# 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. FAA–2004–19930; Directorate Identifier 2004–NE–33–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 proposed AD would require initial and repetitive borescope inspections of the high pressure-and-intermediate pressure (HP–IP) turbine internal and external oil vent tubes for coking and carbon buildup, and cleaning or replacing the vent tubes if necessary. This proposed AD results from a report of an RB211 Trent 700 series engine experiencing a disk shaft separation, overspeed of the IP turbine rotor, and multiple blade release of IP turbine blades. Preliminary findings suggest these events resulted from an internal oil fire in the HP-IP turbine oil vent tubes due to coking and carbon buildup. This fire led to a second fire in the internal air cavity below the IP turbine disk drive shaft. We are proposing this AD to prevent internal oil fires in RB211 Trent 800 series turbofan engines due to coking and carbon buildup, that could cause uncontained engine failure and damage to the airplane.

**DATES:** We must receive any comments on this proposed AD by February 25, 2005.

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

- *DOT Docket Web Site:* Go to *http://dms.dot.gov* and follow the instructions for sending your comments electronically.
- *Government-wide Rulemaking Web Site:* Go to *http://www.regulations.gov* and follow the instructions for sending your comments electronically.
- *Mail:* Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL–401, Washington, DC 20590–001.
- *Fax:* (202) 493–2251.
- *Hand Delivery:* Room PL–401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Contact Rolls-Royce plc, PO Box 31, Derby, England; telephone: 011–44–1332–249428; fax: 011–44–1332–249223 for the service information identified in this proposed AD.

**FOR FURTHER INFORMATION CONTACT:** Ian Dargin, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803–5299; telephone (781) 238–7178; 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 ''Docket No. FAA–2004–19930; Directorate Identifier 2004–NE–33–AD'' in the subject line of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. We will consider all comments received by the closing date and may amend the proposed AD in light of those comments.

We will post all comments we receive, without change, to *http://dms.dot.gov,* including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD. Using the search function of the DMS Web site, anyone can find and read the comments in any of our dockets, including 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) or you may visit *http://dms.dot.gov.*

### Examining the AD Docket

You may examine the docket that contains the proposal, any comments received, and any final disposition in person at the DMS Docket Offices between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone (800) 647–5227) is on the plaza level of the Department of Transportation Nassif Building at the street address stated in **ADDRESSES.** Comments will be available in the AD docket shortly after the DMS receives them.

### Discussion

As a member of the National Transportation Safety Board (NTSB) investigation team, we are investigating an incident event on RR RB211 Trent 700 series engines and possible unsafe condition on RB211 Trent 800 series engines. The Civil Aviation Authority (CAA), which is the airworthiness authority for the United Kingdom (UK) is helping us investigate. A report was received of an RB211 Trent 700 series engine experiencing a disk shaft separation, overspeed of the IP turbine rotor, and multiple blade release of IP turbine blades. Preliminary findings suggest these events resulted from an internal oil fire in the HP–IP turbine oil vent tubes due to coking and carbon buildup. This fire led to a second fire in the internal air cavity below the IP turbine disk drive shaft. Because the oil vent tubes on the event engine were destroyed, the partner engine on the same airplane was inspected. That inspection revealed heavy coking and carbon buildup, with partial blockage of the HP–IP turbine oil vent tubes. Both engines had the same on-wing life of 15,169 hours with 2,344 cycles-since-new. Both engines contained Mobil Jet Oil 291, which also is suspect and will be removed from the list of approved oils for these engines. The NTSB investigation is ongoing and a probable cause finding has not yet been made. The fire, disk overspeed, and blade release appear to be the result of the coking and carbon buildup, evident in the sister engine and linked by cycles and oil use to the event engine. The Trent 800 series engines have similar

design HP–IP turbine oil vent tubes and are the subject of this proposed AD.

**Relevant Service Information**

We have reviewed and approved the technical contents of RR Alert Service Bulletin (ASB) No. RB.211–72–AE362, dated May 7, 2004, that describes procedures for:

- Initial and repetitive borescope inspections for coking and carbon buildup in the HP–IP turbine oil vent tubes; and
- Cleaning the tubes if necessary, and removing the engine from service to clean or replace the tubes.

