[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2007-27009; Directorate Identifier 2007-NE-02-AD; Amendment 39-17820; AD 2014-07-06]

RIN 2120-AA64

Airworthiness Directives; Turbomeca S.A. Turboshaft Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding airworthiness directive (AD) 2007-19-09R1 for all Turbomeca S.A. Arriel 2B1 turboshaft engines that do not have modification TU157 incorporated. AD 2007-19-09R1 required replacement of the hydromechanical metering unit (HMU) with a serviceable HMU. This AD requires HMU replacement; reduction of the compliance interval; and inclusion of the power turbine C2 cycle consumption rate when determining compliance times. This AD was prompted by reports of ruptures on HMU constant delta pressure valves that have less than 2,000 hours in service. We are issuing this AD to prevent failure of the HMU, which could lead to damage to the engine, and damage to the aircraft.

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

ADDRESSES: For service information identified in this AD, contact Turbomeca, S.A., 40220 Tarnos, France; phone: 33 5 59 74 40 00; telex: 570 042; fax: 33 5 59 74 45 15. You may view this 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 by searching for and locating Docket No. FAA-2007-27009; 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 mandatory continuing airworthiness information (MCAI), 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: James Gray, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7742; fax: 781-238-7199; email: james.e.gray@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2007-19-09R1, Amendment 39-16322 (75 FR 30687, June 2, 2010), ("AD 2007-19-09R1"). AD 2007-19-09R1 applied to the specified products. The NPRM published in the Federal Register on December 24, 2013 (78 FR 77614). The NPRM proposed to continue to require HMU replacement. That NPRM also proposed to require reduction of the compliance interval; and inclusion of the power turbine C2 cycle consumption rate when determining compliance times.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (78 FR 77614, December 24, 2013).

Conclusion

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

Costs of Compliance

We estimate that this AD affects 264 engines installed on airplanes of U.S. registry. We also estimate that it will take about one hour per engine to comply with this AD. The average labor rate is $85 per hour. Required parts cost about $5,000 per engine. Based on these figures, we estimate the cost of this AD to U.S. operators is $1,342,440.

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

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 to the extent that it justifies making a regulatory distinction, 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 part 39 of the Federal Aviation Regulations (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) 2007-19-09R1, Amendment 39-16322 (75 FR 30687, June 2, 2010), and adding the following new AD:

2014-07-06 Turbomeca S.A.: Amendment 39-17820; Docket No. FAA-2007-27009; Directorate Identifier 2007-NE-02-AD.

(a) Effective Date

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

(b) Affected ADs

This AD supersedes AD 2007-19-09R1, Amendment 39-16322 (75 FR 30687, June 2, 2010).

(c) Applicability

This AD applies to Turbomeca S.A. Arriel 2B1 turboshaft engines that do not have modification TU157 incorporated.

(d) Unsafe Condition

This AD was prompted by reports of ruptures on hydromechanical metering unit (HMU) constant delta pressure valves that have less than 2,000 hours in service. We are issuing this AD to prevent failure of the HMU, which could lead to damage to the engine, and damage to the aircraft.

(e) Compliance

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

(1) HMU operating hours and power turbine C2 cycles are known:

(i) If on the effective date of this AD, the HMU C2 cycles are less than 900, then replace the HMU before the HMU accumulates 1,000 C2 cycles or 1,500 HMU operating hours, whichever occurs first;

(ii) If on the effective date of this AD, the HMU C2 cycles are 900 or more, then replace the HMU within 100 HMU C2 cycles after the effective date of this AD;

(iii) Thereafter, replace the HMU at every 1,000 HMU C2 cycles or 1,500 HMU operating hours, whichever comes first.

(2) HMU operating hours are known and C2 cycles are not known:

(i) If on the effective date of this AD, the HMU operating hours are less than 1,100, then replace the HMU before accumulating 1,200 HMU operating hours;

(ii) If on the effective date of this AD, the HMU operating hours are 1,100 or more, then replace the HMU within 100 HMU operating hours after the effective date of this AD;

(iii) Thereafter, replace the HMU at every 1,200 HMU operating hours.

(f) Definition

For the purpose of this AD, HMU operating hours or C2 cycles are defined as operating hours or C2 cycles since new, since overhaul, or since incorporation of Turbomeca S.A. Service Bulletin (SB) No. 292 73 2105, Version B, dated December 16, 2010, or earlier version, or Turbomeca S.A. Mandatory SB (MSB) No. 292 73 2818, Version D, dated June 24, 2013, or earlier version.

(g) Optional Terminating Action

Incorporation of Turbomeca S.A. SB No. 292 73 2157, Version C, dated July 17, 2013, or earlier version, is terminating action to the replacement and repetitive inspection requirements of this AD.

(h) Credit for Previous Actions

If you performed the actions required by paragraphs (e)(1) or (e)(2) of this AD using an earlier version of Turbomeca S.A. MSB No. 292 73 2818, Version D, dated June 24, 2013, you met the requirements of this AD. However, you must still repetitively replace the HMU as required by paragraphs (e)(1)(iii) and (e)(2)(iii) of this AD.

(i) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs to 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 James Gray, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New

England Executive Park, Burlington, MA 01803; phone: 781-238-7742; fax: 781-238-7199; email: james.e.gray@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency AD 2013-0171, dated July 30, 2013. You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov/#!documentDetail;D=FAA-2007-27009-0015.

(3) Turbomeca S.A. MSB No. 292 73 2818, Version D, dated June 24, 2013, Turbomeca S.A. SB No. 292 73 2157, Version C, dated July 17, 2013, and Turbomeca S.A. SB No. 292 73 2105, Version B, dated December 16, 2010, which are not incorporated by reference in this AD, can be obtained from Turbomeca S.A. using the contact information in paragraph (j)(4) of this AD.

(4) For service information identified in this AD, contact Turbomeca, S.A., 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; telex: 570 042; fax: 33 (0)5 59 74 45 1.

(5) You may view this 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.

(k) Material Incorporated by Reference

None.

Issued in Burlington, Massachusetts, on April 2, 2014.

Colleen M. D'Alessandro,
Assistant Directorate Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

[FR Doc. 2014-08008 Filed 04/09/2014 at 8:45 am; Publication Date: 04/10/2014]