


EASA	NOTIFICATION OF A PROPOSAL TO ISSUE AN AIRWORTHINESS DIRECTIVE
	<p>PAD No.: 12-035</p> <p>Date: 26 April 2012</p> <p>Note: This Proposed Airworthiness Directive (PAD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.</p>
<p>In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below. All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation closing date indicated.</p>	
<p>Type Approval Holder's Name :</p> <p>CFM International SA</p>	<p>Type/Model designation(s) :</p> <p>CFM56-5, -5A and -5B Engines</p>
<p>TCDS Number : EASA.E.003 and EASA.E.067</p>	
<p>Foreign AD : Not applicable</p>	
<p>Supersedure : None</p>	
ATA 73	Engine Fuel and Control – Hydro-Mechanical Units – Cleaning and Inspection
<p>Manufacturer(s): SNECMA, General Electric</p>	
<p>Applicability:</p>	<p>CFM International CFM56-5, CFM56-5A and CFM56-5B series engines, all certified Models, all serial numbers.</p> <p>These engines are known to be installed on, but not limited to, certain Airbus A318, A319, A320 and A321 aeroplanes.</p>
<p>Reason:</p>	<p>Over the past 18 months, some A320 family aeroplanes, operated predominantly using TS-1 fuel, have experienced in-flight shut downs (IFSD) resulting from hydro-mechanical unit (HMU) failures. TS-1 fuel is mainly supplied in countries belonging to the Commonwealth of Independent States.</p> <p>Investigations have determined that these HMU failures were caused by corrosion and consequential seizure of the HMU delta-p valve. Investigations have found the presence of contaminants and corrosive catalysts within the TS-1 fuel.</p> <p>This condition, if not corrected, could lead to an increased IFSD rate, increasing the risk of an emergency landing, possibly resulting in damage to the aeroplane and injury to the occupants.</p> <p>For the reasons described above, this AD requires repetitive monitoring of TS-1 fuel usage and, depending on findings, cleaning and inspection of the affected HMU, or replacement with a serviceable unit.</p>
<p>Effective Date:</p>	<p>[TBD: 14 days after final AD issue date]</p>

Required Action(s)
and Compliance
Time(s):

Required as indicated, unless accomplished previously:

- (1) Within 30 days after the effective date of this AD, and thereafter at intervals not to exceed 12 months, accomplish the following actions concurrently, for each HMU.
 - (1.1) Determine whether during the preceding 12 months period, the HMU has been operated on TS-1 fuel.
 - (1.2) If the HMU has been operated on TS-1 fuel, calculate the percentage of TS-1 fuel uploads during that 12 months period.

Note: Appendix 1 of this AD contains a list of HMU known to be approved for installation on CFM56 engines. That list is not exhaustive and for information only; the actions as required by this AD are not limited to those HMU.

- (2) If, based on the results of the actions as required by paragraph (1) of this AD, it is determined that the HMU has been exposed to TS-1 fuel for 50% or more of the aeroplane fuel uploads during the preceding 12 months period, within the compliance time as specified in Table 1 of this AD, as applicable, remove the affected HMU from the engine for cleaning and inspection, in accordance with Section 3 Accomplishment Instructions, paragraph A (2), of CFM Service Bulletin (SB) CFM56-5B 73-0122 Revision 8, or SB CFM56-5 73-0182 Revision 6, as applicable to engine type.

Table 1 - Initial HMU Cleaning and Inspection

Compliance Time , whichever occurs later, A, B or C	
A	Upon accumulation by the HMU of 10 000 engine hours since first exposure to TS-1 fuel, or since last HMU overhaul, or since last cleaning and passing of the inspection in accordance with Section 3 Accomplishment Instructions paragraph A (2) of SB CFM56-5B 73-0122 (any revision), or SB CFM56-573-0182 (any revision), as applicable to engine type.
B	Within 24 months after the effective date of this AD
C	Before next flight

- (3) If, during an inspection as required by paragraph (2) of this AD, the HMU does not pass the inspection, before installation on an engine, accomplish the applicable corrective actions, depending on findings, in accordance with approved instructions.
- (4) If, during a second or later calculation, as required by paragraph (1) of this AD, it is determined that the HMU has been exposed to TS-1 fuel for less than 50% of the preceding 12 months period, the cleaning and inspection, based on a previous calculation are no longer required.
- (5) Accomplishment of corrective actions, as required by paragraph (3) of this AD, does not constitute terminating action for the repetitive calculations required by paragraph (1) of this AD and, depending on findings, the cleanings and inspections as required by paragraph (2) of this AD.
- (6) From the effective date of this AD, do not install a HMU that has been exposed to TS-1 fuel on an engine, and do not install an engine with an HMU that has been exposed to TS-1 fuel on an aeroplane, unless the exposure rate of that HMU has been determined and the HMU is thereafter used in compliance with the requirements of this AD.

Ref. Publications:	<p>CFM International S.A. SB CFM56-5B 73-0122 Revision 8, and SB CFM56-5 73-0182 Revision 6, both dated 08 March 2012.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>
Remarks :	<ol style="list-style-type: none"> 1. This Proposed AD will be closed for consultation on 24 May 2012. 2. Enquiries regarding this PAD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail ADs@easa.europa.eu. 3. For any question concerning the technical content of the requirements in this PAD, please contact: <p>CFM SA Customer Support Centre, Telephone : +33 1 64 14 88 66, Fax : +33 1 64 79 85 55 E-mail : snecma.csc@snecma.fr,</p> <p>or</p> <p>CFM Inc. Aviation Operations Centre, Telephone: +1 513-552-3272, or +1 877-432-3272, E-mail : geae.aoc@ge.com.</p>

Appendix 1 – Hydro-mechanical units, identified by Part Number (P/N), known to be approved for installation on CFM56-5 and -5B engines

Affected P/N		Affected Engines (all Models)	
CFM P/N	Woodward P/N	CFM56-5	CFM56-5B
1348M79P02	8061-508	X	
1348M79P03	8061-509	X	
1348M79P04	8061-510	X	
1348M79P06	8061-511	X	
1348M79P07	8061-512	X	
1348M79P08	8061-526	X	X
1348M79P09	8061-531	X	X
1348M79P10	8061-532	X	X
1348M79P11	8061-533	X	X
1348M79P12	8061-534	X	X
1348M79P13	8061-535	X	X
1348M79P14	8061-536	X	X