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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

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

**[Docket No. FAA-2008-0597; Directorate Identifier 2008-NE-12-AD; Amendment 39-15542; AD 2008-11-19]**

**RIN 2120-AA64**

**Airworthiness Directives; Rolls-Royce plc (RR) Models 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) 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:

Three Trent 700 IP Turbine discs that exhibited signs of wear at the bore following failure of the bearing chamber sealing sleeve were returned to service. This was based on the fact that Non-Destructive Testing (NDT) did not reveal micro cracking on the affected disc areas. Further engineering investigation considered that, although no micro cracking had been found, the worn disc bore surfaces would have an associated fatigue penalty compared to an unaffected bore. A crack developing from these rubbed surfaces could potentially lead to a disc burst.

As the described wear, present at the bores of those three discs, presents a potential unsafe condition, this Airworthiness Directive requires identification of the three affected serial numbers of IP Turbine Discs (P/N FK20795) and removal from service prior to attaining a certain number of cycles, as indicated.

We are issuing this AD to prevent a failure of the intermediate pressure (IP) turbine disc that could result in an uncontained failure of the engine and possible damage to the airplane.

**DATES:** This AD becomes effective June 16, 2008.

We must receive comments on this AD by June 30, 2008.

**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: 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.

### **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:** James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: [james.lawrence@faa.gov](mailto:james.lawrence@faa.gov); telephone (781) 238-7176; 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 2007-0267-E, dated October 8, 2007 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

Three Trent 700 IP Turbine discs that exhibited signs of wear at the bore following failure of the bearing chamber sealing sleeve were returned to service. This was based on the fact that Non-Destructive Testing (NDT) did not reveal micro cracking on the affected disc areas. Further engineering investigation considered that, although no micro cracking had been found, the worn disc bore surfaces would have an associated fatigue penalty compared to an unaffected bore. A crack developing from these rubbed surfaces could potentially lead to a disc burst.

As the described wear, present at the bores of those three discs, presents a potential unsafe condition, this Airworthiness Directive requires identification of the three affected serial numbers of IP Turbine Discs (P/N FK20795) and removal from service prior to attaining a certain number of cycles, as indicated.

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

#### **Relevant Service Information**

Rolls-Royce has issued Alert Service Bulletin RB.211-72-AF734, dated October 3, 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 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 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.

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

Since there are currently no domestic operators of this engine model, notice and opportunity for public comment before issuing this AD are unnecessary. A situation exists that allows the immediate adoption of this regulation.

## **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-2008-0597; Directorate Identifier 2008-NE-12-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. 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).

## **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, 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:



**2008-11-19 Rolls-Royce plc:** Amendment 39-15542; Docket No. FAA-2008-0597; Directorate Identifier 2008-NE-12-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective June 16, 2008.

**Affected ADs**

- (b) None.

**Applicability**

(c) This AD applies to Rolls-Royce plc models Trent 768-60, 772-60, 772B-60, 772C-60 turbofan engines with intermediate pressure (IP) turbine discs, part number (P/N) FK20795, that have a serial number specified in Table 1 of this AD, installed. These engines are installed on, but not limited to, Airbus 330 series airplanes.

**Reason**

(d) Three Trent 700 IP Turbine discs that exhibited signs of wear at the bore following failure of the bearing chamber sealing sleeve were returned to service. This was based on the fact that Non-Destructive testing (NDT) did not reveal micro cracking on the affected disc areas. Further engineering investigation considered that, although no micro cracking had been found, the worn disc bore surfaces would have an associated fatigue penalty compared to an unaffected bore. A crack developing from these rubbed surfaces could potentially lead to a disc burst.

As the described wear, present at the bores of those three discs, presents a potentially unsafe condition, this Airworthiness Directive requires identification of the three affected serial numbers of IP Turbine Discs (P/N FK20795) and removal from service prior to attaining a certain number of cycles, as indicated.

We are issuing this AD to prevent a failure of the IP turbine disc that could result in an uncontained failure of the engine and possible damage to the airplane.

**Actions and Compliance**

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

(1) The affected IP Turbine Discs, P/N FK20795, must be removed from service prior to attaining the following number of Cycles Since New (CSN):

**Table 1.–IP Turbine Discs by Engine Serial Number and Disc Serial Number**

<b>Serial Number</b>	<b>Removal limit in CSN:</b>
CREB452	7,960
CREB216	7,930
CREB322	7,500

(2) For detailed instructions, refer to Rolls-Royce RB211 Propulsion System Non-Modification Service Bulletin RB211-72-AF734 original issue, section 3. Accomplishment Instructions.

**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 MCAI EASA Airworthiness Directive 2007-0267-E, dated October 8, 2007, and RR Alert Service Bulletin RB.211-72-AF734, dated October 3, 2007, for related information.

(i) Contact James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: james.lawrence@faa.gov; telephone (781) 238-7176; fax (781) 238-7199, for more information about this AD.

**Material Incorporated by Reference**

(j) None.

Issued in Burlington, Massachusetts, on May 23, 2008.

Robert G. Mann,  
Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.  
[FR Doc. E8-12061 Filed 5-29-08; 8:45 am]