This ASB requires that all operators submit inspection data to the manufacturer. The CAA classified this ASB as mandatory and issued AD G–2004–0009, dated May 27, 2004, in order to ensure the airworthiness of these RB211 Trent 800 series engines in the UK.

**Differences Between This Proposed AD and the Manufacturer's Service Information**

Although RR ASB No. RB.211–72–AE362, dated May 7, 2004, requires replacing the scavenge oil filter and sending the removed filter to RR for examination as part of returning the engine to service, this proposed AD does not require sending the removed filter to RR.

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

These Trent 800 series 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. In keeping with this bilateral airworthiness agreement, the CAA 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. For this reason, we are proposing this AD, which would require:

- Initial and repetitive borescope inspections of the HP-IP turbine oil vent tubes for coking and carbon buildup; and
- Cleaning the oil vent tubes or removing the engine from service if the tubes fail the inspection.

**Interim Action**

These actions are interim actions and we may take further rulemaking actions in the future.

**Costs of Compliance**

There are about 420 RB211 Trent 800 series engines of the affected design in the worldwide fleet. We estimate that this proposed AD would affect 120 engines installed on airplanes of U.S. registry. We also estimate that it would take about 1.5 work hours per engine to perform the proposed on-wing inspections, and about 0.5 work hour to perform the proposed in-shop inspections. The average labor rate is $65 per work hour. Based on these figures, we estimate the total cost for U.S. operators to perform one on-wing inspection to be $11,700, and the total cost to perform one in-shop inspection to be $3,900.

**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 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 at the address listed under **ADDRESSES.**

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

Air transportation, Aircraft, Aviation safety, Safety.

**The Proposed Amendment**

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. FAA–2004–19930; Directorate Identifier 2004–NE–33–AD.

**Comments Due Date**

(a) The Federal Aviation Administration (FAA) must receive comments on this airworthiness directive (AD) action by February 25, 2005.

**Affected ADs**

(b) None.

*Applicability:* (c) This AD applies to Rolls-Royce plc (RR) RB211 Trent 875–17, 877–17, 884–17, 884B–17, 892–17, 892B–17, and 895–17 series turbofan engines. These engines are installed on, but not limited to, Boeing 777 airplanes.

**Unsafe Condition**

(d) This AD results from a report of an RB211 Trent 700 series engine experiencing a disk shaft separation, overspeed of the IP turbine rotor, and multiple blade release of IP turbine blades. Preliminary findings suggest these events resulted from an internal oil fire in the HP–IP turbine oil vent tubes due to coking and carbon buildup. This fire led to a second fire in the internal air cavity below the IP turbine disk drive shaft. We are issuing this AD to prevent internal oil fires in RB211 Trent 800 series turbofan engines due to coking and carbon buildup, that could cause 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.

**Initial Visual Inspection**

(f) Using paragraph 3.A. (on-wing) or 3.B. (in-shop) of Accomplishment Instructions of RR Alert Service Bulletin (ASB) RB.211–72–AE362, dated May 7, 2004, and the inspection schedule in Table 1 of this AD, perform an initial borescope inspection of the high pressure-and-intermediate pressure (HP–IP) turbine internal and external oil vent tubes for coking and carbon buildup as follows:

(1) Insert an 8 mm diameter flex borescope to see if it will pass along the full length of the vent tube into the bearing chamber.

(2) If the vent tube prevents an 8 mm diameter flex borescope from passing along the full length of the tube into the bearing chamber, repeat the action using a 6 mm flex borescope.

(3) If the 6 mm diameter flex borescope passes through to the bearing chamber, continue using the engine in service, and perform the repetitive inspections in this AD at the required intervals specified in Table 2 of this AD.

(4) If the vent tube prevents the 6 mm diameter flex borescope from passing along the full length of the tube into the bearing chamber, remove the engine from service within 10 cycles-since-last inspection (CSLI).

