

# Proposed Rules

Federal Register

Vol. 69, No. 43

Thursday, March 4, 2004

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 2003-NE-54-AD]

RIN 2120-AA64

#### Airworthiness Directives; Rolls-Royce plc RB211 Trent 800 Series Turbofan Engines

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to adopt a new airworthiness directive (AD) for Rolls-Royce plc (RR) RB211-Trent 800 series turbofan engines. This proposal would require revising the Time Limits Manual for RR RB211-Trent 800 series turbofan engines. These revisions would include required enhanced inspection of selected critical life-limited parts at each piece-part exposure. This proposal results from the need to require enhanced inspection of selected critical life-limited parts of RB211-Trent 800 series turbofan engines. We are proposing this AD to prevent failure of critical life-limited rotating engine parts, which could result in an uncontained engine failure and damage to the airplane.

**DATES:** We must receive any comments on this proposed AD by May 3, 2004.

**ADDRESSES:** Use one of the following addresses to submit comments on this proposed AD:

- By mail: Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 2003-NE-54-AD, 12 New England Executive Park, Burlington, MA 01803-5299.

- By fax: (781) 238-7055.

- By e-mail: [9-ane-adcomment@faa.gov](mailto:9-ane-adcomment@faa.gov).

You may examine the AD docket, by appointment, at the FAA, New England Region, Office of the Regional Counsel,

12 New England Executive Park, Burlington, MA.

**FOR FURTHER INFORMATION CONTACT:**

Christopher Spinney, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7175, fax (781) 238-7199.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

We invite you to submit any written relevant data, views, or arguments regarding this proposal. Send your comments to an address listed under **ADDRESSES**. Include "AD Docket No. 2003-NE-54-AD" in the subject line of your comments. If you want us to acknowledge receipt of your mailed comments, send us a self-addressed, stamped postcard with the docket number written on it; we will date-stamp your postcard and mail it back to you. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. If a person contacts us verbally, and that contact relates to a substantive part of this proposed AD, we will summarize the contact and place the summary in the docket. We will consider all comments received by the closing date and may amend the proposed AD in light of those comments.

We are reviewing the writing style we currently use in regulatory documents. We are interested in your comments on whether the style of this document is clear, and your suggestions to improve the clarity of our communications that affect you. You may get more information about plain language at <http://www.faa.gov/language> and <http://www.plainlanguage.gov>.

**Examining the AD Docket**

You may examine the AD Docket (including any comments and service information), by appointment, between 8 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays. See **ADDRESSES** for the location.

**Discussion**

A recent FAA study analyzing 15 years of accident data for transport category airplanes identified several root causes for a failure mode that can result in serious safety hazards to transport category airplanes. This study

identified uncontained failure of critical life-limited rotating engine parts as the leading engine-related safety hazard to airplanes. Uncontained engine failures have resulted from undetected cracks in rotating parts that started and grew to failure. Cracks can start from causes such as unintended excessive stress from the original design, or they may start from stresses induced from material flaws, handling, or damage from machining operations. The failure of a rotating part can present a significant safety hazard to the airplane by release of high-energy fragments that could injure passengers or crew by penetration of the cabin, damage flight control surfaces, sever flammable fluid lines, or otherwise compromise the airworthiness of the airplane.

Based on these findings, the FAA, with the concurrence of the Civil Aviation Authority (CAA), which is the Airworthiness Authority for the United Kingdom (U.K.), has developed an intervention strategy to significantly reduce uncontained engine failures. This intervention strategy was developed after consultation with industry and will be used as a model for future initiatives. The intervention strategy is to conduct enhanced, nondestructive inspections of rotating parts, which could most likely result in a safety hazard to the airplane in the event of a part fracture. We are considering the need for additional rulemaking. We might issue future ADs to introduce additional intervention strategies to further reduce or eliminate uncontained engine failures.

Properly focused enhanced inspections require identification of the parts whose failure presents the highest safety hazard to the airplane, identifying the most critical features to inspect on these parts, and utilizing inspection procedures and techniques that improve crack detection. The CAA, with close cooperation of RR, has completed a detailed analysis that identifies the most safety significant parts and features, and the most appropriate inspection methods.

Critical life-limited high-energy rotating parts are currently subject to some form of recommended crack inspection when exposed during engine maintenance or disassembly. The inspections currently recommended by the manufacturer would become mandatory for those parts listed in the

compliance section as a result of this proposed AD. Furthermore, we intend that additional mandatory enhanced inspections resulting from this AD would serve as an adjunct to the existing inspections. We have determined that the enhanced inspections will significantly improve the probability of crack detection on disassembled parts during maintenance. All mandatory inspections must be conducted in accordance with detailed inspection procedures prescribed in the manufacturer's Engine Manual.

