



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0184; Product Identifier 2018-NE-07-AD; Amendment 39-19248; AD 2018-07-17]

RIN 2120-AA64

Airworthiness Directives; Safran Helicopter Engines, S.A., Turboshaft Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Safran Helicopter Engines, S.A., Arrius 2B1, 2B1A, 2B2, and 2K1 turboshaft engines. This AD requires inspecting the power turbine wheel (PTW) assembly and replacing the PTW if the turbine blade dampers are found missing. This AD was prompted by the manufacturer reporting a number of PTW assemblies may have been assembled without the blade dampers. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this final rule, 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 & Propeller Standards Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7759. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0184.

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-2018-0184; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The street address for Docket Operations (phone: 800-647-5527) is listed above. 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:

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2018-0044, dated February 14, 2018 (referred to after this as the MCAI), to address an unsafe condition for the specified products. The MCAI states:

During an ARRIUS 2B2 engine ground run check, the "Degrade" indicator illuminated and unusual vibration occurred. At the same time, bluish smoke and debris came out of the exhaust pipe. Both engines were shut down without further occurrences.

Investigations at Safran Helicopter Engines revealed that missing dampers on the PTW assembly caused rupture of PTW blades. Further investigations identified a batch of potentially affected PTW.

The dampers on the PTW blades reduce the mechanical stress exerted on the blades. With no dampers, mechanical stress on the blades can exceed the vibratory fatigue limit, eventually leading to rupture of the blades.

This condition, if not corrected, could lead to In Flight Shut Down and release of low energy debris through exhaust pipe, potentially resulting in forced landing, damage to the helicopter and injury to occupants.

To address this potential unsafe condition, Safran Helicopter Engines issued the SB to provide instructions for inspection and PTW replacement.

For the reasons described above, this [EASA] AD requires replacement of potentially affected PTWs with serviceable parts.

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-2018-0184.

Related Service Information under 1 CFR Part 51

We reviewed Safran Helicopter Engines Alert Mandatory Service Bulletin (MSB) No. A319 72 2854, Version A, dated February 9, 2018. The MSB describes procedures for replacing the PTW. 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

This product has been approved by 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 and service information referenced above. We are issuing this AD because we evaluated all the relevant information provided by EASA and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

AD Requirements

This AD requires inspecting the PTW assembly and replacing the PTW if the turbine blade dampers are found missing.

FAA's Justification and Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because the compliance time for the action is less than the time required for public comment. EASA made a determination of an unsafe condition warranting regulatory action and compliance within 20 flight hours or 30 days. Therefore, we find good cause that notice and opportunity for prior public comment are impracticable. In addition, for the reason stated above, we find that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, we invite you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2018-0184 and Product Identifier 2018-NE-07-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this final rule. We will consider all comments received by the closing date and may amend this final rule 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 we receive about this final rule.

Costs of Compliance

We estimate that this AD affects 46 engines installed on helicopters of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Records Search	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$3,910

We estimate the following costs to do any necessary replacements that would be required based on the results of the mandated inspection. We have no way of determining the number of aircraft that might need these replacements:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
PTW replacement	16 work-hours X \$85 per hour = \$1,360	\$16,500	\$17,860

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 Manager, Engine and Propeller Standards Branch, Policy and Innovation Division.

Regulatory Findings

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),
- (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 adding the following new airworthiness directive (AD):

2018-07-17 **Safran Helicopter Engines (Type Certificate previously held by Turbomeca, S.A.):** Amendment 39-19248; Docket No. FAA-2018-0184; Product Identifier 2018-NE-07-AD.

(a) Effective Date

This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Safran Helicopter Engines, S.A., Arrius 2B1, 2B1A, 2B2, and 2K1 turboshaft engines with a power turbine wheel (PTW) assembly having a serial number listed in Appendix 2.1 of Safran Helicopter Engines Mandatory Service Bulletin (MSB) No. A319 72 2854, Version A, dated February 9, 2018.

(d) Subject

Joint Aircraft System Component (JASC) Code 7250, Turbine Section.

(e) Unsafe Condition

This AD was prompted by an engine failure caused by missing turbine blade dampers. We are issuing this AD to prevent failure of a power turbine blade. The unsafe condition, if not addressed, could result in loss of engine power in flight and reduced control of the helicopter.

(f) Compliance

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

(g) Required Actions

Within 20 flight hours or 30 days after the effective date of this AD, whichever occurs first:

(1) Inspect the PTW in accordance with paragraph 2.4.2.3 of Safran Helicopter Engines MSB No. A319 72 2854, Version A, dated February 9, 2018; and

(2) If, as a result of the inspection required by paragraph (g)(1) of this AD, any dampers are found missing, replace the PTW with a part eligible for installation before further flight.

(h) Installation Prohibition

Do not install an engine with a PTW with a serial number listed in Appendix 2.1 of Safran Helicopter Engines MSB A319 72 2854, Version A, dated February 9, 2018, unless all thirty-one blade dampers are installed.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, ECO Branch, FAA, 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 certification office, send it to the attention of the person identified in paragraph (j)(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.

(j) 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 European Aviation Safety Agency (EASA) AD 2018-0044, dated February 14, 2018, for more information. You may examine the EASA AD in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2018-0184.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Safran Helicopter Engines Alert Mandatory Service Bulletin No. A319 72 2854, Version A, dated February 9, 2018.

(ii) Reserved.

(3) For Safran Helicopter Engines service information identified in this AD, contact Safran Helicopter Engines, S.A., 40220 Tarnos, France; phone: (33) 05 59 74 40 00; fax: (33) 05 59 74 45 15.

(4) You may view this service information at FAA, Engine & Propeller Standards Branch, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7759.

(5) You may view this service information that is incorporated by reference 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>.

Issued in Burlington, Massachusetts, on April 6, 2018.

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

[FR Doc. 2018-07541 Filed: 4/11/2018 8:45 am; Publication Date: 4/12/2018]