

Forced Landing Without Power Pattern

CIRCUIT TRAINING

Objective

To be able to select an appropriate landing site and carry out the pattern for a forced landing without power.

1. Considerations

Configuration

- Best L/D ratio, idle power, prop windmilling, _____ kts
- Effect on range

Wind Indicators

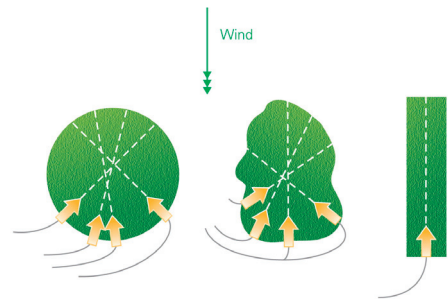
Work out direction from:

- Smoke
- Dust
- Crop movements
- Tree / Leaf movement
- Wind lanes
- Waves and ripples
- Wind shadow
- Cloud shadow
- Drift
- Local knowledge

Landing Site

7 S's, C & E

- Size
- Shape
- Slope
- Surface
- Surround
- Stock
- Sun
- Communication
- Elevation



Situational Awareness

- Always keep an eye out for forced landing options
- Know what the surface wind is, and the better landing areas

2. Airmanship

- Checks, including touch checks
- No pax/solo limitations
- "Simulating" to begin with
- Go around – landings later
- Legal limitations

3. Aeroplane Management

- Ts and Ps stable
- Engine warming 1000'
- Fly the aeroplane

5. Air Exercise

From a cruising altitude...

Immediate actions

- Carb heat HOT, close throttle
- Convert speed to height
- Set glide attitude and trim
- Confirm wind and choose landing site
- Make the plan
- MAYDAY call

Trouble Checks

- F** Fuel Selector ON, fuel pump ON, change tanks (touch)
- M** Mixture RICH, carb heat HOT, primer LOCKED
- I** Ignition LEFT, RIGHT or BOTH. Ts & Ps
- P** Partial power check

Make the plan

1. Choose reference points

- Landing aim point – 1/3 way into field
- 1000' agl area – 90° from threshold area, but closer
- 1500' agl area – 500' back from 1000' agl area

2. Convert heights to altitudes

3. Positioning

- Assess the aeroplane's position and its ability to make it into the 1500' area

4. Ask regularly

- "Am I confident of making it to the 1500' area"

5. After 1500' area reached

- Spacing downwind

6. Approach starts at 1000' area

- Constant assessment of approach by reference to 1/3 aim point
- Can adjust base turn – but not 1000' area
- Offset drift
- Ask "Can I reach the 1/3 aim point?"
- Position at 500' so can touchdown at 1/3 aim point without flap
- Use flap to bring 1/3 aim point back towards threshold

7. Landing phase covered in next lesson

4. Human Factors

- Don't turn your back on paddock
- Practise will make it easier
- Concentrate on pattern
- Re-evaluate decisions to avoid mindsets

