


EASA	EMERGENCY AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2008-0227-E</p> <p>Date: 23 December 2008</p> <p>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</p>
<p>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].</p>	
<p>Type Approval Holder's Name :</p> <p>CFM International SA (CFM)</p>	<p>Type/Model designation(s) :</p> <p>CFM56-5B turbofan engines</p>
<p>TCDS Number : EASA.E.003</p>	
<p>Foreign AD : Not applicable</p>	
<p>Supersedure : None</p>	
ATA 72	Engine – High Pressure Compressor (HPC) Stall Event– Inspection/Replacement
<p>Manufacturer(s):</p>	<p>Snecma, General Electric</p>
<p>Applicability:</p>	<p>CFM International SA (CFM) models CFM56-5B1, -5B2, -5B4, -5B5, -5B6, -5B7, -5B1/P, -5B2/P, -5B3/P, -5B3/P1, -5B4/P, -5B5/P, -5B6/P, -5B7/P, -5B8/P, -5B9/P, -5B1/2P, -5B2/2P, -5B3/2P, -5B3/2P1, -5B4/2P, -5B6/2P, -5B4/P1, -5B4/2P1, -5B9/2P turbofan engines</p> <p>These engines are known to be installed on but not limited to Airbus A318/A319/A320/A321 aircraft.</p>
<p>Reason:</p>	<p>Several occurrences of HPC stalls in service have been reported by Airbus A321 operators with CFM 56-5B engines since January 2007. Root cause is highly deteriorated HPCs. To improve operability and maintainability CFM released ECU software 5BQ in January 2007 which features 2 degrees additional Variable Stator Vanes closure in the low power region to increase the stall margin. This 5BQ software introduction has reduced the frequency of stalls, however since April 2008, 6 different engines have experienced stalls at 3 different operators with 5BQ software.</p> <p>On 15 December a CFM56-5B powered A321 experienced stalls on both engines during the same flight. This event was caused by a high level of HPC deterioration.</p> <p>Engine Stalls on both engines during flight can cause a dual IFSD.</p> <p>This AD has been issued to require for aircraft where both engines have more than 80 C degrees of Exhaust Gas Temperature (EGT) deterioration, one of the engines be removed.</p>

Effective Date:	24 December 2008
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> 1. Identify all engines that have greater than 80 C degrees of deterioration as measured by the EGT margin deterioration in accordance with the instructions of CFM International Service Bulletin CFM56-5B S/B 72-0722. 2. For all aircraft with both engines above 80 C degrees of EGT margin deterioration, as identified under paragraph 1 of this AD, until 07 January 2009 and in accordance with the instruction of CFM International Service Bulletin CFM56-5B S/B 72-0722, remove the engine identified under paragraph 3 of this AD and replace it with an engine below 80 C degrees of EGT margin deterioration. 3. Prior to engine removal, perform an HPC borescope inspection (BSI) of both engines per the current applicable A318/A319/A320/A321 AMM instructions for the HPC stages 1, 3, 6, and 9, adhering to the applicable A318/A319/A320/A321 AMM limits to determine which engine should be removed.
Ref. Publications:	<p>CFM56-5B S/B 72-0722, dated 22 December 2008</p> <p>The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.</p>
Remarks :	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this EAD. 2. The safety assessment has requested not to implement the full consultation process and an immediate publication and notification. 3. Enquiries regarding this EAD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu. 4. For any question concerning the technical content of the requirements in this EAD, please contact: CFM International, SA Customer Support Center E-mail : snecma.csc@snecma.fr International Phone : +33 1 64 14 88 66 Fax : +33 1 64 79 85 55 or CFM Inc. Customer Support Center E-mail : geae.csc@ae.ge.com International Phone: +1 513-552-3272 USA Phone: 877-GEAE-CSC