

# Cessna-172M N172JD

(8-19-24)

## \*Check Fuel and Oil Quantity (max 38 usable fuel and 5 minimum oil)

### Preflight Cabin

- |                                 |              |
|---------------------------------|--------------|
| 1. S.P.A.R.O.W.                 | Check        |
| 2. Pitot Tube Cover             | Remove       |
| 3. Control Wheel Lock           | Remove       |
| 4. Master Switch (Battery Only) | On           |
| 5. Fuel Quantity/Annunciators   | Check        |
| 6. Flaps                        | Extend       |
| 7. Lights, Pitot Heat           | On/Check/Off |
| 8. Master Switch                | Off          |
| 9. Windscreen                   | Clean        |

### Preflight Empennage

- |                     |                              |
|---------------------|------------------------------|
| 1. Aspen OAT        | Check for Blockage           |
| 2. Tail Tie-Down    | Disconnect                   |
| 3. Control Surfaces | Check Freedom and Security   |
| 4. Trim Tab         | Check Security               |
| 5. Antennas         | Check Security and Condition |

### Preflight Right Wing

- |                          |                |
|--------------------------|----------------|
| 1. Aileron               | Check          |
| 2. Flap                  | Check          |
| 3. Wing Tie Down         | Disconnect     |
| 4. Main Wheel Tire/Brake | Check          |
| 5. Fuel Quantity         | Check Visually |
| 6. Fuel Drain Valve (1)  | Drain/Check    |
| 7. Fuel Filler Cap       | Secure         |

### Preflight Nose

- |                                  |                                   |
|----------------------------------|-----------------------------------|
| 1. Fuel Strainer Valve           | Pull to Check Ensure Full Closure |
| 2. Engine Oil Dipstick           | Check level and Secure            |
| *5 qt minimum (5.5 Summer)       |                                   |
| *Fill to 6+ for extended flights |                                   |
| <b>*DO NOT OVERTIGHTEN*</b>      |                                   |
| 3. Engine Cooling Air Inlets     | Clear                             |
| 4. Propeller & Spinner           | Check                             |
| 5. Alternator Belt               | Check                             |

- |                              |       |
|------------------------------|-------|
| 6. Air Filter                | Check |
| 7. Nose Wheel Strut and Tire | Check |
| 8. Static Source Opening     | Check |

### Preflight Left Wing

- |                            |                    |
|----------------------------|--------------------|
| 1. Pitot Tube + Drain Hole | Check for Blockage |
| 2. Fuel Tank Vent          | Check for Blockage |
| 3. Stall Warning Opening   | Check for Blockage |
| 4. Wing Tie Down           | Disconnect         |
| 5. Fuel Quantity           | Check Visually     |
| 6. Fuel Drain Valve(1)     | Drain/Check        |
| 7. Fuel Filler Cap         | Secure             |
| 8. Aileron                 | Check              |
| 9. Flap                    | Check              |
| 10. Main Wheel Tire/Brake  | Check              |
| 11. Baggage Door           | Secure             |

### Before Starting Engine

- |                            |                 |
|----------------------------|-----------------|
| 1. Preflight Inspection    | Complete        |
| 2. Passenger Brief         | Complete        |
| 1. S- Seats/Seatbelts      |                 |
| 2. A- Air                  |                 |
| 3. F- Fire                 |                 |
| 4. E- Emergency            |                 |
| 5. T- Talking              |                 |
| 6. Y- Your Questions       |                 |
| 3. Seats/Seatbelts         | Adjust and Lock |
| 4. Brakes                  | Test & Set      |
| 5. Fuel Selector           | Both            |
| 6. Elevator Trim           | Set for Takeoff |
| 7. Alternate Static Source | Off             |
| 8. Mixture Control         | Full Rich       |
| 9. Throttle                | Pump x2         |
| 10. Throttle               | Open 1/8 Inch   |

- |                      |                   |
|----------------------|-------------------|
| 11. Carb Heat        | Cold              |
| 12. Circuit Breakers | Check In          |
| 13. Lights           | Off Except Beacon |

