

# 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-2006-24777; Directorate Identifier 2006-NE-19-AD]

RIN 2120-AA64

#### Airworthiness Directives; Rolls-Royce Deutschland Ltd & Co KG Tay 611-8, Tay 620-15, Tay 650-15, and Tay 651-54 Series Turbofan Engines

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

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

**SUMMARY:** The FAA proposes to adopt a new airworthiness directive (AD) for Rolls-Royce Deutschland Ltd & Co KG (RRD) Tay 611-8, Tay 620-15, Tay 650-15, and Tay 651-54 series turbofan engines, with certain low pressure (LP) compressor modules installed. This proposed AD would require an ultrasonic inspection (UI) of LP compressor fan blades for cracks, within 30 days after the effective date of the proposed AD on certain serial number (SN) Tay 650-15 engines. This proposed AD would also require repetitive UIs of LP compressor fan blades on all engines. This proposed AD would also require, for Tay 650-15 and Tay 651-54 engines, UIs of LP compressor fan blades whenever the blade set is removed from one engine and installed on a different engine. This proposed AD results from a report that a set of LP compressor fan blades failed before reaching the LP compressor fan blade full published life limit. We are proposing this AD to prevent LP compressor fan blades from failing due to blade root cracks, leading to uncontained engine failure and damage to the airplane.

**DATES:** We must receive any comments on this proposed AD by August 28, 2006.

**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 Deutschland Ltd & Co KG, Eschenweg 11, D-15827 Dahlewitz, Germany; telephone 49 (0) 33-7086-1768; fax 49 (0) 33-7086-3356 for the service information identified in this proposed AD.

#### FOR FURTHER INFORMATION CONTACT:

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

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

We invite you to send us any written relevant data, views, or arguments regarding this proposal. Send your comments to an address listed under **ADDRESSES**. Include "Docket No. FAA-2006-24777; Directorate Identifier 2006-NE-19-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 Office 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

The Luftfahrt-Bundesamt (LBA), which is the airworthiness authority for Germany, notified us that an unsafe condition may exist on RRD Tay 611-8, Tay 620-15, Tay 650-15, and Tay 651-54 series turbofan engines. The LBA advises that a Tay 650 LP compressor fan blade set failed before reaching the LP compressor fan blade full published life limit. The set of fan blades accumulated 14,166 cycles-in-service. An investigation revealed that the set of LP compressor fan blades failed due to cracking in the blade root. Rolls-Royce initially introduced a fluorescent penetrant inspection in the engine manual to detect cracking in the blade root. However, further research indicates that repetitive UIs are most effective in detecting blade root cracks.

#### Relevant Service Information

We reviewed and approved RRD Service Bulletin (SB) No. TAY-72-1591, dated May 8, 2003, that describes procedures for UI of LP compressor fan blades for cracks on certain SNs of Tay 650-15 engines with certain LP compressor modules. These engines may have not yet had UI of LP compressor fan blades. We have also reviewed and approved the technical contents of RRD SB No. TAY-72-1442, Revision 3, dated November 26, 2003, that describes procedures for UIs of LP compressor fan blades for all RRD Tay

611–8, Tay 620–15, Tay 650–15, and Tay 651–54 series turbofan engines with certain LP compressor modules. The LBA classified these SBs as mandatory and issued airworthiness directive D–1998–055R3, dated December 15, 2003, in order to ensure the airworthiness of these RRD Tay 611–8, Tay 620–15, Tay 650–15, and Tay 651–54 series turbofan engines in Germany. EASA has approved the LBA AD under approval No. 1869 on December 15, 2003.

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

These RRD Tay 611–8, Tay 620–15, Tay 650–15, and Tay 651–54 series turbofan engines are manufactured in Germany. They 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 LBA kept us informed of the situation described above. We have examined the LBA'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:

- UI of LP compressor fan blades for cracks, within 30 days after the effective date of the proposed AD on certain serial number (SN) Tay 650–15 engines.
- Repetitive UIs of LP compressor fan blades on all engines.
- For Tay 650–15 and Tay 651–54 engines, UIs of LP compressor fan blades whenever the blade set is removed from one engine and installed on a different engine.
- Removal of the complete LP compressor fan blade set and the LP compressor fan disc from service, if any LP compressor fan blade is cracked.

The proposed AD would require you to use the service information described previously to perform these actions.

#### Costs of Compliance

We estimate that this proposed AD would affect about 1,000 RRD Tay 611–8, Tay 620–15, Tay 650–15, and Tay 651–54 series turbofan engines installed on airplanes of U.S. registry. We also estimate that it would take about 4 work-hours per engine to perform a proposed inspection, and that the average labor rate is \$80 per work-hour. Required parts would cost about \$95,000 per LP compressor fan disk and \$140,000 per set of LP compressor fan blades. We estimate that 5 percent or 50 engines would require replacing the LP compressor fan disc and LP compressor

fan blade set. Based on these figures, we estimate the total cost of the proposed AD to U.S. operators to be \$11,750,000.

#### 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 regulatory evaluation of the estimated costs to comply with this proposed AD. See the **ADDRESSES** section for a location to examine the regulatory evaluation.

#### 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 Deutschland Ltd & Co KG

(formerly Rolls-Royce plc): Docket No. FAA–2006–24777; Directorate Identifier 2006–NE–19–AD.

#### Comments Due Date

(a) The Federal Aviation Administration (FAA) must receive comments on this airworthiness directive (AD) action by August 28, 2006.

#### Affected ADs

(b) None.

