

# CESSNA 172 CHECKLIST

## PRE-EXTERNAL CHECKS

1. Wing & Engine covers - **REMOVED**
2. Control lock - **REMOVED**
3. Trim Check - **Full Movement**
4. Master - **BATTERY ONLY - On**
5. Flaps - **Down to 20 Degrees**
6. Lights - **Check** (as required)
7. Check - **Fuel Gauges**
8. Master - **Off**
9. ELT - **On board or Placarded**
10. Fire Extinguisher - **Secure & Charged**
11. First aid kit & Documents - **Stowed**

## External checks - PER POH

### ENGINE START

1. Record - **Hobbs Meter**
2. Passengers - **Brief** (See Briefings)
3. Seats & Harnesses - **Adjusted**
4. Avionics Master - **OFF**
5. Radios - **OFF**
6. Transponder - **OFF**
7. All Switches - **OFF**
8. Beacon - **ON**
9. Circuit Breakers - **Checked**
10. FUEL - **ON LEFT**
11. Mixture - **RICH**
12. Throttle - **Set 1/4"**
13. Carb Heat - **COLD**
14. Magnetos - **on BOTH**
15. Prime (**2 - 3 Shots**)
16. Master - **BATTERY ONLY - ON**
17. Brakes - **SET**
18. Check - **All Clear**
19. **Start Engine** (1000 RPM)

### AFTER START

1. Oil Pressure - **Check** (30 Sec)
2. Record - **Engine Start Time**
3. Alternator - **ON - Check Charging**
4. Avionics Master - **ON**
5. Radios - **ON**
6. Mixture - **Lean for Taxiing**
7. Flaps - **Cycle & UP in Stages**
8. Throttle Tension - **SET**
9. Flight Instruments - **SET**
10. Alternate Static - **CHECK**
11. Transponder - **STANDBY /1200**
12. Radio - **CHECK**
13. FUEL - **ON RIGHT**

## TAXI

1. Lights - **As required**
2. Brakes - **CHECK**
3. Rolling Instruments Check - **L/R**

## RUN UP

1. Line up - **Into Wind**
2. Nose Wheel - **STRAIGHT**
3. Brakes - **SET**
4. Fuel on - **BOTH**
5. Mixture - **RICH**
6. Throttle - **1700 RPM**
7. Oil Temp & Pressure - **CHECK**
8. Suction - **4" - 6"**
9. Ammeter - **Check with Load**
10. Mags - **Check Max drop 125 RPM**  
**Max diff 50 RPM**
11. Carb Heat - **HOT**
12. Mixture Leaning - **CHECK**
13. Throttle - **IDLE**
14. Carb Heat - **COLD**
15. Throttle - **1000 RPM**

## BEFORE TAKEOFF

1. Seats and Harnesses - **SECURE**
2. Door & Windows - **SECURE**
3. FUEL - **ON BOTH & SUFFICIENT**
4. Flaps - **as REQUIRED**
5. Mixture - **RICH**
6. Carb Heat - **COLD**
7. Landing Light - **ON**
8. Mags - **On BOTH**
9. Master Switch - **ON**
10. Primer - **LOCKED**
11. Instruments - **CHECKED & SET**
12. Avionics - **CHECKED & SET**
13. Trim - **Set for Takeoff**
14. Controls - **FREE & CORRECT**
15. Pitot Heat - **As Required**
16. Transponder - **ALT**
17. Time up - **Record**
18. **Pre Take-off Brief** (See Briefings)
19. **360° Lookout**

## TAKEOFF ROLL CHECKS

1. Takeoff Power - **CHECK**
2. Oil Pressure & Temp.- **GREEN**
3. Airspeed indication - **ALIVE**

# CESSNA 172 CHECKLIST

## CRUISE CHECKS

1. Landing Light - **OFF**
2. Power - **As Required**
3. Engine Gauges - **CHECK**
4. Mixture - **Lean as Required**
5. Carb Heat - **CHECK**
6. Ammeter Electric Load - **CHECK**

