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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2007-0036; Directorate Identifier 2007-NE-22-AD; Amendment 39-15636; AD 2008-16-18]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce plc RB211-524 Series Turbofan Engines; Correction

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; correction.

SUMMARY: This document makes a correction to Airworthiness Directive (AD) 2008-16-18. That AD applies to Rolls-Royce (RR) RB211-524 series turbofan engines with certain high pressure (HP) turbine disks installed. That AD was published in the Federal Register on August 11, 2008 (73 FR 46550). Paragraph (c) in the regulatory section is incorrect. This document corrects that paragraph. In all other respects, the original document remains the same.

DATES: Effective Date: Effective September 8, 2008.

FOR FURTHER INFORMATION CONTACT: Jason Yang, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: jason.yang@faa.gov; telephone (781) 238-7747; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION: On August 11, 2008 (73 FR 46550), we published a final rule AD, FR Doc. E8-18102, in the Federal Register. That AD applies to RR RB211-524 series turbofan engines. We need to make the following correction:

§ 39.13 [Corrected]

On page 46551, in the first column, in the Regulatory Section, in the Applicability paragraph (c), in the second line, "with certain high pressure (HP) turbine discs installed" is corrected to read "with high pressure (HP) turbine discs, part numbers (P/Ns)-serial numbers (SNs) FK24651-LAQDY6061 and -LDRCZ10453 to -LDRCZ10720, and -LQDY9903, and -LQDY9924, FK24790-CRCZ6 to -CRCZ25 and -LDRCZ10717 to -LDRCZ14022, UL23166-LQDY6516 to -LQDY8718, UL24561-LQDY6389 to -LQDY6438, UL24994-LQDY6405 to -LQDY8727, UL29472-LAQDY6013 to -LAQDY6092 and -LDRCZ10029 to -LDRCZ10821 and -LDRCZ6000 to -LDRCZ6060 and -

LQDY6592 to -LQDY9993, UL29473-CRCZ24 to -CRCZ25 and -CZ12135 to -CZ12333 and -LAQDY6010 to -LAQDY6088 and -LDRCZ10003 to -LDRCZ15372 and -LDRCZ6001 to -LDRCZ9995 and -LQDY10001 and -LQDY9606 to -LQDY9989, installed".

Issued in Burlington, Massachusetts, on August 28, 2008.

Marc Bouthillier,

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

[FR Doc. E8-20498 Filed 9-5-08; 8:45 am]

[Federal Register: August 11, 2008 (Volume 73, Number 155)]
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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2007-0036; Directorate Identifier 2007-NE-22-AD; Amendment 39-15636; AD 2008-16-18]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce plc RB211-524 Series Turbofan Engines

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

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

Recently an RB211 HP turbine disc has been found with a crack which had propagated further than expected from the risk model that was used to establish the original inspection.

We are issuing this AD to detect cracks that could cause the high pressure (HP) turbine disc to fail and result in uncontained failure of the engine.

DATES: This AD becomes effective September 15, 2008. The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of September 15, 2008.

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: Jason Yang, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: jason.yang@faa.gov; telephone (781) 238-7747; 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 October 24, 2007 (72 FR 60293). That NPRM proposed to correct an unsafe condition for the specified products. The Civil Aviation Authority (CAA), which is the aviation authority for the United Kingdom, has issued United Kingdom Airworthiness Directive G-2006-0002, dated February 13, 2006, to correct an unsafe condition for the specified products. The CAA AD states:

A population of HP turbine discs that were manufactured between 1989-1999 and which were subject to possible machining anomalies, were believed to have an increased chance of suffering from cooling air hole cracking, compared to the general fleet population of HP turbine discs. As a result of this risk, Rolls-Royce issued Non-Modification Service Bulletin (NMSB) 72-C816, recommending in-service inspections of the subject discs.

Recently an RB211 HP turbine disc has been found with a crack which had propagated further than expected from the risk model that was used to establish the original inspection defined in the above NMSB; This has led to the need for a revision of the original inspection requirements.

An HP turbine disc fracture would be uncontained and create a potential unsafe condition. Accordingly, this AD introduces revised inspection requirements to reflect the increased risk of HP turbine disc cracking and potential disc fracture.

