[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2010-0710; Directorate Identifier 2010-NE-26-AD; Amendment 39-16892; AD 2011-26-02]

RIN 2120-AA64

Airworthiness Directives; Turbomeca Arriel 1 Series 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 was prompted by Turbomeca restoring all or part of the life limits of the affected discs, and European Aviation Safety Agency's (EASA) issuance of AD 2010-0101R2, dated March 24, 2011, to do the same. Turbomeca has introduced a reinforced eddy-current inspection (ECI) which, combined with a revised analysis, allows the life limit of the affected discs to be extended. We are issuing this revision to prevent failure of the gas generator (GG) second stage turbine disc which could result in the release of high energy debris and damage to the helicopter.

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, 40220 Tarnos, France; phone: 33 05 59 74 40 00; fax: 33 05 59 74 45 15; email: noria-dallas@turbomeca.com. 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: Frederick Zink, Aerospace Engineer, Engine Certification Office, FAA, 12 New England Executive Park, Burlington, MA; phone: 781-238-7779; fax: 781-238-7199; e-mail: frederick.zink@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to revise AD 2010-19-06, amendment 39-16434 (75 FR 57371, September 21, 2010). That AD applies to the specified products. The NPRM published in the Federal Register on July 19, 2011 (76 FR 42610). That NPRM proposed to require removing GG second stage turbine discs, P/N 0 292 25 040 0, that do not have the "CFR" marking, from service before exceeding 4,000 cycles-in-service (CIS) since-new. That NPRM also proposed to require removing GG second stage turbine discs, P/N 0 292 25 040 0, that have the "CFR" marking, from service before exceeding 6,500 CIS since-new.

That NPRM was prompted by Turbomeca restoring all or part of the life limits of the affected discs, per EASA's issuance of AD 2010-0101R2, dated March 24, 2011, to do the same. Turbomeca's reinforced ECI provides a lower (improved) detection threshold for metallurgical non-conformities. This reinforced ECI, combined with a revised analysis, allows the life limit of the post-TU347 GG second stage turbine discs identified as "CFR" to be extended to 6,500 CIS since-new. Further, as a result of this

testing and analysis, the non-CFR 2nd stage turbine discs pre-TU347 inspection disc life has been extended to 4,000 CIS since-new. This new AD still prevents disc failure but also extends the life limits of the affected discs. We are issuing this revision to prevent failure of the GG second stage turbine disc which could result in the release of high energy debris and damage to the helicopter.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (76 FR 42610, July 19, 2011) or on the determination of the cost to the public.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting the AD as proposed except for minor clarifications. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (76 FR 42610, July 19, 2011) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (76 FR 42610, July 19, 2011).

Costs of Compliance

We estimate that this AD will affect 203 Turbomeca Arriel 1 series turboshaft engines on helicopters of U.S. registry. We estimate that no additional labor costs will be incurred to return part of the life limit of the discs that do not have the "CFR" marking to the original published life limit. Based on these figures, we estimate the total cost of this AD to U.S. operators to be $0.

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) 2010-19-06, Amendment 39-16434 (75 FR 57371, September 21, 2010), and adding the following new AD:

2011-26-02 **Turbomeca:** Amendment 39-16892; Docket No. FAA-2010-0710; Directorate Identifier 2010-NE-26-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 revises AD 2010-19-06, Amendment 39-16434.

(c) **Applicability**

This AD applies to Turbomeca Arriel 1A, 1A1, 1B, 1C, 1C1, 1C2, 1D, 1D1, and 1S1 turboshaft engines that have incorporated Modification TU347.

(d) **Unsafe Condition**

This AD was prompted by Turbomeca restoring all or part of the life limits of the affected discs. We are issuing this AD to prevent failure of the gas generator (GG) second stage turbine disc which could result in the release of high energy debris and damage to the helicopter.

(e) **Compliance**

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

(2) Remove from service the GG second stage turbine discs, part number (P/N) 0 292 25 040 0, that do not have the "CFR" marking before exceeding 4,000 cycles-in-service (CIS) since-new.

(3) Remove from service gas generator second stage turbine discs, P/N 0 292 25 040 0, that have the "CFR" marking before exceeding 6,500 CIS since-new.

(f) **Gas Generator Second Stage Turbine Installation Prohibition**

(1) After the effective date of this AD, do not install into any engine gas generator second stage turbine discs, P/N 0 292 25 040 0, that do not have the "CFR" marking and have 4,000 or more CIS since-new.

(2) After the effective date of this AD, do not install into any engine gas generator second stage turbine discs, P/N 0 292 25 040 0, that have the "CFR" marking and have 6,500 or more CIS since-new.

(g) **Alternative Methods of Compliance (AMOCs)**

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

(h) **Related Information**

(1) Refer to Turbomeca Alert Mandatory Service Bulletin No. A292 72 0831, Version C, for related information. Contact Turbomeca, 40220 Tarnos, France; phone: 33 05 59 74 40 00; fax: 33 05 59 74 45 15; or e-mail: noria-dallas@turbomeca.com for a copy of this service information.

(2) 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.

(3) For more information about this AD, contact Frederick Zink, Aerospace Engineer, Engine Certification Office, FAA, 12 New England Executive Park,

Burlington, MA 01803; phone: 781-238-7779; fax: 781-238-7199; e-mail: frederick.zink@faa.gov.

(i) **Material Incorporated by Reference**

None.

Issued in Burlington, MA, on December 5, 2011.

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

[FR Doc. 2011-31797 Filed 12/12/2011 at 8:45 am; Publication Date: 12/13/2011]