



適航指令發布單

Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2022-07-005	發布日期 Date issued	2022/7/11
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	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.		
主旨摘要 Subject	Engine - High Pressure Turbine Nozzle Assembly and Stator Stationary Seal - Inspection		
<div style="text-align: center;">民航局 CAA</div> <input type="checkbox"/> 本國產品 Native product <input type="checkbox"/> 其他個案 Other	<div style="text-align: center;">設計國民航主管機構 Original Authority</div> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> FAA <input checked="" type="checkbox"/> EASA <input type="checkbox"/> Brazil <input type="checkbox"/> Transport Canada Civil Aviation <input type="checkbox"/> DGAC </div> <div style="width: 45%;"> <input type="checkbox"/> Germany LBA <input type="checkbox"/> CAA-NL <input type="checkbox"/> UK CAA <input type="checkbox"/> Japan CAB <input type="checkbox"/> CAA of Israel <input type="checkbox"/> Other _____ </div> </div>		
	設計國 AD 編號 Original AD number	2022-0139	
	1. 直接採用原 AD 之內容?(Is the original AD directly adopted?) <input checked="" type="checkbox"/> 是(Yes) <input type="checkbox"/> 否(No) _ a. 生效日期另訂為(Re-specify the effective date as) : _____ b. 執行時限另訂為(Re-specify the compliance time or period as) : _____ 2. 使用人是否需要將 AD 執行結果向民航局提出報告?(Do Users need to report the status of compliance to the CAA?) <input type="checkbox"/> 是(Yes) <input checked="" type="checkbox"/> 否(No)		
備註 Note	ATA 72. Ref. Publications: CFM SB LEAP-1A-72-00-0460-01A-930A-D Issue 002 dated 10 June 2022.		
註： 1. AD 內容後附。 2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。 3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6330 / 6332, Fax：(02)2545-8464, e-mail： adcaa@mail.caa.gov.tw Note： 1. The AD text is enclosed. 2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval. 3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6330 / 6332, Fax： (02)2545-8464, e-mail： adcaa@mail.caa.gov.tw			



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

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.

