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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2010–0562; Directorate Identifier 2009–NE–29–AD; Amendment 39–16969; AD 2012–04–13]

RIN 2120–AA64

Airworthiness Directives; Rolls-Royce plc (RR) Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding an existing airworthiness directive (AD) for all RR model RB211–524G2–T–19, –524G3–T–19, –524H–T–36, and –524H2–T–19; and RB211–Trent 553–61, 553A2–61, 556–61, 556A2–61, 556B–61 556B2–61, 560–61, 560A2–61; RB211–Trent 768–60, 772–60, 772B–60; and RB211–Trent 875–17, 877–17, 884–17, 884B–17, 892–17, 892B–17, and 895–17 turbofan engines that have a high-pressure (HP) compressor stage 1 to 4 rotor disc with a part number (P/N) listed in Table 1 of the AD. That AD currently requires repetitive inspections of the axial dovetail slots, and follow-on corrective action depending on findings. Since we issued that AD, we determined that the definition of shop visit is too restrictive in the existing AD. This continues to require those repetitive inspections and follow-on corrective actions. This new AD changes the definition of a shop visit to be less restrictive. This AD was prompted by our determination that the definition of ''shop visit'' in the existing AD is too restrictive, in that it would require operators to inspect more often than required to ensure safety. We are issuing this AD to detect cracks in the HP compressor stage 1 and 2 disc posts, which could result in failure of the disc post and HP compressor blades, release of uncontained engine debris, and damage to the airplane.

DATES: This AD is effective April 11, 2012.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of April 11, 2012.

ADDRESSES: For service information identified in this AD, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, England, DE248BJ; phone: 011–44–1332–242424; fax: 011–44–1332–245418 or email from *http://www.rolls-royce.com/contact/civil_team.jsp,* or download the publication from *https://www.aeromanager.com.* You may review copies of the referenced service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781–238–7125.

Examining the AD Docket

You may examine the AD docket on the Internet at *http://www.regulations.gov;* or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800–647–5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Alan Strom, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781–238–7143; fax: 781–238–7199; email: *alan.strom@faa.gov.*

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2011–09–07, Amendment 39–16669 (76 FR 24793, May 3, 2011). That AD applies to the specified products. The NPRM published in the **Federal Register** on October 20, 2011 (76 FR 65136). That NPRM proposed to continue to require initial and repetitive fluorescent penetrant inspections of the HP compressor stage 1 to 4 rotor discs at the first shop visit after accumulating 1,000 cycles-since-new on the stage 1 to 4 rotor discs or at the next shop visit after the effective date of that AD, which ever occurs later. That NPRM also proposed to continue to require repetitive inspections at every shop visit. That NPRM also proposed to change the definition of a shop visit to be less restrictive.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal and the FAA's response to each comment.

Support for the NPRM

Two commenters, the Boeing Company and American Airlines, support the intent of the NPRM (76 FR 65136, October 20, 2011).

Request To Change From a Supersedure to a Revision

One commenter, American Airlines, requested that we change the proposed AD (76 FR 65136, October 20, 2011) from being an AD supersedure to being an AD revision of the existing AD 2011–09–07 (76 FR 24793, May 3, 2011), or, have Rolls-Royce plc revise Alert Service Bulletin (ASB) No. RB.211–72–AF964 to remove the reference to AD 2011–09–07, so that we can reference that latest ASB revision in the AD. The commenter stated that the ASB revision should be issued before the AD is issued, and referenced in the AD, to avoid the burden of needing global Alternative Methods of Compliances written.

We do not agree. The reference to the previous AD (76 FR 24793, May 3, 2011) in ASB No. RB.211–72–AF964 is not the section of the ASB incorporated by reference by this AD. We can not delay publishing an AD to wait for an administrative change to a service bulletin. Administrative updates to service bulletins are made for a variety of reasons. These revisions are easily handled by the alternative method of compliance process described in paragraph (i) of this AD. We did not change the AD.

Conclusion

We reviewed the relevant data, considered the comments received, and

determined that air safety and the public interest require adopting the AD as proposed.

