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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2007-0037; Directorate Identifier 2007-NE-41-AD; Amendment 39-15521; AD 2008-10-14]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce Deutschland Ltd. & Co. KG. (RRD) TAY 650-15 Turbopan Engines

AGENCY: Federal Aviation Administration (FAA), 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:

Strip results from some of the engines listed in the applicability section of this directive revealed excessively corroded low pressure turbine disks stage 2 and stage 3. The corrosion is considered to be caused by the environment in which these engines are operated. Following a life assessment based on the strip findings it is concluded that inspections for corrosion attack are required. The action specified by this AD is intended to avoid a failure of a low pressure turbine disk stage 2 or stage 3 due to potential corrosion problems which could result in uncontained engine failure and damage to the airplane.

We are issuing this AD to detect corrosion that could cause stage 2 or stage 3 disk of the low pressure turbine to fail and result in an uncontained failure of the engine.

DATES: This AD becomes effective June 25, 2008. The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of June 25, 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 January 2, 2008 (73 FR 75). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states that:

Strip results from some of the engines listed in the applicability section of this directive revealed excessively corroded low pressure turbine disks stage 2 and stage 3. The corrosion is considered to be caused by the environment in which these engines are operated. Following a life assessment based on the strip findings it is concluded that inspections for corrosion attack are required.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM or on the determination of the cost to the public.

Editorial Change To Clarify the Actions and Compliance Section

We added the revision date of September 1, 2006, to paragraph (e)(1) to clarify the requirements to that paragraph. Also, we added Tasks 72-52-23-200-000 and 72-52-24-200-000 to paragraph (e)(3) to clarify the requirements of that paragraph.

Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting the AD with the changes described previously. We determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Costs of Compliance

Based on the service information, we estimate that this proposed AD would affect about two engines installed on airplanes of U.S. registry. We also estimate that it would take about 1.0 work-hours per product to inspect the disk, and that the average labor rate is \$80 per work-hour. If corrosion is found, we estimate that it would take about 2 work-hours to replace the disk. Required parts would cost about \$40,000 per product. Based on these figures, we estimate the total cost of the proposed AD to U.S. operators to be \$80,480. 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:



2008-10-14 Rolls-Royce Deutschland Ltd & Co KG (RRD) (formerly Rolls-Royce plc, Derby, England): Amendment 39-15521. FAA-2007-0037; Directorate Identifier 2007-NE-41-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective June 25, 2008.

Affected ADs

(b) None.

Applicability

(c) This AD applies to RRD TAY 650-15 turbofan engines that have a serial number listed in Table 1 of this AD, and low pressure turbine module M05300AA installed. These engines are installed on, but not limited to, Fokker F28 Mark 0100 airplanes.

Table 1.—Affected TAY 650-15 Engines by Serial Number

Engine Serial Number
17251
17255
17256
17273
17275
17280
17281
17282
17300
17301
17327
17332
17365
17393
17437
17443

Engine Serial Number
17470
17520
17521
17523
17539
17542
17556
17561
17562
17563
17580
17581
17612
17618
17635
17637
17645
17661
17686
17699
17701
17702
17736
17737
17738
17739
17741
17742
17808

Reason

(d) Strip results from some of the engines listed in the applicability section of this directive revealed excessively corroded low pressure turbine disks stage 2 and stage 3. The corrosion is considered to be caused by the environment in which these engines are operated. Following a life assessment based on the strip findings it is concluded that inspections for corrosion attack are

required. The action specified by this AD is intended to avoid a failure of a low pressure turbine disk stage 2 or stage 3 due to potential corrosion problems which could result in uncontained engine failure and damage to the airplane.

We are issuing this AD to detect corrosion that could cause stage 2 or stage 3 disk of the low pressure turbine to fail and result in an uncontained failure of the engine.

Actions and Compliance

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

(1) Prior to accumulating 11,700 flight cycles (FC) since new, and thereafter at intervals not exceeding 11,700 FC of the engine, inspect the low pressure turbine disks stage 2 and stage 3 for corrosion in accordance with RRD Alert Service Bulletin TAY-72-A1524, Revision 1, dated September 1, 2006.

(2) For engines that already exceed 11,700 FC on the effective date of this AD, perform the inspection within 90 days after the effective date of this AD.

(3) When, during any of the inspections as required by paragraph (e)(1) of this directive, corrosion is found, replace the affected parts. The RRD TAY 650 Engine Manual–E-TAY-3RR, Tasks 72-52-23-200-000 and 72-52-24-200-000 contains information on performing the inspection for corrosion and rejection criteria.

Other FAA AD Provisions

(f) 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

(g) Refer to EASA Airworthiness Directive 2006-0288, dated September 15, 2006, and RRD Alert Service Bulletin TAY-72-A1524, Revision 1, dated September 1, 2006, for related information.

(h) 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

(i) You must use Rolls-Royce Deutschland Alert Service Bulletin TAY-72-A1524, Revision 1, dated September 1, 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 Deutschland Ltd & Co KG, Eschenweg 11, Dahlwitz, 15827 Blankenfelde-Mahlow, Germany; telephone 49 (0) 33-7086-1768; fax 49 (0) 33-7086-3356.

(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 May 5, 2008.

Peter A. White,

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

[FR Doc. E8-10633 Filed 5-20-08; 8:45 am]