

Issued: 13 August 2015

Minimum Fuel Calls

This Information Notice contains information that is for guidance and/or awareness.

Recipients are asked to ensure that this Information Notice is copied to all members of their staff who may have an interest in the information (including any 'in-house' or contracted maintenance organisations and relevant outside contractors).

Applicability:	
Aerodromes:	All Certificated/Licensed Aerodromes
Air Traffic:	All Air Navigation Service Providers, Air traffic Controllers
Airspace:	Not primarily affected
Airworthiness:	Not primarily affected
Flight Operations:	All Operators, All AOC Holders
Licensed/Unlicensed Personnel:	All Flight Crew, Examiners and Instructors

1 Introduction

- 1.1 This Information Notice (IN) has been produced in response to UK Airprox Board (UKAB) Airprox Report No. 2014090.
- 1.2 The purpose of this IN is to remind pilots, controllers and operators of the definition of MINIMUM FUEL, pilot guidance when to declare MINIMUM FUEL, and the ATC reaction.

2 Background

- 2.1 The "MINIMUM FUEL" call was introduced by ICAO to provide Air Traffic Control (ATC) with a warning that if an aircraft's remaining track miles and/or holding are extended then it may land with less than the legally required Final Reserve Fuel.
- 2.2 Currently many UK operators use a PAN call in this situation but as the PAN call does not receive full International recognition the "MINIMUM FUEL" definition and call was agreed at ICAO.

3 Regulatory

3.1 In-Flight Fuel Management

- 3.1.1 ICAO Annex 6 4.3.7.2.1 states:

"The pilot-in-command shall request delay information from ATC when unanticipated circumstances may result in landing at the destination aerodrome with less than the final

reserve fuel plus any fuel required to proceed to an alternate aerodrome or the fuel required to operate to an isolated aerodrome.” When there is significant holding this will be provided in the form of an Estimated Arrival Time (EAT).

- 3.1.2 The pilot-in-command will determine a MINIMUM FUEL state when having committed to land at the selected aerodrome, any change to the existing clearance or EAT may result in landing with less than the planned final reserve fuel. If a missed approach is likely, this may be taken into consideration. ATC will be advised of the minimum fuel state by declaring “MINIMUM FUEL”.
- 3.1.3 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 co-ordinate when transferring control of the aeroplane to ensure other ATC units are aware of the flight’s fuel state.
- 3.1.4 Guidance on declaring minimum fuel is contained in the Flight Planning and Fuel Management Manual ([ICAO Doc 9976](#)).

3.2 Emergency Declarations

- 3.2.1 ICAO Annex 6 4.3.7.2.3 states:

The pilot-in-command shall declare a situation of fuel emergency by broadcasting “MAYDAY, MAYDAY, MAYDAY, FUEL”, when the calculated usable fuel predicted to be available upon landing at the nearest aerodrome where a safe landing can be made is less than the planned final reserve fuel.

4 Definitions

Minimum Fuel: 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 the planned final reserve fuel. This is not an emergency situation but an indication that an emergency situation is possible should any additional delay occur - ICAO Annex 6 4.3.7 Note 1.

Final Reserve: Final Reserve Fuel is fuel for 30 minutes of flight for turbine powered aircraft or 45 minutes for piston powered aircraft - EASA Part Cat AMC1CAT.OP.MPA 150(b) Fuel Policy.

5 Recommendations

- 5.1 The CAA recommends operators should review their operations manuals to ensure they contain the appropriate advice to flight crew in light of this IN.

5.2 Reporting

It is of significant value to Flight Safety Data when crews file an Air Safety Report, that the report records the actual amount of fuel on landing as well as the planned ‘Final Reserve’.

6 Further Information

- UKAB Airprox Report No. 2014090
- ICAO Doc 9976 - Flight Planning and Fuel Management Manual
- ICAO Doc 8168 - PANS OPS
- CAT.OP.MPA.280 In-flight fuel Management Aeroplanes