Costs of Compliance

Based on the service information, we estimate that this AD will affect about 371 products of U.S. registry. We also estimate that it will take about 20 work-hours per product to comply with this AD. The average labor rate is $85 per work-hour. No parts will be required per product. Based on these figures, we estimate the cost of the AD on U.S. operators to be $630,700.

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 AD will not have federalism implications under Executive Order 13132. This AD will 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 this AD:

(1) Is not a ''significant regulatory action'' under Executive Order 12866,

(2) Is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska, and

(4) 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.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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 removing airworthiness directive (AD) 2011–09–07, Amendment 39–16669 (76 FR 24793, May 3, 2011), and adding the following new AD:

2012–04–13 Rolls-Royce plc: Amendment 39–16969; Docket No. FAA–2010–0562; Directorate Identifier 2009–NE–29–AD.

(a) Effective Date

This airworthiness directive (AD) is effective April 11, 2012.

(b) Affected ADs

This AD supersedes AD 2011–09–07, Amendment 39–16669 (76 FR 24793, May 3, 2011).

(c) Applicability

This AD applies to Rolls-Royce plc (RR) model RB211–524G2–T–19, –524G3–T–19, –524H–T–36, and –524H2–T–19; and RB211–Trent 553–61, 553A2–61, 556–61, 556A2–61, 556B–61 556B2–61, 560–61, 560A2–61; RB211–Trent 768–60, 772–60, 772B–60; and RB211–Trent 875–17, 877–17, 884–17, 884B–17, 892–17, 892B–17, and 895–17 turbofan engines that have a high-pressure (HP) compressor stage 1 to 4 rotor disc with a part number (P/N) listed in Table 1 of this AD.

TABLE 1—AFFECTED HP COMPRESSOR STAGE 1 TO 4 ROTOR DISC P/NS BY ENGINE MODEL

Engine model	HP compressor stage 1 to 4 rotor disc P/N
(1) RB211–524G2–T–19, –524G3–T–19, –524H–T–36, and –524H2–T–19.	FW20195, FK25502, or FW23711.
(2) RB211 Trent 553–61, 553A2–61, 556–61, 556A2–61, 556B–61, 556B2–61, 560–61, and 560A2–61.	FK30524.
(3) RB211 Trent 768–60, 772–60, and 772B–60	FK22745, FK24031, FK26185, FK23313, FK25502, FK32129, FW20195, FW20196, FW20197, FW20638, or FW23711.
(4) RB211 Trent 875–17, 877–17, 884–17, 884B–17, 892–17, 892B–17, and 895–17.	FK24009, FK26167, FK32580, FW11590, or FW61622.

(d) Unsafe Condition

This AD was prompted by our determination that the definition of ''shop visit'' in the existing AD is too restrictive, in that it would require operators to inspect more often than required to ensure safety. We are issuing this AD to detect cracks in the HP compressor stage 1 and 2 disc posts, which could result in failure of the disc post and HP compressor blades, release of uncontained engine debris, and damage to the airplane.

(e) Compliance

Comply with this AD within the compliance times specified, unless already done.

(f) Cleaning and Inspection

(1) Clean and perform a fluorescent penetrant inspection of the HP compressor stage 1 to 4 rotor discs at the first shop visit after accumulating 1,000 cycles since new on the stage 1 to 4 rotor discs or at the next shop visit after the effective date of this AD, which ever occurs later.

(2) Use paragraph 3.A through 3.E.(11) of the Accomplishment Instructions of Rolls-Royce Alert Service Bulletin (ASB) No. RB.211–72–AF964, Revision 2, dated June 8, 2011, to do the inspections.

(3) Thereafter at every engine shop visit, perform the inspection specified by paragraph (f) of this AD.

(g) Definition

For the purpose of this AD, an ''engine shop visit'' is whenever all compressor blades are removed from the HP compressor drum.

(h) Credit for Previous Action

A cleaning and inspection performed before the effective date of this AD using Rolls-Royce ASB No. RB.211–72–AF964, Revision 1, dated June 6, 2008, or Revision 2, dated June 8, 2011, satisfies a cleaning and inspection cycle required by this AD.

