



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2019-0352; Product Identifier 2019-NE-09-AD; Amendment 39-19705; AD 2019-16-02]

RIN 2120-AA64

Airworthiness Directives; GE Honda Aero Engines Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all GE Honda Aero Engines (GHAE) HF120 model turbofan engines with a certain fuel pump metering unit (FPMU) assembly. This AD was prompted by damage found on the permanent magnetic alternator (PMA) drive gear within the FPMU assembly. This AD requires removal of a certain FPMU assembly and its replacement with a part eligible for installation. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact GE Honda Aero Engines, LLC, 9050 Centre Pointe Drive, Suite 350, West Chester, OH, 45069; phone 513-552-7820; email: info@honda-aero.com; internet: www.gehonda.com. You may view this service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA, 01803. For information on the availability of this material at the FAA, call 781-238-7759. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0352.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0352; 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 final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Michael Richardson-Bach, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7747; fax: 781-238-7199; email: michael.richardson-bach@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all GHAE HF120 model turbofan engines with a certain FPMU assembly. The NPRM published in the Federal Register on May 21, 2019 (84 FR 22986). The NPRM was prompted by an incident on a flight test engine that resulted in the loss of over-speed protection warning. GHAE's subsequent investigation found damage on the PMA drive gear teeth within the FPMU assembly, which was likely due to dynamic loads on the drive gear that exceeded the material capability. The NPRM proposed to require removal of a certain FPMU assembly and its replacement with a part eligible for installation. The FAA is issuing this AD to address the unsafe condition on these products.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request to Update Service Information

GHAЕ commented that the Related Service Information section of the NPRM refers to "GHAЕ HF120 Service Bulletin (SB) 73-0016 R01, dated November 08, 2018." GHAЕ recommended that the FAA revise the AD to refer to Revision 02, dated May 13, 2019. GHAЕ noted that GHAЕ HF120 SB 73-0016 R02 clarifies the interchangeability statement to eliminate confusion as to the FPMU part numbers that are eligible for installation.

The FAA agrees. The FAA revised the Related Service Information paragraph in this AD to refer to GHAЕ HF120 SB 73-0016 R02, dated May 13, 2019.

Request to Revise JASC Code

GHAЕ commented that it considers the FPMU an engine fuel control, falling under JASC Code 7321, Fuel Control/Turbine Engines. GHAЕ classifies the FPMU as 73-21-00 in its Engine Illustrated Parts Catalog. GHAЕ therefore recommended that the FAA change the JASC Code from 7314, Engine Fuel Pump, to 7321, Fuel Control/Turbine Engines.

The FAA agrees. The FAA revised the JASC Code in this AD as suggested by the commenter.

Request to Update Address

GHAЕ commented that the GHAЕ business address listed in the NPRM is incorrect. GHAЕ indicated its office suite number has changed. GHAЕ requested that the FAA change the address in this AD to Suite 350.

The FAA agrees. The FAA updated the address in this AD as suggested by the commenter.

Conclusion

The FAA reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule as proposed except for minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information

The FAA reviewed GHAE HF120 SB 73-0016 R02, dated May 13, 2019. The SB describes procedures for replacement of the FPMU assembly with a part eligible for installation.

Costs of Compliance

The FAA estimates that this AD affects 161 engines installed on airplanes of U.S. registry.

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

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replace the FPMU	6.5 work-hours X \$85 per hour = \$552.50	\$50,000	\$50,552.50	\$8,138,952.50

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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to engines, propellers, and associated appliances to the Manager, Engine and Propeller Standards Branch, Policy and Innovation Division.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will 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 that this AD:

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

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

(3) Will 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.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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 (AD):

2019-16-02 **GE Honda Aero Engines**: Amendment 39-19705; Docket No. FAA-2019-0352; Product Identifier 2019-NE-09-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all GE Honda Aero Engines (GHAE) HF120 model turbofan engines with fuel pump metering unit (FPMU) assembly, part number (P/N) 24100-Q0A-F000, installed.

(d) Subject

Joint Aircraft System Component (JASC) Code 7321, Fuel Control/Turbine Engines.

(e) Unsafe Condition

This AD was prompted by damage found on the permanent magnetic alternator drive gear within the FPMU assembly. The FAA is issuing this AD to prevent failure of the FPMU assembly. The unsafe condition, if not addressed, could result in failure of one or more engines, loss of thrust control, and loss of the airplane.

(f) Compliance

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

(g) Required Actions

Within 20 engine hours after the effective date of this AD, or before accumulating 600 engine hours since new, whichever occurs later, remove the affected FPMU assembly from service and replace it with a part eligible for installation.

(h) Installation Prohibition

After the effective date of this AD, do not install on any engine an FPMU assembly, P/N 24100-Q0A-F000.

(i) Definition

For the purposes of this AD, a “part eligible for installation” is:

- (1) an FPMU assembly, P/N 24100-Q0A-G000 or P/N 24100-Q0A-F100; or
- (2) an FPMU assembly, P/N 24100-Q0A-F000, that is rebuilt and marked as P/N 24100-Q0A-G000 or P/N 24100-Q0A-F100.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 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 (k) of this AD. You may email your request to: ANE-AD-AMOC@faa.gov.

(2) 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.

(k) Related Information

For more information about this AD, contact Michael Richardson-Bach, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7747; fax: 781-238-7199; email: michael.richardson-bach@faa.gov.

(l) Material Incorporated by Reference

None.

Issued in Burlington, Massachusetts, on August 6, 2019.

Robert J. Ganley,
Manager, Engine & Propeller Standards Branch,
Aircraft Certification Service.

[FR Doc. 2019-17078 Filed: 8/8/2019 8:45 am; Publication Date: 8/9/2019]