[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-1239; Project Identifier MCAI-2022-00301-E]

RIN 2120-AA64

Airworthiness Directives; GE Aviation Czech s.r.o. (Type Certificate Previously Held by WALTER Engines a.s., Walter a.s., and MOTORLET a.s.) Turboprop Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for certain GE Aviation Czech s.r.o. (GEAC) M601D-11, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601F, H75-100, H75-200, H80, H80-100, H80-200, H85-100, and H85-200 model turboprop engines. This proposed AD was prompted by reports of cracks in dilution tube weld areas of the combustion chamber outer liner. This proposed AD would require initial and repetitive borescope inspections (BSIs) of the dilution tube weld areas of the combustion chamber outer liner and, depending on the results of the inspections, replacement of the combustion chamber outer liner with a part eligible for installation. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this NPRM by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

• Federal eRulemaking Portal: Go to regulations.gov. Follow the instructions for submitting comments.

• Fax: (202) 493-2251.

• Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

• Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

AD Docket: You may examine the AD docket at regulations.gov under Docket No. FAA-2022-1239; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

• For GEAC service information identified in this NPRM, contact GE Aviation Czech s.r.o., Beranových 65, 199 02 Praha 9, Letňany, Czech Republic; phone: +420 222 538 111.

• You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (817) 222-5110.

FOR FURTHER INFORMATION CONTACT: Barbara Caufield, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7146; email: barbara.caufield@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-2022-1239; Project Identifier MCAI-2022-00301-E" at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Barbara Caufield, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2022-0034, dated March 4, 2022 (referred to after this as "the MCAI"), to correct an unsafe condition on M601D, M601D-1, M601D-2, M601D-11, M601D-11NZ, M601E, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601E-21, M601F, M601FS, M601Z, H75-100, H75-200, H80, H80-100, H80-200, H85-100, and H85-200 engines, all serial numbers. The MCAI states that occurrences of cracks in dilution tube weld areas of the combustion chamber outer liner have been reported. These cracks can lead to crack propagation, possibly resulting in part separation, loss of engine power, and reduced control of the aircraft.

As a result of this unsafe condition, the MCAI specifies initial and repetitive BSIs of the dilution tube weld areas of the combustion chamber outer liner and, depending on the outcome of the inspections, corrective action in accordance with the service information.

You may examine the MCAI in the AD docket at regulations.gov under Docket No. FAA-2022-1239.

Related Service Information under 1 CFR Part 51

The FAA reviewed GEAC Alert Service Bulletin (ASB) ASB-H75-72-40-00-0056 [01], ASB-M601E-72-40-00-0113 [01], ASB-H80-72-40-00-0099 [01], ASB-M601D-72-40-00-0081[01], ASB-M601F-72-40-00-0064[01], ASB-M601Z-72-40-00-0063 [01], and ASB-H85-72-40-00-0045 [01], (single document; formatted as service bulletin identifier [revision number]), dated February 16, 2022. This service information specifies procedures for BSIs of the dilution tube weld areas of the combustion chamber outer liner and replacement of the combustion chamber outer liner.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

FAA's Determination

These products have been approved by the aviation authority of another country and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI and service information described above. The FAA is issuing this NPRM after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Proposed AD Requirements in this NPRM

This proposed AD would require initial and repetitive BSIs of the dilution tube weld areas of the combustion chamber outer liner and, depending on the results of the inspections, corrective action in accordance with the service information.

Differences Between this Proposed AD and the MCAI

EASA AD 2022-0034 applies to GEAC M601D, M601D-1, M601D-2, M601D-11, M601D-11NZ, M601E, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601E-21, M601F, M601FS, M601Z, H75-100, H75-200, H80, H80-100, H80-200, H85-100, and H85-200 model turboprop engines, all serial numbers. GEAC M601D, M601D-1, M601D-2, M601D-11NZ, M601E, M601E-21, M601FS, and M601Z model turboprop engines are not certificated by the FAA and are not included on the U.S. type certificate data sheet; this proposed AD therefore does not include those engines in the applicability.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 33 engines installed on airplanes of U.S. registry.

The FAA estimates the following costs to comply with this proposed AD:

Estimated costs

Action	Labor Cost	Parts Cost	Cost per product	Cost on U.S. operators
BSI of combustion chamber outer liner	2.5 work-hours x $85 per hour = $212.50	$0	$212.50	$7,012.50

The FAA estimates the following costs to do any necessary replacements that would be required based on the results of the proposed inspection. The agency has no way of determining the number of aircraft that might need these replacements:

On-condition costs

Action	Labor Cost	Parts Cost	Cost per product
On-wing replacement of combustion chamber outer liner	64 work-hours x $85 per hour = $5,440	$74,909	$80,349
In-shop replacement of	56 work-hours x $85 per hour =	$74,909	$79,669

combustion chamber outer liner	$4,760		

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected operators.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Would not affect intrastate aviation in Alaska, and

(3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

GE Aviation Czech s.r.o (Type Certificate previously held by WALTER Engines a.s., Walter a.s., and MOTORLET a.s.): Docket No. FAA-2022-1239; Project Identifier MCAI-2022-00301-E.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to GE Aviation Czech s.r.o. (GEAC) M601D-11, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601F, H75-100, H75-200, H80, H80-100, H80-200, H85-100, and H85-200 model turboprop engines installed on single-engine airplanes, with an installed combustion chamber outer liner having part numbers (P/Ns) M601-229.3, M601-229.3A, M601-229.3B, M601-229.31A, or M601-229.31B.

