



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2009-0889; Directorate Identifier 2009-NE-35-AD; Amendment 39-16953; AD 2012-03-11]

RIN 2120-AA64

Airworthiness Directives; Turbomeca S.A. Turboshift Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding an existing airworthiness directive (AD) for all Turbomeca S.A. Arriel 2B and 2B1 turboshift engines. That AD currently requires checking the transmissible torque between the low-pressure (LP) pump impeller and the high-pressure (HP) pump shaft on high-pressure/low-pressure (HP/LP) pump hydro-mechanical metering units (HMUs) that do not incorporate Modification TU 147. This new AD requires inspection and possible replacement of the HMU. This AD was prompted by three additional cases of uncoupling of the HP/LP pump HMU LP fuel pump impeller and the HP fuel pump shaft, since the existing AD was issued. We are issuing this AD to prevent an uncommanded in-flight shutdown, which can result in a forced autorotation landing or accident.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain other publication listed in this AD as of March 11, 2010 (75 FR 5689, February 4, 2010).

ADDRESSES: For service information identified in this AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: 33-05-59-74-40-00, fax: 33-05-59-74-45-15. 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: Rose Len, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7772; fax: 781-238-7199; e-mail: rose.len@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2010-03-06, Amendment 39-16189 (75 FR 5689, February 4, 2010). That AD applies to the specified products. The NPRM published in the Federal Register on

November 7, 2011 (76 FR 68661). That NPRM proposed to require inspection and possible replacement of the HMU.

Comments

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

Claim That the Shop Rate is Too Low

One commenter, Advanced Helicopter Services, claimed that our shop rate in the proposed AD was too low.

We do not agree. We used the hourly labor rate determined by the Office of Management and Budget. We did not change the AD.

Clarification of Paragraph (e)(1)(ii)

Since we issued the NPRM (76 FR 68661, November 7, 2011), we determined that paragraph (e)(1)(ii) was unclear and made changes to clarify the population affected. We also reformatted the compliance instruction in this paragraph for clarity.

Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting the AD with the change described previously.

Costs of Compliance

Based on the service information, we estimate that this AD will affect about 540 engines installed on helicopters of U.S. registry. We also estimate that it will take about 2.5 work-hours per engine to comply with this AD. The average labor rate is \$85 per work-hour. Replacement HMUs will cost about \$12,000 per engine. Based on these figures, if all of the HMUs were to fail the check, we estimate the cost of the AD on U.S. operators to be \$6,594,750.

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) 2010-03-06, Amendment 39-16189 (75 FR 5689, February 4, 2010), and adding the following new AD:

2012-03-11 **Turbomeca S.A.:** Amendment 39-16953; Docket No. FAA-2009-0889; Directorate Identifier 2009-NE-35-AD.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD supersedes AD 2010-03-06, Amendment 39-16189 (75 FR 5689, February 4, 2010).

(c) Applicability

This AD applies to all Turbomeca S.A. Arriel 2B and 2B1 turboshaft engines.

(d) Unsafe Condition

This AD was prompted by three additional cases of uncoupling of the high-pressure/low-pressure (HP/LP) pump hydro-mechanical metering unit (HMU) low-pressure (LP) fuel pump impeller and the high-pressure (HP) fuel pump shaft, since AD 2010-03-06 (75 FR 5689, February 4, 2010) was issued. However, these failures were in HMUs that were modified to post-TU 147 configuration HMUs. The investigation

indicates that these HMUs may also need to be replaced. We are issuing this AD to prevent an uncommanded in-flight shutdown, which can result in a forced autorotation landing or accident.

(e) Compliance

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

(1) Check the transmissible torque between the LP fuel pump impeller and the HP fuel pump shaft as follows:

(i) For HMUs that do not incorporate Modification TU 147, check the torque before accumulating 500 engine flight hours (EFH) since March 11, 2010 (the effective date of AD 2010-03-06 (75 FR 5689, February 4, 2010)). Use Paragraph 2 of Turbomeca Alert Mandatory Service Bulletin (MSB) No. A292 73 2830, Version B, dated July 10, 2009, to do the check.

(ii) For HMUs that incorporated Modification TU 147 on or before March 31, 2010 and those HMUs that are not listed in Figures 2 or 3 of Turbomeca Alert MSB No. A292 73 2836, Version A, dated August 17, 2010:

(A) Check the torque within 750 EFH from the effective date of this AD, but no later than 14 months after the effective date of this AD.

(B) Use Paragraph 2 of Turbomeca Alert MSB No. A292 73 2836, Version A, dated August 17, 2010, to do the check.

(2) If the HMU does not pass the torque check, then replace the HMU with an HMU that is eligible for installation.

(f) HMU Reinstallation

Do not install any HMU removed from service by this AD until it has been checked in accordance with Paragraph 2 of Turbomeca Alert MSB No. A292 73 2836, Version A, dated August 17, 2010, or checked in accordance with Paragraph 2 of

Turbomeca Alert MSB No. A292 73 2830, Version B, dated July 10, 2009, and found eligible for installation.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(h) Related Information

For more information about this AD, contact Rose Len, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7772; fax: 781-238-7199; e-mail: rose.len@faa.gov.

(i) Material Incorporated by Reference

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.

(1) Turbomeca Alert Mandatory Service Bulletin No. A292 73 2836, Version A, dated August 17, 2010 approved for IBR on [INSERT DATE 35 DAYS AFTER PUBLICATION].

(2) Turbomeca Alert Mandatory Service Bulletin No. A292 73 2830, Version B, dated July 10, 2009 approved for IBR on March 11, 2010.

(3) For service information identified in this AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: 33-05-59-74-40-00, fax: 33-05-59-74-45-15.

(4) 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.

(5) 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 6, 2012.

Peter A. White,
Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

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