Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 25-106

Issued: 17 July 2025

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/cancellation 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 – 7 days after AD issue date]

TCDS Number(s): EASA.E.110

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – High Pressure Turbine Rotor Stage 1 Blade – Inspection

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Manufacturer(s):
SAFRAN Aircraft Engines, formerly SNECMA (France); General Electric (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, LEAP-1A35A engines, all serial numbers (s/n).

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-72-00-0485-01A-930A-D Issue 002-00.

Where the SB refers to India region, this has to be interpreted as Critical departure regions, as specified in this AD.

Affected part: High pressure turbine (HPT) rotor stage 1 blades, having Part Number (P/N) 2747M92P01, P/N 2553M91G03, P/N 2553M91G05, P/N 2553M91G06, P/N 2553M91G07 or P/N 2553M91G08.

Serviceable part: HPT rotor stage 1 blade, having P/N 2825M11G02 or any HPT rotor stage 1 blade eligible for installation in accordance with CFM instructions, that is not an affected part.

Critical departure: Take-off accomplished in the Indian subcontinent region. This includes India, Sri Lanka, Nepal, Bhutan, Bangladesh and Maldives.

Groups:
Group 1 engines are LEAP-1A29, LEAP-1A29CJ, LEAP-1A30, LEAP-1A32, LEAP-1A33, LEAP-1A33B2 and LEAP-1A35A engines.
Group 2 engines are LEAP-1A23, LEAP-1A24, LEAP-1A24E1, LEAP-1A26, LEAP-1A26CJ and LEAP-1A26E1 engines.

Reason:

Occurrences were reported of finding cracked affected parts on engines operated extensively in the Indian subcontinent.

This condition, if not detected and corrected, could lead to failure of the affected parts, possibly resulting in in-flight shut-down and reduced control of the aeroplane.

To address this potential unsafe condition, CFM issued the SB, as defined in this AD, providing instructions to accomplish borescope inspections (BSI) of HPT stage 1 rotor blades.

For the reason described above, this AD requires repetitive inspections of the affected parts and, depending on findings, accomplishment of corrective actions.

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

Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

Inspection(s):

(1) For engines having an affected part installed, that, on the effective date of this AD, has accumulated more than 1 100 critical departures (see Note 1 of this AD): Accomplish the (repetitive) inspection(s) as specified in paragraph (1.1) or (1.2), as applicable.

(1.1) For Group 1 engines: Within the threshold as identified in Table 1 of this AD, as applicable, and, thereafter, at intervals not exceeding 150 cycles (see Note 2 of this AD), inspect each affected part [blades] in accordance with the instructions of the SB.

(1.2) For Group 2 engines: Within the threshold as identified in Table 2 of this AD, as applicable, and thereafter, at intervals not exceeding 300 cycles (see Note 2 of this AD), inspect each affected part [blades] in accordance with the instructions of the SB.

Table 1 – Group 1 engines – Initial Inspection Threshold (See Note 1 of this AD)

Cycles	Initial Inspection Threshold
More than 2 400 cycles	Within 100 cycles after the effective date of this AD
2 400 cycles or less	Before exceeding 2 500 cycles

Table 2 – Group 2 engines – Initial Inspection Threshold (See Note 1 of this AD)

Cycles	Initial Inspection Threshold
More than 5 000 cycles	Within 100 cycles after the effective date of this AD
5 000 cycles or less	Before exceeding 5 100 cycles

Note 1: If the number of critical departures accumulated by an affected part of an engine is unknown, the critical departures accumulated by that engine can be used instead.

Note 2: Unless otherwise stated, the cycles specified in Table 1, Table 2, Table 3 and Table 4 of this AD are those accumulated since new (first installation on an engine) by the HPT rotor stage 1 blade which has accumulated the highest number of cycles since new.

(2) For engines having an affected part installed, none of which, on the effective date of this AD, has accumulated more than 1 100 critical departures (see Note 1 of this AD): Upon exceeding 1 100 critical departures for an affected part of an engine, accomplish the (repetitive) inspection(s) as specified in paragraph (2.1) or (2.2), as applicable.

(2.1) For Group 1 engines: Within the threshold as identified in Table 3 of this AD, as applicable, and, thereafter, at intervals not exceeding 150 cycles (see Note 2 of this AD), inspect each affected part [blades] in accordance with the instructions of the SB.