## DESCENT/IN RANGE

1. Instruments - **CHECKED & SET**
2. Mixture - **RICH**
3. Landing Light - **ON**
4. Passengers - **Brief**

## BEFORE LANDING

1. Fuel - **ON BOTH**
2. Mixture - **RICH**
3. Carb Heat - **ON**
4. Landing Light - **ON**
5. Mags - **On BOTH**
6. Master - **ON**
7. Primer - **LOCKED**
8. Engine Gauges - **CHECK**
9. Brake Pressure - **CHECK**
10. Seats & Harnesses - **SECURE**
11. Doors & Windows - **SECURE**
12. **Pre-Landing Brief**
13. Sterile cockpit - **BELOW 1000**

## AFTER LANDING

1. Clear Runway by 200' - **STOP**
2. Carb Heat - **COLD**
3. Throttle - **1000 RPM**
4. Flaps - **UP**
5. Mixture - **Lean for Taxiing**
6. Landing Lights - **OFF**
7. [Pitot heat OFF]
8. Check ELT - **121.5**
9. [Close Flight Plan]
10. Transponder - **OFF/1200**
11. Time Down - **Record**

## SHUTTING DOWN

1. Radios - **OFF**
2. Avionics Master - **OFF**
3. All Switches - **OFF**
4. Beacon - **ON**
5. Throttle - **IDLE**
6. Live Mags - **Check**
7. Throttle - **1000 RPM**
8. Mixture - **Idle Cut Off**
9. Mags - **OFF & KEY OUT**
10. Master - **OFF**
11. Fuel - **OFF**

## AFTER PROP STOPS

1. Record - **Engine Stop Time**
2. Record - **Hobbs Meter**
3. Control Lock - **IN**
4. Seats Belts - **SECURE**
5. Pitot Tube Cover - **ON**
6. Aircraft - **Refuel**
7. Aircraft - **Tie Down**

## DIVERSION CHECKLIST

1. Track
2. Heading (correct for wind)
3. Distance
4. ETE
5. MEF
6. Safe Altitude
7. Fuel Required/Endurance
8. Notify FSS
9. Time
10. Twist Heading Indicator (set)
11. Turn (Check Departure Angle)
12. Throttle (Set & Lean)

## TAKEOFF BRIEF

This will be a \_\_\_\_\_ departure runway \_\_\_\_\_. If it does not look right, sound right or feel right or we are not airborne by \_\_\_\_\_ then I / you will reject the takeoff by closing the throttle and bringing the airplane to a stop.

In the unlikely event of an engine failure on takeoff I / you will maintain / take control and land straight ahead on the remaining runway or if unable I / you will land on \_\_\_\_\_ or \_\_\_\_\_.

## LANDING BRIEF

This will be a \_\_\_\_\_ landing runway \_\_\_\_\_. If the approach does not look right or something is on the runway or we cannot safely be down within the first 1/3 we will overshoot and rejoin the circuit.

(If passengers are carried on board)

Please keep your hands and feet clear of the controls

## **PASSENGER SAFETY BRIEFING**

1. Location & use of emergency exits
2. Location & use of seat belts/shoulder harnesses
3. Positioning of seats and seat backs
4. Storage of baggage & other articles
5. Location & use of :
  - First aid kit
  - Fire extinguisher
  - ELT
  - Survival kit
  - Emergency equipment
6. Use of portable electronic devices
7. Actions required in event of emergency
8. No smoking

## **EMERGENCY LANDING**

**SEAT BELTS & HARNESSSES.....FASTENED**

**SEATS & SEAT BACKS.....SECURED / UP**

**BAGGAGE & LOOSE ARTICLES.....STOWED**

**SHARP OBJECTS AND GLASSES.....REMOVE AND STOW**

**BRACE POSITION.....ASSUME**

**USE JACKET AS FACE CUSHION**

**OPEN DOORS PRIOR TO LANDING.**

## RADIO COMMUNICATIONS

Whenever you make any radio call, adhere to the format below:

T = Type  
I = Identification  
P = Position  
A = Altitude  
I = Intentions  
D = Departure Aerodrome

## POSITION REPORTS

Pilots operating VFR en route in uncontrolled airspace should continuously monitor 126.7 MHz and whenever practicable, make a position report.