Additionally, this proposed AD would:

- Allow air carriers that operate under the provisions of 14 CFR part 121 with an FAA-approved continuous airworthiness maintenance program, and maintenance facilities to verify completion of the enhanced inspections.
- Allow the air carrier or maintenance facility to retain the maintenance records that include the inspections resulting from this proposed AD, if the records include the date and signature of the person who performed the maintenance action.
- Require retaining the records with the maintenance records of the part, engine module, or engine until the task is repeated.
- Establish a method of record preservation and retrieval typically used in existing continuous airworthiness maintenance programs.
- Require adding instructions in an air carrier's maintenance manual on how to implement and integrate this record preservation and retrieval system into the air carrier's record keeping system.

For engines or engine modules that are approved for return to service by an authorized FAA-certificated entity, and that are acquired by an operator after the effective date of the proposed AD, you would not need to perform the mandatory enhanced inspections until the next piece-part opportunity. For example, you would not have to disassemble to piece-part level, an engine or module returned to service by an FAA-certificated facility simply because that engine or module was previously operated by an entity not required to comply with this proposed AD. Furthermore, we intend that operators perform the enhanced inspections of these parts at the next piece-part opportunity after the initial acquisition, installation, and removal of the part after the effective date of this proposed AD. For piece parts not approved for return to service before the effective date of this AD, the proposed AD would require that you perform the mandatory enhanced inspections before

approval of those parts for return to service. The proposed AD would allow installation of piece parts approved for return to service before the effective date of this AD. However, the proposed AD would require an enhanced inspection at the next piece-part opportunity.

This proposal would require, within the next 40 days after the effective date of this proposed AD, revisions to the Time Limits Manual.

#### **FAA's Determination and Requirements of the Proposed AD**

Since an unsafe condition has been identified that is likely to exist or develop on other Rolls-Royce plc RR RB211 Trent 800 series turbofan engines of the same type design that are used on Boeing 777 airplanes registered in the United States, the proposed AD would require revisions to the Time Limits Manual for RR RB211-Trent 800 series turbofan engines to include required enhanced inspection of selected critical parts at each piece-part exposure.

#### **Changes to 14 CFR Part 39—Effect on the Proposed AD**

On July 10, 2002, we issued a new version of 14 CFR part 39 (67 FR 47998, July 22, 2002), which governs the FAA's AD system. This regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. This material previously was included in each individual AD. Since this material is included in 14 CFR part 39, we will not include it in future AD actions.

#### **Costs of Compliance**

There are about 350 engines of the affected design in the worldwide fleet. We estimate that 90 engines installed on airplanes of U.S. registry would be affected by this proposed AD. We also estimate that it would take about 75 work hours per engine to perform the proposed inspections, and that the average labor rate is \$65 per work hour. Since this is an added inspection requirement, included as part of the normal maintenance cycle, no additional part costs are involved. Based on these figures, the total cost impact of the proposed AD on U.S. operators is estimated to be \$438,750.

#### **Regulatory Findings**

We have 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 that the 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); and
3. Would 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 proposal and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under **ADDRESSES**. Include "AD Docket No. 2003-NE-54-AD" in your request.

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

Air transportation, Aircraft, Aviation safety, Safety.

#### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration 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:

**Rolls-Royce plc:** Docket No. 2003-NE-54-AD.

#### **Comments Due Date**

(a) The Federal Aviation Administration (FAA) must receive comments on this airworthiness directive (AD) action by May 3, 2004.

#### **Affected ADs**

- (b) None.

#### **Applicability**

(c) This AD applies to Rolls-Royce plc (RR) RB211-Trent 800 series turbofan engines. These engines are installed on, but not limited to, Boeing 777 airplanes.

#### **Unsafe Condition**

(d) This AD results from the need to require enhanced inspection of selected critical life-limited parts of RB211-Trent 800 series turbofan engines. We are issuing this AD to prevent critical life-limited rotating engine part failure, which could result in an uncontained engine failure and 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.

(f) Within the next 40 days after the effective date of this AD, revise the Time Limits Manual (TLM), and for air carrier operations revise the approved continuous airworthiness maintenance program, by

adding the following: GROUP A PARTS MANDATORY INSPECTION.

(1) Inspections referred to as 'Focus Inspect' in the applicable Engine Manual inspection Task are mandatory inspections for the components given below, when the conditions that follow are satisfied:

(i) When the component has been completely disassembled to piece-part level as given in the applicable disassembly procedures contained in the Engine Manual; and

(ii) The part has more than 100 recorded flight cycles in operation since the last piece-part inspection; or

(iii) The component removal was for damage or a cause directly related to its removal; or

(iv) Where serviceable used components, for which the inspection history is not fully known, are to be used again.

