EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2014-0261 **Date: 04 December 2014** Note: This 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 EU 748/2012, Part 21.A.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].

Design Approval Holder's Name:	**Type/Model designation(s):**
CFM INTERNATIONAL S.A.	CFM56-7B engines

TCDS Number:	EASA.E.004
Foreign AD:	Not applicable
Supersedure:	None

ATA 05	**Engine Fuel & Control – Engine Electronic Control – Software Update**
Manufacturer(s):	SNECMA, General Electric
Applicability:	CFM56-7B engines, all models, all serial numbers. These engines are known to be installed on, but not limited to, Boeing 737-600, -700, -800, -900 and -900ER aeroplanes.
Reason:	Several thrust instability events have occurred in service on the CFM56-7B fleet resulting from fuel containing water-borne contaminates being supplied to the engine which had an adverse effect on the response of the fuel control valve in the hydro-mechanical unit (HMU). In one occurrence, it led to a dual engine event that resulted in the overspeed and in-flight shutdown (IFSD) of one engine. This condition, if not corrected, could potentially lead to engine overspeed and IFSD of one or more engines, loss of thrust control, damage to the engine, and damage to, or reduced control of, the aeroplane. To address this potentially unsafe condition, CFM has modified its EEC (Electronic Engine Control) software to compensate for compromised fuel within the hydro-mechanical unit and improve the response of the fuel control valve, thereby mitigating these thrust instability events. Consequently, CFM56-7B Service Bulletin (SB) 73-0203 and SB 73-0204 were issued to provide instructions for introducing this improved Engine Electronic Control (EEC) software in-service. For the reasons described above, this AD requires the introduction of the improved EEC software, either by modification (software upload) of the current EEC, or replacement with an EEC that contains the improved software.

Effective Date:	18 December 2014
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within 6 months after the effective date of this AD, modify the engine by installing software standard 7.B.W in the EEC, in accordance with the instructions of CFM56-7B SB 73-0203 or CFM56-7B SB 73-0204, as applicable or replace the EEC with a unit that contains software standard 7.B.W. (2) Installation of a later EEC software standard, subsequent to 7.B.W, in accordance with the instructions of its associated SB, approved by EASA, or approved under CFM DOA, is acceptable to comply with the requirements of this AD. (3) After modification of an engine as required by paragraph (1) of this AD, do not install any EEC unit on that engine, unless the software standard is 7.B.W or later (see also paragraph (2) of this AD).
Ref. Publications:	CFM International CFM56-7B SB 73-0203 dated 09 June 2014. CFM International CFM56-7B SB 73-0204 dated 09 June 2014. The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.
Remarks:	1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. This AD was posted on 29 October 2014 as PAD 14-159 for consultation until 19 November 2014. The Comment Response Document can be found at http://ad.easa.europa.eu/. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu. 4. For any question concerning the technical content of the requirements in this AD, please contact: CFM SA Customer Support Center E-mail : snecma.csc@snecma.fr. International Phone : +33 1 6414 8866 Fax : +33 1 6479 8555, or CFM Inc. Customer Support Center E-mail : geae.aoc@ge.com. International Phone: +1 513 552 3272 Fax : +1 513 552 3329.