



## Notification of a proposal to issue an Airworthiness Directive

**PAD No.: 17-054**

**Issued: 26 April 2017**

Note: This Proposed Airworthiness Directive (PAD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.

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 date indicated.

**Design Approval Holder's Name:**

CFM INTERNATIONAL S.A.

**Type/Model designation(s):**

CFM56-3 engines

**Effective Date:** [TBD - standard: 14 days after AD issue date]

**TCDS Number(s):** EASA.E.066

**Foreign AD:** Not applicable

**Supersedure:** None

### ATA 72 – Engine – Variable Stator Vane Actuating System – Check

#### **Manufacturer(s):**

SNECMA (France); General Electric Aircraft Engines (United States)

#### **Applicability:**

CFM56-3, CFM56-3B and CFM56-3C engines, all serial numbers, except those that have been repaired in accordance with the instructions of CFM56-3 Engine Shop Manual (ESM) 72-32-01, Repair 031.

These engines are known to be installed on, but not limited to, Boeing 737-300, -400 and -500 aeroplanes.

#### **Reason:**

A dual engine loss of thrust control was reported. During subsequent investigation, corrosion was found on the inside of the high pressure compressor (HPC) case around the variable stator vane (VSV) bores.

This condition, if not detected and corrected, could lead to binding, sticking and seizure of the VSVs, causing loss of engine thrust control.



To address this potential unsafe condition, CFM International issued CFM56-3 Service Bulletin (SB) No. 72-1169, providing instructions to check the VSV.

For the reason described above, this AD requires repetitive checks of the VSV actuating system and, depending on findings, accomplishment of applicable corrective action(s).

This AD also includes reference to an optional terminating action for the repetitive checks.

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

Required as indicated, unless accomplished previously:

Note 1: For the purpose of this AD, an affected engine has a compressor front stator case part number (P/N) 1499M30G01, or P/N 1499M30G02, or P/N 1499M30G03, or P/N 1676M88G01, that is not marked "RP031" adjacent to the part number.

Note 2: For the purpose of this AD, CFM International CFM56-3 SB No. 72-1169 is hereafter referred to as "the SB" in this AD.

#### **Inspection:**

- (1) Within 12 months after the effective date of this AD, and, thereafter, at intervals not to exceed the compliance time as identified in Table 1 of this AD, as applicable, depending on the higher load measured during the previous check, accomplish a VSV travel check for HPC stage 1, stage 2 and stage 3 of each affected engine, in accordance with the instructions of the SB.

Table 1 – Compliance Time

| Higher Load applied to move an Actuation Ring                                 | Compliance Time |
|-------------------------------------------------------------------------------|-----------------|
| More than 334 Newton (N) / 75 pounds (lbs), but not more than 445 N / 100 lbs | 3 months        |
| 334 N / 75 lbs or less                                                        | 12 months       |

#### **Corrective Action(s):**

- (2) If, during any VSV travel check as required by paragraph (1) of this AD, the load required to move any actuation ring exceeds 445 N / 100 lbs, remove the affected engine from service and, before release to service of that engine, repair the engine in accordance with the instructions of the SB.

#### **Terminating action:**

- (3) Repair of an affected engine, as required by paragraph (2) of this AD, or in accordance with the instructions of CFM56-3 ESM 72-32-01, Repair 031, which includes marking the compressor front stator case "RP031" adjacent to the part number, constitutes terminating action for the repetitive checks as required by paragraph (1) of this AD for that engine.



**Engine Installation:**

- (4) From the effective date of this AD, it is allowed to install an affected engine on an aeroplane provided that, following installation, VSV travel checks are accomplished on that engine as required by paragraph (1) of this AD.

**Ref. Publications:**

CFM International S.A. CFM56-3 SB No. 72-1169 original issue dated 25 April 2016, or Revision 01 dated 04 November 2016.

The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.

**Remarks:**

1. This Proposed AD will be closed for consultation on 24 May 2017.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
3. For any question concerning the technical content of the requirements in this PAD, please contact:

CFM SA Customer Support Centre, Telephone: +33 1 64 14 88 66, Fax: +33 1 64 79 85 55

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