The unsafe condition is loss of braking capability and possible brake fires, which could reduce the ability of the flightcrew to safely land the airplane.

Compliance

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Actions

(g) Do the following actions.

(1) Within 6 months after the effective date of this AD, do a detailed inspection for wear of the brake QD couplings by measuring dimension “A,” in accordance with Part 1 of the Accomplishment Instructions of Fokker Service Bulletin SBF100–32–156, Revision 1, dated June 29, 2009. Repeat the inspection thereafter at the applicable intervals specified in Table 1 of this AD, except as required by paragraph (g)(2) of this AD.

Table 1—Repetitive Inspection Intervals

<table>
<thead>
<tr>
<th>Condition</th>
<th>Inspection Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than or equal to 0.76 mm</td>
<td>6 months</td>
</tr>
<tr>
<td>Less than 0.76 mm but greater than or equal to 0.72 mm</td>
<td>3 months</td>
</tr>
<tr>
<td>Less than 0.72 mm but greater than or equal to 0.68 mm</td>
<td>30 days</td>
</tr>
<tr>
<td>Less than 0.68 mm but greater than or equal to 0.61 mm</td>
<td>7 days</td>
</tr>
<tr>
<td>Less than 0.61 mm but greater than 0.53 mm</td>
<td>24 hours</td>
</tr>
</tbody>
</table>

(2) If, during any inspection required by paragraph (g)(1) of this AD, dimension “A” on any brake QD coupling is less than or equal to 0.53 mm, before further flight, replace the affected brake QD coupling with an improved unit having P/N AE73059E or P/N AE73091E, as applicable, in accordance with Part 2 of the Accomplishment Instructions of Fokker Service Bulletin SBF100–32–156, Revision 1, dated June 29, 2009.

(3) Within 24 months after the effective date of this AD, replace all remaining brake QD couplings having P/N AE70690E, P/N AE70691E, P/N AE99111E, and P/N AE99110E with improved units, in accordance with Part 2 of the Accomplishment Instructions of Fokker Service Bulletin SBF100–32–156, Revision 1, dated June 29, 2009.

(4) Installation of brake QD couplings with an improved unit having P/N AE73059E or P/N AE73091E at all locations terminates the repetitive inspections required by paragraph (g)(1) of this AD.

(5) Replacing the brake QD couplings is also acceptable for compliance with the corresponding requirements of paragraphs (g)(1), (g)(2), and (g)(3) of this AD if done before the effective date of this AD, in accordance with any of the service bulletins specified in Table 2 of this AD:

Table 2—Fokker Credit Service Bulletins

<table>
<thead>
<tr>
<th>Service Bulletin</th>
<th>Revision</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fokker Service Bulletin SBF100–32–127</td>
<td>1</td>
<td>March 6, 2009</td>
</tr>
<tr>
<td>Fokker Service Bulletin SBF100–32–156</td>
<td>Original</td>
<td>March 6, 2009</td>
</tr>
</tbody>
</table>

FAA AD Differences

Note 1: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(b) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM–116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Tom Rodriguez, Aerospace Engineer, International Branch, ANM–116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057–3356, telephone (425) 227–1137; fax (425) 227–1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120–0056.

Related Information


Issued in Renton, Washington, on May 4, 2010.

Ali Bahrami,
Manager, Transport Airplane Directorate, Aircraft Certification Service.

DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; Rolls-Royce plc (RR) RB211–22B and RB211–524 Series Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for the products listed above. This proposed AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as: Several low pressure turbine (LPT) shafts have been found...
with cracks originating from the rear cooling air holes. The cracks were found at normal component overhaul, by the standard Magnetic Particle Inspection (MPI) technique defined in the associated engine manual. The cracks have been found to initiate from corrosion pits. Propagation of a crack from the rear cooling air holes may result in shaft failure and subsequently in an uncontained Low Pressure Turbine failure. For the reasons stated above, this AD requires the inspection of the affected engines’ LPT shafts and replacement of the shaft, as necessary. We are proposing this AD to detect cracks, initiated by corrosion pits, originating from the rear cooling air holes, which could result in shaft failure and subsequently in an uncontained failure of the LPT and damage to the airplane.

DATES: We must receive comments on this proposed AD by July 6, 2010.

ADRESSES: 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.
- 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.
- Contact Rolls-Royce plc, P.O. Box 31, Derby, DE24 8BJ, United Kingdom: Telephone 011 44 1332 242424; fax 011 44 1332 249936, for the service information identified in this proposed AD.

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 (telephone (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: Tara Chaidez, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: tara.chaidez@faa.gov; telephone (781) 238–7773; fax (781) 238–7199.

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–2009–1157; Directorate Identifier 2009–NE–26–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 docket, 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 2007–0310 R1, dated January 8, 2008 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products.

