



## Airworthiness Directive

**AD No.:** 2017-0100

**Issued:** 08 June 2017

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

### Design Approval Holder's Name:

GE AVIATION CZECH

### Type/Model designation(s):

M601 Engines

**Effective Date:** 22 June 2017

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

**Foreign AD:** Not applicable

**Supersedure:** None

### ATA 72 – Engine – Power Turbine Disc – Replacement

#### Manufacturer(s):

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

#### Applicability:

M601D, M601D-1, M601D-2, M601D-11, M601D-11NZ, M601E, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601E-21, M601F, M601FS, M601F-11, M601F-22, M601F-32, M601T and M601Z engines, all serial numbers.

These engines are known to be installed on, but not limited to, Thrush Aircraft Inc. (formerly Quality, Ayres, Rockwell) S-2R, PZL "Warszawa-Okęcie" PZL-106 (Kruk), Air Tractor (AT-300 to AT-502), Grumman AG CAT, Fletcher FU-24, Technavia SM-92T Finist, Lancair IV P, RUAG (formerly Dornier) Do 28 and Aircraft Industries (formerly LET) L-410 aeroplanes.

#### Reason:

It was identified during a recent design review that power turbine (PT) rotors with certain discs, part number (P/N) M601-3220.6 and P/N M601-3220.7, have a reduction in the declared theoretical PT rotor overspeed limit.

This condition, if not corrected, may lead to high energy debris release in case of PT rotor overspeed occurrence, possibly resulting in damage to, and/or reduced control of, the aeroplane.



To address this potential unsafe condition, GE Aviation Czech issued Alert Service Bulletins (ASB) ASB-M601E-72-50-00-0069, ASB-M601D-72-50-00-0052, ASB-M601F-72-50-00-0035, ASB-M601T-72-50-00-0028 and ASB-M601Z-72-50-00-0038 (single document, hereafter referred to as “the ASB” in this AD), providing PT disc replacement instructions.

For the reason described above, this AD requires replacement of the affected PT discs, and prohibits further installation of the affected PT discs.

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

Required as indicated, unless accomplished previously:

Note 1: For the purpose of this AD, an “affected PT disc” has P/N M601-3220.6 or P/N M601-3220.7.

Note 2: For the purpose of this AD, Group 1 engines are those that have an affected PT disc (see Note 1 of this AD) installed. Group 2 engines are those that do not have an affected PT disc installed.

#### Modification:

- (1) For Group 1 engines (see Note 2 of this AD): Within 5 years, or during the next engine shop visit, whichever occurs first after the effective date of this AD, modify the engine by replacing the affected PT disc (see Note 1 of this AD) with a non-affected PT disc in accordance with the instructions of the ASB.

#### Part(s) Installation:

- (2) Do not install on any engine an affected PT disc (see Note 1 of this AD) as required by paragraph (2.1) or (2.2) of this AD, as applicable (see Note 2 of this AD).

(2.1) For a Group 1 engine: After modification of that engine as required by paragraph (1) of this AD.

(2.2) For a Group 2 engine: From the effective date of this AD.

#### Ref. Publications:

GE Aviation Czech ASB-M601E-72-50-00-0069, ASB-M601D-72-50-00-0052, ASB-M601F-72-50-00-0035, ASB-M601T-72-50-00-0028, ASB-M601Z-72-50-00-0038 (single document), original issue, dated 21 February 2017.

The use of later approved revisions of this 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 09 May 2017 as PAD 17-058 for consultation until 06 June 2017. 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](mailto:ADs@easa.europa.eu).
4. For any question concerning the technical content of the requirements in this AD, please contact: GE Aviation Czech, Beranových 65, 199 02 Praha 9 – Letňany, Czech Republic Tel.: +420 222 538 999; E-mail: [tp.ops@ge.com](mailto:tp.ops@ge.com).

Superseded

