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**Subject:**

**Guidance on Declaration of an Emergency to ATC and the Decision to Initiate an Evacuation**

**Reference:**

**FOM 227**

**Reason for Issue:**

Guidance on declaration of an emergency to ATC and the decision to initiate an evacuation.

**Instruction:**

There are two states of emergency used in aviation and they are classified as follows:

1. Distress:

A condition of being threatened by serious and/or imminent danger and requiring immediate assistance.

2. Urgency:

A condition concerning the safety of an aircraft or other vehicle, or of some person on board or within sight, but does not require immediate assistance.

The pilot should start the emergency call with the appropriate international RTF prefix as follows:

Distress 'MAYDAY, MAYDAY, MAYDAY'


Urgency 'PAN PAN, PAN PAN, PAN PAN'

The structure of a Distress or Urgency call should be made in the following order:

- MAYDAY MAYDAY MAYDAY / PAN PAN PAN PAN PAN PAN
- Name of station addressed
- Callsign
- Type of Aircraft
- Nature of Emergency
- Intention of Pilot in Command
- Present or last known position, FL/Altitude and heading
- Any other useful information that the PIC deems to be of use.

If a pilot is already in communication with an ATC Centre, before the emergency arises, assistance should be requested from the controller on the frequency in use. In

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this case, any SSR code setting previously assigned by ATC should be retained until instructions are received to change the code setting.

If, however, the pilot is not in direct communication with an ATC Centre, the SSR transponder code should be switched, preferably before the emergency call is made, to Emergency Code 7700, with Mode C if available.

The VHF frequency used for transmitting Distress and /or Urgency calls is 121.5MHz. Frequencies are also available on the HF band and should be confirmed in the Jeppesen en-route books found on the aircraft for the applicable area of operation. e.g Arabian Sea 2,143KHz (of interest – marine vessels at sea use 4,125KHz day, 8,291KHz day/night and 16,590KHz night)

During a MAYDAY or PAN PAN call, it is very important to continuously update the status of the aircraft with ATC.

For example, an Engine Fire on Take Off would warrant the use of a Distress (MAYDAY) call, but when the subsequent Engine Fire Checklist has been completed (the fire is extinguished and no other factors are present), a downgrade of the emergency state to Urgency (PAN) would ensure an appropriate level of support from ATC.

The above example would look something like this (time and circumstance permitting):


- |   |   |           |
|---|---|-----------|
| <ul style="list-style-type: none"> <li>➤ MAYDAY/MAYDAY/MAYDAY</li> <li>➤ Abu Dhabi Approach</li> <li>➤ Etihad 123</li> <li>➤ A330</li> <li>➤ Engine fire</li> <li>➤ Immediate intention is to maintain runway heading and climb altitude 3000'</li> </ul> | } | Primary   |
| <ul style="list-style-type: none"> <li>➤ Souls on board</li> <li>➤ Endurance or XXX kgs of fuel on board</li> </ul>   | } | Secondary |

*(The more information ATC have, the better they can tailor their emergency contingency procedures to your specifics).*

It is invariably preferable for pilots believing themselves to be facing emergency situations to declare them as early as possible and then cancel/downgrade later if they decide the situation allows.

If the Distress condition has passed or been rectified prior to contacting ATC, the radio transmission should reflect the current condition existing at the time of the message. If, for any reason, the radio transmission is delayed until after the engine is secured, and the fire is extinguished, it is appropriate to convey the current aircraft

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condition using an Urgency (PAN) message.

During any Urgency or Distress event, radiotelephony protocol dictates that the term MAYDAY or PAN should always precede the aircraft call sign. e.g. MAYDAY ETIHAD 123. All subsequent changes of frequency would also entail placing the MAYDAY or PAN terminology prior to the callsign.

Be aware that most ATC Centre's will activate an Emergency Response Plan on receipt of a declaration of Distress (MAYDAY). If the situation is subsequently cancelled or downgraded by the pilot, the level of response from ATC and related Emergency Services may not reflect the cancellation or downgrade requested. For example, emergency vehicles may be deployed.

In contrast, there are cases where situations may deteriorate. A good example of this is fuel (or lack thereof). The first notification to ATC that any further delays may result in landing without 'Final Reserve Fuel' should be in the form of:

- MINIMUM FUEL, Etihad 123

ATC should then respond with either the minutes of holding remaining or track miles expected to aircraft touch down. It is then the Pilots decision to declare a fuel emergency:

- MAYDAY/MAYDAY/MAYDAY FUEL
- Abu Dhabi Tower
- Etihad 123

The decision to evacuate an aircraft should be based on the situation within the passenger cabin and any external factors that may change that situation for the worse. It is very important that both the external factors and the cabin situation are assessed using the most reliable information available at the time. Where possible, ask the informant to describe what they can see, rather than their interpretation of the event. This applies to Cabin Crew, ATC, other Aircraft and the Emergency Services.


Ask yourself the following question:

- IS IT SAFE FOR THE GUESTS TO REMAIN IN THE PASSENGER CABIN?

If the answer to this question is YES, do not evacuate immediately, but continue to evaluate the situation, both internal and external. As further information becomes available, continue to ask yourself the following question:

- IS THIS A STABLE SITUATION OR LIKELY TO DETERIORATE?

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If the situation is deteriorating towards an unacceptable level, then an evacuation is probably the best action available to the commander.

When a Distress or Urgency call is made, ATC will invariably require certain information. This is likely to be the total number of persons on board and also the fuel endurance (if airborne) or fuel on board (in quantity) if on ground or about to land. This information is passed onto the first response team that will attend any emergency situation, that being the Fire Services. In some countries, the Fire Services have their own dedicated frequency (e.g. 121.6MHz). Otherwise they will be listening out on 121.5MHz. It is important to remember that the standard of English may be poor and great care should be taken when communicating with the Fire Services. The use of standard phraseology is important.

After dealing with the occurrence, and having ensured the safety of the aircraft and its occupants, it is essential to manage the ongoing situation. The Etihad NOC will provide all possible assistance, but clearly that unit must be informed of all elements of the emergency in the first instance. Once the situation is under control, the aircraft Commander must communicate details of any significant event to the NOC Duty Manager by the most expeditious and secure means available.

Management of any event is not just confined to the aircrew involved, the management teams of the NOC and Operations. In this era of multi-media and almost instantaneous communication, the Etihad Corporate Communications team plays a vital role in post-event management. It is easy to overlook this aspect once an event has been operationally addressed, but Commanders must consider the media implications of any operational occurrence and must provide information swiftly via the NOC Duty manager.

A good example of the need for timely NOC notification would be after a significant in-flight turbulence event involving damage of injury, or an airborne interception. Remember that customers may well send text or images from within the aircraft, and in supplying NOC with discreetly worded factual information via ACARS or SATCOM, you are providing essential information for the immediate management of the event.

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