(2) The list of Group A Parts is specified below:

Part nomenclature	Part number	Inspected per overhaul manual task
Low Pressure Compressor Rotor Disc .....	All .....	72-31-16-200-801
Low Pressure Compressor Rotor Shaft .....	All .....	72-31-20-200-801
Intermediate Pressure Compressor Rotor Shaft .....	All .....	72-32-31-200-801
Intermediate Pressure Rear Shaft .....	All .....	72-33-21-200-801
High Pressure Compressor Stage 1 to 4 Rotor Discs Shaft .....	All .....	72-41-31-200-801
High Pressure Compressor Stage 5 & 6 Discs and Cone .....	All .....	72-41-31-200-802
High Pressure Turbine Rotor Disc .....	All .....	72-41-51-200-801
Intermediate Pressure Turbine Rotor Disc .....	All .....	72-51-31-200-801
Intermediate Pressure Turbine Rotor Shaft .....	All .....	72-51-33-200-801
Low Pressure Turbine Stage 1 Rotor Disc .....	All .....	72-52-31-200-801
Low Pressure Turbine Stage 2 Rotor Disc .....	All .....	72-52-31-200-802
Low Pressure Turbine Stage 3 Rotor Disc .....	All .....	72-52-31-200-803
Low Pressure Turbine Stage 4 Rotor Disc .....	All .....	72-52-31-200-804
Low Pressure Turbine Stage 5 Rotor Disc .....	All .....	72-52-31-200-805
Low Pressure Turbine Rotor Shaft .....	All .....	72-52-33-200-801

**Alternative Methods of Compliance**

(g) You must perform these mandatory inspections using the TLM and the applicable Engine Manual unless you receive approval to use an alternative method of compliance under paragraph (h) of this AD. Section 43.16 of the Federal Aviation Regulations (14 CFR 43.16) may not be used to approve alternative methods of compliance or adjustments to the times in which these inspections must be performed.

(h) 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.

**Maintaining Records of the Mandatory Inspections**

(i) You have met the requirements of this AD by using a TLM changed as specified in paragraph (f) of this AD, and, for air carriers operating under part 121 of the Federal Aviation Regulations (14 CFR part 121), by modifying your continuous airworthiness maintenance plan to reflect those changes. You must maintain records of the mandatory inspections that result from those changes to the TLM according to the regulations governing your operation. You do not need to record each piece-part inspection as compliance to this AD. For air carriers operating under part 121, you may use either the system established to comply with section 121.369 or use an alternative system that your principal maintenance inspector has accepted if that alternative system:

(1) Includes a method for preserving and retrieving the records of the inspections resulting from this AD; and

(2) Meets the requirements of section 121.369(c); and

(3) Maintains the records either indefinitely or until the work is repeated.

(j) These record keeping requirements apply only to the records used to document the mandatory inspections required as a result of revising the Time Limits Manual as specified in paragraph (f) of this AD, and do not alter or amend the record keeping requirements for any other AD or regulatory requirement.

**Related Information**

(k) CAA airworthiness directive No. G-2003-0003, dated November 25, 2003, also addresses the subject of this AD.

Issued in Burlington, Massachusetts, on February 25, 2004.

**Jay J. Pardee,**

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

[FR Doc. 04-4799 Filed 3-3-04; 8:45 am]

**BILLING CODE 4910-13-P**

**DEPARTMENT OF THE INTERIOR**

**Bureau of Indian Affairs**

**25 CFR Parts 30, 37, 39, 42, 44, and 47**

**RIN 1076-AE49**

**Implementation of the No Child Left Behind Act of 2001; Correction**

**AGENCY:** Bureau of Indian Affairs, Interior.

**ACTION:** Proposed rule; correction.

**SUMMARY:** The Bureau of Indian Affairs proposed a rulemaking to implement the No Child Left Behind Act of 2001 in the **Federal Register** of February 25, 2004 (67 FR 8752). The direct Internet response address given was in error. This action corrects that error.

**FOR FURTHER INFORMATION CONTACT:**

Catherine Freels, Designated Federal Official, PO Box 1430, Albuquerque, NM 87103-1430; Phone: 505/248-7240; e-mail: [efreels@bia.edu](mailto:efreels@bia.edu).

**SUPPLEMENTARY INFORMATION:** In the **Federal Register** document published on February 25, 2004, there was an error in the direct Internet response address. The Bureau of Indian Affairs is correcting the document as follows:

In proposed rule document (**Federal Register** document 04-3714) make the following correction:

On page 8752, in the first column, 17 lines from the bottom of the column, the direct Internet response address should read: "<http://www.blm.gov/nhp/news/regulatory/index.htm>."

Dated: February 26, 2004.

**David W. Anderson,**

*Assistant Secretary—Indian Affairs.*

[FR Doc. 04-4695 Filed 3-3-04; 8:45 am]

**BILLING CODE 4310-02-M**