

# Airworthiness DirectiveAD No.:2021-0118Issued:28 April 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-1B engines

Effective Date:30 April 2021TCDS Number(s):EASA.E.115Foreign AD:Not applicableSupersedure:None

# ATA 73 – Engine Fuel and Control – Pressure Sub-System Units – Operational Check

#### Manufacturer(s):

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

#### **Applicability:**

LEAP-1B21, LEAP-1B23, LEAP-1B25, LEAP-1B27, LEAP-1B28, LEAP-1B28B1, LEAP-1B28B2, LEAP-1B28B3, LEAP-1B28B3, LEAP-1B28B31 and LEAP-1B28BBJ2 engines, all serial numbers (s/n).

These engines are known to be installed on, but not limited to, Boeing 737-8, 737-8200 and 737-9 aeroplanes.

#### **Definitions:**

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

The SB: CFM International (CFMI) Service Bulletin (SB) LEAP-1B-73-00-0038-01A-930A-D issue 002.

Affected part: Pressure sub-system (PSS) units, having Part Number (P/N) 2474M65P06 (Vendor Identification Number (VIN) 261807915-0303), and a serial number (s/n) as listed in Table 1 of the SB, except PSS units which meet any of the clearing criteria as listed in section 5.B.(3) of the SB.

**Serviceable part**: PSS units, eligible for installation, which are not affected parts. An affected part that meets any of the clearing criteria as listed in section 5.B.(3) of the SB is considered a serviceable part.



**The ORF**: Operational Readiness Flight (ORF) as required by EASA AD 2021-0039R2 (or equivalent requirement).

#### Groups:

Group 1 engines are those that have an affected part installed, installed on Boeing 737-8 or 737-9 aeroplanes, which, as of the effective date of this AD, have not yet accomplished the ORF.

Group 2 engines are those that have an affected part installed, installed on Boeing 737-8 or 737-9 aeroplanes which, as of the effective date of this AD, have already accomplished the ORF, or on aeroplanes which were delivered after 18 November 2020, but before 21 April 2021.

Group 3 engines are those that do not have an affected part installed.

#### Reason:

Corrosion has been detected on several PSS pressure transducers, following an extended period of storage.

This condition, if not detected and corrected, could lead to loss of engine thrust control, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, CFMI issued the SB, providing instructions to determine the serviceability of affected parts.

For the reasons described above, this AD requires, for certain engines, a one-time operational check after a minimum power-on time of the affected PSS unit, and for certain other engines, repetitive checks of PSS maintenance messages and, depending on findings, replacement with a serviceable part.

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

Required as indicated, unless accomplished previously:

#### **Operational Check:**

(1) For Group 1 engines: Before accomplishment of the ORF, apply electric power to the affected part and accomplish an operational check of the affected part in accordance with the instructions of section 5.A.(3) of the SB.

Note 1: Any flight prior to the ORF must be operated with a Permit-to-Fly issued under Annex I (Part 21) of Regulation (EU) 748/2012, and under EASA approved flight conditions. Accomplishment of the instructions provided in Section 5.A.(2) of the SB will be required in those flight conditions.

(2) For Group 2 engines: From the effective date of this AD, before each flight, determine if any PSS maintenance message, as identified in paragraph 5.B.(2)(a)2 of the SB, is displayed, in accordance with the instructions of section 5.B.(2) of the SB.

#### Corrective Action(s):

(3) If, during the operational check as required by paragraph (1) of this AD, any PSS maintenance message, as identified in the paragraph 5.A.(3)(b)5 of the SB, is displayed, before next flight,



replace the affected part with a serviceable part (see definition) in accordance with the instructions of the SB.

(4) If, during any determination as required by paragraph (2) of this AD, any PSS maintenance message, as identified in paragraph 5.B.(2)(a)2 of the SB, is found displayed, before next flight, replace the affected part with a serviceable part (see definition) in accordance with the instructions of the SB.

## **Terminating Action**:

(5) Replacement on an engine of the affected part with a serviceable part (see definition), or accomplishment of any of the clearing criteria, as identified in section 5.B.(3) of the SB, constitutes terminating action for the requirements of paragraph (1) or (2) of this AD, as applicable, for that engine.

## Credit:

(6) Operational checks and corrective actions, accomplished on an engine before the effective date of this AD in accordance with the instructions of CFMI SB LEAP-1B-73-00-0038-01A-930A-D issue 001, are acceptable to comply with the initial requirement of paragraphs (1) to (4) of this AD, as applicable, for that engine.

## Part(s) Installation:

(7) For Group 1, Group 2 and Group 3 engines: From the effective date of this AD, it is allowed to install on any engine an affected part, provided it is a serviceable part, as defined in this AD.

#### **Ref. Publications:**

CFMI SB LEAP-1B-73-00-0038-01A-930A-D issue 001 dated 23 April 2021, and issue 002 dated 25 April 2021.

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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.
- 3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.
- 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 <u>EU aviation safety</u> 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: <u>cfm.csc@safrangroup.com</u>,

or

CFM Inc. Aviation Operations Centre, Telephone: +1 513-552-3272, or +1 877-432-3272, Fax: +1 877-432-3329, E-mail: <u>geae.aoc@ge.com</u>, or <u>aviation.fleetsupport@ge.com</u>.

