[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2024-2552; Project Identifier MCAI-2022-01243-R; Amendment 39-23019; AD 2025-08-06]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is superseding Airworthiness Directive (AD) 2021-09-14 which applied to certain Airbus Helicopters (Airbus) Model SA330J helicopters. AD 2021-09-14 required repetitively inspecting for a gap between the main gearbox (MGB) oil cooling fan assembly (fan) rotor blade and the upper section of the guide vane bearing housing, installing improved MGB fan rotor shaft bearings, and repetitively inspecting the improved MGB fan rotor shaft bearings. Since the FAA issued AD 2021-09-14, Airbus has developed modifications to the components of the MGB fan bearing assembly and issued new material regarding these modifications. This AD retains the actions required by AD 2021-09-14 and also requires installing the improved MGB fan rotor bearing assembly, which constitutes terminating action for the repetitive inspections. These actions are specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 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 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:**

*AD Docket*: You may examine the AD docket at regulations.gov under Docket No. FAA-2024-2552; 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), any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

*Material Incorporated by Reference:*

• For EASA material identified in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu; website: easa.europa.eu. You may find this material on the EASA website at ad.easa.europa.eu.

• You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Parkway, Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at regulations.gov under Docket No FAA-2024-2552.

**FOR FURTHER INFORMATION CONTACT:** Hal Jensen, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (303) 342-1080; email: hal.jensen@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Background**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2021-09-14, Amendment 39-21528 (86 FR 26829, May 18, 2021) (AD 2021-09-14). AD 2021-09-14 applied to Airbus Model SA330J helicopters with MGB fan rotor shaft bearings (both rear and front) part number (P/N) 704A33651114 (manufacturer P/N (MP/N) 205FFTX74K6-G33) or P/N 704A33651268 (MP/N 594918) installed. AD 2021-09-14 required repetitively inspecting for a gap between the MGB fan rotor blade and the upper section of the guide vane bearing housing and, depending on the results or within a specified compliance time, installing improved MGB fan rotor shaft bearings and repetitively inspecting the improved MGB fan rotor shaft bearings. The FAA issued AD 2021-09-14 to prevent rotor burst of the MGB fan, damage to the hydraulic lines and flight controls, and subsequent loss of control of the helicopter.

The NPRM published in the *Federal Register* on December 10, 2024 (89 FR 99169). The NPRM was prompted by EASA AD 2022-0191, dated September 15, 2022 (EASA AD 2022-0191) (also referred to as the MCAI) issued by EASA, which is the Technical Agent for the Member States of the European Union. The MCAI states that Airbus has developed modifications (mod) 0776102 and mod 0776104, which introduce a new Kevlar protection on the fan bearing rectifier and a new flexible duct. Additionally, Airbus issued revised material to provide in-service modification instructions.

In the NPRM, the FAA proposed to retain all the requirements of AD 2021-09-14 and require accomplishing the actions specified in EASA AD 2022-0191 except for any

differences identified as exceptions in the regulatory text of this AD and except as discussed under "Differences Between this AD and EASA AD 2022-0191." You may examine the MCAI in the AD docket at regulations.gov under Docket No. FAA-2024-2552.

**Discussion of Final Airworthiness Directive**

**Comments**

The FAA received no comments on the NPRM or on the determination of the costs.

**Conclusion**

These products have been approved by the aviation authority of another country and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. Except for minor editorial changes, this AD is adopted as proposed in the NPRM.

**Material Incorporated by Reference under 1 CFR Part 51**

The FAA reviewed EASA AD 2022-0191, which requires repetitively inspecting for play (a gap) on the MGB fan rotor shaft bearings (both rear and front) between the MGB fan rotor blade and the upper section of the guide vane bearing housing. If there is play that does not meet the minimum requirement or at a specified compliance time, EASA AD 2022-0191 requires replacing the affected MGB fan rotor shaft bearings with serviceable MGB fan rotor shaft bearings (both rear and front) as defined in EASA AD 2022-0191. Additionally, EASA AD 2022-0191 allows credit for performing these inspections and corrective action, provided specific requirements are met.

EASA AD 2022-0191 also requires modifying the MGB fan bearing assembly, which would constitute terminating action for the repetitive inspections.

Lastly, EASA AD 2022-0191 only allows installing serviceable MGB fan rotor shaft bearings as defined in EASA AD 2022-0191 and installing an improved MGB fan bearing assembly as defined in EASA AD 2022-0191.

This material 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.

**Differences Between this AD and EASA AD 2022-0191**

The inspection material referenced in EASA AD 2022-0191 specifies returning certain parts to the manufacturer, whereas this AD requires removing those parts from service instead. The inspection material referenced in EASA AD 2022-0191 specifies completing a response form, whereas this AD does not require that action.

