



Safety Information Bulletin

Operations

SIB No.: 2014-08R1

Issued: 10 August 2016

Subject: Cold Soaked Fuel Frost Dispatch

Ref. Publications:

- Regulation (EU) [965/2012](#)¹, CAT.OP.MPA.250² – Ice and other contaminants – ground procedures.
- Boeing 737-600/-700/-800/-900 Airplane Flight Manual (AFM) D631A001.J01 rev 16 dated 07 April 2016 – Miscellaneous Limitations – Cold Soaked Fuel Frost (CSFF).
- Boeing 737-600/-700/-800/-900 Generic Flight Crew Operations Manual (FCOM) D6-27370-TBC rev 37 – Supplementary Procedures – Anti-Ice, Rain – Cold Soaked Fuel Frost (where “TBC” is a code specific for each customer).

Applicability:

Commercial air transport operations with Boeing 737 “Next Generation (NG)” aeroplanes (737-600, 737-700, 737-800, 737-900, 737-900ER).

Description:

According to Regulation (EU) 965/2012, commercial air transport operations in icing conditions must observe CAT.OP.MPA.250²:

Ice and other contaminants — ground procedures

(a) The operator shall establish procedures to be followed when ground de-icing and anti-icing and related inspections of the aircraft are necessary to allow the safe operation of the aircraft.

(b) The commander shall only commence take-off if the aircraft is clear of any deposit that might adversely affect the performance or controllability of the aircraft, except as permitted under (a) and in accordance with the AFM.

In 2012, European stakeholders and EASA Member States’ National Aviation Authorities sought EASA’s advice on the possibility to takeoff with a Boeing 737NG aeroplane with CSFF, as this was permitted through the AFM but was not allowed under U.S. regulation. Canadian operators were permitted to takeoff when operating within the AFM conditions and limitations.

¹ As amended by (EU) 83/2014, (EU) 71/2014 and (EU) 800/2013.

² Paragraph NCC.OP.185 of the Supplementary Document to ED Decision 2013/021/R “AMC & GM Part-NCC Initial Version” contains the same provisions for non-commercial operations.

This is information only. Recommendations are not mandatory.



EASA issued SIB 2014-08, providing recommendations to conduct CSFF take-offs based on the approved AFM, dated 16 December 2008. The SIB also recognised the difficulty for flight crews to assess the frost thickness and informed about the work launched by Boeing to define a simplified procedure that would not rely on frost thickness measurement.

In 2015, the Federal Aviation Administration (FAA) agreed to grant Exemptions to operators requesting operations with the “Revised Cold Soaked Fuel Frost Dispatch Procedure for 737NG Models”.

Throughout 2015, EASA conducted an extensive review of the simplified procedure proposed by Boeing to takeoff with CSFF. Since Boeing had already demonstrated to the FAA adequate aeroplane performance within the CSFF limits defined in the AFM, this review focused on demonstrating that, under expected conditions during turn-around, the CSFF would not build up beyond the limits set in the AFM once compliance with the limits and applicable conditions was positively assessed by the flight crew after the previous landing.

Based on the results of this investigation, EASA approved a new AFM version containing the simplified procedure “Revised Cold Soaked Fuel Frost Dispatch Procedure for 737NG Models”. The simplified procedure eliminates the need for measurement of the frost thickness while establishes new environmental conditions as pre-requisites for its application.

This SIB revises and replaces EASA SIB 2014-08 to:

- inform B737 operators, already conducting take-offs under the CSFF procedure, about the newly approved simplified procedure, for which the required conditions are easier to confirm by the pilot.
- highlight that strict adherence to the conditions and limitations for dispatch of 737NG aeroplanes with CSFF on wing surfaces is essential for safe operation.

At this time, the safety concern described in this SIB does not warrant the issuance of a safety measure under Regulation (EU) [965/2012](#), Annex II, ARO.GEN.135(c).

Recommendation(s):

EASA recommends that operators intending to operate 737NG aeroplanes with CSFF under the AFM conditions and limitations should develop detailed operational procedures, including adequate training, based only on the simplified procedure.

In case of doubt whether or not AFM conditions are met, flight crews should request appropriate de-icing/anti-icing of the aeroplane prior to take-off, or should postpone departure until appropriate conditions are met. The final decision rests with the pilot in command.

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