### CAUTION

**The radio master switch and PFD switch must be off during engine start to prevent possible damage to avionics.**

- |                              |     |
|------------------------------|-----|
| 10. Radio Master, PFD Switch | OFF |
|------------------------------|-----|

### NOTE

**If engine is warm omit priming procedure**

### PRIMING PROCEDURE

- |              |               |
|--------------|---------------|
| 1. 1-3 Pumps | IF NEEDED     |
| 2. Primer    | In and Locked |

### Starting Engine

- |                                 |   |
|---------------------------------|---|
| 1. Propeller Area               | Clear   |
| 2. Master Switch (Battery Only) | On  |
| 3. Ignition Switch              | Start   |
| 4. Throttle                     | 800-1000 RPM                                      |
| 5. Oil Pressure                 | Check   |
| 6. Mixture                      | Lean for Max RPM                                  |
| 7. Master Switch (ALT)          | On  |
| 8. Radio Master/Radios          | On  |
| 9. PFD Switch                   | On  |
| 10. EDM 830 Display             | "REFUEL?"Y/N<br>(See EDM830 Cheat Sheet for more) |
| 11. Nav Lights                  | OFF Except for Night                              |
| 12. Flaps                       | Retract   |
| 13. Flap handle                 | Neutral   |

### Before Taxi

- |                           |                                    |
|---------------------------|------------------------------------|
| 1. Heat / Vents / Defrost | As Needed                          |
| 2. Radios/Nav aids/GPS    | Checked / Set                      |
| 3. ATIS                   | Set BARO/ALT/HDG Bug               |
| 4. Transponder            | Verify ALT/SQK<br>No Annunciations |

### Taxi

- |                                  |                          |
|----------------------------------|--------------------------|
| 1. Airport Diagram               | Available                |
| 2. Taxi Clearance                | Obtain                   |
| 3. Taxi Route                    | Brief                    |
| 4. Taxi Area                     | Clear                    |
| 5. Brakes                        | Release and Test         |
| 6. Throttle                      | Adjust for Min Brake Use |
| 7. Flight Instruments            | Check                    |
| • Turn coordinator + Mag Compass |                          |

### NOTE:

**This checklist is a guide to coordinate Pilot Operating Handbook and STC data applicable to this particular aircraft only. The applicable Pilot Operating Handbook and STC installations remain the official documentation for this aircraft. The pilot in command is responsible for complying with all items in the Pilot Operating Handbook and applicable STCs**



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**Before Takeoff - Run-Up**

- |                            |  |
|----------------------------|--|
| 1. Seats/Seat Belts        | Secure                                       |
| 2. Seat Backs              | Most Upright Position                        |
| 3. Cabin Doors             | Closed and Locked                            |
| 4. Flight Controls         | Free & Correct                               |
| 5. Flight Instruments      | Check & Set                                  |
| 6. Fuel Quantity           | Check  |
| 7. Mixture                 | Richen to 1/2"                               |
| 8. Carb Heat               | Cold   |
| 9. Throttle                | 1700 RPM                                     |
| 1. Mag Check               | L-R-L-Both<br>(125/50 Max)                   |
| EGT                        | Uniform Rise<br>(Volts 8.5+, see supplement) |
| 2. Carb Heat               | Check RPM Drop<br>CRB Temp Increase          |
| 3. Engine Instruments      | Check  |
| 4. Amps/Volts              | Check Positive/14V                           |
| 10. Annunciators           | Check  |
| 11. Throttle               | Check Idle                                   |
| 15. Throttle               | 800-1000 RPM                                 |
| 16. Mixture                | Lean Max RPM                                 |
| 17. Throttle Friction Lock | Adjust                                       |
| 18. GPS CDI                | Select Nav Source                            |
| 19. ASPEN CDI              | Select Nav Source                            |
| 20. EDM830 Switch          | Select EGT                                   |
| 21. Transponder            | Verify ALT/SQK<br>No Annunciations           |
| 22. Carb Heat              | Cold   |
| 23. Parking Brake          | Release                                      |

