

SECTION 3**EMERGENCY PROCEDURES**

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ENGINE FAILURE DURING TAKE-OFF ROLL**If the remaining runway is sufficient:**

Throttle to idle, stop along the runway axis using brakes as required.

If the remaining runway is not sufficient:

Throttle idle (pull)
 Brakes apply heavily
 Mixture idle cut-off
 Fuel selector off
 Battery switch off
 Magneto switch off

ENGINE FAILURE IMMEDIATELY AFTER TAKE-OFF

Glide speed (flaps in take-off position) (73 kt) 135 km/h
 Mixture idle cut-off
 Fuel selector off
 Magneto switch off
 Battery switch off

IMPORTANT

Land straight ahead, with small direction changes
 only needed to avoid obstacles.

Never try to turn back to the runway,
 as altitude after take-off is seldom sufficient.

ENGINE FAILURE IN FLIGHT

If the altitude seems sufficient to attempt an engine restart:

Adopt best gliding speed, flaps up (78 kt) 145 km/h. In these conditions, without wind, the aircraft covers approximately 9.3 times its altitude.

Fuel selector open
 Electric pump on
 Mixture full rich
 Throttle 2 to 3 cm travel forward
 Magneto switch L + R ("both")

If the propeller still turns, the engine should restart.

If the propeller is stopped, operate the starter.

If the engine still does not start, prepare for a forced landing, following the procedure below.

POWER OFF FORCED LANDING

Choose a suitable landing area:

Belts and harnesses tight
 Electric pump off
 Mixture idle cut-off (down)
 Throttle idle (pull)
 Magneto switch off
 Fuel selector off
 Alternator switch off
 Unlock canopy when reaching final

On final

Flaps full down
 Battery switch off

PRECAUTIONARY POWER LANDING OFF AIRFIELD

Fly over the chosen field at low speed (130 km/h - 70 kt), several times if needed in order to locate the most suitable landing area, flaps in "take-off" position (1st notch), then make a precautionary approach at 120 km/h (65 kt), flaps in "landing" position (2nd notch).

On final, unlock the canopy.

Before touchdown

Magneto switch off
Battery switch off

NOTE IN CASE OF CANOPY JAMMING

Canopy handle in "open" position.

Release the two canopy release levers located on the arm rests, on both sides of the instrument panel, and place them in vertical position.

FIRE**Engine fire on the ground, during starting**

Leave the engine run with:

Fuel selector	off
Electric pump	off
Throttle	full power (push)
Mixture	idle cut-off (down)

This procedure is intended to force the engine "swallow" the fuel accumulated in the inlet pipes (generally following an excess of fuel injection during a difficult engine start).

If the fire continues

Magneto switch	off
Battery switch	off
Alternator switch	off

Abandon the aircraft and try to extinguish the fire with the aids available: fire extinguishers, blankets, clothing or sand.

Engine fire in flight

Fuel selector	off
Throttle	full power (push) until the engine stops
Mixture	cut-off (down)
Electric pump	off
Alternator switch	off
Cabin heat and ventilation	off
Adopt maximum gliding speed	(78 kt) 145 km/h

Prepare for a forced landing off airfield, following the procedure "Power off forced landing off airfield".

Do not attempt to restart the engine.

Cabin fire

Extinguish the fire by all means possible (optional extinguisher).

To eliminate smoke, apply maximum ventilation. *

In case of an electrical fire (smell of fumes indicating insulation burning):

Cabin ventilation.....	reduce
Alternator switch.....	off
Battery switch.....	off

Land quickly if the fire continues.

VIBRATIONS AND ROUGH ENGINE OPERATION

Vibrations and rough engine operation are generally due to (verify in this order):

- Carburettor icing: refer to paragraph "icing"
- Mixture set too rich or too lean: adjust the mixture (see section 4)
- Fuel system contamination: check the fuel pressure. Switch on the electric pump.
- Ignition failure: magneto switch on "L", then "R", then back to "BOTH". Select the position providing the best engine operation and fly to the nearest airfield at reduced power, mixture set to obtain the smoothest engine operation possible.

LOW OIL PRESSURE

In case of low oil pressure indication, check oil temperature, and if it is too high (red arc):

- Reduce power.
- Fly to the nearest airfield, and prepare for a possible off airfield landing.

ICING

Proceed as follows when inadvertently encountering icing:

- Carburettor heat on (pull).
- Increase power in order to reduce ice build-up to minimum.
- Switch on Pitot heat (if installed).
- Select maximum cabin heat, and direct the full output to the windscreen (position "defrost") to quickly eliminate the ice.
- Turn back or change altitude to obtain an outside air temperature less conducive to icing.
- Plan to land at the nearest airfield.

If the build-up of ice is extremely fast, carry out a forced landing.

Remember that a layer of 0.5 cm (0.2 in) on the leading edge of the wing increases substantially the stalling speed. If needed, use a higher than normal approach speed: 135 km/h (73 kt).

REMARKS

If continuous carburettor heat is deemed necessary, it is imperative to adjust the mixture control to obtain normal engine operation.

Always use carburettor heat "fully on or fully off"; in certain cases, an intermediate position could increase icing.

ELECTRICAL POWER SUPPLY MALFUNCTION

The failure of the alternator is indicated when the amber "alternator failure" light on the warning panel is lit, and a progressive drop in voltage (shown on the voltmeter).

If the amber light is lit

Switch off the alternator, then switch it back on.

This operation resets the overvoltage relay which may have tripped due to a transient overvoltage.

If the failure persists

- Switch off the alternator
- Switch off all the electrical equipment not essential for continuing the flight
- Land as soon as possible, and have the electrical system inspected.

NOTE

An alternator failure does not prevent the normal engine operation

INADVERTENT SPIN

Should a spin occur, apply the following procedure:

Throttle idle (pull)
 Rudder full opposite to direction of rotation
 Elevator neutral
 Ailerons neutral

NOTE

If flaps are down when the spin begins, retract them immediately

Once the rotation is stopped, bring rudder to neutral position and recover within flight limitations.

LOSS OF ELEVATOR CONTROL

In case of a loss of elevator control (accidental disconnection):

- Stabilize the aircraft in level flight, flaps up, at 130 km/h (70 kt), using the elevator trim and throttle.
- Do not change the elevator trim setting and control the angle of descent with throttle only. Reduce throttle only when in short final and near to the ground.