

1. *Protection from Unwanted Effects of High-Intensity Radiated Fields (HIRF)*. Each electrical and electronic system that performs critical functions must be designed and installed to ensure that the operation and operational capability of these systems to perform critical functions are not adversely affected when the airplane is exposed to high intensity radiated fields.

2. For the purpose of these special conditions, the following definition applies:

*Critical Functions*. Functions whose failure would contribute to or cause a failure condition that would prevent the continued safe flight and landing of the airplane.

Issued in Renton, Washington, on November 17, 1999.

**Donald L. Riggan,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service, ANM-100.*

[FR Doc. 99-31397 Filed 12-2-99; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 98-ANE-33-AD]

RIN 2120-AA64

#### **Airworthiness Directives; Rolls-Royce, plc RB211 Trent 875, 877, 884, 892, 892B Series Turbofan Engines**

**AGENCY:** Federal Aviation Administration, DOT.

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

**SUMMARY:** This document proposes the superseding of an existing airworthiness directive (AD), applicable to certain Rolls-Royce, plc RB211 Trent 800 series turbofan engines, that currently requires initial and repetitive ultrasonic inspections of fan blade roots for cracks, and replacement, if necessary, with serviceable parts. This proposed action would reduce initial cyclic compliance threshold and repetitive inspection intervals. This proposal would also allow inspections to be accomplished within 100 cycles-in-service if the initial or repetitive thresholds are exceeded on the effective date of the AD. This proposal is prompted by an improved understanding of the crack propagation mechanism and the latest service operational data. The actions specified by the proposed AD are intended to prevent fan blade failure, which could

result in multiple fan blade releases, uncontained engine failure, and possible damage to the airplane.

**DATES:** Comments must be received by February 1, 2000.

**ADDRESSES:** Submit comments to the Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 98-ANE-33-AD, 12 New England Executive Park, Burlington, MA 01803-5299. Comments may also be sent via the Internet using the following address: "9-ane-adcomment@faa.gov". Comments sent via the Internet must contain the docket number in the subject line. Comments may be inspected at this location between 8:00 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Rolls-Royce North America, Inc., 2001 South Tibbs Ave., Indianapolis, IN 46241; telephone (317) 230-3995, fax (317) 230-4743. This information may be examined at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA.

**FOR FURTHER INFORMATION CONTACT:** Jason Yang, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7747, fax (781) 238-7199.

#### **SUPPLEMENTARY INFORMATION:**

##### **Comments Invited**

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments

submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 98-ANE-33-AD." The postcard will be date stamped and returned to the commenter.

#### **Availability of NPRMs**

Any person may obtain a copy of this NPRM by submitting a request to the FAA, New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 98-ANE-33-AD, 12 New England Executive Park, Burlington, MA 01803-5299.

#### **Discussion**

On September 11, 1998, the Federal Aviation Administration (FAA) issued airworthiness directive 98-19-21, Amendment 39-10762 (63 FR 50484, September 22, 1998, corrected by 63 FR 52961, October 2, 1998), applicable to Rolls-Royce, plc (R-R) RB211 Trent 800 series turbofan engines, to require initial and repetitive ultrasonic inspections of fan blade roots for cracks, and replacement, if necessary, with serviceable parts. That action was prompted by reports of multiple fan blade root cracks in several factory test engines. That condition, if not corrected, could result in fan blade failure, which could result in multiple fan blade releases, uncontained engine failure, and possible damage to the airplane.

#### **Information since Publication of AD 98-19-21**

Since the issuance of that AD, the Civil Aviation Authority (CAA) of the United Kingdom and the FAA have received revised analysis from the manufacturer and recent service data from operators. R-R's analysis provides an improved understanding of the crack propagation mechanism and the service operational data since institution of the inspection program required by the current AD indicates that the initial compliance threshold and repetitive inspection intervals must be decreased in order to maintain an acceptable level of safety.

#### **Service Bulletin (SB)**

R-R has issued SB RB211-72-C445, Revision 6, dated September 3, 1999, that describes the initial inspection threshold and repetitive inspection intervals for Trent 800 series turbofan engines. The SB also describes the procedures for ultrasonic inspections of fan blade roots for cracks, and provides part rejection data.