**Before Takeoff- Hold Short Line**

- |                                    |   |
|------------------------------------|---|
| 1. Frequency                       | TWR/CTAF                                  |
| 2. Elevator Trim                   | Set for Takeoff                           |
| 3. Flaps                           | Set for Takeoff (0°-10°)                  |
| 4. Takeoff                         | Brief                                     |
| Runway/Takeoff Type/Speeds/HDG/ALT |   |
| Lose Engine...                     |   |
| Runway                             | IDLE, EXIT RWY                            |
| Airborne Rwy Remaining             | LAND                                      |
| Below 1000 AGL                     | PUSH 70kts,<br>Land Straight +/-30°       |
| Above 1000 AGL                     | PUSH 70kts,<br>Consider Return to Airport |
| 5. Land/Taxi/Bcn/Strobe            | On  |
| 6. Mixture                         | Full Rich                                 |

**All speeds in KIAS****Normal Takeoff**

- |             |           |
|-------------|-----------|
| 1. Flaps    | 0°-10°    |
| 2. Throttle | Full Open |
| 3. Vr       | 53 KIAS   |
| 4. Vy       | 73 KIAS   |

**SHORT FIELD**

- |                                     |                  |
|-------------------------------------|------------------|
| 1. FLAPS                            | 10°              |
| 2. Use all Available Runway         |                  |
| 3. Hold Brakes/Full Power/Check RPM |                  |
| 4. Release Brakes                   |                  |
| 5. Vr                               | 53 KIAS          |
| 6. Vx                               | 58 KIAS          |
| 7. Obstacle Cleared                 | 73 KIAS/Flaps UP |

**SOFT FIELD**

- |                            |                  |
|----------------------------|------------------|
| 1. FLAPS                   | 10°              |
| 2. Full Aft/No Brakes      |                  |
| 3. Remain in Ground Effect |                  |
| 4. Begin Climb             | Vx 58 KIAS       |
| 5. Obstacle Cleared        | 73 KIAS/Flaps UP |

**Enroute Climb**

- |                           |                       |
|---------------------------|-----------------------|
| 1. Airspeed               | 80 - 90 KIAS          |
| 2. Throttle               | Full Open             |
| 3. Carb Heat              | Cold                  |
| 4. Mixture                | Full Rich below 3000' |
| 5. Engine Instruments/CHT | Check                 |
| 6. Transponder            | Verify ALT/SQK        |

**Cruise**

- |                  |                 |
|------------------|-----------------|
| 1. Power         | 2,200-2,400 RPM |
| 2. Carb Heat     | Cold            |
| 3. Elevator Trim | Adjust          |
| 4. Mixture       | Lean Max Rmp    |
| 5. Landing Light | Off             |

**Pre-Maneuver Checklist**

- |                       |             |
|-----------------------|-------------|
| 1. Instruments        | Check       |
| 2. Configure Airplane |             |
| Fuel                  | Tank Both   |
| Mixture               | Full Rich   |
| Carb Heat             | Off         |
| Landing Light         | On          |
| 3. Seatbelts          | Secure      |
| 4. Clearing Turns     | Execute     |
| 5. Radio Call         | As Required |

**Enroute Descent**

- |                        |                       |
|------------------------|-----------------------|
| 1. Weather (ATIS)      | Obtain                |
| 2. Altimeters          | Set                   |
| 3. Approach            | Brief                 |
| 4. VOR/GPS Setup       | As Needed             |
| 5. ASPEN and GPS CDI   | Select                |
| 6. Fuel Selector Valve | Both                  |
| 7. Mixture             | Full Rich below 3000' |
| 8. Carb Heat           | Hot Below Green Arc   |
| 9. Landing Light       | On                    |

**Before Landing**

- |                          |  |
|--------------------------|--|
| 1. Seat Backs            | Most Upright Position                        |
| 2. Seats/Seat Belts      | Secure                                       |
| 3. Fuel Selector Valve   | Both   |
| 4. Mixture Control       | Richen                                       |
| 5. Carb Heat             | As Needed<br>(apply full heat prior to idle) |
| 6. Landing & Taxi Lights | On   |

