| OPERATIONS ADVISORY NOTICE (OAN) | | |
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| OAN Number:**02/18R1** | Issue Date:**8 May 2018** | |
| **Subject: In-Flight Fuel Management – Phraseology for Fuel Related Messages to Air Traffic Control** | | |

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## 1.0 INTRODUCTION

This OAN rescinds OAN 02/18 dated 30th January 2018 and is being issued in relation to the subject matter. EASA SIB 2018-08, issued 8 May 2018 recommends all operators to align their Operations Manuals in line with the recommendations issued by ICAO.

## 2.0 ICAO REQUIREMENTS AND EASA RULEMAKING

The required standards are found in ICAO Annex 6 Part I. The change was effective as of 15 November 2012.

The EC is in the process of aligning the EU 965/2012 requirements with ICAO recommendations through RMT .0573 & RMT .0574.

### 2.1 OM Inspections

The Flight Operations Inspectorate has conducted a desktop operations manual inspection on in-flight fuel management procedures (namely OM Part A Section 8.3).

This inspection has revealed that a number of operator's procedures are not aligned with the mentioned requirements. The Flight Operations Inspectorate will be issuing a finding through Centrik, and operators are expected to align their OM content accordingly.

All operators are reminded that they are ultimately responsible to ensure manuals are compliant with requirements.

## 3.0 REFERENCES

*ICAO Annex 6 Part I*

*EASA SIB 2018-08; https://ad.easa.europa.eu/ad/2018-08*

**Flight Operations Inspectorate**

# Safety Information Bulletin

## Operations – ATM/ANS

**SIB No.: 2018-08**

**Issued: 08 May 2018**

**Subject: In-Flight Fuel Management — Phraseology for Fuel-Related Messages between Pilots and Air Traffic Control**

### Revision / Cancellation:

This SIB replaces EASA SIB 2013-12, dated 23 July 2013, which is withdrawn.

### Ref. Publications:

- ICAO Annex 6 'Operation of aircraft' Part I — 'International Commercial Air Transport – Aeroplanes', 10th Edition dated July 2016.
- ICAO Annex 6 'Operation of aircraft' Part II — 'International General Aviation – Aeroplanes', 9th Edition dated July 2016.
- ICAO Doc 4444 'Procedures for air navigation services — Air Traffic Management', 16th Edition dated 2016 (hereinafter referred to as PANS-ATM).
- ICAO Doc 9976 'Flight Planning and Fuel Management (FPFM) Manual', 1st edition dated 2015.
- Commission Regulation (EU) No 965/2012 dated 05 October 2012 on air operations (hereinafter referred to as the Air Ops Regulation).
- Commission Implementing Regulation (EU) 2016/1185 dated 20 July 2016 amending Implementing Regulation (EU) No 923/2012 as regards the update and completion of the common rules of the air and operational provisions regarding services and procedures in air navigation (SERA Part C) and repealing Regulation (EC) No 730/2006.
- EASA ED Decision 2016/023/R dated 13 October 2016 amending the Acceptable Means of Compliance and Guidance Material to Commission Implementing Regulation (EU) No 923/2012 'AMC and GM to the rules of the air' — Amendment 1.

### Applicability:

All aeroplane operators, pilots, air traffic service (ATS) providers and air traffic controllers (ATC).

### Description:

Minimum fuel situations have been the subject of several investigations by the air accident and incident investigations boards. Moreover, information received by EASA from mandatory occurrence reports related to fuel indicates that the MINIMUM FUEL declaration has been frequently misunderstood and misused by pilots and ATC.

EASA SIB 2013-12 informed stakeholders about the adopted ICAO amendment 36 to Annex 6 Part I, which, in particular, introduced new standards for in-flight fuel management and associated phraseology. The ICAO standards on the MINIMUM FUEL declaration have been applicable since 15 November 2012. Furthermore, point SERA.11012 introduced a similar requirement in 2016.

The relevant ICAO standard and related notes in Annex 6 Parts I and II require that:

*'The pilot-in-command shall advise ATC of a minimum fuel state by declaring MINIMUM FUEL when, having committed to land at a specific aerodrome, the pilot calculates that any change to the existing clearance to that aerodrome may result in landing with less than planned final reserve fuel.'*

*Note 1 — The declaration of MINIMUM FUEL informs ATC that all planned aerodrome options have been reduced to a specific aerodrome of intended landing and any change to the existing clearance may result in landing with less than planned final reserve fuel. This is not an emergency situation but an indication that an emergency situation is possible should any additional delay occur.'*

For Commercial Air Transport (CAT) operators, Part I includes the following Note 2:

*'Guidance on declaring minimum fuel for CAT operators is contained in the Fuel Planning Manual (Doc 9976).'*

