

IBAC Bulletin 12- 03

Subject: In-flight fuel management

Introduction

Amendment 36 to ICAO Annex 6 Part I “International Commercial Air Transport Operations” will become applicable on 15 November 2012 *inter alia* addresses the above subject. A counterpart amendment (# 4) to PANS-ATM (Doc. 4444) will also become applicable on 12 November 2012.

Whereas the amendment #4 to PANS-ATM does not differentiate between commercial and general aviation operations it applies to **all** operations. **Thus, it will be incumbent on all pilots to adhere to relevant new provisions and procedures...**for details see below.

While a proposal has not yet been developed to amend Annex 6 Part II “International General Aviation Operations” to bring it into line with the a number of provisions adopted in Amendment 36 to Annex 6 Part I, it is the firm intention of the ICAO Air Navigation Commission to do so in the not too far distant future.

New Annex 6 Part I provisions- excerpts

4.3.7 In-flight fuel management

4.3.7.1 An operator shall establish policies and procedures, approved by the State of the Operator, to ensure that in-flight fuel checks and fuel management are performed.

4.3.7.2 The pilot-in-command shall continually ensure that the amount of usable fuel remaining on board is not less than the fuel required to proceed to an aerodrome where a safe landing can be made with the planned final reserve fuel remaining upon landing.

4.3.7.2.1 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.

4.3.7.2.2 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.

Note 2.— Guidance on declaring minimum fuel is contained in the Flight Planning and Fuel Management Manual (Doc 9976).

4.3.7.2.3 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.

Note 1.— The planned final reserve fuel refers to the value calculated in 4.3.6.3 e) 1) or 2) and is the minimum amount of fuel required upon landing at any aerodrome.

Note 2.— The words “MAYDAY FUEL” describe the nature of the distress conditions as required in Annex 10, Volume II, 5.3.2.1, b) 3.

Note 3.— Guidance on procedures for in-flight fuel management are contained in the Flight Planning and Fuel Management Manual (Doc 9976).

Amendment 4 to PANS-ATM – Excerpts

10.2.5 In circumstances where an aircraft has declared minimum fuel or is experiencing an emergency or has declared minimum fuel, or in any other situation wherein the safety of the aircraft is not assured, the type of emergency and/or the circumstances experienced by the aircraft shall be reported by the transferring unit to the accepting unit and any other ATS unit that may be concerned with the flight and to the associated rescue coordination centres, if necessary.

15.5.4 Fuel emergency and minimum fuel

Note 1.— General procedures to be applied when a pilot reports an emergency situation are contained in 15.1.1 and 15.1.2.

Note 2.— Coordination procedures to be applied between transferring and accepting ATS units for flights in fuel emergency or minimum fuel situations are contained in Chapter 10, 10.2.5.

Note 3.— The words MAYDAY FUEL describe the nature of the distress condition as required in Annex 10, Volume II, 5.3.2.1.1 b) 3.

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 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.

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Recommended Actions by Operators/Pilots

- 1. Carefully review the above excerpts from ICAO documents**
- 2. Update operations manuals and other documents, as appropriate**
- 3. Ensure that pilot training curricula are updated**
- 4. Monitor the promulgation of relevant AICs by States/ANSPs**

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