



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0397; Directorate Identifier 2013-NE-15-AD]

RIN 2120-AA64

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

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all Rolls-Royce Deutschland Ltd & Co KG (RRD) model Tay 650-15 turbopan engines. This proposed AD was prompted by excessive deterioration of the high-pressure (HP) air bleed valve operating mechanism. This proposed AD would require a one-time inspection of the HP air bleed valve operating mechanism and, depending on findings, corrective action. We are proposing this AD to prevent multiple fan blade failure, which could result in uncontained engine failure and damage to the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

- Mail: Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

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

- Fax: 202-493-2251.

For service information identified in this proposed AD, contact Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, Dahlewitz, 15827 Blankenfelde-Mahlow, Germany; phone: 49 0 33-7086-1944; fax: 49 0 33-7086-3276. You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (phone: 800-647-5527) is the same as the Mail address provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Frederick Zink, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England

Executive Park, Burlington, MA 01803; phone: 781-238-7779; fax: 781-238-7199; email: frederick.zink@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2013-0397; Directorate Identifier 2013-NE-15-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD. Using the search function of the Web site, anyone can find and read the comments in any of our dockets, including, if provided, the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78).

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness

Directive 2013-0086, dated April 9, 2013, to correct an unsafe condition for the specified products. That mandatory continuing airworthiness information (MCAI) states:

A review of the service history of Tay engines discovered that the High Pressure (HP) air bleed valve operating mechanism could be a subject of excessive deterioration, influencing the aerodynamics and stability of the Low Pressure (LP) compressor (fan) rotor.

This condition, if not corrected, could reduce fan flutter margin and, in some cases, could lead to multiple fan blade failures, possibly resulting in an uncontained release of high energy debris with consequent damage to, and/or reduced control of, the aeroplane.

We are proposing this AD to prevent multiple fan blade failure, which could result in uncontained engine failure and damage to the airplane. You may obtain further information by examining the MCAI in the AD docket.

Relevant Service Information

RRD has issued Alert Non-Modification Service Bulletin (NMSB) No. TAY-75-A1784, dated February 14, 2013. The NMSB describes procedures for inspection of the HP air bleed valve operating mechanism and corrective action, if necessary.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of Germany and is approved for operation in the United States. Pursuant to our bilateral agreement with the European Community, EASA has notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This proposed AD would require a one-time inspection of the HP air bleed valve operating mechanism and, depending on findings, corrective action.

Costs of Compliance

We estimate that this proposed AD affects 52 Tay turbofan engines installed on airplanes of U.S. registry. We also estimate that it would take about 10 hours per engine to comply with this proposed AD. The average labor rate is \$85 per hour. Required parts cost about \$153 per product. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$52,156.

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 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) 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.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

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 (AD):

Rolls-Royce Deutschland Ltd & Co KG Turbofan Engines (formerly Rolls-Royce plc): Docket No. FAA-2013-0397; Directorate Identifier 2013-NE-15-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Rolls-Royce Deutschland Ltd & Co KG (RRD) model Tay 650-15 turbofan engines.

(d) Reason

This AD was prompted by excessive deterioration of the high-pressure (HP) air bleed valve operating mechanism which affects the aerodynamic flutter margin, causing subsequent multiple fan blade failure. We are issuing this AD to prevent multiple fan blade failure, which could result in uncontained engine failure and damage to the airplane.

(e) Actions and Compliance

Unless already done, do the following actions.

(1) Within 1,500 flight cycles after the effective date of this AD, perform a one-time inspection of the HP air bleed valve operating mechanism. Use paragraphs 3.D. and 3.E. of RRD Alert Non-Modification Service Bulletin (NMSB) No. TAY-75-A1784, dated February 14, 2013, to do your inspection.

(2) If the measured torque necessary to open and close the HP air bleed valve is higher than the torque values referenced in paragraph 3.D.(1)(a) of RRD Alert NMSB No. TAY-75-A1784, dated February 14, 2013, then before next flight, accomplish paragraph 3.E. of RRD Alert NMSB No. TAY-75-A1784, dated February 14, 2013.

(f) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(g) Related Information

(1) For more information about this AD, contact Frederick Zink, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7779; fax: 781-238-7199; email: frederick.zink@faa.gov.

(2) Refer to European Aviation Safety Agency Airworthiness Directive 2013-0086, dated April 9, 2013, and RRD Alert NMSB No. TAY-75-A1784, dated February 14, 2013, for related information.

(3) For service information identified in this AD, contact Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, Dahlewitz, 15827 Blankenfelde-Mahlow, Germany; phone: 49 0 33-7086-1944; fax: 49 0 33-7086-3276. You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on June 6, 2013.

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

[FR Doc. 2013-14034 Filed 06/12/2013 at 8:45 am; Publication Date: 06/13/2013]