Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 22-079

Issued: 17 June 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-1A engines

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

TCDS Number(s): EASA.E.110

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – High Pressure Turbine Nozzle Assembly and Stator Stationary Seal – Inspection

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

Applicability:
LEAP-1A23, LEAP-1A24, LEAP-1A24E1, LEAP-1A26, LEAP-1A26CJ, LEAP-1A26E1, LEAP-1A29, LEAP-1A29CJ, LEAP-1A30, LEAP-1A32, LEAP-1A33, LEAP-1A33B2 and LEAP-1A35A engines, serial numbers (s/n) 598-280, 598-283, 598-284, 598-291, 598-300, 598-302, 598-327, 598-572, 598-629, 598-646, 598-648, 598-659, 598-667, 598-812, 598-862, 598-909 and 599-192.

These engines are known to be installed on, but not limited to, certain Airbus A319, A320 and A321 aeroplanes.

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

The SB: CFM International (CFM) Service Bulletin (SB) LEAP-1A-72-00-0460-01A-930A-D Issue 002.

Reason:

Occurrences have been reported of non-synchronous vibrations on certain engines. Investigations have shown that this vibration may result in increased interstage seal clearances, resulting in hot gas ingestion and thermal degradation of the high pressure turbine rotor interstage seal and high pressure turbine (HPT) rotor stage 2 disk.

This condition, if not detected and corrected, could affect the low cycle fatigue life of the HPT rotor interstage seal and HPT rotor stage 2 disk.

To address this potential unsafe condition, CFM issued the SB, as defined in this AD, identifying the affected engines and providing inspection instructions.

For the reasons described above, this AD requires a one-time inspection of the honeycomb of the stage 2 HPT nozzle assembly and of the HPT stator stationary seal, and, depending on findings, accomplishment of applicable corrective action(s).

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

Required as indicated, unless accomplished previously:

Inspection:

(1) Within the most restrictive compliance time as identified in Table 1 and Table 2 of the SB, as applicable to engine s/n, or during the next engine shop visit, whichever occurs first after the effective date of this AD, inspect the honeycomb of the stage 2 HPT nozzle assembly and the honeycomb of the HPT stator stationary seal 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, as identified in the SB, is found, before next flight, or before release to service of the engine, as applicable, accomplish the applicable corrective action(s) in accordance with the instructions of the SB.

Ref. Publications:

CFM SB LEAP-1A-72-00-0460-01A-930A-D Issue 002 dated 10 June 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 01 July 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.