I3101 Brief Guide

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Curriculum Basis: CNATRAINST 1542.156D

Land As Soon As Possible

CNAF_M 3710.7 1.6:

- Definition: Land at the first site at which a safe landing can be made.

Land As Soon As Practicable

CNAF_M 3710.7 1.6:

- Definition: Extended flight is not recommended. The landing site and duration of flight is at the discretion of the pilot in command.

MAYDAY/PAN Report

Definitions (Pilot Controller Glossary):

- Distress: A condition of being threatened by serious and/or imminent danger and of requiring immediate assistance.
- Urgency: A condition of being concerned about safety and of requiring timely but not immediate assistance; a potential distress condition.
- **Emergency**: A distress or an urgency condition.
- MAYDAY: The international radiotelephony distress signal. When repeated three times, it indicates imminent and grave danger and that immediate assistance is requested.
- PAN-PAN: The international radio-telephony urgency signal. When repeated three times, indicates uncertainty or alert followed by the nature of the urgency.

AIM 6-1-2/6-3-1/6-3-2:

- Pilots apprehensive for their safety for any reason should request assistance.
- Distress (MAYDAY) communications have absolute priority.
- Urgency (PAN-PAN) communications have priority except for distress.
- Report:

1. If **distress**, MAYDAY MAYDAY MAYDAY; if **urgency**, PAN-PAN PAN-PAN PAN-PAN.
2. Name of station addressed.
3. Aircraft identification and type.
4. Nature of **distress** or **urgency**.
5. Weather.
6. Pilots intentions and request.
7. Present position and heading; or if lost, last known position, time, and heading since that position.
8. Altitude of flight level.
9. Fuel remaining in minutes.
10. Number of people on board.
11. And other useful information.

Landing Site Selection

TH-57 NATOPS:

- In all situations, time permitting, consideration should be given to as many of the SWEEP items as possible:
- (S) size, suitability, slope, surface;
- (W) winds, potential loss of wind effect;
- (E) elevation (MSL, AGL, DA);
- (E) egress route;
- (P) power required vs. power available.

Land immediately: - Whatever is safest in your immediate vicinity. - Example: flying down an unlit coastline at night with no discernible beach and unsure of land vegetation; land in the shallow waters along the coast.

Land as soon as possible: - Nearest safe location (i.e. a landing site which will likely ensure the preservation of the aircraft and crew). - Example: flying over a heavily wooded area and there is a small clearing off in the distance; land in the clearing.

Land as soon as practicable: - Ideally an appropriate airfield. - Example: flying near two airfields nearly equidistant from your location, except one offers contract fuel; land at the one with contract fuel.

Single Instrument Indications

In-flight Malfunctions when IMC

- If the malfunctioning equipment is not critical for safety of flight, but required for IMC flight (i.e. directional gyro), notify ATC and request vectors/descent to VMC.

TH-57 Instrument and Navigation FTI 203:

- **If VMC, remain VMC!**
- Procedurally the same as in VMC except if under IFR, ATC must be notified. Be ready to answer the question: "Are you declaring an emergency?"
- May take longer to handle due to increased task loading of flying instruments.
- Some equipment is critical for IMC flight, be familiar with your area of operation to request descent to an minimum safe altitude (MSA), minimum off course altitude (MOCA), or maximum elevation figure (MEF) in attempt to gain VMC.

FAR 91.183:

- Operating under IFR, must report any information relating to the safety of flight.

AIM 5-4-8.c:

- Minimum safe altitude (MSA) is published on instrument approach plates for emergency use and provides 1000 ft clearance over obstacles within a 25 NM (sometimes 30 NM) radius of a reference point. May be sectored (max of 4).

Crew Coordination During Emergencies

Follow the NATOPS brief: - System failures not immediate in nature (i.e. no critical memory items), non-flying pilot breaks out the PCL and ensures all steps are completed, and reads all notes, cautions, and warnings. - Aircraft emergencies (i.e. has critical memory items), flying pilot executes all critical memory items that require flight control input (exception: hydraulic power cylinder malfunction), non-flying pilot executes all critical memory items that do not require flight control input and subsequently breaks out the PCL and ensures proper completion of all steps and reads all notes, cautions, and warnings.

RI Syllabus

CNATRAINST 1542.156D:

- I3200 block: 4 events as pilot, 4 as co-pilot.
- I3300 block: 5 events as pilot, 5 as co-pilot.
- I4300 block: 4 events as pilot.
- I4400 block: 4 events as pilot.