**Cessna 172 Checklist**

**C-172 PREFLIGHT INSPECTION C-172**

**FIRST**

1. Fuel Quantity -- CHECK VISUALLY for desired level in BOTH Tanks

2. Fuel Filler Caps -- CHECK SECURE

3. Windshield -- CHECK

**CABIN**

1. Pilot's Operating Handbook, ARW -- AVAILABLE IN THE AIRPLANE

2. Control Wheel Lock -- REMOVE

3. Ignition Switch -- OFF

4. Master Switch -- ON

5. Fuel Quantity Indicators -- CHECK QUANTITY

6. Flaps -- 10°, CHECK for proper extension

7. Master Switch -- OFF

8. Fuel Selector Valve -- BOTH

**LEFT WING**

1. Main Wheel Tire -- CHECK for proper inflation and security

2. Brakes -- CHECK for cracks and security

3. Fuel Sump -- DRAIN small amount, CHECK FUEL, CHECK CLOSED

4. Cabin Air Intake -- CHECK for blockage

**LEFT WING Leading Edge**

1. Pitot Tube Cover -- REMOVE and CHECK opening for blockage

2. Stall Warning Opening -- CHECK for blockage

3. Fuel Tank Vent Opening -- CHECK for blockage

**LEFT WING Trailing Edge**

1. Flap -- CHECK freedom of movement and security

2. Aileron -- CHECK freedom of movement and security

3. Position Light -- RED

**Empennage**

1. Rudder Gust Lock -- REMOVE

2. Control Surfaces -- CHECK freedom of movement and security

3. Antenna -- CHECK for security

**RIGHT WING Trailing Edge**

1. Flap -- CHECK freedom of movement and security

2. Aileron -- CHECK freedom of movement and security

3. Position Light -- GREEN

**RIGHT WING**

1. Main Wheel Tire -- CHECK for proper inflation and security

2. Brakes -- CHECK for cracks and security

4. Fuel Sump -- DRAIN small amount, CHECK FUEL, CHECK CLOSED

4. Cabin Air Intake -- CHECK for blockage

## C-172 PREFLIGHT INSPECTION CONT C-172

**NOSE**

1. Engine Oil Level -- CHECK, do not operate with less than 6 quarts. Fill to 8 quarts for extended flight

2. Fuel Strainer -- DRAIN for 4 seconds, CHECK CLOSED

3. Propeller and spinner -- CHECK for nicks and security

4. Alternator belt -- CHECK for tightness

5. Carburetor Air Filter -- CHECK for blockage

6. Landing Light -- CHECK for condition and cleanliness

7. Nose wheel Strut and Tire -- CHECK for proper inflation and security

8. Static Source Opening -- CHECK for blockage

**CABIN**

1. Master Switch -- ON

2. Flaps -- RETRACT

3. Radios -- ON and WORKING, listen for ATIS, get CLEARANCE (CRADS)

4. Radios -- SET

5. Radios -- OFF

6. Lights (all), Pitot Heat -- ON and WORKING

7. Lights, Avionics Power Switch, Pitot Heat -- OFF

8. Master Switch -- OFF

9. Elevator Trim -- TAKEOFF

10. Baggage Door -- CLOSED and LOCKED

11. Tie Downs -- DISCONNECT

**BEFORE STARTING ENGINE**

1. Preflight Inspection -- COMPLETE

2. Passenger Briefing -- COMPLETE

3. Seats, Belts, Shoulder Harnesses -- ADJUST and LOCK

