



適航指令發布單

Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2021-04-001	發布日期 Date issued	2021/5/3
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, all serial numbers (s/n). These engines are known to be installed on, but not limited to, certain Airbus A319, A320 and A321 aeroplanes.		
主旨摘要	Engine - High Pressure Turbine Case - Replacement		
民航局 CAA <input type="checkbox"/> 本國產品 Native products <input type="checkbox"/> 其他個案 Other	設計國民航主管機構 Original Authorities <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> FAA</div> <div style="width: 50%;"><input type="checkbox"/> Germany LBA</div> <div style="width: 50%;"><input checked="" type="checkbox"/> EASA</div> <div style="width: 50%;"><input type="checkbox"/> CAA-NL</div> <div style="width: 50%;"><input type="checkbox"/> Brazil</div> <div style="width: 50%;"><input type="checkbox"/> UK CAA</div> <div style="width: 50%;"><input type="checkbox"/> Transport Canada Civil Aviation</div> <div style="width: 50%;"><input type="checkbox"/> Japan CAB</div> <div style="width: 50%;"><input type="checkbox"/> DGAC</div> <div style="width: 50%;"><input type="checkbox"/> CAA of Israel</div> <div style="width: 50%;"><input type="checkbox"/> Other _____</div> </div>		
	設計國 AD 編號 Original AD number	2021-0097	
	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) : _____ <input type="checkbox"/>		
	2. 使用人是否需要將 AD 執行結果向民航局提出報告?(Do <input type="checkbox"/> 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-72-00-0417-01A-930A-D original issue (001) dated 06 October 2020. and CFM SB LEAP-1A-72-00-0421-01A-930A-D original issue (001) dated 22 October 2020.		
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)2349-6331~3, 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)2349-6331~3, Fax：(02)2545-8464, e-mail： adcaa@mail.caa.gov.tw			



Airworthiness Directive

AD No.: 2021-0097

Issued: 31 March 2021

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, 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 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: 14 April 2021

TCDS Number(s): EASA.E.110

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – High Pressure Turbine Case – Replacement

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, 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-72-00-0421-01A-930A-D.

Affected HPT Case: A High Pressure Turbine (HPT) case, having Part Number 2668M94G01 and having at least one HPT case port casting s/n as listed in Table 1 of this AD.

Serviceable HPT Case: An HPT case which is not an affected HPT case. For this AD, an HPT case not listed in CFM SB LEAP-1A-72-00-0417-01A-930A-D is serviceable.



Reason:

It has been determined that certain HPT cases have been manufactured with defects on port castings, which could reduce the life of the HPT case.

This condition, if not corrected, could lead to failure of the HPT case, possibly resulting in high energy debris release, with consequent damage to, and reduced control of the aeroplane.

To address this potential unsafe condition, CFM issued the SB to provide instructions for parts identification and replacement.

For the reason described above, this AD requires the early replacement of the affected HPT cases. This AD also prohibits (re)installation of the affected HPT cases.

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

Required as indicated, unless accomplished previously:

Replacement:

- (1) Before exceeding the cycles since new (CSN) as specified in Table 1 of this AD, remove from service each affected HPT case and replace it with a serviceable HPT case in accordance with the instructions of the SB.

Table 1 – HPT Case Replacement (see Note 1 of this AD)

HPT Case Port Casting s/n	Compliance Time
FHYR3776 and FHYY6973	9 000 CSN
FHYL6295 and FHYP7240	11 000 CSN
FHYR3403 and GNF00703	12 000 CSN
FHYR2561 and FHYR2578	13 000 CSN

Note 1: The CSN specified in Table 1 of this AD are those accumulated by the HPT case since its first installation on an engine.

Parts Installation:

- (2) From the effective date of this AD, it is allowed to install a HPT case on any engine, provided it is a serviceable HPT case, as defined in this AD (see Note 2 of this AD).

Note 2: Removal of an HPT case from an engine and reinstallation of that HPT case on the same engine during a single maintenance visit does not constitute 'install' as specified in paragraph (2) of this AD.

Ref. Publications:

CFM SB LEAP-1A-72-00-0417-01A-930A-D original issue (001) dated 06 October 2020.

CFM SB LEAP-1A-72-00-0421-01A-930A-D original issue (001) dated 22 October 2020.



The use of later approved revisions of the above-mentioned documents 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 02 February 2021 as PAD 21-013 for consultation until 02 March 2021. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
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.

