

[Federal Register: May 30, 2008 (Volume 73, Number 105)]  
[Rules and Regulations]  
[Page 31017-31019]  
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[DOCID:fr30my08-2]

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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

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

**[Docket No. FAA-2007-27955; Directorate Identifier 2007-NE-15-AD; Amendment 39-15539; AD 2008-11-16]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Rolls-Royce plc (RR) RB211 Trent 500 Series Turbofan Engines**

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

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

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**SUMMARY:** The FAA is superseding an existing airworthiness directive (AD) for RR RB211 Trent 553-61, 553A2-61, 556-61, 556A2-61, 556B-61, 556B2-61, 560-61, and 560A2-61 turbofan engines. That AD currently requires removing certain serial-numbered intermediate pressure compressor (IPC) drums, part number (P/N) FK30102. This AD requires removing those same IPC drums, and requires a new reduced life limit for all other IPC drums, P/N FK30102. This AD results from an RR engineering assessment that it is necessary to reduce the cyclic lives of the other drums with the same P/N. We are issuing this AD to prevent uncontained loss of IPC stage 1 blades, which could result in damage to the airplane.

**DATES:** Effective July 7, 2008.

We must receive any comments on this AD by July 29, 2008.

**ADDRESSES:** Use one of the following addresses to comment on this AD.

- 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.

Contact Rolls-Royce plc, P.O. Box 31, Derby, DE24 8BJ, United Kingdom; telephone: 44 (0) 1332 242424; fax: 44 (0) 1332 249936; e-mail <http://tech.help@rolls-royce.com> for the service information identified in this AD, or download the service information from <https://www.aeromanager.com>.

**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; telephone (781) 238-7176, fax (781) 238-7199.

**SUPPLEMENTARY INFORMATION:** On September 11, 2007, the FAA issued AD 2007-19-10, Amendment 39-15201 (72 FR 53108, September 18, 2007). That AD requires replacing certain IPC drums, listed in that AD by serial number, before exceeding 2,910 cycles-since-new (CSN). That AD was the result of a discovery of strain-induced porosity in a Trent 500 IPC drum forging. That condition, if not corrected, could result in uncontained loss of IPC stage 1 blades, which could result in damage to the airplane.

### **Actions Since AD 2007-19-10 Was Issued**

Since that AD was issued, the European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, recently notified us that an unsafe condition may exist on RR RB211 Trent 553-61, 553A2-61, 556-61, 556A2-61, 556B-61, 556B2-61, 560-61, and 560A2-61 turbofan engines. The EASA advises that it is necessary to reduce the cyclic lives of the other drums with the same P/N. This AD requires:

- Removing IPC drums, P/N FK30102, that have a serial number (SN) specified in this AD, within 2,910 CSN or the next overhaul after the effective date of this AD, whichever occurs first; and
- Removing all other IPC drums, P/N FK30102, within 5,830 CSN.

We are issuing this AD to prevent uncontained loss of IPC stage 1 blades, which could result in damage to the airplane.

### **Bilateral Airworthiness Agreement**

This engine model is manufactured in the United Kingdom and is type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Under this bilateral airworthiness agreement, the EASA has kept the FAA informed of the situation described above. We have examined the findings of the EASA, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

### **FAA's Determination and Requirements of This AD**

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 553-61, 553A2-61, 556-61, 556A2-61, 556B-61, 556B2-61, 560-61, and 560A2-61 turbofan engines of the same type design. We are issuing this AD to prevent uncontained loss of IPC stage 1 blades, which could result in damage to the airplane. This AD requires:

- Removing IPC drums, P/N FK30102, that have an SN specified in this AD, within 2,910 CSN or the next overhaul after the effective date of this AD, whichever occurs first, and
- Removing all other IPC drums, P/N FK30102, within 5,830 CSN.

### **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. Therefore, 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 was not preceded by notice and an opportunity for public comment; however, we invite you to send us any written relevant data, views, or arguments regarding this AD. Send your comments to an address listed under ADDRESSES. Include "AD Docket No. FAA-2007-27955; Directorate Identifier 2007-NE-15-AD" in the subject line of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify it.

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 AD. Using the search function of the Web site, anyone can find and read the comments in any of our dockets, including the name, if provided, 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).

## **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.

## **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 have 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 that 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 summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary at the address listed under ADDRESSES.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Safety.

### **Adoption of the Amendment**

Under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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 removing Amendment 39-15201 72 FR 53108, September 18, 2007, and by adding a new airworthiness directive, Amendment 39-15539, to read as follows:



**2008-11-16 Rolls-Royce plc:** Amendment 39-15539. Docket No. FAA-2007-27955; Directorate Identifier 2007-NE-15-AD.

**Effective Date**

(a) This airworthiness directive (AD) becomes effective July 7, 2008.

**Affected ADs**

(b) This AD supersedes AD 2007-19-10, Amendment 39-15201.

**Applicability**

(c) This AD applies to Rolls-Royce plc (RR) RB211 Trent 553-61, 553A2-61, 556-61, 556A2-61, 556B-61, 556B2-61, 560-61, and 560A2-61 turbofan engines with an intermediate pressure compressor (IPC) drum, part number (P/N) FK30102, installed. These engines are installed on, but not limited to, Airbus A340-500 and 600 series airplanes.

**Unsafe Condition**

(d) This AD results from an RR engineering assessment that it is necessary to reduce the cyclic lives of the other drums with the same P/N. We are issuing this AD to prevent uncontained loss of IPC stage 1 blades, which could result in damage to the airplane.

**Compliance**

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

**Removing IPC drums, P/N FK30102, With Certain Serial Numbers (SNs)**

(f) For engines with an IPC drum, P/N FK30102, that has an SN specified in Table 1 of this AD, remove the IPC within 2,910 cycles-since-new (CSN) or the next overhaul after the effective date of this AD, whichever occurs first.

**Table 1 – IPC Drums by SN**

MW0134967	MW0131219	MW0156891
MW0158192	MW0164840	MW0168864
MW0168190	MW0171399	KHI00012

**Removing All Other IPC Drums, P/N FK30102**

(g) For engines with an IPC drum, P/N FK30102, that doesn't have an SN specified in Table 1 of this AD, remove the IPC drum within 5,830 CSN.

## **Prohibited Installation of IPC Drums, P/N FK30102**

(h) After the effective date of this AD, do not install the following:

(1) IPC drums, P/N FK30102, that have an SN specified in Table 1 of this AD, and have accumulated or exceeded 2,910 CSN.

(2) IPC drums, P/N FK30102, that don't have an SN specified in Table 1 of this AD, and have accumulated or exceeded 5,830 CSN.

## **Alternative Methods of Compliance**

(i) The Manager, Engine Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

## **Material Incorporated by Reference**

(j) None.

## **Related Information**

(k) EASA airworthiness directive 2008-0042, dated February 27, 2008, and RR Alert Service Bulletins RB.211-72-AF258, Revision 1, dated March 29, 2007; and RB.211-72-AF431, dated January 14, 2008, also address the subject of this AD.

(l) 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.

Issued in Burlington, Massachusetts, on May 21, 2008.

Robert G. Mann,

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

[FR Doc. E8-11946 Filed 5-29-08; 8:45 am]