

# IFR Emergencies

In all emergencies: **FLY THE PLANE!**

Every emergency is different. Use your best judgment.

## Vocabulary

“PAN-PAN-PAN” is used for \_\_\_\_\_ situations.

“MAYDAY-MAYDAY-MAYDAY” is used for \_\_\_\_\_ situations.

“MINIMUM FUEL” indicates a potential emergency if the plane does not land promptly.

## Lost Communication (14 CFR 91.185)

1. Troubleshoot the system. Start small, then go big.

- Make sure there are no bigger problems like an alternator failure.
- Your headset & co-pilot's/passengers' headsets
- Your radios (check volume, switch between COM 1 and COM 2)
- Your frequencies (correct frequencies?)
- ATC's equipment (If you are out of range of them, try other frequencies or relay to other aircraft.)

2. Squawk “\_\_\_\_\_”

3. If VFR, continue VFR and land as soon as practical (notify ATC) while continuing radio calls in case you can still transmit out.

4. If IFR

Route (in this order) (AVE F)

Last **A** \_\_\_\_\_ by ATC clearance

If **V** \_\_\_\_\_, proceed directly to fix, route, or airway

Route to **E** \_\_\_\_\_ (in expect further clearance...)

Route **F** \_\_\_\_\_

Altitude (highest of the following) (MEA)

**M** \_\_\_\_\_ IFR altitude (MEA or MOCA)

Altitude to **E** \_\_\_\_\_

Last **A** \_\_\_\_\_

If Holding

Depart the holding fix at EFC time then begin the approach

If no EFC, then:

Proceed to and hold (if necessary) at the holding pattern depicted for the approach procedure. If none is depicted, at the fix at which the approach begins (IAF.)

Descent for the approach

Begin the descent for approach at the fix at which the approach begins, but not before the ETA on the flight plan.

## **Alternator Failure**

### 1. Troubleshoot

- Is there a quick fix like recycling the alternator switch?
- Did the alternator circuit breaker pop?

### 2. LOAD SHED

- Turn off all unnecessary electrical equipment.
- Remember your transponder. – It uses a lot of power.
- Make as few radio calls as possible. Consider making only one to declare an emergency, but continue monitoring.

### 3. Take care of all vital electrical operations while you still have power.

- Do you need to lower your landing gear electrically?
- Do you need to find the nearest airport on your GPS?

### 4. Get to VFR conditions as soon as possible.

## **Vacuum System Failure**

### 1. Fly “partial panel.”

### 2. Determine your need to land as soon as practical.

### 3. If necessary, request a “no-gyro” Airport Surveillance Approach.

## **Reporting Failures (14 CFR 91.187)**

- A/C Identification
- Equipment affected
- Degree to which IFR capability is impaired
- The nature and extent of assistance needed from ATC

## **British Airways Problem-Solving Model (DODAR)**

Diagnose – What is the nature of the problem?

Options – What options do I have?

Decide – Pick an acceptable option.

Assign – Assign tasks to crew members, passengers, ATC, and anyone that can help

Review – Evaluate the outcome. Do you need to make changes?

**An ounce of prevention is worth a pound of cure.**