

Theory Brief 6b: Emergencies in the Circuit

Aim:

“To be able to recognise an emergency and achieve a safe outcome”

Objectives:

1. To be able to abort the take-off
2. To be able to complete a forced landing shortly after take-off
3. To safely land the aircraft in the event of an engine failure in the circuit

Aborting the take-off roll

- Throttle – IDLE
- Brakes – APPLY as required

Optional

- Ignition Switch – OFF
- Master Switch – OFF
- Fuel valve - Closed

Reasons to abort the take-off

- Birds impacting the aircraft
- Ground traffic
- ASI not working
- RPM not sufficient
- Oil T's and P's not in the green
- Door opening during take-off roll
- Suspected engine fire
- Any reason for which it would be safer to discontinue the take-off, rather than continue

EFATO - Engine Failure After Take-Off - (Simulation Exercise)

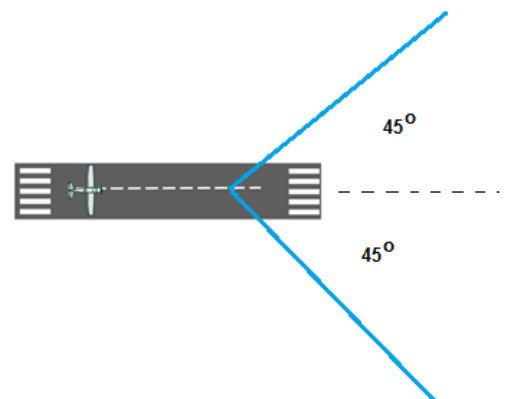
If in the unlikely event of an engine failure after take-off,

- it is imperative to maintain flying speed by lowering the nose into the glide descent attitude with minimal delay.
- An immediate, positive forward movement of the control column is required to achieve this.

NEVER TURN AROUND TO LAND ON THE RUNWAY DOWNWIND! (This will most likely be fatal)

You must attain 75 knots prior to attempting to land (if possible)

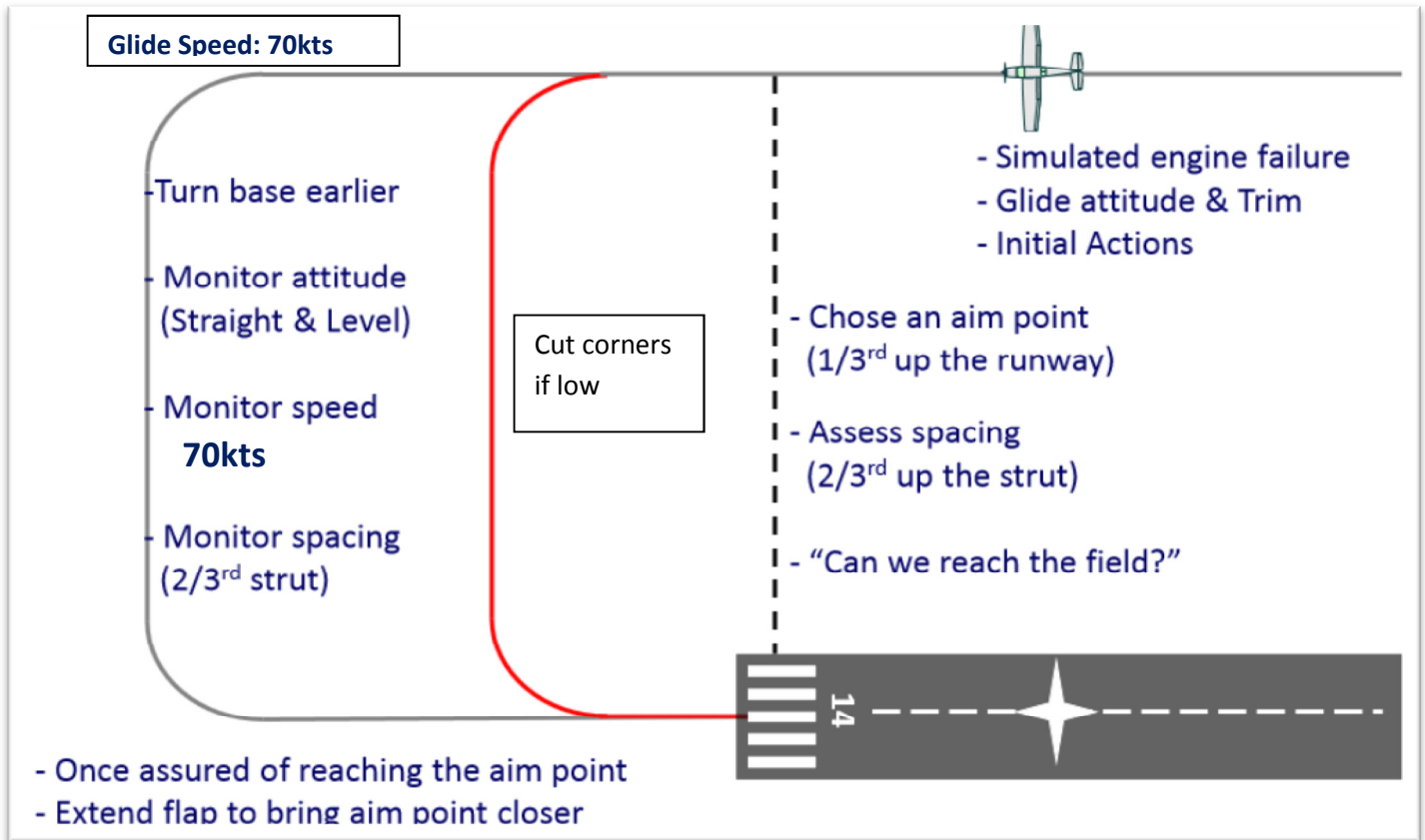
Glide straight ahead, veering only as necessary to avoid obstacles and land the aircraft (within 45° of centreline). It is better to go through a fence and sustain minor injury and damage to the aircraft than attempt a 180 degree turn. It is unlikely that time will permit you to make a **MAYDAY** call.



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Glide approach from a late downwind position (Air Exercise)



Air Exercises

1. Abort a take-off on the command of your instructor.
2. Conduct a safe transition to glide after simulated EFATO.
3. Conduct a safe landing from downwind onto the runway without use of power.