



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 17-132R1

Issued: 05 March 2018

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):

CFM56-7B engines

Effective Date: [TBD: 7 days after AD issue date]

TCDS Number(s): EASA.E.004

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – Fan Blades – Inspection

Manufacturer(s):

SAFRAN Aircraft Engines, formerly SNECMA (France); General Electric Aircraft Engines (United States)

Applicability:

CFM56-7B20, CFM56-7B22, CFM56-7B22/B1, CFM56-7B24, CFM56-7B24/B1, CFM56-7B26, CFM56-7B26/B1, CFM56-7B26/B2, CFM56-7B27, CFM56-7B27/B1, CFM56-7B27/B3, CFM56-7B20/2, CFM56-7B22/2, CFM56-7B24/2, CFM56-7B26/2, CFM56-7B27/2, CFM56-7B20/3, CFM56-7B22/3, CFM56-7B22/3B1, CFM56-7B24/3, CFM56-7B24/3B1, CFM56-7B26/3, CFM56-7B26/3B1, CFM56-7B26/3B2, CFM56-7B27/3, CFM56-7B27/3B1, CFM56-7B27/3B1F, CFM56-7B27/3B3, CFM56-7B26/3F, CFM56-7B26/3B2F, CFM56-7B27/3F, CFM56-7B20E, CFM56-7B22E, CFM56-7B22E/B1, CFM56-7B24E, CFM56-7B24E/B1, CFM56-7B26E, CFM56-7B26E/B1, CFM56-7B26E/B2, CFM56-7B27E, CFM56-7B27E/B1, CFM56-7B27E/B3, CFM56-7B26E/F, CFM56-7B26E/B2F, CFM56-7B27E/F and CFM56-7B27E/B1F engines, all serial numbers.

These engines are known to be installed on, but not limited to, Boeing 737-600, 737-700, 737-800 and 737-900 aeroplanes.



Definitions:

For the purpose of this AD, the following definitions apply:

Qualified engine shop visit: the removal of an engine when the subsequent engine maintenance performed prior to reinstallation of the engine entails a 360-degree separation of major mating engine flanges, or the removal of a disk, hub, or spool. Replacement of an engine module on-wing, replacement of a gearbox, or accomplishment of a top/bottom case do not constitute a qualified engine shop visit.

Affected fan blade: a fan blade having P/N 340-001-022-0, P/N 340-001-027-0, P/N 340-001-029-0, P/N 340-001-037-0 or P/N 340-001-039-0.

The SB: CFM International CFM56-7B Service Bulletin (SB) No. 72-1024

Serviceable fan blade: a not affected fan blade; or an affected fan blade which is new, or which passed an inspection in accordance with the instructions of the SB, or of CFM56-7B SB No. 72-1019, or an eddy current inspection (ECI) in accordance with CFM International Engine Shop Manual (ESM) task 72-21-01-200-001 Revision 55.

Reason:

An occurrence was reported of fan blade failure on a CFM56-7B engine. The released fan blade was initially contained by the engine case, but there was subsequent uncontained forward release of debris and separation of the inlet cowl. Preliminary investigation determined that the fracture in the blade initiated from the fan blade dovetail.

This condition, if not detected and corrected, could lead to fan blade failure, possibly resulting in uncontained forward release of debris, with consequent damage to the engine and the aeroplane.

To address this potential unsafe condition, CFM International issued CFM56-7B SB No. 72-1019, later revised, and CFM56-7B SB No. 72-1024, providing inspection instructions.

For the reason described above, this AD requires a one-time inspection of certain fan blades, and, depending on findings, accomplishment of applicable corrective action(s).

Since PAD 17-132 was issued, available data and comments received on that PAD have been reviewed. This PAD has been revised accordingly.

This AD is considered an interim action and further AD action may follow.

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

Required as indicated, unless accomplished previously:

Inspection:

- (1) Within 9 months after the effective date of this AD, accomplish an ultrasonic inspection of each affected fan blade in accordance with the instructions of the SB.



Corrective Action(s):

- (2) If, during the inspection as required by paragraph (1) of this AD, any discrepancy is detected on a fan blade, before next flight, or before release to service of the engine, as applicable, replace that fan blade with a serviceable part in accordance with the instructions of the SB.

Credit:

- (3) Accomplishment of ECI of a fan blade of an engine in accordance with CFM International ESM task 72-21-01-200-001 Revision 55 is acceptable to comply with the requirements of paragraph (1) of this AD, as applicable, for that fan blade.
- (4) Inspections and corrective actions accomplished on an engine in accordance with the instructions of CFM56-7B SB No. 72-1019 are acceptable to comply with the requirements of paragraphs (1) and (2) of this AD for that engine.

Part installation:

- (5) From the effective date of this AD, it is allowed to install a fan blade on an engine, provided it is serviceable.

Ref. Publications:

CFM International S.A. CFM56-7B SB No. 72-1019 original issue dated 24 March 2017, or Revision 01 dated 13 June 2017.

CFM International S.A. CFM56-7B SB No. 72-1024 original issue dated 26 July 2017.

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

Remarks:

1. This Proposed AD will be closed for consultation on 19 March 2018.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. For any question concerning the technical content of the requirements in this PAD, please contact:

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or

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