



Airworthiness Directive

AD No.: 2022-0139

Issued: 07 July 2022

Note: This Airworthiness Directive (AD) 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.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301 or Annex Vb Part M.L.A.301, as applicable, 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 [Regulation (EU) 1321/2014 Annex I, Part M.A.303 or Annex Vb Part M.L.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

CFM INTERNATIONAL S.A.

Type/Model designation(s):

LEAP-1A engines

Effective Date: 21 July 2022

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

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 (HPT) rotor interstage seal and 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. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. This AD was posted on 17 June 2022 as PAD 22-079 for consultation until 01 July 2022. No comments were received during the consultation period.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, 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 AD 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.

5. For any question concerning the technical content of the requirements in this AD, 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

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