

[Federal Register: April 2, 2010 (Volume 75, Number 63)]
[Rules and Regulations]
[Page 16664-16666]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr02ap10-10]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2009-0302; Directorate Identifier 2009-NE-09-AD; Amendment 39-16245; AD 2009-08-08R1]

RIN 2120-AA64

Airworthiness Directives; Turbomeca ARRIEL 1B, 1D, 1D1, 2B, and 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:

During production of Arriel 1 and Arriel 2 Power Turbine (PT) wheels, geometric non-conformances on blade fir tree roots have been detected by Turboméca. Potentially non-conforming PT blades have been traced as having been installed on Module M04 (PT) listed in Mandatory Service Bulletin (MSB) A292 72 0827 for Arriel 1 engines and A292 72 2833 for Arriel 2 engines.

The geometric non-conformities of the blades may potentially lead to a reduction in the fatigue resistance of PT blades to a lower level than their authorized in service use limit. This reduction of fatigue resistance can potentially result in blade release, which could cause an uncommanded in-flight shutdown.

We are issuing this AD to prevent release of PT blades, which could result in an uncommanded in-flight shutdown and emergency autorotation landing.

DATES: This AD becomes effective May 7, 2010. The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of May 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 and 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 December 23, 2009 (74 FR 68194). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

Since issuance of initial version of AD 2009-0112 additional information is available:

–The list of Modules M04 concerned by the restriction of the cycle use limit of these PT blades has been updated again: The serial numbers of Modules M04 which have been retrofitted are crossed out. However, no new affected Modules M04 have been identified. See figure 1 of the referenced Turboméca MSB.

–Additional testing and analysis had been carried out by Turboméca which allows increasing the cyclic use limit of these PT blades to 5 000 flight cycles.

Therefore this AD revises AD 2009-0112 and requires establishing the cyclic use limit of these PT blades to 5 000 flight cycles.

For PT blades having reached a number of flight cycles superior or equal to 5 000, removal of Module M04, or PT wheel assembly, or PT blades is required prior to next flight.

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 will affect about 10 products of U.S. registry. We also estimate that it will take about 8 work-hours per product to comply with this AD.

The average labor rate is \$80 per work-hour. Required parts will cost about \$43,000 per product. Based on these figures, we estimate the cost of the AD on U.S. operators to be \$436,400.

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 removing amendment 39-15881, and adding the following new AD:



2009-08-08R1 Turbomeca S.A.: Amendment 39-16245. Docket No. FAA-2009-0302; Directorate Identifier 2009-NE-09-AD.

Effective Date

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

Affected ADs

- (b) This AD revises AD 2009-08-08, Amendment 39-15881.

Applicability

- (c) This AD applies to:

(1) Turbomeca Arriel 1B, 1D, and 1D1 turboshaft engines with the power turbine (PT) modules M04 installed, as listed by serial number (S/N) in Figure 1 of Turbomeca Alert Mandatory Service Bulletin (MSB) No. A292 72 0827, Version C, dated July 15, 2009; and

(2) Turbomeca Arriel 2B and 2B1 turboshaft engines with the power turbine modules M04 installed, as listed by S/N in Figure 1 of Turbomeca Alert MSB No. A292 72 2833, Version C, dated July 15, 2009.

(3) These engines are installed on, but not limited to, Eurocopter AS 350 B, AS 350 BA, AS 350 B1, AS 350 B2, AS 350 B3, and EC 130 B4 helicopters.

Reason

- (d) European Aviation Safety Agency (EASA) AD No. 2009-0112R1, dated July 30, 2009, states:

Since issuance of initial version of AD 2009-0112 additional information is available:

–The list of Modules M04 concerned by the restriction of the cycle use limit of these PT blades has been updated again: The serial numbers of Modules M04 which have been retrofitted are crossed out. However no new affected Modules M04 have been identified. See figure 1 of the referenced Turboméca MSB.

–Additional testing and analysis had been carried out by Turboméca which allows increasing the cyclic use limit of these PT blades to 5,000 flight cycles.

We are issuing this AD to prevent release of PT blades, which could result in an uncommanded in-flight shutdown and emergency autorotation landing.

Actions and Compliance

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

- (1) For engines with an affected Module M04 (PT module), which has accumulated 5,000 total PT cycles or more on the effective date of this AD, remove the PT blades from service before further flight.
- (2) For engines with an affected Module M04, which has accumulated fewer than 5,000 total PT cycles on the effective date of this AD, remove the PT blades from service before accumulating 5,000 total PT cycles.
- (3) After the effective date of this AD, do not install any PT blades removed as specified in paragraph (e)(1) or (e)(2) of this AD, into any engine.

FAA AD Differences

(f) Although the compliance section of EASA AD No. 2009-0112R1, dated July 30, 2009, states to replace the Module M04, or PT wheel assembly, or PT blades, this AD states to remove the PT blades from service.

(g) Although EASA AD No. 2009-0112R1, dated July 30, 2009, applies to the Arriel 2B1A engine, this AD does not apply to that model because it has no U.S. type certificate.

Other FAA AD Provisions

(h) 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

(i) Refer to MCAI EASA Airworthiness Directive 2009-0112R1, dated July 30, 2009, for related information.

(j) Contact Kevin Dickert, Aerospace Engineer, Engine Certification Office, FAA, Engine and 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

(k) You must use the service information specified in Table 1 of this AD 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 Turbomeca, 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>.

Table 1 – Material Incorporated by Reference

Service Bulletin No.	Page	Revision	Date
Mandatory Service Bulletin A292 72 0827	All	Version C	July 15, 2009
Mandatory Service Bulletin A292 72 2833	All	Version C	July 15, 2009

Issued in Burlington, Massachusetts, on March 16, 2010.

Francis A. Favara,
Manager, Engine and Propeller Directorate,
Aircraft Certification Service.