(d) Subject

Joint Aircraft System Component (JASC) Code 7240, Turbine Engine Combustion Section.

(e) Unsafe Condition

This AD was prompted by reports of cracks in dilution tube weld areas of the combustion chamber outer liner. The FAA is issuing this AD to prevent failure of the combustion chamber outer liner. The unsafe condition, if not addressed, could result in

uncontained release of the combustion chamber outer liner, loss of engine power, and reduced control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

(1) At the next 300-hour (Type 3) engine inspection, or within 25 flight hours (FHs) after the effective date of this AD, whichever occurs later, and thereafter at intervals not to exceed 300 FHs, perform a borescope inspection (BSI) of the dilution tube weld areas of the combustion chamber outer liner in accordance with the Accomplishment Instructions, paragraph 2.1 of GEAC Alert Service Bulletin (ASB) ASB-H75-72-40-00-0056 [01], ASB-M601E-72-40-00-0113 [01], ASB-H80-72-40-00-0099 [01], ASB-M601D-72-40-00-0081[01], ASB-M601F-72-40-00-0064[01], ASB-M601Z-72-40-00-0063 [01], and ASB-H85-72-40-00-0045 [01] (single document; formatted as service bulletin identifier [revision number]), dated February 16, 2022 (the ASB).

(2) If a crack is detected during any BSI required by paragraph (g)(1) of this AD, before further flight, perform the applicable corrective actions in accordance with the Accomplishment Instructions, paragraph 2.1, Table 1 of the ASB.

(h) Terminating Action

Replacing the affected combustion chamber outer liner with a combustion chamber outer liner that does not have P/N M601-229.3, M601-229.3A, M601 229.3B, M601-229.31A, or M601-229.31B, constitutes a terminating action for the repetitive inspections required by paragraph (g)(1) of this AD.

(i) Conditional Part Installation

(1) After the effective date of this AD, it is permissible to install an engine having an affected combustion chamber outer liner installed on a single-engine airplane, provided that prior to operation, the BSI required by paragraph (g)(1) of this AD is performed and, depending on the findings, the applicable corrective actions are performed as required by paragraph (g)(2) of this AD.

(2) After the effective date of this AD, it is permissible to install an affected combustion chamber outer liner on the engine of a single-engine airplane, provided that it is a part eligible for installation, as defined in paragraph (j) of this AD, and provided that prior to operation, the BSI required by paragraph (g)(1) of this AD is performed and, depending on the findings, the applicable corrective actions are performed as required by paragraph (g)(2) of this AD.

(j) Definitions

For the purpose of this AD, a "part eligible for installation" is an affected combustion chamber outer liner, which was not previously installed on an engine, or an affected combustion chamber outer liner that, before installation, has passed an inspection (no defects found) in accordance with the Accomplishment Instructions, paragraphs 2.2 and 2.3 of the ASB, or a combustion chamber outer liner that does not have P/Ns M601-229.3, M601-229.3A, M601-229.3B, M601-229.31A, or M601-229.31B.

(k) Alternative Methods of Compliance (AMOCs)

The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in § 39.19. In accordance with § 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (l)(2) of this AD or email to: ANE-AD-AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(l) Additional Information

(1) Refer to European Union Aviation Safety Agency (EASA) AD 2022-0034, dated March 4, 2022, for related information. This EASA AD may be found in the AD docket at regulations.gov under Docket No. FAA-2022-1239.

(2) For more information about this AD, contact Barbara Caufield, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7146; email: barbara.caufield@faa.gov.

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) GE Aviation Czech s.r.o. (GEAC) Alert Service Bulletin (ASB) ASB-H75-72-40-00-0056 [01], ASB-M601E-72-40-00-0113 [01], ASB-H80-72-40-00-0099 [01], ASB-M601D-72-40-00-0081[01], ASB-M601F-72-40-00-0064[01], ASB-M601Z-72-40-00-0063 [01], and ASB-H85-72-40-00-0045 [01] (single document; formatted as service bulletin identifier [revision number]), dated February 16, 2022.

(ii) [Reserved]

(3) For GEAC service information identified in this AD, contact GE Aviation Czech s.r.o., Beranových 65, 199 02 Praha 9, Letňany, Czech Republic; phone: +420 222 538 111.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on September 21, 2022.

Christina Underwood, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.
[FR Doc. 2022-20857 Filed: 9/26/2022 8:45 am; Publication Date: 9/27/2022]