

[Federal Register: September 27, 2010 (Volume 75, Number 186)]
[Rules and Regulations]
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[DOCID:fr27se10-7]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2007-28077; Directorate Identifier 2007-NE-20-AD; Amendment 39-16445; AD 2009-09-03R1]

RIN 2120-AA64

Airworthiness Directives; Turboméca S.A. Arriel 2B and 2B1 Turboshift Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are revising an existing 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:

Since issuance of AD 2007-0109, Turboméca has released modification TU166 which consists in inserting HP blade dampers between the HP disc and the HP blade platform. Introduction of these dampers has demonstrated to limit axial displacement of the HP blade relative to the disk in case of blade lock rupture or opening, therefore eliminating the need for inspection and replacement.

We are issuing this AD to prevent an uncommanded in-flight engine shutdown which could result in an emergency autorotation landing or an accident.

DATES: This AD becomes effective November 1, 2010. The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of November 1, 2010. The Director of the Federal Register approved the incorporation by reference of Turboméca S.A. Mandatory Service Bulletin No. 292 72 2825, dated April 5, 2007, listed in this AD as of June 1, 2009 (74 FR 18981, April 27, 2009).

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: Richard Woldan, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7136; 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 May 12, 2010 (75 FR 26681). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states that:

Since issuance of AD 2007-0109, Turboméca has released modification TU166 which consists in inserting HP blade dampers between the HP disc and the HP blade platform. Introduction of these dampers has demonstrated to limit axial displacement of the HP blade relative to the disk in case of blade lock rupture or opening, therefore eliminating the need for inspection and replacement.

Therefore, this AD revises AD 2007-0109 by retaining the same requirements of AD 2007-0109 except that applicability is limited to ARRIEL 2B, 2B1 and 2B1A engines which do not incorporate modification TU166.

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.

Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed.

Differences Between This AD and the MCAI or Service Information

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we required different actions in this AD from those in the MCAI in order to follow FAA policies. Any such differences are described in a separate paragraph of the AD. These requirements take precedence over the actions copied from the MCAI.

Costs of Compliance

Based on the service information, we estimate that this AD would affect about 248 products of U.S. registry. We also estimate that it would take about 2 work-hours per product to comply with this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of the AD on U.S. operators to be \$42,160.

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 (phone (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 removing Amendment 39-15889 (74 FR 18981), and adding a new airworthiness directive, Amendment 39-16445, to read as follows:



2009-09-03R1 Turboméca S.A.: Amendment 39-16445. Docket No. FAA-2007-28077; Directorate Identifier 2007-NE-20-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective November 1, 2010.

Affected ADs

- (b) This AD revises AD 2009-09-03, Amendment 39-15889.

Applicability

(c) This AD applies to Turboméca S.A. ARRIEL 2B and 2B1 turboshaft engines that don't incorporate modification TU166. These engines are installed on, but not limited to, Eurocopter AS 350 B3 and EC 130 B4 helicopters.

Reason

- (d) This AD results from:

Since issuance of AD 2007-0109, Turboméca has released modification TU166 which consists in inserting HP blade dampers between the HP disc and the HP blade platform. Introduction of these dampers has demonstrated to limit axial displacement of the HP blade relative to the disk in case of blade lock rupture or opening, therefore eliminating the need for inspection and replacement.

We are issuing this AD to prevent an uncommanded in-flight engine shutdown which could result in an emergency autorotation landing or an accident.

Actions and Compliance

- (e) Unless already done, do the following actions:

Initial Inspection

(1) Perform an initial high-pressure (HP) turbine borescope inspection according to Turboméca S.A. Mandatory Service Bulletin (MSB) No. 292 72 2825, Version B, dated September 21, 2009, or earlier version as follows:

- (i) For engines with fewer than 500 hours and 450 cycles since new or since the last HP turbine borescope inspection, inspect before reaching 600 hours or 500 cycles whichever occurs first. Replace HP turbine modules with rearward turbine blade displacement greater than 0.5 mm.

- (ii) For the remaining engines, inspect within the next 100 hours. Replace HP turbine modules with rearward turbine blade displacement greater than 0.5 mm.

Repetitive Inspections

(2) Perform repetitive HP turbine borescope inspections according to Turboméca S.A. MSB No. 292 72 2825, Version B, dated September 21, 2009 or earlier version:

(i) Within 600 hours or 500 cycles from the previous inspection, whichever occurs first, if the rearward displacement of the turbine blades was less than 0.2 mm. Replace HP turbine modules with rearward turbine blade displacement greater than 0.5 mm.

(ii) Within 100 hours of the previous inspection if the rearward displacement of the turbine blades was between 0.2 mm and 0.5 mm. Replace HP turbine modules with rearward turbine blade displacement greater than 0.5 mm.

Optional Terminating Action

(f) Incorporating modification TU166 terminates the repetitive inspection requirements of paragraphs (e)(2)(i) and (e)(2)(ii) of this AD.

FAA AD Differences

(g) For clarification, we restructured the actions and compliance wording of this AD.

(h) We deleted the Turboméca reporting requirement from the AD.

(i) Although EASA Airworthiness Directive 2007-0109R1, dated November 9, 2009, applies to the ARRIEL 2B1A engine, this AD does not apply to that model because it has no U.S. type certificate.

Alternative Methods of Compliance (AMOCs)

(j) 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

(k) Refer to EASA Airworthiness Directive 2007-0109R1, dated November 9, 2009, and Turboméca S.A. MSB No. 292 72 2825, Version B, dated September 21, 2009, or earlier version, for related information.

(l) Contact Richard Woldan, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7136; fax (781) 238-7199, for more information about this AD.

Material Incorporated by Reference

(m) You must use Turboméca S.A. Mandatory Service Bulletin No. 292 72 2825, Version B, dated September 21, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register previously approved the incorporation by reference of Turboméca S.A. Mandatory Service Bulletin No. 292 72 2825, dated April 5, 2007, on June 1, 2009 (74 FR 18981, April 27, 2009).

(2) For service information identified in this AD, contact Turboméca, 40220 Tarnos, France; telephone 33 05 59 74 40 00, fax 33 05 59 74 45 15.

(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 September 17, 2010.

Robert J. Ganley,
Acting Manager, Engine and Propeller Directorate,
Aircraft Certification Service.