## EASA



## EMERGENCY AIRWORTHINESS DIRECTIVE

## AD No.: 2009-0154-E

## Date: 15 July 2009

Note: This Emergency Airworthiness Directive (AD) 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

This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].

Type Approval Holder's Name :		Type/Model designation(s) :
CFM International SA		CFM56-5B turbofan engines
TCDS Number :	EASA E.003	
Foreign AD :	Not applicable	
Supersedure :	None	
ATA 73	Engine Fuel and Control - Hydromechanical Unit (HMU) – Inspection/Replacement	
Manufacturer(s):	Snecma, GE Aviation	
Applicability:	CFM56-5B engine models equipped with Hydromechanical units HMU VIN 8061- 532 (P/N 1348M79P10), VIN 8061-535 (P/N 1348M79P13), VIN 8061-536 (P/N 1348M79P14), Serial Numbers (S/N) as identified within paragraph 1.A of CFM Service Bulletin CFM56-5B S/B 73-0238 Revision 1 and which have not been modified in accordance with CFM56-5A S/B 73-0208, CFM56-5B S/B 73-0239 or CFM56-5C S/B 73-0180. These engines are known to be installed on, but not limited to Airbus A318,	
Reason:	A319, A320 and A321 series a	aeroplanes. s have occurred on CFM56-5B turbofan engines.
Reason:	in-ilight compressor stall event	s have occurred on CFM56-5B turboran engines.

These events could have been caused by malfunction of the Hydromechanical Unit Variable Stator Vanes (VSV)/Variable Bleed Valves (VBV) Scored Vanes and could lead to in-flight shutdown of the engine, which can result in a catastrophic effect at aircraft level if more than one engine is affected.
For the reasons described above, this AD mandates the inspection and replacement of the affected HMUs.

Effective Date:

17 July 2009

Required as indicated unless previously accomplished:	
<ol> <li>Within 24 hours after the effective date of this AD, check engine records for any occurrence of ECAM (Electronic Centralized Aircraft Monitoring) "ENG X START FAULT- ENG X STALL" and/or "ENG X COMPRESSOR VANE" warnings since entry into service of the HMUs.</li> </ol>	
Note: The letter " <b>X</b> " in ECAM warnings above is a placeholder for a numeral varying from 1 to 2	
<ol><li>For engines which have displayed before the effective date of this AD, any of the ECAM warnings described in paragraph 1 of this AD: before further flight, replace the affected HMU with a serviceable unit.</li></ol>	
<ol> <li>For engines which have never displayed any of the ECAM warnings described in paragraph 1 of this AD:</li> </ol>	
3.1. From the effective date of this AD, after any ECAM warnings described in paragraph 1 of this AD (during air or ground operations): before further flight, replace the affected HMU with a serviceable unit.	
3.2. If both engines on the same aeroplane are found with HMUs S/N as identified within paragraph 1.A of SB CFM56-5B S/B 73-0238 Revision 1, within 30 days after the effective date of this AD, replace at least one HMU with a serviceable unit.	
Replacement of an HMU with a serviceable unit must be done in accordance with paragraph 3.C of CFM Service Bulletin CFM56-5B S/B 73-0238 Revision 1.	
<u>Optional Terminating Action</u> : Modification of both HMUs per one of the following SBs: CFM56-5A S/B 73-0208, CFM56-5B S/B 73-0239 or CFM56-5C S/B 73-0180 is an alternative corrective action for the requirements of this AD.	
CFM56-5B S/B 73-0238 Revision 1, 19 June 2009.	
CFM56-5A S/B 73-0208, dated 19 June 2009	
CFM56-5B S/B 73-0239, dated 19 June 2009	
CFM56-5C S/B 73-0180, dated 19 June 2009	
The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.	
<ol> <li>If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> </ol>	
<ol><li>The safety assessment has requested not to implement the full consultation process and an immediate publication and notification.</li></ol>	
<ol> <li>Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management &amp; Research Section, Certification Directorate, EASA. E-mail: <u>ADs@easa.europa.eu</u>.</li> </ol>	
<ul> <li>4. For any question concerning the technical content of the requirements in this AD, please contact:</li> <li>CFM SA Customer Support Center</li> <li>E-mail : <u>snecma.csc@snecma.fr</u></li> <li>International Phone : +33 1 64 14 88 66</li> <li>Fax : +33 1 64 79 85 55</li> <li>or</li> <li>CFM Inc. Customer Support Center</li> <li>E-mail : <u>geae.csc@ae.ge.com</u></li> <li>International Phone: +1 513-552-3272</li> <li>USA Phone: 877-GEAE-CSC</li> </ul>	