Pilots are encouraged to make position reports on the appropriate FISE frequency to an FIC where they are recorded by the flight service specialist and are immediately available in the event of SAR action. The following reporting format is recommended:

1. Identification
2. Position
3. Time over
4. Altitude
5. VFR / VFR-OTT
6. Destination

## FREQUENCIES

Rockcliffe Unicom / ATF	123.50	Ottawa ATIS	121.15
Practice Area	123.35	Ottawa Terminal	127.70
Gatineau Radio / MF	122.30	Ottawa Tower North	120.10
Carp Unicom / ATF	122.80	Ottawa Tower South	118.80
Quebec Radio / RCO	123.37	Ottawa Ground	121.90
Pendleton Unicom / ATF	123.30	YOW VOR	114.60
		Arnprior Unicom / ATF	122.70

## RADIO TROUBLESHOOTING

- Master Switch ON
- Circuit Breakers IN
- Radio Master switch ON
- Radio Volume ON and Loud
- Frequency 123.5
- Nav. Ident Button In or OFF, Volume DOWN
- Audio panel
- Intercom Volume ON and set
- Intercom Squelch SET (can hear yourself speak)
- Intercom/ISO to INTERCOM (not to "Pilot Isolate")
- Headset Volume ON and Adjusted  
(set to MONO if option exists)
- Headset PLUGGED IN FULLY

HOLD THE PLUG BODY WHEN PLUGGING OR  
UNPLUGGING THE HEADSET

Pulling on the cords can break the wires.

## EMERGENCY TRANSPONDER CODES

<b>Hijacking</b>	<b>7500</b>
<b>Com. Failure</b>	<b>7600</b>
<b>Emergency</b>	<b>7700</b>

## **EMERGENCY PROCEDURES**

### **ENGINE FAILURE DURING TAKEOFF ROLL**

1. Throttle - **Idle**
2. Brakes - **Apply**
3. Wing Flaps - **Retract**
4. Mixture - **Idle Cut Off**
5. Ignition Switch - **Off**
6. Master Switch - **Off**

### **ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF**

1. Airspeed - **65 KIAS** (flaps up) **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**

### **ENGINE FAILURE DURING FLIGHT**

1. Airspeed - **65 KIAS**
2. Carburetor Heat - **On**
3. Fuel Selector Valve - **Both**
4. Mixture - **Rich**
5. Ignition Switch - **Both** (or Start if propeller is stopped)
6. Primer - **In and locked**

### **EMERGENCY LANDING WITHOUT ENGINE POWER**

1. Airspeed - **65 KIAS** (flaps up) **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. Doors - **Unlatch prior to touch down**
7. Touchdown - **Slightly tail low**
8. Brakes - **Apply Heavily**

## EMERGENCY PROCEDURES

### PRECAUTIONARY LANDING WITH ENGINE POWER

1. Wing Flaps - **20°**
2. Airspeed - **70 KIAS**
3. Selected field - **Fly over**, noting terrain and obstructions, then retract flaps upon reaching a safe altitude and airspeed.
4. Avionics Master and Electrical Switch - **Off**
5. Wing Flaps - **40° (on final approach)**
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 MHz**, giving location and intentions.
2. Heavy Objects (in baggage area) - **Secure or Jettison**
3. Flaps - **20° to 40°**
4. Power - **Establish 300ft/ min Descent at 55 KIAS**  
**NOTE:**  
If no power is available, approach at 65 KIAS with flaps or at 60 KIAS with 10° flaps.
5. Approach
  - High winds, heavy seas - **Into the wind**
  - Light winds, heavy swells - **Parallel to swells**
6. Cabin Doors - Unlatch
7. Touchdown - **Level attitude at establish descent**
8. Face - **Cushion with folded coat or seat cushion**
9. Airplane - **Evacuate through cabin doors.** If necessary, open window and flood cabin to equalize pressure so doors can be opened.
10. Life Vests and Rafts - **Inflate**

## EMERGENCY PROCEDURES

### ENGINE FIRE 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.
2. If engine starts:
  - Power - **1700 rpm for a few minutes**
  - Engine - **Shutdown and inspect for damage**
3. If engine fails to start:
  - Throttle - **Full open**
  - Mixture - **Idle Cut Off**
  - Cranking - **Continue for two or three minutes**
4. Fire extinguisher - **Obtain** (have ground attendants obtain if not installed).
5. Engine-Secure.
  - Master Switch - **Off**
  - Ignition Switch - **Off**
  - Fuel Shutoff Valve - **Off**
6. Fire - **Extinguish using fire extinguisher**, seat cushion, wool blanket, or dirt. If practical try to remove carburetor air filter if it is ablaze.
7. Fire Damage – **Inspect**, repair damage or replace damaged components or wiring before conducting another flight.