#### Applicability

(c) This AD applies to Rolls-Royce Deutschland Ltd & Co KG (RRD) Tay 611–8 and Tay 620–15 turbofan engines with low pressure (LP) compressor module part number (P/N) MO1100AA or P/N MO1100AB installed, and Tay 650–15 and Tay 651–54 turbofan engines with LP compressor module P/N MO1300AA or P/N MO1300AB installed. These engines are installed on, but not limited to, Fokker F.28 Mark 0070 and 0100 airplanes, Supplemental Type Certificate No. SA842SW, Boeing 727 airplanes, and Gulfstream G–IV airplanes.

#### Unsafe Condition

(d) This AD results from a report that a set of LP compressor fan blades failed before reaching the LP compressor fan blade full published life limit. We are issuing this AD to prevent LP compressor fan blades from failing due to blade root cracks, leading to 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.

#### Ultrasonic Inspection (UI) of LP Compressor Fan Blades for Certain Tay 650–15 Engines That Have Not Yet Had UI of the LP Compressor Fan Blades

(f) For Tay 650–15 engines, serial numbers 17201, 17202, 17226, 17253, 17341, 17356, 17428, 17450, 17457, 17458, 17497, 17530, 17622, 17643, 17655, 17678, 17709, 17751, 17755, 17805, and 17806 that have not yet had UI of the LP compressor fan blades:

(1) Within 30 days after the effective date of this AD, perform UI of the LP compressor fan blades for cracks.

(2) Use Part 1 of RRD Service Bulletin (SB) No. TAY–72–1591, dated May 8, 2003, to do the inspection.

### UI of LP Compressor Fan Blades Being Installed in a Different Engine; Tay 650–15 and Tay 651–54 Engines

(g) For Tay 650–15 and Tay 651–54 engines, whenever LP compressor fan blades are removed and are being installed in a different engine:

(1) Perform UI of the LP compressor fan blades for cracks.

(2) Use Part 1 of RRD SB No. TAY–72–1442, Revision 3, dated November 26, 2003, to do the inspection.

### UI of LP Compressor Fan Blades for All Tay Engines

(h) Perform UI of the LP compressor fan blades for cracks, using Part 2 of RRD SB No. TAY–72–1442, Revision 3, dated November 26, 2003, at the following:

(1) For Tay 650–15 and Tay 651–54 engines, at every engine shop visit for any reason or before reaching every 4,000 flight hours-since-last-fan-blade UI, whichever occurs first.

(2) For Tay 620–15 engines, before reaching every 4,000 flight hours but no later than every 10 years since-last-fan-blade UI, whichever occurs first.

(3) For Tay 611–8 engines, before reaching every 8,000 flight hours but no later than every 10 years since-last-fan-blade UI, whichever occurs first.

### LP Compressor Fan Blades That Are Cracked

(i) If any LP compressor fan blade is cracked, then remove the complete LP compressor fan blade set and the LP compressor fan disc from service.

### Alternative Methods of Compliance

(j) 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

(k) Luftfahrt-Bundesamt airworthiness directive D–1998–055R3, dated December 15, 2003, which was approved by EASA under approval No. 1869 on December 15, 2003, also addresses the subject of this AD.

Issued in Burlington, Massachusetts, on June 21, 2006.

**Thomas A. Boudreau,**

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

[FR Doc. E6–10087 Filed 6–26–06; 8:45 am]

**BILLING CODE 4910–13–P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA–2006–25192; Directorate Identifier 2006–NM–004–AD]

RIN 2120–AA64

### Airworthiness Directives; Bombardier Model CL–600–2B19 (Regional Jet Series 100 & 440) Airplanes

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

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

**SUMMARY:** The FAA proposes to supersede an existing airworthiness directive (AD) that applies to certain Bombardier Model CL–600–2B19 (Regional Jet Series 100 & 440) airplanes. The existing AD currently requires repetitive detailed and eddy current inspections of the main fittings of the main landing gears (MLG) to detect discrepancies, and related investigative/corrective actions if necessary. The existing AD also requires servicing the shock strut of the MLGs; inspecting the shock strut of the MLGs for nitrogen pressure, visible chrome dimension, and oil leakage; and servicing any discrepant strut. This proposed AD would require installing a new, improved MLG main fitting, which would terminate the repetitive inspection and servicing requirements of the existing AD. This proposed AD results from stress analyses that showed certain main fittings of the MLGs are susceptible to premature cracking, starting in the radius of the upper lug. We are proposing this AD to detect and correct premature cracking of the main fittings of the MLGs, which could result in failure of the fittings and consequent collapse of the MLGs during landing.

**DATES:** We must receive comments on this proposed AD by July 27, 2006.

**ADDRESSES:** Use one of the following addresses to submit comments 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.

• **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 Bombardier, Inc., Canadair, Aerospace Group, P.O. Box 6087, Station Centre-ville, Montreal, Quebec H3C 3G9, Canada, for service information identified in this proposed AD.

#### FOR FURTHER INFORMATION CONTACT:

Richard Beckwith, Aerospace Engineer, Airframe and Propulsion Branch, ANE–171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228–7302; fax (516) 794–5531.

#### SUPPLEMENTARY INFORMATION:

#### Comments Invited

We invite you to submit any relevant written data, views, or arguments regarding this proposed AD. Send your comments to an address listed in the **ADDRESSES** section. Include the docket number “Docket No. FAA–2006–25192; Directorate Identifier 2006–NM–004–AD” at the beginning 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 that 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 Docket

You may examine the AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647–5227) is located on the plaza level of the Nassif Building at the DOT street address stated in the **ADDRESSES**