[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-4551; Directorate Identifier 2016-NE-07-AD; Amendment 39-18576; AD 2016-13-12]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce Deutschland Ltd & Co KG Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Rolls-Royce Deutschland Ltd & Co KG (RRD) BR700-710A1-10, -710A2-20, and -710C4-11 turbofan engines. This AD requires removing the pawl carrier pivot pins, part number (P/N) BRR17117, from service and replacing them with parts eligible for installation. This AD was prompted by a seized low-pressure turbine (LPT) fuel shut-off pawl carrier caused by corrosion of the pawl carrier pivot pin. We are issuing this AD to prevent failure of the fuel shut-off mechanism, which could result in uncontained part release, damage to the engine, and damage to the airplane.

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

ADDRESSES: For service information identified in this final rule, contact Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, Dahlewitz, 15827 Blankenfelde-Mahlow,

Germany; phone: +49 (0) 33 7086 2673; fax: +49 (0) 33 7086 3276. You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-4551.

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-2016-4551; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, 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: Philip Haberlen, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7770; fax: 781-238-7199; email: philip.haberlen@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to the specified products. The NPRM was published in

the *Federal Register* on April 1, 2016 (81 FR 18806). The NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

> Seizing of a fuel shut-off mechanism pawl carrier was reported. The subsequent investigation determined that corrosion of the pawl carrier pivot pin P/N BRR17117, was the failure cause.
>
> This condition, if not corrected, could lead to loss of the fuel shut-off mechanism functionality and loss of the engine over-speed protection, possibly resulting in release of high-energy debris, with consequent damage to, and/or reduced control of the airplane.

You may obtain further information by examining the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-4551.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (81 FR 18806, April 1, 2016).

Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting this AD as proposed.

Related Service Information

RRD has issued Alert Service Bulletin (ASB) BR700-72-A101523, Revision 3, dated December 10, 2015. The service information describes procedures for replacing the pawl carrier pivot pins. 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 the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 4 engines installed on airplanes of U.S. registry. We also estimate that it will take about 3 hours per engine to comply with this AD. The average labor rate is $85 per hour. Required parts cost about $860 per engine. Based on these figures, we estimate the cost of this AD on U.S. operators to be $4,460.

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.

We are 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

We determined that 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 this AD:

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

(2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and

(4) 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):

2016-13-12 **Rolls-Royce Deutschland GmbH (Type Certificate previously held by Rolls-Royce Deutschland GmbH, formerly BMW Rolls-Royce GmbH):** Amendment 39-18576; Docket No. FAA-2016-4551; Directorate Identifier 2016-NE-07-AD.

(a) Effective Date

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

(b) Affected ADs

None.

(c) Applicability

(1) This AD applies to:

(i) Rolls-Royce Deutschland (RRD) BR700-710A1-10 engines with serial number (S/N) 11505 and below and with a low-pressure turbine (LPT) module, part number (P/N) M51-104 or P/N M51-111, installed;

(ii) RRD BR700-710A2-20 engines with S/N 12492 and below and with an LPT module, P/N M51-108 or P/N M51-111, installed;

(iii) RRD BR700-710C4-11 engines with S/N 15277 and below, with configuration standard 710C4-11 engraved on the engine data plate and with an LPT module, P/N M51-112, installed; and

(iv) RRD BR700-710C4-11 engines with S/N 15329 and below, with configuration standard 710C4-11/10 engraved on the engine data plate and with an LPT module, P/N M51-112, installed.

(2) Reserved.

(d) Reason

This AD was prompted by a seized LPT fuel shut-off pawl carrier caused by corrosion of the pawl carrier pivot pin. We are issuing this AD to prevent failure of the

fuel shut-off mechanism, which could result in uncontained part release, damage to the engine, and damage to the airplane.

(e) Actions and Compliance

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

(1) Within 6 months after the effective date of this AD, remove each pawl carrier pivot pin, P/N BRR17117, from service and replace with a part eligible for installation.

(2) Reserved.

(f) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

(g) Related Information

(1) For more information about this AD, contact Philip Haberlen, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7770; fax: 781-238-7199; email: philip.haberlen@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency AD 2016-0034, dated February 24, 2016, for more information. You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating it in Docket No. FAA-2016-4551.

(3) RRD Alert Service Bulletin BR700-72-A101523, Revision 3, dated December 10, 2015, can be obtained from RRD using the contact information in paragraph (g)(4) of this AD.

(4) For service information identified in this AD, contact Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, Dahlewitz, 15827 Blankenfelde-Mahlow, Germany; phone: +49 (0) 33 7086 2673; fax: +49 (0) 33 7086 3276.

(5) You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(h) Material Incorporated by Reference

None.

Issued in Burlington, Massachusetts, on June 23, 2016.

Colleen M. D'Alessandro,
Manager, Engine & Propeller Directorate,
Aircraft Certification Service.
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