More clarification is provided in ICAO Doc 9976, chapter 6.8.5 'Minimum fuel declarations':

*'Note 1 — Pilots should not expect any form of priority handling as a result of a "MINIMUM FUEL" declaration. ATC will, however, advise the flight crew of any additional expected delays as well as coordinate when transferring control of the aeroplane to ensure other ATC units are aware of the flight's fuel state.'*

As highlighted in ICAO Doc 9976, it is 'important to note that although the coordinated escalation process (with ATC) related to the protection of final reserve fuel typically occurs in three steps, each situation is different and may be resolved at any stage in the process. The three steps in the escalation process are:

| **Protecting final reserve fuel in accordance with Annex 6, Part I, 4.3.7** | |
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| **Step 1** | Request delay information when required (in accordance with 4.3.7.2.1). |
| **Step 2** | Declare MINIMUM FUEL when committed to land at a specific aerodrome **and** any change in the existing clearance may result in a landing with less than planned final reserve fuel (in accordance with 4.3.7.2.2). |
| **Step 3** | Declare a fuel emergency when the calculated fuel on landing at the nearest suitable aerodrome, where a safe landing can be made, will be less than the planned final reserve fuel (in accordance with 4.3.7.2.3).' |

Operators can consult several examples and scenarios on the use of the MINIMUM FUEL declaration in ICAO Doc 9976, Ch. 6.10.

The corresponding provisions for air traffic controllers can be found in ICAO Doc 4444 PANS-ATM:

*'Minimum fuel. The term used to describe a situation in which an aircraft's fuel supply has reached a state where the flight is committed to land at a specific aerodrome and no additional delay can be accepted.' (Ch. 1 Definitions)*

*'15.5.4.1 When a pilot reports a state of minimum fuel, the controller shall inform the pilot as soon as practicable of any anticipated delays or that no delays are expected.*

*Note — The declaration of MINIMUM FUEL informs ATC that all planned aerodrome options have been reduced to a specific aerodrome of intended landing, and any change to the existing*

*clearance may result in landing with less than planned final reserve fuel. This is not an emergency situation but an indication that an emergency situation is possible should any additional delay occur.'*

The relevant requirements in the European regulation SERA are the following:
*Article 2 Definitions:*

*'94a. "minimum fuel" means a term used to describe a situation in which an aircraft's fuel supply has reached a state where the flight is committed to land at a specific aerodrome and no additional delay can be accepted;'*

*SERA.11012 Minimum Fuel and Fuel Emergency*

*'(a) When a pilot reports a state of minimum fuel, the controller shall inform the pilot as soon as practicable of any anticipated delays or that no delays are expected.*

*(b) When the level of fuel renders declaring a situation of distress necessary, the pilot, in accordance with SERA.14095, shall indicate that by using the radiotelephony distress signal (MAYDAY), preferably spoken three times, followed by the nature of the distress condition (FUEL).'*

The associated Guidance Material is provided in the Annex to ED Decision 2016/023/R, as follows:
*GM1 SERA.11012 Minimum fuel and fuel emergency*

*'The declaration of MINIMUM FUEL informs ATC that all planned aerodrome options have been reduced to a specific aerodrome of intended landing, and any change to the existing clearance may result in landing with less than planned final reserve fuel. This is not an emergency situation but an indication that an emergency situation is possible should any additional delay occur.'*

Example of phraseology to be used for declaring MINIMUM FUEL:
PILOT: [airline call sign] 'MINIMUM FUEL.'
ATC: 'ROGER [NO DELAY EXPECTED or EXPECT (delay information)].

The Air Ops Regulation does not yet contain requirements about the MINIMUM FUEL declaration. This will be completed through EASA Rulemaking Task (RMT) RMT.0573 'Fuel planning and management'. More examples for the appropriate use of the MINIMUM FUEL declaration will be provided in the EASA Guidance Material associated to RMT.0573. However, all the provisions referenced above already contain the relevant requirements on the MINIMUM FUEL declaration.

## Recommendation(s):

EASA recommends that operators and ATS providers take note of the references provided in this SIB, amend, as appropriate, their procedures for in-flight fuel management and the fuel-related phraseology in accordance with the latest applicable ICAO Standards And Recommended Practices and the SERA requirements, and document those changes in their Operations Manuals accordingly.
EASA recommends that operators highlight in their training that the MINIMUM FUEL declaration is not an emergency declaration but only indicates that an emergency situation is possible if an additional delay occurs.
The 'PAN PAN PAN' call should not be used instead of the MINIMUM FUEL declaration.

EASA also recommends that operators and ATS providers ensure that these procedures are properly disseminated and used by the relevant personnel.

**Contact(s):**

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