4. Fuel Selector Valve -- BOTH

5. Radios, Electrical Equipment, Avionics Power Switch -- OFF

6. Circuit Breakers -- CHECK IN

7. Brakes -- TEST and SET

**STARTING ENGINE ABOVE FREEZING**

1. Mixture -- RICH

2. Carburetor Heat -- COLD

3. Prime -- AS REQUIRED, IN, and LOCKED

4. Throttle -- OPEN 1/2 INCH

5. **Master Switch -- ON**

6. Rotating Beacon -- ON

7. Propeller Area -- CLEAR

8. Ignition Switch -- START (RELEASE when engine starts)

9. Throttle -- ADJUST for 1000 RPM or less

10. Oil Pressure -- CHECK

11. Mixture -- LEAN for Max RPM's or RICH below 3000'

12. Radios, Avionics Power Switch -- ON

13. Transponder -- Standby

**TAXI**

1. All Radios -- ON

2. Turn Coordinator -- WORKING

3. Magnetic Compass -- FULL OF FLUID

4. Suction/Vacuum -- WORKING

5. Electrical (Ammeter) -- CHECK

**BEFORE TAKEOFF**

1. Parking Brake -- SET

2. Cabin Doors -- CLOSED and LATCHED

3. Fuel Selector Valve -- BOTH

4. Flight Controls -- FREE and CORRECT

5. Throttle -- 1700 RPM

a. Mixture -- LEAN for Max RPM's, RICH below 3000'

b. Magnetos -- CHECK (RPM drop should not exceed 125 RPM on either

magneto or 50 RPM differential between magnetos)

c. Carburetor Heat -- CHECK (for RPM drop)

d. Engine Instruments -- CHECK

e. Ammeter -- CHECK

f. Suction Gage -- CHECK

6. Flight Instruments -- SET including D.G., A.F., Alt.

7. Throttle -- 1000 RPM

8. Throttle Friction Lock -- ADJUST

9. Parking Brake -- RELEASE

**Cleared For Takeoff**

1. **S**trobes -- ON

2. **T**ime -- COPY

3. **A**irspeed -- ALIVE

4. **R**unway heading -- ON D.G.

5. **T**ransponder -- ALT

**TAKEOFF**

**Normal Takeoff**

1. Wing Flaps -- UP

2. Carburetor Heat -- COLD

3. Throttle -- FULL OPEN

4. Elevator Control -- LIFT NOSE WHEEL at 55 KIAS

5. Climb Speed -- 80-90 KIAS (78 KIAS Vy)

**Short Field Takeoff**

1. Wing Flaps -- UP

2. Carburetor Heat -- COLD

3. Brakes -- APPLY

4. Throttle -- FULL OPEN

5. Mixture -- RICH (Above 3000 feet, LEAN to obtain MAX RPM's)

6. Breaks -- RELEASE

7. Elevator Control -- SLIGHTLY TAIL LOW

8. Climb Speed -- 64 KIAS (Until all obstacles are cleared)

9. Wing Flaps -- RETRACT slowly after reaching 78 KIAS

**ENROUTE CLIMB**

1. Airspeed -- 70-90 KIAS

2. Throttle -- FULL OPEN

3. Mixture -- RICH below 3000', LEAN for MAX RPM's

**BEFORE APPROACH**

1. Seats, Belts, Harnesses - ADJUST and LOCK

2. Mixture -- RICH

3. Carburetor Heat -- ON

4. Fuel Selector Valve -- BOTH

**APPROACH (Prior to IAF)**

1. **M**issed Approach Review -- COMPLETE

2. **A**TIS -- ALTIMETER SETTING

3. **R**adios -- (NAV/COMM - IDENTIFY)

4. **T**ime to MAP -- COPY

5. **H**eading Indicator -- SET

6. **A**ltitude -- (MDA-30 sec, DH-50ft)

