

# Proposed Rules

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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-08-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 875-17, Trent 877-17, Trent 884-17, Trent 892-17, Trent 892B-17, and Trent 895-17 turbofan engines with intermediate pressure (IP) turbine discs, part numbers (P/Ns) FK21117 and FK33083 installed. This proposed AD would require removal from service of these IP turbine discs in accordance with newly established reduced turbine disc life limits. This proposed AD is prompted by reports of two IP turbine blade release incidents as a result of dust caps separating from the blades, and subsequent improved modeling analysis. The actions specified in this proposed AD are intended to prevent uncontained IP turbine disc failure and damage to the airplane.

**DATES:** We must receive any comments on this proposed AD by July 7, 2003.

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

- Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 2003-NE-08-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:

James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299, telephone (781) 238-7176; 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-08-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 through a nonwritten communication, 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.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

The Civil Aviation Authority (CAA), which is the airworthiness authority for the United Kingdom (U.K.), recently notified the FAA that an unsafe condition may exist on RR RB211 Trent

875-17, Trent 877-17, Trent 884-17, Trent 892-17, Trent 892B-17, and Trent 895-17 turbofan engines. The CAA advises that reports were received of two IP turbine blade release incidents as a result of dust caps separating from the blades. Subsequently, the manufacturer applied improved modeling techniques for analysis, which revealed higher than predicted operating temperatures at the IP turbine disc rim and surrounding area due to inflow of annulus exhaust gases. As a result of this analysis, the manufacturer has assigned new lower life limits of 8,600 cycles-since-new (CSN) for IP turbine disc P/N FK21117, and 3,000 CSN for IP turbine disc P/N FK33083.

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

These RR RB211 Trent 875-17, Trent 877-17, Trent 884-17, Trent 892-17, Trent 892B-17, and Trent 895-17 turbofan engines, manufactured in the U.K., are 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. Pursuant to this bilateral airworthiness agreement, the CAA has kept us informed of the situation described above. We have examined the CAA's findings, 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. Therefore, we are proposing this AD, which would require replacing IP turbine discs, P/Ns FK21117 and FK33083, at or before reaching the new reduced life cycle limits of 8,600 CSN and 3,000 CSN respectively.

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

On July 10, 2002, we published a new version of 14 CFR part 39 (67 FR 47997, 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 approximately 350 RR RB211 Trent 875-17, Trent 877-17,