(2.2) For Group 2 engines: Within the threshold as identified in Table 4 of this AD, as applicable, and, thereafter, at intervals not exceeding 150 cycles (see Note 2 of this AD), inspect each affected part [blades] in accordance with the instructions of the SB.

Table 3 – Group 1 engines – Initial Inspection Threshold (See Note 1 of this AD)

Cycles	Initial Inspection Threshold
More than 2 400 cycles	Within 100 cycles after an affected part exceeds 1 100 critical departures
2 400 cycles or less	Before exceeding 2 500 cycles

Table 4 – Group 2 engines – Initial Inspection Threshold (See Note 1 of this AD)

Cycles	Initial Inspection Threshold
More than 5 000 cycles	Within 100 cycles after an affected part exceeds 1 100 critical departures
5 000 cycles or less	Before exceeding 5 100 cycles

Corrective Action(s):

(3) For engines installed on twin-engine aeroplanes: If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, any discrepancy, as identified in section 5.E.1.(f)1 of the SB, is found on an engine (hereafter referred to as 'first engine'), which requires removal or reinspection within 50 cycles or less of that engine, within 5 engine cycles after that inspection, unless already accomplished during the last 50 cycles (for Group 1 engines) or 100 cycles (for Group 2 engines) accumulated by the second engine before that inspection, inspect each affected part of the second engine of that aeroplane in accordance with the instructions of the SB.

(4) If, during the inspection as required by paragraph (3) of this AD, any discrepancy, as identified in section 5.E.1.(f)2 of the SB, is found on the second engine of an aeroplane, accomplish the actions as specified in paragraphs (4.1) and (4.2).

(4.1) Before next flight, remove from service one engine (first engine or second engine) of that aeroplane and, before release to service of that engine, contact CFM for approved repair instructions and accomplish those instructions accordingly.

(4.2) Accomplish the applicable corrective action(s) on the remaining installed engine (second engine or first engine) within the compliance time as specified in, and in accordance with the instructions of the applicable Aircraft Maintenance Manual (AMM), or contact CFM for approved repair instructions and accomplish those instructions accordingly.

(5) If, during the inspection as required by paragraph (3) of this AD, no discrepancy, as identified in section 5.E.1.(f)2 of the SB, is found on the second engine, accomplish the applicable corrective action(s) on the first engine within the compliance time as specified in, and in accordance with the instructions of the applicable AMM, or contact CFM for approved repair instructions and accomplish those instructions accordingly.

(6) For engines in shop: If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, any discrepancy, as identified in section 5.E.1(f)1 of the SB, is found on an engine, before release to service of that engine, contact CFM for approved repair instructions and accomplish those instructions accordingly.

Terminating Action:

(7) Replacement of an affected part with a serviceable part in accordance with CFM approved instructions constitutes terminating action for the repetitive inspections as required by paragraph (1) or (2) of this AD, as applicable, for that engine.

Part(s) Installation:

(8) From the effective date of this AD, it is allowed to install an affected part on any engine provided that, following that installation, the engine is inspected as required by this AD.

(9) From the effective date of this AD, following removal from service of an engine as required by paragraph (4.1) of this AD, it is allowed to install on a twin-engine aeroplane an engine having affected parts installed which are not new, provided that, before that installation, that engine has passed an inspection (no discrepancies found) in accordance with the instructions of the SB.

Reporting:

(10) If, during any inspection as required by paragraph (1), (2) or (3) of this AD, as applicable, any discrepancy, as identified in section 5.E.1.(f)1 or 5.E.1.(f)2, as applicable, of the SB, is found on an engine, within 30 days after that inspection, or 30 days after the effective date of this AD, whichever occurs later, report the inspection results to CFM. This can be accomplished in accordance with the instructions of the SB.

Ref. Publications:

CFM SB LEAP-1A-72-00-0485-01A-930A-D Issue 002-00 dated 16 April 2025.

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 31 July 2025.

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 14 87 65, E-mail: cfm.csc@safrangroup.com,

   or

   CFM Inc., GE Aviation Fleet Support, Telephone: +1 513-552-3272 or +1 877-432-3272, E-mail: aviation.fleetsupport@ge.com.