



Safety Information Bulletin

Airworthiness – Operations

SIB No.: 2016-06

Issued: 15 April 2016

Subject: Aircraft Ground De-icing / Anti-icing Operations with Auxiliary Power Unit Running

Ref. Publications:

- Fokker Services (Fokker) Service Letter (SL) 220 Revision 1, dated 13 April 2004.
- Fokker Airworthiness Recommendations Catalogue item 12-31-4 issue 1, dated 01 April 2004.
- Fokker Manual Change Notification – Maintenance Documentation (MCNM) F100-073 Revision 1, and Manual Change Notification – Operational Documentation (MCNO) F100-040 Revision 1, both dated 25 November 2005.
- Federal Aviation Administration (FAA) Airworthiness Directive (AD) [2002-07-03](#), dated 4 April 2002.

Applicability:

Fokker F28 Mark 0070 and Mark 0100 aeroplanes.

Description:

There have been 4 reported occurrences between 1996 and 2004 of uncontained auxiliary power unit (APU) failures during de-icing / anti-icing operations on ground. The investigation of those events revealed that the APU failed due to ingestion of the (alcohol based) de-icing fluid in the inlet. This happened in sufficient quantity to cause the rotational speed of the APU to increase uncontrollably, to well above the overspeed limit, ultimately resulting in rim separation of the turbine rotor.

To address this safety concern, Fokker issued SL 220, recommending airlines to tighten their control over the qualified de-/anti-icing facilities and to increase the awareness of the personnel involved with respect to the application of de-icing fluids into the intake of a running APU (and any other critical points/areas during de-icing). At the same time, improvements were also introduced to related Fokker operational and maintenance documentation.

Prompted by occurrences in the United States, the FAA issued AD 2002-07-03, requiring an amendment of the Airplane Flight Manual to prohibit US operators to conduct anti-/de-icing operations with the APU running. Between 2004 and 2014, no other occurrence of this type was reported to EASA, but in January 2015 a new case was reported, which is still under investigation.

At this time, the safety concern described in this SIB is not considered to be an unsafe condition that would warrant either AD action under Regulation (EU) [748/2012](#), Part 21.A.3B, or the issuance of a safety measure under Regulation (EU) [965/2012](#), Annex II, ARO.GEN.135(c).

This is information only. Recommendations are not mandatory.



Recommendation(s):

The Agency recommends operators and qualified de-/anti-icing facilities to increase awareness of the personnel involved with respect to this particular risk. The relevant staff should especially be made aware of the location of the APU inlet and be instructed to thoroughly follow the recommendations and precautions contained in the Aircraft Maintenance Manual (as updated by Fokker MCNM F100-073 Revision 1) and in the Aircraft Operating Manual (as updated by Fokker MCNO F100-040 Revision 1).

Contact(s):

For further information contact the EASA Safety Information Section, Certification Directorate.

E-mail: ADs@easa.europa.eu.

For copies of the relevant service publications, or technical advice, contact Fokker Services B.V., Technical Services Dept. P.O. Box 1357, 2130 EL, Hoofddorp, The Netherlands, Telephone +31-88-6280-350, Fax +31-88-6280-111, E-mail: technicalservices@fokker.com.

The referenced publications can also be downloaded from www.myfokkerfleet.com.

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