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

Issued: January 2011 Replaces: October 2010

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
- 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	ht or feel right or we a	are not airborne
by then <u>I / you</u>	will reject the takeof	f by closing the
throttle and bringing the	airplane to a stop.	
In the unlikely event of	an engine failure on t	takeoff <u>I / you</u>
will maintain / take cor	ntrol and land straigh	t ahead on the
remaining runway or if	unable <u>I / you</u> will la	nd 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 & HARNESSESFASTEN	ED
SEATS & SEAT BACKSSECURE	CD / UP
BAGGAGE & LOOSE ARTICLESSTOWEI	D
SHARP OBJECTS AND GLASSESREMOV	E AND STOW
BRACE POSITIONASSUME	E
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

4. Altitude

2. Position

5. VFR / VFR-OTT

3. Time over

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

Hijacking 7500 Com. Failure 7600 Emergency 7700

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

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

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)
- 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).

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.

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.
- 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 ¼ 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.

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

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.