**At FAF or for Holding**

1. **T**urn -- AS NEEDED

2. **T**ime -- ONE MINUTE

3. **T**wist -- SET inbound course

4. **T**hrottle -- SET to holding speed

5. **T**alk -- AS NEEDED

**LANDINGS**

**Normal Landing**

1. Airspeed -- 60-70 KIAS (Flaps UP)

2. Wing Flaps -- AS DESIRED (below 85 KIAS)

3. Airspeed -- 55-65 KIAS (Flaps DOWN)

4. Touchdown -- MAIN WHEELS FIRST

5. Landing Roll -- LOWER NOSE WHEEL GENTLY

6. Braking -- MINIMUM REQUIRED

**Balked Landing**

1. Throttle -- FULL OPEN

2. Carburetor Heat -- COLD

3. Wing Flaps -- Retract to 20°

4. Airspeed -- 55 KIAS

5. Wing Flaps -- RETRACT (slowly at 60 KIAS)

**AFTER LANDING**

1. **F**laps -- UP

2. **A**ccessories -- OFF

3. **C**arburetor Heat -- COLD

4. **T**ransponder -- Standby

5. **T**rim -- To Takeoff

6. **S**trobes -- OFF

**SECURING AIRPLANE**

1. **R**adios -- OFF

2. **E**lectrical Equipment, Lights -- OFF

3. **M**ixture -- IDLE CUT-OFF

4. **M**ags -- OFF

5. **M**aster Switch -- OFF

**6. Flight plan -- CLOSE**

# EMERGENCY CHECKLIST

**1. Airplane -- FLY**

**ENGINE FAILURES -- During Takeoff Run**

1. Throttle -- IDLE

2. Brakes -- APPLY

3. Wing Flaps -- RETRACT

4. Mixture -- IDLE CUT-OFF

5. Ignition Switch -- OFF

6. Master Switch -- OFF

**Immediately after Takeoff**

1. Airspeed -- 65 KIAS (Flaps UP) or 60 KIAS (Flaps DOWN)

2. Mixture -- IDLE CUT-OFF

3. Fuel Selector Valve -- OFF

4. Ignition Switch -- OFF

5. Wing Flaps -- AS REQUIRED

6. Master Switch -- OFF

7. Land -- STRAIGHT AHEAD if below 400 feet AGL

**During Flight**

1. Airspeed -- 65 KIAS

2. Find place to land

3. Carburetor Heat -- ON

4. Throttle -- FULL

5. Mixture -- RICH

6. Fuel Selector Valve -- BOTH

7. Primer -- IN and LOCKED

8. Ignition Switch -- BOTH (or START if propeller is stopped)

9. Magnetos -- CHECK

10. Fuel Quantity Indicators -- CHECK QUANTITY

11. Radios -- Declare Emergency, Transponder -- SET to 7700

13. Landing -- EXECUTE FORCED LANDING

**FORCED LANDINGS** -- **Without Engine Power**

1. Airspeed -- 65 KIAS (flaps UP) or 60 KIAS (Flaps DOWN)

2. Mixture -- IDLE CUT-OFF

3. Fuel Selector Valve -- OFF

4. Ignition Switch -- OFF

5. Wing Flaps -- AS REQUIRED (40° recommended)

6. Master Switch -- OFF

7. Doors -- UNLATCH PRIOR TO TOUCHDOWN

8. Touchdown -- SLIGHTLY TAIL LOW

9. Brakes -- APPLY HEAVILY

**Precautionary with Engine Power**

1. Wing Flaps -- 20°

2. Airspeed -- 60 KIAS

3. Selected Field -- FLY OVER, noting obstructions and terrain, then retract flaps upon reaching a safe altitude and airspeed.

4. Radios, Electrical Switches, and Radio Power Switch -- OFF

5. Wing Flaps -- 40°

6. Airspeed -- 60 KIAS

7. Master Switch -- OFF

8. Doors -- UNLATCH PRIOR TO TOUCHDOWN

9. Touchdown -- SLIGHTLY TAIL LOW

10. Ignition Switch -- OFF

11. Brakes -- APPLY HEAVILY

**Ditching**

1. Radio -- TRANSMIT MAYDAY on 121.5 and SQUAWK 7700

2. Heavy Objects (in baggage area) -- SECURE or JETTISON

3. Approach -- High Winds, Heavy Seas -- INTO THE WIND

Light Winds, Heavy Swells -- PARALLEL TO SWELLS

4. Wing Flaps -- 20° to 40°

5. Power -- ESTABLISH 300 FT/MIN DESCENT AT 55 KIAS

If no power : Flaps -- 10°, Airspeed -- 60 KIAS or Flaps -- 0°, Airspeed -- 65 KIAS

6. Cabin Doors -- UNLATCH

7. Life Vests -- Put ON, DO NOT inflate.

8. Touchdown -- LEVEL ATTITUDE AT 300 FT/MIN DESCENT

9. Face -- CUSHION at touchdown with folded coat

10. Airplane -- EVACUATE through cabin doors. If necessary, open windows and flood cabin to equalize pressure so doors can be opened.

