



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0838; Product Identifier 2017-NE-33-AD]

RIN 2120-AA64

Airworthiness Directives; Safran Helicopter Engines, 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 all Safran Helicopter Engines, S.A., Arriel 2E turboshaft engines. This proposed AD was prompted by reports of ruptured front support pins on the accessory gearbox front support. This proposed AD would require replacement of the accessory gearbox front support. We are proposing this AD to address the unsafe condition on these products.

DATES: We must receive comments on this NPRM by [INSERT DATE 45 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>. Follow the instructions for submitting comments.
- 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 Safran Helicopter Engines, S.A., 40220 Tarnos, France; phone: (33) 05 59 74 40 00; fax: (33) 05 59 74 45

15. You may view this service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, 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-2017-0838; 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 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 in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Robert Green, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: robert.green@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2017-0838; Product Identifier 2017-NE-33-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM because of 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 NPRM.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD No. 2016-0235, dated November 24, 2016 (referred to hereinafter as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

Some cases were reported of ruptured front support pins on ARRIEL 1E2 engines. That condition, if not detected and corrected, could lead to the loss of the load path integrity of the engine front support. Consequently, Turboméca issued Mandatory Service Bulletin (MSB) 292 72 0842 to provide instructions for the inspection of the pins and front support replacement, and EASA issued AD 2015-0064 (later revised) to require those actions. Since EASA AD 2015-0064R1 was issued, SAFRAN Helicopter Engines

developed a new pin design, in order to increase the mechanical strength of the pin, through modification TU380, for ARRIEL 1E2 engines. Although no cases of front support pin rupture have been reported on ARRIEL 2E engines, since the ARRIEL 1E2 and 2E type designs have the same front support, SAFRAN Helicopter Engines decided to also apply this new pin design on ARRIEL 2E engines through modification TU197. To address this potential unsafe condition, SAFRAN Helicopter Engines decided, as precautionary measure, to replace the front support on ARRIEL 2E engines, and published MSB 292 72 2197 to provide instructions for in-service front support replacement. For the reasons described above, this AD requires modification of the affected engines by replacement of each pre-mod TU197 front support.

You may obtain further information by examining the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0838.

Related Service Information

We reviewed Safran Helicopter Engines, S.A., Mandatory Service Bulletin (MSB) No. 292 72 2197, Version A, dated September 15, 2016. The MSB describes procedures for replacement of the accessory gearbox front support. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

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. 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 for replacement of the accessory gearbox front support.

Costs of Compliance

We estimate that this proposed AD affects 28 engines installed on aircraft of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Front support replacement	2 work-hours X \$85 per hour = \$170	\$19,731	\$19,901	\$557,228

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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In

accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to engines, propellers, and associated appliances to the Manager, Engine and Propeller Standards Branch, Policy and Innovation Division.

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),
- (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.

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 airworthiness directive (AD):

Safran Helicopter Engines, S.A. (Type Certificate previously held by Turbomeca, S.A): Docket No. FAA-2017-0838; Product Identifier 2017-NE-33-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Safran Helicopter Engines S.A. Arriel 2E turboshaft engines with front support, part number 0 292 11 715 0, installed (pre-mod TU 197 configuration).

(d) Subject

Joint Aircraft System Component (JASC) Code 8300, Accessory Gearboxes.

(e) Reason

This AD was prompted by reports of ruptured front support pins on the accessory gearbox front support. We are issuing this AD to prevent failure of a front support, loss of engine thrust control and reduced control of the helicopter.

(f) Compliance

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

(g) Required Actions

Before the accessory gearbox and transmission shaft module (Module 01) accumulates 1,600 engine operating hours since new, or within 80 engine operating hours after the effective date of this AD, whichever occurs later, replace the front support with a part eligible for installation.

(h) Definition

For the purpose of this AD, a part eligible for installation is a Module 01 with a pre-mod TU 197 front support, that has not accumulated more than 1,680 engine operating hours since new; or a Module 01 with a post-mod TU 197 front support.

(i) Installation Prohibition

As of the effective date of this AD, you may not install a pre-mod TU 197 front support on any engine with a post-mod TU 197 front support installed.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, FAA, ECO Branch, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ECO Branch, send it to the attention of the person identified in paragraph (k)(1) of this AD. You may email your request to: ANE-AD-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Related Information

(1) For more information about this AD, contact Robert Green, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: robert.green@faa.gov.

(2) Refer to MCAI EASA AD 2016-0235, dated November 24, 2016, for more information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2017-0838.

Issued in Burlington, Massachusetts, on October 24, 2017.

Robert J. Ganley,
Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.

[FR Doc. 2017-23606 Filed: 11/2/2017 8:45 am; Publication Date: 11/3/2017]