

EMERGENCY PROCEDURES

Cessna: C172R (Air Plains-180HP)

CVD: 1 Dec 15

(G400 thru G750 & KAP140)

Engine Failure During Takeoff Roll

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

Engine Failure Immediately After Takeoff

1. **Airspeed**
70 KIAS (Flaps Up)
65 KIAS (Flaps Down).
2. Mixture.....Idle Cut Off.
3. Fuel Shutoff Valve .Off (Pull Full Out).
4. Ignition..... Off.
5. Wing Flaps As Required.
6. Master Switch Off.
7. Cabin Door Unlatch.
8. Land Straight Ahead.

Engine Failure During Flight (Restart)

1. **Airspeed****68 KIAS.**
2. **Alternate Air** **On (Pull control full out).**
3. **Fuel Shutoff Valve** **On (Push full In).**
4. **Fuel Selector****Both.**
5. **Auxiliary Fuel Pump** ... **On.**
6. **Mixture** **Rich (if restart has not occurred).**

7. Ignition Switch..... Both (or START if propeller is stopped).

Note

If the propeller is wind milling, the engine will restart automatically within a few seconds. If the propeller has stopped (possible at low speeds), turn the ignition switch to Start, advance the throttle slowly from idle and lean the mixture from full rich as required for smooth operation.

8. Auxiliary Fuel PumpOff.

Note

If the fuel flow indicator immediately drops to zero (indicating an engine-driven fuel pump failure), return the Auxiliary Fuel Pump Switch to the On position.

Forced Landing Without Engine Power

1. Passenger Seat Backs..... Most Upright Position.
2. Seats & Seat Belts Secure.
3. Airspeed..... 70 KIAS (Flaps Up) 65 KIAS (Flaps Down).
4. Mixture Idle Cut Off.
5. Fuel Shutoff Valve.. Off (Pull Full Out).
6. Ignition Switch.....Off.
7. Wing Flaps.....As Required (30° Recommended).
8. Master Switch Off (when landing is assured).
9. DoorsUnlatched Prior to Touchdown.

10. Touchdown....Slightly Tail Low.
11. Brakes Apply Heavily.

Precautionary Landing With Engine Power

1. Passenger Seat Backs..... Most Upright Position.
2. Seats and Seatbelts Secure.
3. Airspeed.....65 KIAS.
4. Wing Flaps..... 20°.
5. Select Field Fly Over, noting terrain and obstructions, then retract flaps upon reaching a safe altitude and airspeed.
6. Avionic Master Switch and Electrical Switches Off.
7. Flaps30° on Final Approach.
8. Airspeed.....65 KIAS.
9. Master SwitchOff.
10. Doors.....Unlatched Prior To Touchdown.
11. Touchdown.... Slightly Tail Low.
12. Ignition SwitchOff.
13. Brakes Apply Heavily.

Engine Fire During Start

1. **Cranking ..Continue** to get a start which would suck the flames an accumulated fuel into the engine.
- If Engine Starts:**
2. Power 1800 RPM for a few minutes.
 3. EngineShutdown and Inspect for damage.

If Engine Fails to Start:

4. **Throttle** **Full Open.**
5. **Mixture** **Idle Cut Off.**
6. **Cranking** **Continue.**
7. **Fuel Shutoff Valve**.....**Off (Pull Full Out).**

8. Auxiliary Fuel Pump Switch. Off.
9. Fire ExtinguisherActivate.
10. Engine Secure Secure.
 - a. Master Switch Off.
 - b. Ignition Switch Off.
11. Parking Brake Release.
12. Airplane..... Evacuate.
13. Fire Extinguish using fire extinguisher, wool blanket, or dirt.
14. Fire DamageInspect, repair damage or replace damaged components or wiring before conducting another flight.

Engine Fire in Flight

1. **Mixture** **Idle Cut Off.**
2. **Fuel Shutoff Valve**....**Pull Out (Off).**
3. **Auxiliary Fuel Pump Switch** **Off.**
4. **Master Switch** **Off.**
5. Cabin Heat & Air..... Off (Except Overhead Vents).
6. Airspeed 100 KIAS (If fire is not extinguished, increase glide speed to find an airspeed – within airspeed limitations – which will provide an incombustible mixture).
7. Forced LandingExecute (as described in Emergency Landing Without Engine Power).

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 Ignition switch) Off

Warning
After discharging fire extinguisher and ascertaining that fire has been extinguished, ventilate the cabin.

6. Vents/Cabin Air/Heat Open when it is ascertained that fire is completely extinguished.

If fire has been extinguished and electrical power is necessary for continuance of flight to nearest suitable airport or landing areas:

7. Master Switch On.
8. Circuit Breakers Check for faulty circuit, Do Not Reset.
9. Radio Switches Off.
10. Avionics Master Switch On.
11. Radio/Electrical Switches .. On one at a time, with delay after each until short circuit is localized.

Cabin Fire

1. Master Switch Off.

Warning
After discharging fire extinguisher and ascertaining that fire has been extinguished, ventilate the cabin.

2. Vents/Cabin Air/Heat . Closed (to avoid drafts).
3. Fire Extinguisher Activate.

4. Vents/Cabin Air/Heat....Open when it is ascertained that fire is completely extinguished.
5. Land the airplane as soon as possible to inspect for damage.

Wing Fire

1. Landing/Taxi Lights Off.
2. Navigation Lights Off.
3. Strobe Lights Off.
4. Pitot Heat Off.

Note

Perform sideslip to keep flames away from the fuel tank and cabin. Land as soon as possible using flaps only as required for final approach and touchdown.

Icing

1. Turn Pitot Heat On.
2. Turn back or change altitude to obtain an outside air temp that is less conducive to icing.
3. Pull cabin heat control to full out and open defroster outlets to obtain maximum windshield defroster airflow. Adjust cabin air control to get maximum defroster heat and airflow.
4. Open The Throttle to increase engine speed and minimize ice buildup on the propeller blades.
5. Watch for signs of induction icing and apply alternate air as required. An unexplained loss in engine speed could be caused by induction system ice or air intake filter ice. Lean the mixture for maximum RPM if alternate air is used 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 ice accumulation of ¼ inch or more on the wing leading edges, be prepared for significantly higher stall speed and a longer ground roll.
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 landing approach.
10. Perform landing approach using a forward slip, if necessary, for improved visibility.
11. Approach at 65 to 75 KIAS depending upon the amount of accumulation.
12. Perform a landing in level attitude.

Ditching

1. Radio Transmit Mayday on 121.5 giving location and intentions and squawk 7700.
2. Heavy Objects (in baggage area) Secure or Jettison (if possible).
3. Passenger Seat Backs Most Upright Position.
4. Seats and Seat Belts Secure.
5. Wing Flaps 20° to 30°.
6. Power Est. a 300 FPM descent at 55 KIAS.

Note

If no power is available, approach at 70 KIAS with flaps up or at 65 KIAS with 10° flaps.

7. Approach:
 - High winds, heavy seas .. Into the Wind.
 - Light winds, heavy swells Parallel to swells.
8. Cabin Doors Unlatch.
9. Touchdown Level attitude at established descent rate.
10. Face.... Cushion at touchdown with folded coat.
11. ELT Activate.
12. Airplane Evacuate through cabin doors. If necessary, open window and flood cabin to equalize pressure so doors can be opened.
13. Life vests and raft Inflate when clear of airplane.

For all other Emergency Abnormal Procedures. See the POH Section 3.

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.