You may obtain further information by examining the CAA AD in the AD docket.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comment received. The commenter supports the NPRM.

Editorial Change for Clarity

We changed the paragraph layering in paragraph (e) of the regulatory text to clarify the requirements for disks that have a serial number in Table 1 of this AD and disks that don't have a serial number in Table 1 of this AD.

Conclusion

We reviewed the available data, including the comment received, and determined that air safety and the public interest require adopting the AD with the change described previously. We determined that this change will not increase the economic burden on any operator or increase the scope of the AD.

Costs of Compliance

We estimate that this AD will affect 72 engines of U.S. registry. We also estimate that it will take about 10 work-hours per product to comply with this AD. The average labor rate is \$80 per work-hour. Required parts will cost about \$15,000 per product. Based on these figures, we estimate

the total cost of the proposed AD to U.S. operators to be \$1,137,600. Our cost estimate is exclusive of possible warranty coverage.

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 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 this AD:

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. 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.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office 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 street address for the Docket Operations office (telephone (800) 647-5527) is provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

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 adding the following new AD:



CORRECTION: [*Federal Register: September 8, 2008 (Volume 73, Number 174); Page 51912;*
www.access.gpo.gov/su_docs/aces/aces140.html]

2008-16-18 Rolls-Royce plc: Amendment 39-15636. Docket No. FAA-2007-0036; Directorate Identifier 2007-NE-22-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective September 15, 2008.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Rolls-Royce (RR) RB211-524 series turbofan engines with high pressure (HP) turbine discs, part numbers (P/Ns)-serial numbers (SNs) FK24651-LAQDY6061 and -LDRCZ10453 to -LDRCZ10720, and -LQDY9903, and -LQDY9924, FK24790-CRCZ6 to -CRCZ25 and -LDRCZ10717 to -LDRCZ14022, UL23166-LQDY6516 to -LQDY8718, UL24561-LQDY6389 to -LQDY6438, UL24994-LQDY6405 to -LQDY8727, UL29472-LAQDY6013 to -LAQDY6092 and -LDRCZ10029 to -LDRCZ10821 and -LDRCZ6000 to -LDRCZ6060 and -LQDY6592 to -LQDY9993, UL29473-CRCZ24 to -CRCZ25 and -CZ12135 to -CZ12333 and -LAQDY6010 to -LAQDY6088 and -LDRCZ10003 to -LDRCZ15372 and -LDRCZ6001 to -LDRCZ9995 and -LQDY10001 and -LQDY9606 to -LQDY9989, installed. These engines are installed on, but not limited to, Boeing 747 series and 767 series airplanes and Lockheed L1011 series airplanes.

Reason

(d) Recently an RB211 HP turbine disc has been found with a crack which had propagated further than expected from the risk model that was used to establish the original inspection.

We are issuing this AD to detect cracks that could cause the HP turbine disc to fail and result in uncontained failure of the engine.

Actions and Compliance

(e) Unless already done, do the following actions.

(1) Carry out the eddy current inspection as detailed in Section 3–Accomplishment Instructions of Rolls-Royce NMSB RB.211-72-AE718, dated January 24, 2006.

(2) Carry out the eddy current inspection in accordance with the following schedule:

(i) The HP disc serial numbers listed in Table 1 are to be inspected as follows:

Table 1. HP Disk Serial Numbers by Part Number

Part No	Serial No				
		UL29473	LQDY6957		UL24994 LQDY6792
UL29473	LAQDY6043	UL29473	LQDY9075		UL24994 LQDY6859
UL29473	LAQDY6048	UL29473	LQDY9084		UL24994 LQDY6860
UL29473	LAQDY6079	UL29473	LQDY9557		UL24994 LQDY6866
UL29473	LDRCZ10057	UL29473	LQDY9906		UL24994 LQDY6869
UL29473	LDRCZ10264	UL29473	LQDY9956		UL24994 LQDY6934
UL29473	LDRCZ10415	UL29473	LQDY9970		UL24994 LQDY6946
UL29473	LDRCZ11402	UL29473	LQDY9985		UL24994 LQDY6963
UL29473	LDRCZ11425	UL29472	LQDY9125		UL23166 LQDY6745
UL29473	LDRCZ11497	UL29472	LQDY9554		UL23166 LQDY6846
UL29473	LDRCZ11663	UL29472	LQDY9582		UL23166 LQDY6848
UL29473	LDRCZ11679	UL29472	LQDY9895		UL23166 LQDY6954
UL29473	LDRCZ12301	UL29472	LQDY9910		FK24790 LDRCZ12492
UL29473	LDRCZ12308	UL29472	LQDY9947		FK24790 LDRCZ12694
UL29473	LDRCZ12316	UL29472	LQDY9960		
UL29473	LDRCZ12319	UL24994	LQDY6777		