The MCAI states:

Several low pressure turbine (LPT) shafts have been found with cracks originating from the rear cooling air holes. The cracks were found at normal component overhaul, by the standard Magnetic Particle Inspection (MPI) technique defined in the associated engine manual. The cracks have been found to initiate from corrosion pits. Propagation of a crack from the rear cooling air holes may result in shaft failure and subsequently in an uncontained Low Pressure Turbine failure. For the reasons stated above, this AD requires the inspection of the affected engines’ LPT shafts and replacement of the shaft, as necessary.

You may obtain further information by examining the MCAI in the AD docket.

Relevant Service Information

Rolls-Royce plc has issued Alert Service Bulletin RB.211–72–AF336, dated October 24, 2007. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA’s Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of the United Kingdom, and is approved for operation in the United States. Pursuant to our bilateral agreement with the United Kingdom, they have 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.

Costs of Compliance

Based on the service information, we estimate that this proposed AD would affect about 10 products of U.S. registry. We also estimate that it would take about 7 work-hours per product to comply with this proposed AD. The average labor rate is $85 per work-hour. Required parts would cost about $15,000 per product. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be $155,950.

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

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 AD:


Comments Due Date

(a) We must receive comments by July 6, 2010.

Affected Airworthiness Directives (ADs)

(b) None.

Applicability

(c) This AD applies to Rolls-Royce plc: RB211–22B series and RB211–524B4–D–02, RB211–524D4–9, RB211–524D4–39, RB211–524D4–B–19, RB211–524D4–B–39, RB211–524D4X–19, and RB211–524D4X–B–19 model turbofan engines. These engines are installed on, but not limited to, Boeing 747 series and Lockheed L–1011 series airplanes.

Reason

(d) This AD results from:

Several low pressure turbine (LPT) shafts have been found with cracks originating from the rear cooling air holes. The cracks were found at normal component overhaul, by the standard Magnetic Particle Inspection (MPI) technique defined in the associated engine manual. The cracks have been found to initiate from corrosion pits. Propagation of a crack from the rear cooling air holes may result in shaft failure and subsequently in an uncontained Low Pressure Turbine failure.

For the reasons stated above, this AD requires the inspection of the affected engines’ LPT shafts and replacement of the shaft, as necessary.

We are issuing this AD to detect cracks, initiated by corrosion pits, originating from the rear cooling air holes, which could result in shaft failure and subsequently in an uncontained failure of the LPT and damage to the airplane.

Actions and Compliance

(e) Unless already done, do the following actions.

Initial Inspection Requirements

(1) At the next engine shop visit after the effective date of this AD when the LPT shaft is completely disassembled to piece-part level, inspect the LPT shaft using paragraphs 3.A.(1)(a) through 3.A.(4)(l) of the accomplishment instructions of Rolls-Royce Service Bulletin RB.211–72–AF336, dated October 24, 2007.

Repetitive Inspection Requirements

(2) Thereafter, reinspect the LPT shaft using paragraphs 3.A.(1)(a) through 3.A.(4)(l) of the accomplishment instructions of Rolls-Royce Service Bulletin RB.211–72–AF336, dated October 24, 2007 and the following schedule in Table 1 of this AD:

Table 1—Repetitive Inspection Interval by Engine Model

<table>
<thead>
<tr>
<th>Engine model</th>
<th>Maximum time between inspections (engine cycles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) RB211–22B Series, all models</td>
<td>3,500.</td>
</tr>
<tr>
<td>(ii) RB211–524B4–D–02</td>
<td>4,000.</td>
</tr>
<tr>
<td>(iii) RB211–524D4–19, RB211–524D4–39, RB211–524D4–B–19, RB211–524D4–B–39, RB211–524D4X–19, and RB211–524D4X–B–19</td>
<td>4,000. At the next engine shop visit after the last inspection.</td>
</tr>
</tbody>
</table>

Remove Parts With Cracks

(3) Remove cracked LPT shafts, found using paragraphs (e)(1) or (e)(2) of this AD, from service before further flight.

Definitions

(4) For the purpose of this AD, an engine shop visit is the induction of an engine into the shop for maintenance involving the separation of pairs of major mating engine flanges. The separation of engine flanges solely for the purposes of transportation without subsequent engine maintenance does not constitute an engine shop visit.

Other FAA AD Provisions

(f) Alternative Methods of Compliance (AMOCs): The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

Related Information

(g) Refer to MCAI EASA Airworthiness Directive 2007–0310 R1, dated January 8, 2008, and Rolls-Royce plc: Alert Service Bulletin RB.211–72–AF336, dated October 24, 2007, for related information. Contact Rolls-Royce plc: P.O. Box 31, Derby, DE24 8BJ, United Kingdom; telephone 044 1332 242424; fax 044 1332 249936, for a copy of this service information.

(b) Contact Tara Chaidez, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: tara.chaidez@faa.gov; telephone (781) 238–7773; fax (781) 238–7199, for more information about this AD.

Issued in Burlington, Massachusetts, on May 12, 2010.

Peter A. White, Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service.

DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; The Boeing Company Model 747–400 and 747–400D Series Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Model 747–400 and 747–400D series airplanes. This proposed AD would...