TABLE 1.—INITIAL INSPECTION SCHEDULE

| If the engine or the 05 module: | Then initially inspect: |
|---|---|
| Has reached the threshold life of 15,000 hours time-since new (TSN) or reached the threshold life of 3,000 cycles-since-new (CSN) on the effective date of this AD. | Within 1,000 hours time-in-service (TIS) or 200 cycles-in service (CIS) after the effective date of this AD, whichever occurs first. |
| Has fewer than 15,000 hours TSN or fewer than 3,000 CSN on the effective date of this AD. | Within 1,000 hours TIS or 200 CIS after reaching the threshold life. |

**Repetitive Visual Inspections**

(g) Using paragraph 3.A. (on-wing) or 3.B. (in-shop) of Accomplishment Instructions of RR ASB RB.211–72–AE362, dated May 7, 2004, paragraphs (f)(1) through (f)(4) of this AD, and the inspection schedule in Table 2 of this AD, perform repetitive borescope inspections of the HP–IP turbine internal and external oil vent tubes for coking and carbon buildup.

TABLE 2.—REPETITIVE INSPECTION SCHEDULE

| If at the previous inspection, before any cleaning was performed: | Then: |
|---|---|
| (1) There was no coking and carbon buildup of a visible thickness; or an 8 mm diameter flex borescope could pass along the full length of the internal vent tube into the bearing chamber. | Reinspect within 6,000 hours time-since-last-inspection (TSLI) or within 1,200 cycles-since-last-inspection (CSLI), whichever occurs first. |
| (2) The coking or carbon buildup prevented an 8 mm diameter flex borescope from passing through the internal vent tube, but a 6 mm diameter flex borescope could pass along the full length of the internal vent tube into the bearing chamber. | Reinspect within 1,500 hours TSLI or within 300 CSLI, whichever occurs first. |
| (3) The coking or carbon buildup prevented the 6 mm diameter flex borescope from passing through the full length of the internal vent tube and into the bearing chamber. | Remove the engine from service within 10 CSLI. |

**Reporting Requirements**

(h) Report findings of the inspection to Rolls-Royce using Table 1 (On-wing Inspection Findings) or Table 2 (In-shop Inspection Findings) of RR ASB RB.211–72–AE362, dated May 7, 2004. The Office of Management and Budget (OMB) has approved the reporting requirements specified in Table 1 and Table 2 of RR ASB RB.211–72–AE362, dated May 7, 2004, and assigned OMB control number 2120–0056.

**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.

**Related Information**

(j) CAA airworthiness directive No. G–2004–0009, dated May 27, 2004, also addresses the subject of this AD.

Issued in Burlington, Massachusetts, on December 17, 2004.

**Francis A. Favara,**

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

[FR Doc. 04–28145 Filed 12–23–04; 8:45 am]

**BILLING CODE 4910–13–P**

## DEPARTMENT OF TRANSPORTATION

## Federal Aviation Administration

## 14 CFR Part 71

**[Docket No. FAA–2004–19289; Airspace Docket No. 04–AGL–20]**

## Proposed Establishment of Class E Airspace; McGregor, MN

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

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** This document proposes to establish Class E airspace at McGregor, MN. Standard Instrument Approach Procedures have been developed for McGregor/Isedor Iverson Airport, McGregor, MN. Controlled airspace extending upward from 700 feet or more above the surface of the earth is needed to contain aircraft executing these approaches. This action would establish an area of controlled airspace for McGregor/Isedor Iverson Airport.

**DATES:** Comments must be received on or before February 20, 2005.

**ADDRESSES:** Send comments on the proposal to the Docket Management System, U.S. Department of Transportation, Room Plaza 401, 400 Seventh Street, SW., Washington, DC 20590–0001. You must identify the docket Number FAA–2004–19289/ Airspace Docket No. 04–AGL–20, at the beginning of your comments. You may also submit comments on the Internet at *http://dms.dot.gov.* You may review the public docket containing the proposal, any comments received, and any final