW**

 11. Ignition Switch — **OFF**

 12. Brakes — **APPLY HEAVILY**

**ROUGH RUNNING ENGINE**

 1. Mixture — **LEAN OR ENRICHEN**

 2. Ignition Switch — **CYCLE MAGNETOS**

 **LEFT, RIGHT, BOTH**

3. Reduce Climb Rate For Better Cooling

 4. If Not Recovered — **LAND AS SOON**

 **AS PRACTICAL**

**EXCESSIVE RATE OF CHARGE**

 1. Alternator — **OFF**

 2. Nonessential Electrical Equipment —

 **OFF**

 3. Flight — **TERMINATE ASAP**

**CESSNA 172M EMERGENCY CHECKLIST**

**BEFORE STARTING ENGINE**

 1. Preflight Inspection — **COMPLETE**

 2. Passenger Briefing — **COMPLETE**

 3. Seats, Belts, Harnesses — **ADJUST**

 4. Fuel Selector Valve — **BOTH**

 5. Avionics Master Switch -- **OFF**

 6. Brakes – **TEST AND SET**

 7. Circuit Breakers – **CHECKED IN**

8. Carburetor Heat – **OFF**

 9. Beacon Light – **ON**

 10. Navigation Lights – **AS REQUIRED**

**STARTING ENGINE**

 1. Primer – **AS REQUIRED**

2. Throttle – **OPEN ¼ INCH**

 3. Mixture – **FULL RICH**

 4. Propeller Area -- **CLEAR**

 5. Master Switch -- **ON**

 6. Ignition Switch -- **START**

7. Oil Pressure -- **CHECK**

 8. Throttle – **800-1000 RPM**

 9. Wing Flaps -- **UP**

 10. Avionics Master Switch -- **ON**

 11. Transponder – **ALT (1200)**

 **TAXI**

1. ATIS – **NOTED**
2. Taxi Clearance – **RECEIVED**
3. Brakes -- **TESTED**

 **BEFORE TAKEOFF**

 1. Parking Brake — **SET**

2. Passenger Seat Backs — **UPRIGHT**

 3. Seats And Seatbelts — **SECURE**

4. Cabin Doors — **CLOSED AND**

 **LOCKED**

 5. Flt. Controls — **FREE AND CORRECT**

 6. Flt. Instruments —**CHECK AND SET**

 7. Fuel Quantity — **CHECKED**

 8. Fuel Selector Valve — **BOTH**

 9. Mixture — **RICH**

 10. Elevator Trim — **SET FOR TAKEOFF**

 11. Throttle — **1700 RPM**

 a. Magnetos — **CHECK MAX DROP**

 **125 RPM —**  **50 RPM DIFF**

b. Carburetor Heat -- CHECK

 c. Engine Instruments — **CHECK**

 d. Ammeter — **CHECK**

 e. Suction Guage —  **CHECK**

12. Throttle – **CHECK IDLE**

 12. Throttle — **1000 RPM (or less)**

13. Takeoff Briefing**—COMPLETE**

**CESSNA 172M CHECKLIST**