**Normal Landing**

- |             |                            |
|-------------|----------------------------|
| 1. Airspeed | 65 - 75 KIAS               |
| 2. Flaps    | As Needed<br>Below 85 KIAS |

**SHORT FIELD**

- |                        |                                      |
|------------------------|--------------------------------------|
| 1. Flaps 30°           |                                      |
| 2. Airspeed            | 61 KIAS                              |
| 3. Aerodynamic Braking | Flaps UP<br>Yoke Aft<br>Apply Brakes |

**SOFT FIELD**

- |                          |         |
|--------------------------|---------|
| 1. Wing Flaps            | 20°-30° |
| 2. Hold Nose Wheel Off   |         |
| 3. MINIMUM to NO Braking |         |

**Balked Landing**

- |                |                |
|----------------|----------------|
| 1. Throttle    | Full Open      |
| 2. Carb Heat   | Cold           |
| 3. Wing Flaps  | Retract to 20° |
| 4. Climb Speed | 65 KIAS        |
| 5. Flaps       | Retract Slowly |

**After Landing (Clear of Runway)**

- |                   |                           |
|-------------------|---------------------------|
| 1. Carb Heat      | Cold                      |
| 2. Aircraft       | Clear of Runway Full Stop |
| 3. Mixture        | Lean +1"                  |
| 4. Throttle       | Adjust for Min Brake Use  |
| 5. Wing Flaps     | Up                        |
| 6. Lights         | Off Except for Beacon     |
| 7. Transponder    | ALT/1200                  |
| 8. Pitot Heat     | Off                       |
| 9. Taxi Clearance | Brief                     |

**Securing Aircraft**

- |                        |                          |
|------------------------|--------------------------|
| 1. Lights              | Off                      |
| 2. PFD Switch          | Off                      |
| 3. Radio Master Switch | Off                      |
| 4. Throttle            | Idle                     |
| 5. Magnetos            | Check for Ground         |
| 6. Mixture             | Idle Cut Off             |
| 7. Magnetos            | Off, Remove Key          |
| 8. Master Switch       | Off                      |
| 9. Control Wheel Lock  | Install                  |
| 10. Parking Brake      | Off when Chocked         |
| 11. Fuel Selector      | Left or Right            |
| 12. Sun Shields        | Install                  |
| 13. Pitot Tube Cover   | Put on                   |
| 14. Aircraft           | Locked if away from Home |
| 15. Flight Plan        | Closed                   |

**V Speeds and Specs**

- |  |                    |
|--|--------------------|
| <input type="checkbox"/> X-Wind (Max Demo'd) | 15 Knots           |
| <input type="checkbox"/> Vg                  | 68 KIAS (flaps up) |
| <input type="checkbox"/> Vr                  | 53 KIAS            |
| <input type="checkbox"/> Vx (Sea Level)      | 62 KIAS            |
| <input type="checkbox"/> Vy (Sea Level)      | 73 KIAS            |
| <input type="checkbox"/> Vso Stall w/ Flaps  | 49 KIAS            |
| <input type="checkbox"/> Vs1 Stall w/o Flaps | 56 KIAS            |
| <input type="checkbox"/> Va                  | 85-105 KIAS        |

**Aircraft Information**

- |   |                      |
|---|----------------------|
| <input type="checkbox"/> Gross Takeoff Weight | 2550 lbs             |
| <input type="checkbox"/> Engine               | Lycoming O-360-A4M   |
| <input type="checkbox"/> Max Power            | 180 BHP              |
| <input type="checkbox"/> Max Engine Speed     | 2700 RPM             |
| <input type="checkbox"/> Fuel Type            | 100LL (Blue)         |
| <input type="checkbox"/> Fuel Capacity        | 38 Gal Usable        |
| <input type="checkbox"/> Oil Capacity         | 8 Qts (Minimum 5)    |
| <input type="checkbox"/> Electrical           | 14 Volt              |
| <input type="checkbox"/> Tire Pressure        | Nose-45/ Main-38 PSI |