(i) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA may approve AMOCs for this AD. Use

the procedures found in 14 CFR 39.19 to make your request.

(j) Related Information

(1) For more information about this AD, contact Alan Strom, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781–238–7143; fax: 781–238–7199; email: *alan.strom@faa.gov.*

(2) See European Aviation Safety Agency Airworthiness Directive 2009–0073R1, dated April 8, 2009, for related information.

(k) Material Incorporated by Reference

(1) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51 of the following service information on the date specified:

(i) Rolls-Royce Alert Service Bulletin No. RB.211–72–AF964, Revision 2, dated June 8, 2011 approved for IBR April 11, 2012.

(ii) Rolls-Royce ASB No. RB.211–72–AF964, Revision 1, dated June 6, 2008 approved for IBR June 7, 2011 (76 FR 24793, May 3, 2011).

(2) For service information identified in this AD, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, England, DE248BJ; phone: 011–44–1332–242424; fax: 011–44–1332–245418 or email from *http://www.rolls-royce.com/contact/civil_team.jsp,* or download the publication from *https://www.aeromanager.com.*

(3) You may review copies of the service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781–238–7125.

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal-register/cfr/ibr_locations.html.*

Issued in Burlington, Massachusetts, on February 23, 2012.

Peter A. White,

Manager, Engine & Propeller Directorate, Aircraft Certification Service.

[FR Doc. 2012–5370 Filed 3–6–12; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2011–0959; Directorate Identifier 2011–NE–25–AD; Amendment 39–16970; AD 2012–04–14]

RIN 2120–AA64

Airworthiness Directives; Rolls-Royce plc Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for RB211–Trent 800 series turbofan engines. This AD requires inspecting the front combustion liner head section for cracking, and if found cracked, removing the front combustion liner head section from service at the next shop visit. This AD was prompted by mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. Specifically, routine inspections revealed cracking on the head sections of two RB211–Trent 800 front combustion liners. We are issuing this AD to prevent uncontained engine failure and damage to the airplane.

DATES: This AD becomes effective April 11, 2012. The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of April 11, 2012.

ADDRESSES: The Docket Operations office is located at Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12–140, Washington, DC 20590–0001.

FOR FURTHER INFORMATION CONTACT: Alan Strom, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; email: *alan.strom@faa.gov;* phone: 781–238–7143; fax: 781–238–7199.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the **Federal Register** on November 25, 2011 (76 FR 72650). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

Routine inspections have revealed cracking on the head sections of two Trent 800 front combustion liners.

This condition, if not detected and corrected, could lead to hot gas breakout with subsequent downstream component release potentially leading to uncontained high energy debris, possibly resulting in damage to the aeroplane or injury to persons on the ground.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comments received.

Request To Reference the Latest Service Information

American Airlines, The Boeing Company, and Rolls-Royce plc, requested that we reference the latest service information, which is Alert Service Bulletin (ASB) No. RB.211–72–AG456, Revision 1, dated November 4, 2011.

We agree. We changed the AD to reference Revision 1 of the ASB.

Request To Add Previous Credit Paragraph

American Airlines, The Boeing Company, and Rolls-Royce plc, requested that we add a Previous Credit paragraph to list the original ASB to give credit to operators who have performed the initial and repetitive inspections before the effective date of the AD.

We agree. We added Credit for Previous Action paragraph (i) to the AD.

Request To Borescope-Inspect the 04 Module When Removed

Rolls-Royce plc requested that we add wording to the AD that states that the 04 module may be borescope-inspected when it is removed from the engine but is not being stripped. This would give the operator the opportunity to restart the 2,000-cycle on-wing life before the next inspection, or if cracked, would give the operator the opportunity to replace the front combustion liner head section.

We agree. We changed the AD to allow as an alternate procedure, an in-shop borescope inspection.

Request To Eliminate Unnecessary Borescope Inspection

Rolls-Royce plc pointed out that the proposed AD requires the front combustion liner head section to be borescope inspected even if it is being stripped. Visual and fluorescent penetrant inspections would be done as part of the maintenance manual activities after stripping, and the borescope inspection would be unnecessary.