11. Life Vests and Raft - INFLATE

**FIRES -- During Start On Ground**

1. Cranking -- CONTINUE to get a start which would suck the flames and accumulated fuel through the carburetor and into the engine.

If the engine starts:

2. Power -- 1700 RPM for a few minutes

3. Engine -- SHUTDOWN and inspect for damage

If engine fails to start:

4. Throttle -- FULL OPEN

5. Mixture -- IDLE CUT-OFF

5. Cranking -- CONTINUE in an effort to get a start

6. Fire Extinguisher -- OBTAIN (have ground attendants obtain if not installed)

7. Engine -- SECURE

a. Master Switch -- OFF

b. Ignition Switch -- OFF

c. Fuel Selector Valve -- OFF

8. Fire -- EXTINGUISH using fire extinguisher, wool blanket, or dirt

9. Fire Damage -- INSPECT

**Engine Fire in Flight**

1. Mixture -- IDLE CUT-OFF

2. Fuel Selector Valve -- OFF

3. Master Switch -- OFF

4. Cabin Heat and Air -- OFF (except wing root vents)

5. Airspeed -- 100 KIAS (If fire is not extinguished, increase glide speed to find an airspeed which will provide an incombustible mixture)

6. Forced Landing -- EXECUTE

**Electrical Fire in Flight**

1. Master Switch -- OFF

2. All Other Switches (except ignition switch) -- OFF (includes radio power, pitot heat, radios, lights, and electrical equipment)

3. Vents/Cabin Air/Cabin Heat -- CLOSED

4. Fire Extinguisher -- ACTIVATE

When fire is out:

5. Cabin -- VENTILATE

If fire appears out and electrical power is necessary for continuance of flight:

6. Master Switch -- ON

7. Circuit Breakers -- CHECK for faulty circuit, do not reset

8. Radio Switches -- OFF

9. Radio Power Switch -- ON

10. Radio/Electrical Switches -- ON one at a time, with delay after each until short circuit is localized

**Cabin Fire**

1. Master Switch -- OFF

2. Vents/Cabin Air/Cabin Heat -- CLOSED

3. Fire Extinguisher -- ACTIVATE

When fire is out:

4. Cabin -- VENTILATE

5. Airplane -- LAND as soon as possible

**Wing Fire**

1. Navigation Lights -- OFF

2. Strobe -- OFF

3. Pitot Heat Switch -- OFF

4. Airplane -- SIDE SLIP to keep flames away from cabin and LAND as soon as possible

**Landing With A Flat Main Tire**

1. Wing Flaps -- AS DESIRED

2. Approach -- NORMAL

3. Touchdown -- GOOD TIRE FIRST, hold airplane off flat tire as long as possible with aileron control

**Static Source Blockage**

1. Alternate Static Source Valve -- PULL ON

2. Airspeed -- Consult tables in POH

**ELECTRICAL POWER SUPPLY SYSTEM MALFUNCTIONS**

**Ammeter Shows Excessive Rate of Charge**

1. Alternator -- OFF

2. Nonessential Electrical Equipment -- OFF

3. Flight -- TERMINATE as soon as practical

**Low-Voltage Light Illuminates During Flight**

1. Radios, Avionics Power Switch -- OFF

2. Master Switch -- OFF

3. Master Switch -- ON

4. Low Voltage Light -- CHECK OFF

5. Radios, Avionics Power Switch -- ON

If Low-Voltage Light illuminates again:

6. Alternator -- OFF

7. Nonessential Electrical Equipment -- OFF

8. Flight -- TERMINATE as soon as practical