(A) For all RB211-524 engine marks except RB211-524D4 variants:

(1) If the HP turbine disc cycles are greater than 6150 cycles since new on the effective date of this AD, inspect the HP turbine disc within 500 cycles after the effective date of this AD.

(2) If the HP turbine disc cycles are less than 6150 cycles since new on the effective date of this AD, inspect the disc by whichever is the soonest of the conditions below:

(i) Prior to reaching 6650 cycles since new. The HP turbine disc life at inspection must be greater than 700 cycles since new.

(ii) At next shop visit where the HP turbine rotor is removed from the Combustor Outer Case and the HP turbine disc life is greater than 700 cycles since new. If a HP turbine disc that meets these cyclic life criteria is currently at shop visit, and if, at the effective date of this Airworthiness Directive, it has not yet been reinstalled into the Combustion Outer Case, then the HP turbine disc must be inspected in accordance with the requirements of this Airworthiness Directive at the current shop visit.

(B) For all RB211-524D4 engine mark variants:

(1) If the HP turbine disc cycles are greater than 5000 cycles since new on the effective date of this AD, inspect the HP turbine disc within 500 cycles after the effective date of this AD.

(2) If the HP turbine disc cycles were less than 5000 cycles since new on the effective date of this AD, inspect the HP turbine disc by whichever is the soonest of the conditions below:

(i) Prior to reaching 5500 cycles since new. The HP turbine disc life at inspection must be greater than 700 cycles since new.

(ii) At the next shop visit where the HP turbine rotor is removed from the Combustor Outer Case and the HP turbine disc life is greater than 700 cycles since new. If a HP turbine disc that meets these cyclic life criteria is currently at shop visit, and if, at the effective date of this Airworthiness Directive, it has not yet been reinstalled into the Combustion Outer Case, then the HP turbine disc must be inspected in accordance with the requirements of this Airworthiness Directive at the current shop visit.

(ii) For all other HP turbine discs specified in the Applicability of this Directive but not listed in Table 1 of this AD.

(A) Inspect the HP turbine disc at next shop visit where the HP turbine rotor is removed from the Combustor Outer Case and the HP turbine disc life is greater than 700 cycles since new. If a HP turbine disc that meets these cyclic life criteria is currently at shop visit, and if, at the effective date of this Airworthiness Directive, it has not yet been reinstalled into the Combustion Outer Case, then the HP turbine disc must be inspected in accordance with the requirements of this Airworthiness Directive at the current shop visit.

(B) If a HP turbine disc has previously passed the inspection to Rolls-Royce NMSB 72-C816 or the focused inspection carried out in accordance with Rolls-Royce TS594-J Overhaul Process Manual Task 70-00-00-200-223 at greater than 700 cycles since new, then either of these inspections meets the requirements of this Airworthiness Directive.

FAA AD Differences

(f) Wherever the MCAI AD specifies 24 November 2005, this AD specifies the effective date of this AD.

Other FAA AD Provisions

(g) Alternative Methods of Compliance (AMOCs): The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

Related Information

(h) Refer to the Civil Aviation Authority Airworthiness Directive G-2006-0002, dated February 13, 2006, for related information.

(i) Contact Jason Yang, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: jason.yang@faa.gov; telephone (781) 238-7747; fax (781) 238-7199, for more information about this AD.

Material Incorporated by Reference

(j) You must use Rolls-Royce Service Bulletin RB.211-72-AE718, dated January 24, 2006, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Rolls-Royce plc, PO Box 31, Derby, England; telephone: 011 44 1332-242424; fax: 011 44 1332-249936.

(3) You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or 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 July 31, 2008.

Peter A. White,

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

[FR Doc. E8-18102 Filed 8-8-08; 8:45 am]