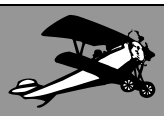
Emergency Landings

Conditions: Dual /VFR

Objective: To develop an understanding of emergency landing procedures



Common Errors

- ❑ Failure to establish V-glide
- ❑ Improper pitch, heading and bank control
- ❑ Incomplete flow or checklist
- ❑ Failure to establish specified configuration
- ❑ Failure to choose an adequate off airport landing site
- ❑ Stall horn or stall
- ❑

Completion Standards

- ❑ Adheres to recommended safety precautions
- ❑ Establishes V_{Glide} & Recognizes elements that can reduce gliding distance
- ❑ Conducts a proper Before Takeoff Briefing that includes Emergency procedures
- ❑ Uses Checklists or Flows

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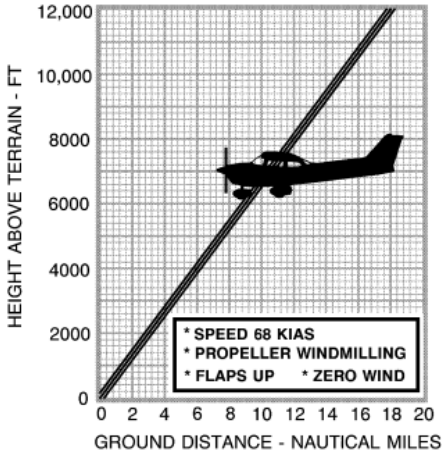
Preparation for Flight & Preflight Discussion

Engine failure

- ❑ The first and most important action to initiate:
  Pitch for **Best Glide** airspeed
- ❑ Second:
  Find & turn towards a suitable landing site
- ❑ Third:
  Time permitting, trouble shoot & attempt to re-start the engine
- ❑ Fourth:
  Complete the appropriate Forced Landing Emergency checklist or flow
- ❑ Fifth:
  Transponder: 7700
  Radio: 121.5 or ATC, (AIM 6-3-2)



Notes: In a turn…….

Stall speed ↑

Lift ↓

Gliding distance ↓

Emergency Procedures — Cessna 172S

ENGINE FAILURE DURING FLIGHT

1. Airspeed – 68 KIAS
2. Fuel Shutoff Valve – ON
3. Fuel Selector Valve – BOTH
4. Auxiliary Fuel Pump - ON
5. Mixture – RICH
6. Ignition Switch – BOTH / START
7. Auxiliary Fuel Pump - OFF

FORCED LANDINGS - EMERGENCY LANDING WITHOUT ENGINE POWER

1. Airspeed – 70 KIAS (flaps UP)
   65 KIAS (flaps DOWN)
2. Mixture – IDLE CUT-OFF
3. Fuel Shutoff Valve – OFF
4. Ignition Switch – OFF
5. Wing Flaps – AS REQUIRED (30^{o})
6. Master switch – OFF
7. Doors – UNLATCH
8. Touchdown – SLIGHTLY tail low
9. Brakes – APPLY HEAVILY

Flight Maneuvers

- ❑ Before Takeoff- Briefing
  Rejected Take-off Plan
  Engine-out Review
- ❑ Take-off / Climb-out
  Note emergency Landing Sites
- ❑ Stall/Spin Awareness
  Cause & Recovery
- ❑ Clear the area
  Altitude: + 1500ft
  Airspeed: @ or below V_A
  Airspace: E or G
  Area Clear: No traffic
- ❑ Simulated Engine Failure
  Throttle - Idle (Simulate engine failure)
  Carb heat – On
  Mixture – Increase for descent
  Pitch for V_{GLIDE}
  Turn towards landing site
  Simulate- Troubleshoot & Restart
  Simulate- Emergency Landing Checklist
  Simulate- Transponder Code & Radio
  Recover @ 1000ft AGL