



Airworthiness Directive

AD No.: 2020-0201R1

Issued: 25 September 2020

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:

GE AVIATION CZECH

Type/Model designation(s):

M601/H80 engines

Effective Date: Revision 1: 02 October 2020
Original issue: 22 September 2020

TCDS Number(s): EASA.E.070

Foreign AD: Not applicable

Revision: This AD revises EASA Emergency AD 2020-0201-E dated 21 September 2020.

ATA 73 – Engine Fuel & Control – Fuel Control Unit – Replacement

Manufacturer(s):

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

Applicability:

M601D, M601D-1, M601D-11, M601D-11NZ, M601E, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601E-21, M601F, M601F-22, M601F-32, M601FS, M601T, H75-200, H80-100, H80-200 and H85-200 engines, all serial numbers.

These engines are known to be installed on, but not limited to, Aircraft Industries (formerly LET) L-410 series; Air Tractor AT-300, AT-400 and AT-500 series; Allied Ag Cat Productions Inc. (formerly Grumman) G-164 series; PZL "Warszawa-Okęcie" PZL-106 (Kruk) series; RUAG Aerospace Services (formerly Dornier) Do 28 series; Thrush Aircraft (formerly Quality, Ayres, Rockwell) S-2R series; and 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-H75-73-00-00-0038, ASB-H80-73-00-00-0074, ASB-H85-73-00-00-0032, ASB-M601D-73-00-00-0066, ASB-M601E-73-00-00-0097, ASB-M601F-73-00-00-0050 and ASB-M601T-73-00-00-0040 (issued as a single document).



Affected part: Fuel control units (FCU), having a Part Number (P/N) and serial number (s/n) as listed in Appendix 1 of this AD.

Serviceable part: An FCU that is not an affected part and is eligible for installation; or an FCU having a P/N listed as 'New Configuration P/N' in section 1.5 'CONFIGURATION DESCRIPTION' of the ASB.

Groups: Group 1, Group 2 and Group 3 engines are those that have an affected part installed, as identified in Appendix 1 of this AD.

Group 4 engines are those that do not have an affected part installed.

Reason:

Several occurrences of engine power fluctuations have been reported during ground tests on engines equipped with an affected part. The investigation results determined that one or more rubber cuff sealings of the cage reinforcement inside the main metering valve of the FCU was wrongly installed, which reduced the cuff ability to properly seal the FCU working pressure.

This condition, if not corrected, may lead to engine surge, fluctuations, or loss of engine power, possibly resulting in loss of control of the aeroplane.

To address this potential unsafe condition, GEAC issued the ASB, providing replacement instructions, and EASA issued Emergency AD 2020-0201-E to require, for engines having an affected part installed, replacement with a serviceable part. That AD also prohibited (re)installation of an affected part.

Since that AD was issued, it was discovered that an FCU s/n was incorrectly specified in the ASB and, consequently, wrongly quoted in the EASA AD. GEAC revised the ASB to correct that error and this AD is revised to amend Appendix 1 (Group 3, s/n 903004 instead of 903008) accordingly.

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

Required as indicated, unless accomplished previously:

Modification(s):

- (1) Within the compliance time(s) after 22 September 2020 [the effective date of the original issue of this AD] as specified in Table 1 of this AD, as applicable, replace the affected part with a serviceable part in accordance with the instructions of the ASB.

Table 1 – FCU Replacement

| Group | Compliance Time |
|-------|---|
| 1 | Within 10 flight hours (FH) |
| 2 | Within 50 FH or 2 months, whichever occurs first |
| 3 | Within 100 FH or 6 months, whichever occurs first |

Parts Installation:

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



(2.1) For Group 1, Group 2 and Group 3 engines: After modification of the engine as required by paragraph (1) of this AD.

(2.2) For Group 4 engines: From 22 September 2020 [the effective date of the original issue of this AD].

Engine Installation:

(3) From 22 September 2020 [the effective date of the original issue of this AD], do not install (see Note 1 of this AD) on any aeroplane a Group 1, Group 2 or Group 3 engine.

Note 1: Removal of an engine from an aeroplane and reinstallation of that engine on the same aeroplane (and at the same location) during a single maintenance visit does not constitute 'install' as specified in paragraph (3) of this AD.

Ref. Publications:

GE Aviation Czech ASB-H75-73-00-00-0038, ASB-H80-73-00-00-0074, ASB-H85-73-00-00-0032, ASB-M601D-73-00-00-0066, ASB-M601E-73-00-00-0097, ASB-M601F-73-00-00-0050 and ASB-M601T-73-00-00-0040 (single document) original issue dated 18 September 2020, and Revision 1 dated 24 September 2020.

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 Programming and Continued Airworthiness 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: 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.



Appendix 1 – Affected Parts, P/N and s/n

Affected parts on Group 1 engines

| P/N | s/n |
|---------------|-------------------|
| LUN 6590.07-8 | 183006 and 183010 |
| LUN 6590.03-8 | 881038 |
| LUN 6590.51-8 | 083001 |

Affected parts on Group 2 engines

| P/N | s/n |
|---------------|-----------------------------------|
| LUN 6590.51-8 | 844086, 861023 and 874026 |
| LUN 6590.07-8 | 111002, 151025, 183013 and 184002 |

Affected parts on Group 3 engines

| P/N | s/n |
|---------------|---|
| LUN 6590.51-8 | 882020, 882028, 884050, 884115, 863030, 871030, 872017, 903004, 122006, 182004 and 182005 |
| LUN 6590.07-8 | 113009, 132016, 133015, 141004, 144028, 152010, 183002, 183003, 183004, 183009, 183011, 183012, 184003, 184004 and 184006 |
| LUN 6590.03-8 | 881021 |
| LUN 6590.08-8 | 183001 and 183002 |

