



PROCEDURES RELATED TO EMERGENCIES

1. Introduction

The procedures outlined herein are intended as a general guide to air traffic services personnel. Air traffic control units shall maintain full and complete coordination, and personnel shall use their best judgment in handling emergency situations.

2. Squawk code during emergency

If the pilot of an aircraft encountering a state of emergency has previously been directed by ATC to operate the transponder on a specific code, this code will normally be maintained until pilot has been advised otherwise.

3. Emergency Declaration

3.1. Urgency call (PAN PAN)

A pilot will declare an urgency call by using the words PAN PAN (3x) followed by his message when he is in a condition concerning the safety of the aircraft or some person on board, but which does not require immediate assistance.

Urgency calls take priority over all other messages, except distress calls.
As an active controller, you shall acknowledge the urgency call.

ATC: [aircraft Call sign] Roger PAN PAN at time [hhmm]Z

There is no need to give the aircraft absolute priority. However an expeditious ATC service is required. Usually a pilot will let you know if he requires anything from you. If not given, you can try to get any information you think is necessary to enable you giving the pilot the best service possible. A pilot may tell you to standby, because he is busy or doesn't have an answer to your question just yet. But you can trust that he will get back to you when he can.

How to handle an urgency call will be different every time.

Important to remember is:

- Do not get tunnel vision and don't focus solely on the traffic requiring assistance
- Do not stop controlling as you may still have other traffic requiring your attention
- There is no need to get stressed. Stay calm, you are not the one having problems. A calm controller, who sounds in control of the situation, reassures the pilot(s).
- Make sure you inform your adjacent controllers of the situation. Relay any information that could be of value for them.

Manoeuvring instructions to an aircraft experiencing engine failure should be limited to a minimum.

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3.2. Distress call (MAY DAY)

A pilot will issue a distress call by using the words MAY DAY (3x) followed by his message when he is in a condition of being threatened by serious and/or imminent danger and of requiring immediate assistance.

Distress calls take priority over all other messages. As controller you shall acknowledge the distress call.

ATC: [aircraft Call sign] Roger MAY DAY at time [hhmm]Z

When a MAY DAY is declared the aircraft requires an absolute priority service over all the other traffic.

Even if the pilots request to hold somewhere to complete checklists and procedures. You are now dealing with an aircraft that has a serious problem possibly endangering the safety of the aircraft, passengers and crew.

The last thing you now need is a second aircraft in distress. Changes of radio frequency and transponder code should be avoided if possible and should normally be made only when or if an improved service can be provided to the aircraft concerned.

Manoeuvring instructions to an aircraft experiencing engine failure should be limited to a minimum.

When appropriate, other aircraft operating in the vicinity of the aircraft in emergency should be advised of the circumstances.

Where ATC has not requested a code to be set, the pilot facing an emergency shall set the transponder to 7700 when possible.

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4. Emergency Handling

4.1. Basics

When an emergency is declared by an aircraft, the ATS unit should take appropriate and relevant action as follows:

1. Unless clearly stated by the flight crew, take all necessary steps to ascertain aircraft identification and type, the type of emergency, the intentions of the flight crew as well as the position and level of the aircraft
2. Decide upon the most appropriate type of assistance which can be rendered
3. Enlist the aid of any other ATS unit or other services which may be able to provide assistance to the aircraft
4. Provide the flight crew with any information requested as well as any additional relevant information, such as details on suitable aerodromes, minimum safe altitudes, weather information
5. Obtain from the operator or the flight crew such of the following information as may be relevant (number of person on board, amount of fuel remaining, possible hazardous materials – these items could not be taken into account for IVAO as we are speaking about virtual flight).
6. Notify nearby appropriate air traffic service units

An aircraft known or believed to be in a state of emergency, including being subjected to unlawful interference shall be given priority over other aircraft.

4.2. Checklist “ASSIST”

ASSIST is a simple set of acronyms which may make it easier for controllers to remember the immediate actions, or sequence of actions, to be followed on initial notification in event of unusual/emergency situation:

- **A**cknowledge the call; get the squawk
- **S**eparate the aircraft from other traffic. Give it room to manoeuvre
- **S**ilence - on the frequency. Provide separate frequency where possible - this prevents unnecessary clutter for the pilots
- **I**nform those who need to know and those who can help; inform others as appropriate
- **S**upport the pilots in any way possible - Start to think of alternative routings, etc.
- **T**ime - Give the pilots time to collect their thoughts, don't harass them for information. Time produces good decisions

Many organizations successfully adopted the **ASSIST** principle pioneered by the Deutsche Flugsicherung GmbH (DFS) entrusted for controlling the air traffic in Germany

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5. Specific cases

5.1. Emergency descent

Upon receipt of advice that an aircraft is making an emergency descent through other traffic, all possible action shall be taken immediately to safeguard all aircraft concerned.

The air traffic controller concerned shall inform any other air traffic controllers and control sectors which may be affected.

Immediately after such an emergency broadcast has been made, the approach control unit or the aerodrome control tower concerned shall forward further clearances to all aircraft involved as to additional procedures to be followed during and subsequent to the emergency descent.

5.2. Weather deviation procedure

When pilot initiates communication with ATC, a rapid response may be obtained by stating WHEATHER DEVIATION REQUIRED to indicate that priority is desired on the frequency and for ATC response.

When necessary, the pilot should initiate communication using the urgency call PAN PAN PAN.

ATC should take one of the following actions:

- When appropriate separation can be applied, issue clearance to deviate from track
- If there is conflicting traffic and ATC is unable to establish appropriate separation, ATC shall:
 - Advise the pilot of inability to issue clearance for the requested deviation, and
 - Advise the pilot of conflicting traffic, and
 - Request the pilot's intention

The pilot shall inform ATC when weather deviation is no longer required, or when a weather deviation has been completed and the aircraft has returned to its cleared route.

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