[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1131; Directorate Identifier 2012-NE-34-AD]

RIN 2120-AA64

Airworthiness Directives; Turbomeca S.A. Turboshaft Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Turbomeca S.A. Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, and 1S1 turboshaft engines. This proposed AD was prompted by a finding that the engine's tachometer unit cycle counting feature is unreliable. This proposed AD would require daily post-flight checks of the engine tachometer's unit cycle counting feature. This proposed AD would also require ground-run functional checks within every 1,000 operating hours. This proposed AD was prompted by detailed analysis and review of the accuracy of the engine's tachometer cycle counting feature. We are proposing this AD to prevent uncontained engine failure and damage to the helicopter.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 days AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov and follow the instructions for sending your comments electronically.

- Mail: Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- Fax: 202-493-2251.

For service information identified in this proposed 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 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; 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 proposed AD, the regulatory evaluation, any comments received and other information. The street address for the Docket Operations office (phone: 800-647-5527) is the same as the Mail address provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Sanjana Murthy, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7750; fax: 781-238-7199; e-mail: sanjana.murthy@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2012-1131; Directorate Identifier 2012-NE-34-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD. Using the search function of the Web site, anyone can find and read the comments in any of our dockets, including, if provided, the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78).

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2012-0187, dated September 18, 2012 (referred to hereinafter as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

> Following detailed analysis and review of in-service feedback performed by Turbomeca on the Arriel 1 engines, the chapter 05-10 Airworthiness Limitation Section (ALS) of Arriel 1 Maintenance Manuals has been updated in order to clarify the definition and update the requirements relative to the cycle counting aid system (modification introduced in production by Turbomeca modification TU207 or TU243 and in-service, respectively, by Turbomeca Service Bulletin (SB) 292 80 0190 or SB 292 80 0168), add associated maintenance tasks, and modify the Power Turbine (PT) partial cycle counting method.

The SBs referenced above introduced the tachometer. The tachometer's cycle counting feature, in some instances, produced results inconsistent with ground run checks. The inaccurate cycle counting results of the tachometer can lead to exceeding life limits on critical rotating parts, which can cause uncontained engine failure. Further information may be obtained by examining the MCAI in the AD docket.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of France and is approved for operation in the United States. Pursuant to our bilateral agreement with the European Community, EASA has notified us of the unsafe condition described in the MCAI referenced above. We are proposing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This proposed AD would require daily post-flight checks of the engine tachometer's unit cycle counting feature. This proposed AD would also require ground-run functional checks within every 1,000 operating hours.

Costs of Compliance

We estimate that this proposed AD would affect about 1,420 engines installed in helicopters of U.S. registry. We also estimate that it would take about 30 minutes per engine to perform a check of the engine's tachometer unit cycle counting feature and that an average of 320 checks would be required per year. Based on the average annual operating hours for an engine, a 1,000 operating hour functional check would not be required for at least one year. The average labor rate is $85 per hour. No parts would be required. Based on these figures, we estimate the average total cost of the proposed AD on U.S. operators to perform checks of the tachometer cycle counting unit for a year, is $19,312,000.

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 proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 proposed regulation:

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 proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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 adding the following new AD:

Turbomeca S.A.: Docket No. FAA-2012-1131; Directorate Identifier 2012-NE-34-AD.

(a) Comments Due Date

We must receive comments by [insert date 60 days after date of publication in the FEDERAL REGISTER].

(b) Affected Airworthiness Directives (ADs)

None.

(c) Applicability

This AD applies to Turbomeca S.A. Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, and 1S1 turboshaft engines that have incorporated Modification TU 207 or TU 243, or have incorporated Turbomeca Service Bulletin (SB) No. 292 80 0168 or SB No. 292 80 0190.

(d) Reason

This AD was prompted by detailed analysis and review of the accuracy of the engine's tachometer cycle counting feature. We are issuing this AD to prevent uncontained engine failure and damage to the helicopter.

(e) Actions and Compliance

(1) During the post flight maintenance inspection after the last flight of each day, compare the cycles counted by the engine's tachometer unit with the cycles counted by the primary counting method.

(2) If the numbers are different, use the primary counting method thereafter to determine all cycle counts. Do not use the values from the tachometer unit cycle counting feature.

(3) If the engine tachometer cycle counting feature remains accurate, then every 1,000 operating hours, perform a ground-run functional check of the tachometer unit cycle counting feature. If the counting feature fails the check, thereafter use only the primary cycle counting method to count cycles.

(4) If the tachometer is replaced, follow instructions in paragraphs (e)(1), (e)(2), and (e)(3) of this AD.

(f) 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.

(g) Related Information

(1) For more information about this AD, contact Sanjana Murthy, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7750; fax: 781-238-7199; e-mail: sanjana.murthy@faa.gov.

(2) Refer to European Aviation Safety Agency AD 2012-0187, dated September 18, 2012, and Turbomeca S.A. Service Bulletin (SB) No. 292 80 0168 and SB No. 292 80 0190, for related information.

(3) 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 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.

Issued in Burlington, Massachusetts, on December 3, 2012.

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

[FR Doc. 2012-29871 Filed 12/10/2012 at 8:45 am; Publication Date: 12/11/2012]