



# Notification of a Proposal to issue an Airworthiness Directive

**PAD No.: 21-112**

**Issued: 03 August 2021**

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 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:**

GE AVIATION CZECH

**Type/Model designation(s):**

M601 engines

**Effective Date:** [TBD - standard: 14 days after AD issue date]

**TCDS Number(s):** EASA.E.070

**Foreign AD:** Not applicable

**Supersedure:** None

## ATA 72 – Engine – Critical Parts – Replacement

### Manufacturer(s):

GE Aviation Czech (GEAC) s.r.o., formerly Walter Engines a.s.

### Applicability:

M601E, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601E-21, M601F and M601FS, all serial numbers (s/n).

These engines are known to be installed on, but not limited to, Aircraft Industries (formerly LET) L-410 series and L-420; Air Tractor AT-300, AT-400 and AT-500 series; Allied Ag Cat Productions Inc. (formerly Grumman) G-164 series; Thrush Aircraft (formerly Quality, Ayres, Rockwell) S-2R series; Viking Air Ltd. (formerly de Havilland Canada) DHC-3 Otter aeroplanes.

### Definitions:

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

**The ASB:** GEAC Alert Service Bulletin (ASB) ASB-M601E-72-30-00-0110 and ASB-M601F-72-30-00-0061 (issued as a single document).

**Affected part:** Compressor cases having Part Number (P/N) M601-154.51; and compressor drums having P/N M601-130.7 or P/N M601-134.7.



**Applicable life limit:** For compressor cases having P/N M601-154.51: 11 000 equivalent flight cycles (FC); for compressor drums having P/N M601-130.7 or P/N M601-134.7: 6 750 equivalent FC.

**Recalculated life:** For an affected part, the consumed life calculated in accordance with the instructions of section 2 of the ASB.

**Groups:** Group 1 engines are those that have an affected part installed.

Note 1: The ASB identifies the engines by s/n known to be Group 1 (at the time of ASB issuance), and the known affected parts. The list is based on information available on the issue date of the ASB and may be not exhaustive.

Group 2 engines are those that do not have any affected part installed.

#### Reason:

It has been determined that the life limit for affected parts was not published in the applicable ALS for certain M601 engines models.

This condition, if not corrected, may lead to failure of an affected part, possibly resulting in engine mount failure and/or high energy debris release.

To address this potential unsafe condition, GEAC issued the ASB, providing applicable instructions.

For the reasons described above, this AD requires replacement of the affected parts.

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

Required as indicated, unless accomplished previously:

#### Part(s) Replacement:

For Group 1 engines: Before the recalculated life of an affected part exceeds the applicable life limit, as defined in this AD, or within 6 months after the effective date of this AD, whichever occurs first, replace that part with a serviceable part, eligible for installation, in accordance with the instructions of the ASB.

Note 2: On the effective date of this AD, no approved instructions exist for in-service installation of an affected part on Group 1 or Group 2 engines.

#### Ref. Publications:

GEAC Alert Service Bulletin (ASB) ASB-M601E-72-30-00-0110 and ASB-M601F-72-30-00-0061 (issued as a single document) original issue dated 26 July 2021.

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 August 2021.



2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto: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: GE Aviation Czech, Beranových 65, 199 02 Praha 9 – Letňany, Czech Republic, Telephone: +420 222 538 999, Website: <https://www.geaviation.cz/customer-support>, E-mail: [tp.ops@ge.com](mailto:tp.ops@ge.com).

