

Pre Take-off Considerations (Take-off Safety Brief)

The purpose of pre take-off considerations is to prepare you to act quickly in the unlikely event of an engine failure during or after take-off.

On training flights they are to be said aloud. However, if you are carrying passengers do not call them aloud, as you may cause undue concern. You should still recall these items internally.

The considerations statements are:

In the event of a...

Engine failure or abnormality during the take-off roll, I will:

*Close the throttle;
Apply the brakes; and
Stop straight ahead.*

Engine failure airborne with sufficient runway remaining, I will:

*Close the throttle;
Immediately lower the nose; and
Land on the remaining runway.*

Engine failure airborne with insufficient runway remaining, I will:

*Set the glide attitude;
{Insert initial actions from your aircrafts P.O.H.}
Select a field within 30 degrees either side of runway heading and land.*

Engine failure once established on crosswind and not below 700 feet AGL, I will:

*Set the glide attitude;
Immediately turn back for a landing runway ____; and
{Insert initial actions from your aircrafts P.O.H.}*

It's important to realise that the above TOSB is a generic sample, and should be altered based on the specific conditions of the day (aircraft type, wind strength, airport of departure, aircraft weight)

Example: "With an engine failure once established on crosswind and not below 900 feet AGL – I will turn back for a landing runway 25".

Extra height has been added because on this day, there is a strong wind that will shorten the glide distance when turning back.

Example: "With an engine failure airborne and insufficient runway remaining – I will adopt the glide attitude, select a field within 30 degrees either side of runway heading and land. Today on runway 25 we have the open ground to the right" This is specific to a take-off on runway 25 at Redcliffe

The TOSB should be concise, short and specific to the takeoff conditions.

If time permits, conduct shutdown sequence from your aircrafts P.O.H.

The use of flaps in these circumstances will depend on the availability of a landing area. If there is a field close by, full flap may be required. If the field is some distance away, flaps should be left until a safe landing is assured.

172S Skyhawk

Information Manual

CESSNA
MODEL 172S

SECTION 3
EMERGENCY PROCEDURES

ENGINE FAILURE DURING FLIGHT (Restart Procedures)

1. **Airspeed -- 68 KIAS.**
2. **Fuel Shutoff Valve -- ON (push full in).**
3. **Fuel Selector Valve -- BOTH.**
4. **Auxiliary Fuel Pump Switch -- ON.**
5. **Mixture -- RICH (if restart has not occurred).**
6. Ignition Switch -- BOTH (or START if propeller is stopped).

NOTE

If the propeller is windmilling, 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.

7. Auxiliary Fuel Pump Switch-- OFF.

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.