### 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 overhead 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** (as describe in emergency landing without engine power).

## EMERGENCY PROCEDURES

### ELECTRICAL FIRE IN FLIGHT

1. Master Switch - **Off**
2. All Other switches (except ignition switch) - **Off**
3. Vents/Cabin Air/Heat - **Closed**
4. Fire Extinguisher - **Activate** (if available)

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

5. Master Switch - **On**
6. Circuit Breakers - **Check for faulty circuit, do not reset**
7. Radio/Electrical Switches - **On one at a time**, with delay after each until short circuit is localized.
8. Vents/Cabin Air/Heat - **Open** when it is ascertained that fire is completely extinguished.

### CABIN FIRE

1. Master Switch - **Off**
2. Vents/Cabin Air/Heat - **Closed** (to avoid drafts)
3. Fire Extinguisher - **Activate** (if available)
4. **Warning** - After discharging an extinguisher within a closed cabin, ventilate the cabin.
5. Land - **as soon as possible to inspect for damage**

### WING FIRE

1. Navigation Light Switch - **Off**
2. Pitot heat switch - **Off**
3. Strobe Light Switch (if installed) - **Off**

**NOTE:** Perform a sideslip to keep the flames away from the fuel tank and cabin, and land as soon as possible using flaps only as required for final approach and touchdown.

## EMERGENCY PROCEDURES

### INADVERTENT ICING ENCOUNTER

1. Turn pitot heat switch on (if installed).
2. Turn back or change altitude to obtain an outside air temperature that is less conducive to icing.
3. Pull cabin heat control full out and open defroster outlet to obtain maximum windshield defroster heat and airflow. Adjust cabin air control to get maximum defroster heat and airflow.
4. Open the throttle to increase engine speed and minimize ice build-up on propeller.
5. Watch for signs of carburetor air filter ice and apply carburetor heat as required. An unexplained loss in engine speed could be caused by carburetor ice or intake filter ice. Lean the mixture for maximum RPM if carburetor heat is use continuously.
6. Plan a landing at the nearest airport. With an extremely rapid ice build-up, select a suitable "off airport" landing site.
7. With an ice accumulation of  $\frac{1}{4}$  inch or more on the wing leading edges, be prepared for significantly higher stall speed.
8. Leave wing flaps retracted. With a severe ice build-up on the horizontal tail, the change in wing wake airflow direction caused by wing flap extension could result in a loss of elevator effectiveness.
9. Open left window and, if practical, scrape ice from a portion of the windshield for visibility in the landing approach.
10. Perform a landing approach using a forward slip, if necessary, for improved visibility.
11. Approach at 65 to 75 KIAS, depending upon the amount of the accumulation.
12. Perform a landing in level attitude.

## EMERGENCY PROCEDURES

### STATIC SOURCE BLOCKAGE

(Erroneous instrument reading suspected)

1. Alternate Static Source Valve - **Pull On**
2. Airspeed - **Consult appropriate Calibration tables in section 5 from POH**

### LANDING WITH A FLAT MAIN TIRE

1. Approach - **Normal**
2. Touchdown - **Good tire first**, hold airplane off flat tire as long as possible.

### ELECTRICAL POWER SUPPLY SYSTEM MALFUNCTION

Over-voltage light illuminates

1. Master Switch - **Off** (both sides)
2. Master Switch - **On** (both sides)
3. Over-voltage light - **Off**

If over-voltage light illuminates again:

4. Reduce electrical load
5. Alternator - **Off**
6. Flight - **Terminate as soon as practical**

Ammeter shows discharge

1. Alternator - **Off**
2. Nonessential electrical equipment - **Off**
3. Flight - **Terminate as soon as practical**

## EMERGENCY PROCEDURES

### LOW OIL PRESSURE

**If low oil pressure is accompanied by normal oil temperature:**

There is a possibility the oil pressure gauge or relief valve is malfunctioning.

**If a total loss of oil pressure is accompanied by a rise in oil temperature:**

There is good reason to suspect an engine failure is imminent. Reduce power immediately and select a suitable forced landing field. Use only the minimum power required to reach the desired touchdown spot.

