

[Federal Register: June 2, 2010 (Volume 75, Number 105)]
[Rules and Regulations]
[Page 30687-30689]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr02jn10-2]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2007-27009; Directorate Identifier 2007-NE-02-AD; Amendment 39-16322; AD 2007-19-09R1]

RIN 2120-AA64

Airworthiness Directives; Turbomeca Arriel 2B1 Turboshaft 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 the issuance of AD 2007-0126 Turbomeca has released modification TU157 which consists in modifying the pressure relief valve of the HMU by introducing a damping device into the valve. Introduction of this device has demonstrated to decrease the pressure fluctuations in the system, therefore reducing significantly the risk of wear of the delta-P diaphragm fabric. This will delete the need for a periodical replacement of the delta-P diaphragm before overhaul of the HMU. The modification TU157 is therefore considered as the terminating action for this AD.

We are issuing this AD to prevent the loss of automatic control mode coupled with the deteriorated performance of the backup mode, which can lead to the inability to continue safe flight, forced autorotation landing, or an accident.

DATES: This AD becomes effective July 7, 2010.

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: Kevin Dickert, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park,

Burlington, MA 01803; e-mail: kevin.dickert@faa.gov; telephone (781) 238-7117; 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 March 22, 2010 (75 FR 13451). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states that:

Since the issuance of AD 2007-0126 Turbomeca has released modification TU157 which consists in modifying the pressure relief valve of the HMU by introducing a damping device into the valve. Introduction of this device has demonstrated to decrease the pressure fluctuations in the system, therefore reducing significantly the risk of wear of the delta-P diaphragm fabric. This will delete the need for a periodical replacement of the delta-P diaphragm before overhaul of the HMU. The modification TU157 is therefore considered as the terminating action for this AD.

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.

Mandatory Service Bulletin Reference Added

Since we issued the proposed AD, Turbomeca issued Mandatory Service Bulletin (MSB) No. 292 73 2818, Version C, dated January 29, 2009. We added that reference to paragraph (e)(2)(iii) of the AD.

Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting the AD with the change described previously.

Differences Between This AD and the MCAI or Service Information

The MCAI applies to the ARRIEL 2B1 and 2B1A engines. The ARRIEL 2B1A engine is not type certificated in the United States, so this AD applies to the ARRIEL 2B1 engine model only.

Costs of Compliance

Based on the service information, we estimate that this AD will affect about 103 products of U.S. registry. We also estimate that it will take about 0.75 work-hour per product to comply with this AD. The average labor rate is \$85 per work-hour. Required parts will cost about \$10,550 per product. Based on these figures, we estimate the cost of the AD on U.S. operators to be \$1,093,216.

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, 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 39-15200 (72 FR 53112, September 18, 2007), and adding the following new AD:



2007-19-09R1 Turbomeca: Amendment 39-16322. Docket No. FAA-2007-27009; Directorate Identifier 2007-NE-02-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective July 7, 2010.

Affected ADs

- (b) This AD revises AD 2007-19-09, Amendment 39-15200.

Applicability

(c) This AD applies to Turbomeca ARRIEL 2B1 turboshaft engines that don't incorporate modification TU157. These engines are installed on, but not limited to, Eurocopter AS 350 B3 and EC 130 B4 helicopters.

Reason

- (d) European Aviation Safety Agency (EASA) AD No. 2009-0091, dated May 4, 2009, states:

Since the issuance of AD 2007-0126 Turbomeca has released modification TU157 which consists in modifying the pressure relief valve of the HMU by introducing a damping device into the valve. Introduction of this device has demonstrated to decrease the pressure fluctuations in the system, therefore reducing significantly the risk of wear of the delta-P diaphragm fabric. This will delete the need for a periodical replacement of the delta-P diaphragm before overhaul of the HMU. The modification TU157 is therefore considered as the terminating action for this AD.

We are issuing this AD to prevent the loss of automatic control mode coupled with the deteriorated performance of the backup mode, which can lead to the inability to continue safe flight, forced autorotation landing, or an accident.

Actions and Compliance

- (e) Unless already done, do the following actions.
 - (1) For ARRIEL 2B1 engines that incorporate modification TU157, no further action is required.
 - (2) For all other ARRIEL 2B1 engines do the following:
 - (i) Replace the hydromechanical metering unit (HMU) with a serviceable HMU before the HMU accumulates 1,500 hours-since-new, hours-since-last-overhaul (HSO), or since incorporation of Turbomeca Service Bulletin (SB) No. 292 73 2105, whichever occurs later.
 - (ii) Thereafter, replace the HMU with a serviceable HMU at every 1,500 hours-since new, since last overhaul, or since incorporation of Turbomeca SB No. 292 73 2105, whichever occurs later.
 - (iii) For the purposes of this AD, a serviceable HMU is an HMU fitted with a new constant delta P diaphragm in accordance with Turbomeca Mandatory Service Bulletin (MSB) No. 292 73 2818,

Original Issue, Dated October 18, 2006, Update No. 1, dated April 3, 2007, or Version C, dated January 29, 2009.

Optional Terminating Action

(3) Replacing the HMU with an HMU that has been modified to TU157 terminates the repetitive requirement of paragraph (e)(2)(ii) of this AD.

FAA AD Differences

(f) This AD differs from the Mandatory Continuing Airworthiness Information (MCAI) because the MCAI applies to the ARRIEL 2B1 and 2B1A engines. The ARRIEL 2B1A engine is not type certificated in the United States, so this proposed AD applies to the ARRIEL 2B1 engine model only.

Alternative Methods of Compliance (AMOCs)

(g) 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) Contact Kevin Dickert, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: kevin.dickert@faa.gov; telephone (781) 238-7117; fax (781) 238-7199, for more information about this AD.

Material Incorporated by Reference

(i) None.

Issued in Burlington, Massachusetts, on May 24, 2010.
Peter A. White,
Assistant Manager, Engine and Propeller Directorate,
Aircraft Certification Service.