## Proposed Actions

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would supersede AD 98-19-21 to reduce initial compliance thresholds and repetitive cyclic inspection intervals. This proposal would also allow inspections to be accomplished within 100 cycles-in-service if the initial or repetitive thresholds are exceeded on the effective date of the AD. The actions would be required to be accomplished in accordance with the SB listed above.

## Economic Analysis

The FAA estimates that 24 engines installed on aircraft of US registry would be affected by this proposed AD, that it would take approximately 8 work hours per engine to accomplish the proposed actions, and that the average labor rate is \$60 per work hour. Based on these figures, the total cost impact of the proposed AD on US operators is estimated to be \$11,520.

## Regulatory Impact

This proposal does not have federalism implications, as defined in Executive Order No. 13132, because it 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. Accordingly, the FAA has not consulted with state authorities prior to publication of this proposal.

For the reasons discussed above, I certify that this 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) if promulgated, 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. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

## List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

## The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 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. Section 39.13 is amended by removing amendment 39-10762 (63 FR 50484, September 22, 1998) and by adding a new airworthiness directive to read as follows:

**Rolls-Royce, plc:** Docket No. 98-ANE-33-AD. Supersedes AD 98-19-21, Amendment 39-10762.

**Applicability:** Rolls-Royce, plc (R-R) RB211 Trent 875, RB211 Trent 877, RB211 Trent 884, RB211 Trent 892, and Trent 892B series turbofan engines, except if the fan blades described in R-R Service Bulletin (SB) RB211-72-C629 were installed as complete sets. These engines are installed on but not limited to Boeing 777 series airplanes.

**Note 1:** This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

**Compliance:** Required as indicated, unless accomplished previously.

To prevent fan blade failure, which could result in multiple fan blade releases, uncontained engine failure, and possible damage to the airplane, accomplish the following:

### Ultrasonic Inspections (Reduced Thresholds and Repetitive Intervals)

(a) Perform initial and repetitive inspections of fan blade roots for cracks, in accordance with R-R SB No. RB211-72-C445, Revision 6, dated September 3, 1999, as follows:

- (1) For Trent 875 series engines, as follows:
  - (i) Initially inspect prior to accumulating 3,000 cycles-since-new (CSN).
  - (ii) Thereafter, inspect at intervals not to exceed 400 cycles-in-service (CIS) since last inspection.

(2) For Trent 877 series engines, as follows:
 

- (i) Initially inspect prior to accumulating 2,000 CSN.

(ii) Thereafter, inspect at intervals not to exceed 350 CIS since last inspection.

(3) For Trent 884 series engines, as follows:
 

- (i) Initially inspect prior to accumulating 1,500 CSN.

(ii) Thereafter, inspect at intervals not to exceed 350 CIS since last inspection.

(4) For Trent 892 and 892B series engines, as follows:

(i) Initially inspect prior to accumulating 900 CSN.

(ii) Thereafter, inspect at intervals not to exceed 200 CIS since last inspection.

### Engines Exceeding Thresholds and Repetitive Intervals

(5) For engines that exceed the initial inspection thresholds listed in paragraphs (a)(1)(i), (a)(2)(i), (a)(3)(i), and (a)(4)(i) on the effective date of this AD, conduct initial inspection within 100 CIS after the effective date of this AD.

(6) For engines that exceed the repetitive inspection intervals listed in paragraphs (a)(1)(ii), (a)(2)(ii), (a)(3)(ii), and (a)(4)(ii) on the effective date of this AD, inspect within 100 CIS after the effective date of this AD.

### Cracked Parts

(7) Prior to further flight, remove from service cracked fan blades and replace with serviceable parts.

### Alternate Method of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office (ECO). Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, ECO.

**Note 2:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the ECO.

### Ferry Flights

(c) Special flight permits may be issued in accordance with §§ 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the inspection requirements of this AD can be accomplished.

Issued in Burlington, Massachusetts, on November 29, 1999.

**David A. Downey,**

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

[FR Doc. 99-31436 Filed 12-2-99; 8:45 am]

**BILLING CODE 4910-13-U**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 99-NM-69-AD]

RIN 2120-AA64

### Airworthiness Directives; Boeing Model 737-100, -200, -200C, -300, -400, and -500 Series Airplanes

**AGENCY:** Federal Aviation Administration, DOT.