

Precautionary Landing

ADVANCED MANOEUVRES

Objective

To learn the procedure to adopt in the event of an off-aerodrome landing.

1. Considerations

Cause	Avoidance
Weather	<ul style="list-style-type: none"> Avoid by setting personal meteorological minima well above the legal minimum Have a careful consideration of the weather before any flight and always have an escape plan
Lost	<ul style="list-style-type: none"> Avoid by maintaining situational awareness and careful pre-flight planning
Fuel	<ul style="list-style-type: none"> May result from becoming lost or trying to get around weather, rather than diverting early This situation will heighten any existing stress levels Avoid by careful pre-flight planning and in-flight fuel monitoring
Daylight	<ul style="list-style-type: none"> This organisation requires all aeroplanes to be on the ground, or in the circuit, 30 minutes before Evening Civil Twilight (ECT) Start early, finish early

- If these situations arise, adopt poor visibility configuration and carry out an off-aerodrome landing
- This can take 15–20 minutes to complete – don't leave it too late

2. Airmanship

- Make early decisions – time to plan
- Wind awareness
- Passenger briefing and security checks
- PAN call and squawk 7700. Possibly MAYAY call
- SADIE** checks
- Minimum descent altitude

3. Aeroplane Management

- Consider poor visibility configuration
- Fuel-avoid exhaustion before landing achieved

5. Air Exercise

- In low flying area
- Low flying area pre-entry checks and radio calls
- Descend to 500 ft, adopt poor visibility configuration
- Decision to land simulated

Pattern

- Search and approach to cross centre at right angles
- Observe drift – confirm wind assessment
 - Establish left/right hand circuit at 500 ft – or 100 ft below cloud base
 - Position so that the site can be seen and evaluated
 - Check approach/overshoot while height available
 - Consider gradient cues
- Radio call if not already completed
 - Pax brief
 - Checks
- Check:
 - approach
 - obstacles
 - wind
 - go around point
 - alignment
 - Choose landmarks, if available, particularly one at end of downwind

Landing

- Use short field technique
- Use maximum braking
- Avoid obstacles
- Keep cabin intact
- After landing, shutdown checklist

4. Human Factors

- Disorientation due low level
- Stress
- Overlearn the procedure

- Start search for suitable site
 - Declare emergency
 - Secure pax and cabin
- Descend to 200'
 - check S's and C
 - assess length of paddock by timing or by superimposing known image
 - note heading or set DI to North
 - aim point
 - overshoot options
 - Climb
 - Confirm:
 - radio call
 - pax brief
 - checks
 - normal circuit spacing
 - Establish short-field approach