The modification material referenced in EASA AD 2022-0191 specifies sending the fan-bearing assembly to an approved D-level maintenance center for modification, whereas this AD requires installing modification 0776102, and as applicable, modification 0725373.

**Costs of Compliance**

The FAA estimates that this AD affects 6 helicopters of U.S. Registry. Labor rates are estimated at $85 per work-hour. Based on these numbers, the FAA estimates that operators may incur the following costs in order to comply with this AD.

Inspecting for a gap between the MGB fan rotor blade and the upper section of the guide vane bearing housing takes 2 work-hours for an estimated cost of $170 per helicopter and $1,020 for the U.S. fleet, per inspection cycle.

Replacing the MGB fan rotor shaft bearings takes 6 work-hours and parts cost $1,938 for an estimated cost of $2,448 per helicopter and $14,688 for the U.S. fleet.

Removing the flexible duct, installing new flexible duct MOD 0776104, removing the fan-bearing assembly, and installing the modified fan-bearing assembly takes 8 work-hours and parts cost $10,000 for an estimated cost of $10,680 per helicopter and $64,080 for the U.S. fleet.

**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.

The FAA is 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**

The FAA has 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) Will not affect intrastate aviation in Alaska, 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.

**List of Subjects in 14 CFR Part 39**

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

**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:

a. Removing Airworthiness Directive AD 2021-09-14, Amendment 39-21528 (86 FR 26829, May 18, 2021); and

b. Adding the following new airworthiness directive:

**2025-08-06 Airbus Helicopters**: Amendment 39-23019; Docket No. FAA-2024-2552; Project Identifier MCAI-2022-01243-R.

**(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 replaces AD 2021-09-14, Amendment 39-21528 (86 FR 26829, May 18, 2021) (AD 2021-09-14).

**(c) Applicability**

This AD applies to Airbus Helicopters Model SA330J helicopters, certificated in any category.

**(d) Subject**

Joint Aircraft System Component (JASC) Code 6322, Main Gearbox Oil Cooler.

**(e) Unsafe Condition**

This AD was prompted by the development of a modification for an improved main gearbox (MGB) fan rotor bearing assembly. The FAA is issuing this AD to prevent rotor burst of the MGB fan, damage to the hydraulic lines and flight controls, and subsequent loss of control of the helicopter.

**(f) Compliance**

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

**(g) Requirements**

Except as specified in paragraphs (h) and (i) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2022-0191, dated September 15, 2022 (EASA AD 2022-0191).

**(h) Exceptions to EASA AD 2022-0191**

(1) Where EASA AD 2022-0191 refers to August 11, 2020 (the effective date of EASA AD 2020-0171, dated July 28, 2020) and to its effective date, this AD requires using the effective date of this AD.

(2) Where EASA AD 2022-0191 refers to flight hours (FH), this AD requires using hours time-in-service.

(3) Where the inspection ASB material referenced in EASA AD 2022-0191 specifies to return certain parts to Airbus Helicopters, this AD requires removing those parts from service.

(4) Where the inspection ASB material referenced in EASA AD 2022-0191 specifies completing the response form in Appendix 4, this AD does not require that action.

(5) Where the modification ASB material referenced in EASA AD 2022-0191 specifies "sending the fan-bearing assembly to an approved D-level maintenance center to integrate modification 0776102 and where applicable, modification 0725373," this AD requires replacing that text with "installing modification 0776102, and as applicable, modification 0725373."

(6) This AD does not adopt the "Remarks" section of EASA AD 2022-0191.

**(i) No Reporting Requirement**

Although the material referenced in EASA AD 2022-0191 specifies to submit certain information to the manufacturer, this AD does not require that action.

**(j) Special Flight Permits**

Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the helicopter to a location where the actions of this AD can be performed, provided there are no passengers onboard.

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

(1) The Manager, International Validation 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 International Validation Branch, send it to the attention of the person identified in paragraph (l) of this AD. Information may be emailed to: 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.

**(l) Additional Information**

For more information about this AD, contact Hal Jensen, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (303) 342-1080; email: hal.jensen@faa.gov.

**(m) Material Incorporated by Reference**

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

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

(i) European Union Aviation Safety Agency (EASA) AD 2022-0191, dated September 15, 2022.

(ii) [Reserved]

(3) For EASA material identified in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu; website: easa.europa.eu. You may find the EASA material on the EASA website at ad.easa.europa.eu.

(4) You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Parkway, Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.

Issued on May 1, 2025.

Steven W. Thompson,
Acting Deputy Director, Compliance & Airworthiness Division,
Aircraft Certification Service.
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