

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

**SUMMARY:** The FAA proposes to adopt a new airworthiness directive (AD) for Rolls-Royce plc (RR) RB211-22B series, RB211-524B, -524C2, -524D4, -524G2, -524G3, and -524H series, and RB211-535C and -535E series turbofan engines with high pressure compressor (HPC) stage 3 disc assemblies, part numbers (P/Ns) LK46210, LK58278, LK67634, LK76036, UL11706, UL15358, UL22577, UL22578, and UL24738 installed. This proposed AD would allow disc assemblies not modified by a certain RR service bulletin to reach their full life only after the disc assemblies are modified with anti-corrosion protection. This proposed AD is prompted by the manufacturer's reassessment of the corrosion risk on HPC stage 3 disc assemblies that have not yet been modified with sufficient application of anti-corrosion protection. The actions specified in this proposed AD are intended to prevent corrosion-induced uncontained disc failure, resulting in damage to the airplane.

**DATES:** We must receive any comments on this proposed AD by September 29, 2003.

**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-12-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 get the service information identified in this proposed AD from Rolls-Royce plc, PO Box 31, Derby, England, DE248BJ; telephone: 011-44-1332-242424; fax: 011-44-1332-245-418.

You may examine the AD docket at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA.

**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 "AD Docket No. 2003-NE-12-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 U.K., recently notified the FAA that an unsafe condition may exist on RR RB211-22B series, RB211-524B, -524C2, -524D4, -524G2, -524G3, and -524H series, and RB211-535C and -535E series turbofan engines with HPC stage 3 disc assemblies, P/Ns LK46210, LK58278, LK67634, LK76036, UL11706, UL15358, UL22577, UL22578, and UL24738 installed. The CAA advises that numerous disc assemblies have been found at overhaul inspection having corrosion-induced pitting. RR has reassessed the risk of corrosion-induced pitting of disc assemblies that have not incorporated any revision of RR service bulletin (SB) No. RB.211-72-9434, or any revision of RR SB No. RB.211-72-5420, which rework the discs and apply anti-corrosion protection, and RR has lowered the disc lives accordingly in the Time Limits Manuals.

##### **Relevant Service Information**

We have reviewed and approved the technical contents of Rolls-Royce plc SB

No. RB.211-72-9434, Revision 4, dated January 12, 2000, and SB No. RB.211-72-5420, dated February 29, 1980, which describe procedures for reworking of HP compressor stage 3 rotor disc assemblies by machining, and application of anti-corrosion protection. The CAA, which is the airworthiness authority for the U.K., classified these SBs as mandatory and issued airworthiness directive 004-01-94, dated January 4, 2002.

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

These Rolls-Royce plc RR RB211-22B series, RB211-524B, -524C2, -524D4, -524G2, -524G3, and -524H series, and RB211-535C and -535E series turbofan engines are 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 the following for affected HP compressor disc assemblies:

- Removing affected disc assemblies from service.
- Re-machining, inspecting, and applying anti-corrosion protection.
- Re-marking, and returning disc assemblies into service.

The proposed AD would require that these actions be done per the service information described previously.

##### **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 2,000 RR RB211-22B series, RB211-524B, -524C2, -524D4, -524G2, -524G3, and -524H series, and RB211-535C and -535E series turbofan engines of the affected design in the worldwide fleet. We estimate that 1,000 engines installed