



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 22-122

Issued: 01 September 2022

Note: This Proposed Airworthiness Directive (PAD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 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):

LEAP-1B engines

Effective Date: [TBD - standard: 14 days after publication]

TCDS Number(s): EASA.E.115

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – Bearing Spring Finger Housing – Inspection

Manufacturer(s):

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

Applicability:

LEAP-1B21, LEAP-1B23, LEAP-1B25, LEAP-1B27, LEAP-1B28, LEAP-1B28B1, LEAP-1B28B2, LEAP-1B28B2C, LEAP-1B28B3, LEAP-1B28BBJ1 and LEAP-1B28BBJ2 engines, all serial numbers (s/n).

These engines are known to be installed on, but not limited to, Boeing 737-8, 737-8200 and 737-9 aeroplanes.

Definitions:

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

The SB: CFM Service Bulletin (SB) LEAP-1B-72-00-0369-01A-930A-D.

Affected part: Bearing No. 3 spring finger housings, having Part Number (P/N) 2542M54G01 and an s/n as identified in the Applicability section of the SB.



Groups: Group 1 are engines that have an affected part installed. The SB provides, for reference only, a list of engine s/n on which affected parts were installed on the production line.

Group 2 are engines that do not have an affected part installed.

Reason:

Occurrences have been reported of experiencing non-synchronous vibrations (NSV). Subsequent investigations identified wear of affected parts as possible cause of those NSV events.

This condition, if not detected and corrected, could lead to high pressure compressor stall, possibly resulting in engine in-flight shut-down, with consequent reduced control of the aeroplane.

To address this potential unsafe condition, CFM issued the SB, as defined in this AD, providing instructions to monitor the oil filter delta pressure (OFDP) loading, which has been identified as an indication of impending failure of an affected part.

For the reasons described above, this AD requires monitoring of the OFDP and, depending on findings, the accomplishment of applicable corrective action(s). This AD also prohibits further installation of affected parts on any engine.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) For group 1 engines: Before an affected part accumulates 125 flight cycles (FC) since first installation on an engine, but not before having accumulated 75 FC since first installation on an engine, or within 50 FC after the effective date of this AD, whichever occurs later, and, thereafter, at intervals not exceeding 100 FC, determine the OFDP data in accordance with the instructions of the SB.

Corrective Action(s):

- (2) If, following any determination as required by paragraph (1) of this AD, any discrepancy, as identified in the SB, is found on an engine, accomplish the applicable corrective action(s) in accordance with the instructions of, and within the compliance time as specified in, the SB, or, before next flight, contact CFM for approved instructions and accomplish those instructions accordingly.

Terminating Action(s):

- (3) Accomplishment of corrective action(s) on an engine, as required by paragraph (2) of this AD, does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD for that engine, unless stated otherwise in the approved CFM instructions or by paragraph (4) of this AD, as applicable.
- (4) Replacing an affected part on an engine with a part that is not an affected part constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that engine.



- (5) Accumulation of 1 000 FC by an affected part since installation on an engine constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that engine (see Note 1 of this AD).

Note 1: An affected part having accumulated 1 000 FC or more since its first installation on an engine is still an affected part; an engine having that part installed is a Group 1 engine.

Part(s) Installation:

- (6) For Group 1 and Group 2 engines: From the effective date of this AD, do not install an affected part on any engine.

Engine(s) Installation:

- (7) From the effective date of this AD, do not install an additional Group 1 engine on an aeroplane that already has a Group 1 engine installed.

Ref. Publications:

CFM SB LEAP-1B-72-00-0369-01A-930A-D original issue dated 22 August 2022.

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

Remarks:

1. This Proposed AD will be closed for consultation on 29 September 2022.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, can be reported to the [EU aviation safety reporting system](#). This may include reporting on the same or similar components, other than those covered by the design to which this PAD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
4. For any question concerning the technical content of the requirements in this PAD, please contact: CFM International S.A., Customer Support Centre, Telephone: +33 1 64 14 88 66, Fax: +33 1 64 79 85 55, E-mail: cfm.csc@safrangroup.com,

or

CFM Inc. Aviation Operations Centre, Telephone: +1 513-552-3272 or +1 877-432-3272, Fax: +1 877-432-3329, E-mail: geae.aoc@ge.com or aviation.fleetsupport@ge.com.

