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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2007-28976; Directorate Identifier 2007-NE-28-AD; Amendment 39-15244; AD 2007-22-08]**

**RIN 2120-AA64**

**Airworthiness Directives; Rolls-Royce plc (RR) RB211 Trent 768-60, 772-60, 772B-60, and 772C-60 Turbofan Engines**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule; request for comments.

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**SUMMARY:** We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) provided by the aviation authority for the United Kingdom to identify and correct an unsafe condition on an aviation product. The MCAI states the following:

This action is necessary following the discovery of IP Compressor Rotor stage 2-3 interstage spacer cracking on an in-service Trent 700 engine. Stress analysis of the damaged rotor has shown a possible threat to the rotor integrity, the cracking therefore presents a potential unsafe condition. The cause of the cracking is currently under investigation.

We are issuing this AD to detect cracks in the stage 2-3 interstage spacer of the intermediate pressure (IP) Compressor Rotor. Cracking of the stage 2-3 interstage spacer could result in an uncontained engine failure and damage to the airplane.

**DATES:** This AD becomes effective November 13, 2007.

The Director of the Federal Register approved the incorporation by reference of RR service bulletins (SBs) RB.211-72-AE753, Revision 1, dated May 24, 2005, and RB.211-72-AF197, dated December 20, 2006, listed in the AD as of November 13, 2007.

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

- Government-wide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

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

### **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 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:** Christopher Spinney, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 16 New England Executive Park, Burlington, MA 01803; e-mail: [christopher.spinney@faa.gov](mailto:christopher.spinney@faa.gov); telephone (781) 238-7175; fax (781) 238-7199.

### **SUPPLEMENTARY INFORMATION:**

#### **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 2007-0136, dated May 14, 2007, to correct an unsafe condition for the specified products. The EASA AD states:

This Airworthiness Directive requires inspections for cracks in the stage 2-3 interstage spacer of the IP Compressor Rotor during shop visit.

This action is necessary following the discovery of IP Compressor Rotor stage 2-3 interstage spacer cracking on an in-service Trent 700 engine. Stress analysis of the damaged rotor has shown a possible threat to the rotor integrity, the cracking therefore presents a potential unsafe condition. The cause of the cracking is currently under investigation.

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

#### **Relevant Service Information**

Rolls-Royce plc has issued Service Bulletins RB.211-72-AE753, Revision 1, dated May 24, 2005, and RB.211-72-AF197, dated December 20, 2006. The actions described in that service information are intended to correct the unsafe condition identified in the EASA AD.

#### **FAA's Determination and Requirements of this 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 EASA AD and service information referenced above. We are issuing this AD because we evaluated all the information

provided by the EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. We are issuing this AD to detect cracks in the stage 2-3 interstage spacer of the IP Compressor Rotor. Cracking of the stage 2-3 interstage spacer could result in an uncontained engine failure and damage to the airplane. This AD requires inspecting the stage 2-3 interstage spacer using an eddy current inspection process at every shop visit. You must use the service information described previously to perform the actions required by this AD.

### **FAA's Determination of the Effective Date**

Although no airplanes that are registered in the United States use these engines, the possibility exists that the engines could be used on airplanes that are registered in the United States in the future. The unsafe condition described previously is likely to exist or develop on other RR RB211 Trent 768-60, 772-60, 772B-60, and 772C-60 turbofan engines of the same type design. Therefore, we determined that notice and opportunity for public comment before issuing this AD are unnecessary and that good cause exists for making this amendment effective in fewer than 30 days.

### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2007-28976; Directorate Identifier 2007-NE-28-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of 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 we receive about this AD.

### **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); 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 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.

### **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 AD:



**2007-22-08 Rolls-Royce plc:** Amendment 39-15244; Docket No. FAA-2007-28976; Directorate Identifier 2007-NE-28-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective November 13, 2007.

**Affected ADs**

- (b) None.

**Applicability**

- (c) This AD applies to Rolls-Royce plc RB211 Trent 768-60, 772-60, 772B-60, and 772C-60 turbofan engines. These engines are installed on, but not limited to, Airbus A330 series airplanes.

**Reason**

(d) This action is necessary following the discovery of IP Compressor Rotor stage 2-3 interstage spacer cracking on an in-service Trent 700 engine. Stress analysis of the damaged rotor has shown a possible threat to the rotor integrity, the cracking therefore presents a potential unsafe condition. The cause of the cracking is currently under investigation.

We are issuing this AD to detect cracks in the stage 2-3 interstage spacer of the IP Compressor Rotor. Cracking of the stage 2-3 interstage spacer could result in an uncontained engine failure and damage to the airplane.

**Actions and Compliance**

- (e) Inspect the IP compressor drum stage 2-3 interstage spacer for cracking at every shop visit as follows:

**Inspection In-shop**

(1) If the IP Compressor rotor is not removed from the IP Compressor Casing, inspect the IP compressor drum stage 2-3 interstage spacer by borescope in accordance with Rolls-Royce RB211 Propulsion System Alert Non Modification Service Bulletin RB211-72-AE753 revision 1, section 3 Accomplishment Instructions (paragraphs F and G are applicable in revision 1).

(2) If the IP Compressor rotor is removed from the IP Compressor Casing inspect the IP compressor drum stage 2-3 interstage spacer by Eddy Current Inspection in accordance with Rolls-Royce RB211 propulsion System Alert Non Modification Service Bulletin RB211-72-AF197 initial issue, section 3 accomplishment Instructions.

(3) IP compressor drums on which cracking is identified by the above means must be rejected from service.

## FAA AD Differences

(f) None.

## Other FAA AD Provisions

(g) 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

(h) Refer to EASA Airworthiness Directive 2007-0136, dated May 14, 2007, for related information.

(i) Contact Christopher Spinney, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: christopher.spinney@faa.gov; telephone (781) 238-7175; fax (781) 238-7199, for more information about this AD.

## Material Incorporated by Reference

(j) You must use the service information specified in Table 1 of this AD to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Rolls-Royce plc, P.O. Box 31, DERBY, DE24 8BJ, UK, telephone: 44 (0) 1332 242424; fax: 44 (0) 1332 249936.

(3) You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA 01803; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

**Table 1 – Material Incorporated by Reference**

<b>Service Bulletin No.</b>	<b>Page</b>	<b>Revision</b>	<b>Date</b>
RB.211-72-AE753	All	1	May 24, 2005
RB.211-72-AF197	All	Original	December 20, 2006

Issued in Burlington, Massachusetts, on October 17, 2007.

Peter A. White,

Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. E7-20913 Filed 10-25-07; 8:45 am]