DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0092; Project Identifier MCAI-2020-01501-R]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters (Type Certificate Previously Held by Eurocopter France) Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede Airworthiness Directive (AD) 2010-16-51, which applies to certain Eurocopter France (now Airbus Helicopters (Airbus)) Model SA330J helicopters. AD 2010-16-51 requires 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 and depending on the results, replacing the two fan rotor shaft bearings with two airworthy bearings. Since the FAA issued AD 2010-16-51, Airbus has developed an improved MGB fan rotor shaft bearing design. This proposed AD would retain the inspection required by AD 2010-16-51, and propose installing improved MGB fan rotor shaft bearings and repetitively inspecting the new improved MGB fan rotor shaft bearings, as specified in a European Union Aviation Safety Agency (EASA) AD, which is proposed for incorporation by reference (IBR). The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed 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 https://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: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For EASA material that is proposed for IBR in this AD, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this material on the EASA website at https://ad.easa.europa.eu. You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., 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 in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0092.

Examining the AD Docket

You may examine the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0092; 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 NPRM, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Mahmood Shah, Aerospace Engineer, Certification Section, Fort Worth ACO Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5538; email Mahmood.g.shah@faa.gov.
SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2021-0092; Project Identifier MCAI-2020-01501-R” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to https://www.regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this proposal.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Mahmood Shah, Aerospace Engineer, Certification Section, Fort Worth ACO Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5538; email
Discussion

The FAA issued AD 2010-16-51, Amendment 39-16410 (75 FR 53857, September 2, 2010) (AD 2010-16-51), which applies to all Eurocopter France (now Airbus) Model SA330J helicopters. AD 2010-16-51 requires, using a 0.2 millimeter (mm) (0.008 inch) feeler gauge attached to a rigid rod, inspecting for a gap between a fan rotor blade and the upper section of the guide vane bearing housing over the entire width of the blade. If the feeler gauge can be inserted between the blade and the housing (a gap greater than or equal to 0.2 mm), AD 2010-16-51 requires no further action. If the feeler gauge cannot be inserted between the blade and the housing (a gap less than 0.2 mm), AD 2010-16-51 requires replacing the two fan rotor shaft bearings with two airworthy bearings and re-inspecting for the minimum gap. The FAA issued AD 2010-16-51 to prevent rotor burst of the MGB fan, damage to the hydraulic lines and flight controls, and subsequent loss of control of the helicopter.

Actions Since AD 2010-16-51 Was Issued

Since the FAA issued AD 2010-16-51, Airbus has developed an improved MGB fan rotor shaft bearing design and issued new service information.

Accordingly, the EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2020-0171, dated July 28, 2020 (EASA AD 2020-0171), to correct an unsafe condition for all Airbus Helicopters, Eurocopter, Eurocopter France, Aérospatiale, Sud Aviation Model SA 330 J helicopters.

This proposed AD was prompted by the newly developed MGB fan rotor shaft bearing design. The FAA is proposing 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. See the EASA AD for additional background information.
Further, since the FAA issued AD 2010-16-51, Eurocopter France changed its name to Airbus Helicopters. This proposed AD reflects that change.

**Related Service Information Under 1 CFR Part 51**

For MGB fan rotor shaft bearings (both rear and front) part number (P/N) 704A33651114 (manufacturer P/N (MP/N) 205FFTX74K6-G33) and MGB fan rotor shaft bearings (both rear and front) P/N 704A33651268 (MP/N 594918), EASA AD 2020-0171 describes procedures for inspecting for play (a gap) 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, the EASA AD requires replacing the affected MGB fan rotor shaft bearings with MGB fan rotor shaft bearings (both rear and front) P/N 704A33651268 (MP/N 594918).

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.

**FAA’s Determination and Requirements of this Proposed AD**

These products have been approved by the aviation authority of another country, and are approved for operation in the United States. Pursuant to the bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the EASA AD referenced above. The FAA is proposing this AD after evaluating all the relevant information and determining the unsafe condition described previously is likely to exist or develop in other products of the same type design.

**Explanation of Retained Requirements**

Although this proposed AD does not explicitly restate the requirements of AD 2010-16-51, this proposed AD would retain a certain requirement of AD 2010-16-51. This requirement is referenced in EASA AD 2020-0171, which, in turn, is referenced in paragraph (g) of this proposed AD.
Proposed AD Requirements

This proposed AD would require accomplishing the actions specified in EASA AD 2020-0171 described previously, as incorporated by reference, except for any differences identified as exceptions in the regulatory text of this AD and except as discussed under “Differences Between this Proposed AD and the EASA AD.”

Explanation of Required Compliance Information

In the FAA’s ongoing efforts to improve the efficiency of the AD process, the FAA initially worked with Airbus and EASA to develop a process to use certain EASA ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has since coordinated with other manufacturers and civil aviation authorities (CAAs) to use this process. As a result, EASA AD 2020-0171 will be incorporated by reference in the FAA final rule. This proposed AD would, therefore, require compliance with EASA AD 2020-0171 in its entirety, through that incorporation, except for any differences identified as exceptions in the regulatory text of this proposed AD. Using common terms that are the same as the heading of a particular section in the EASA AD does not mean that operators need comply only with that section. For example, where the AD requirement refers to “all required actions and compliance times,” compliance with this AD requirement is not limited to the section titled “Required Action(s) and Compliance Time(s)” in the EASA AD. Service information specified in EASA AD 2020-0171 that is required for compliance with EASA AD 2020-0171 will be available on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0092 after the FAA final rule is published.

Differences Between this Proposed AD and the EASA AD

The EASA AD applies to all Model SA 330 J helicopters, whereas this proposed AD applies to certain Model SA330J helicopters instead. The EASA AD refers to flight
hours, whereas this proposed AD uses hours time-in-service. The EASA AD requires inspecting for play, whereas this proposed AD requires inspecting for a gap instead. The EASA AD requires returning certain parts, whereas this proposed AD requires removing the parts from service instead. The EASA AD requires completing a response form, whereas this proposed AD does not.

**Interim Action**

The FAA considers this proposed AD interim action. If final action is later identified, the FAA might consider further rulemaking then.

**Costs of Compliance**

The FAA estimates that this AD affects 15 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 proposed AD.

Inspecting for a gap between the MGB fan rotor blade and the upper section of the guide vane bearing housing would take about 2 work-hours for an estimated cost of $170 per helicopter and $2,550 for the U.S. fleet, per inspection cycle.

Replacing a set of two bearings would take about 6 work-hours and parts would cost up to about $1,665 for an estimated cost of up to $2,175 per helicopter.

**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 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) 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 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:

   a. Removing Airworthiness Directive (AD) 2010-16-51, Amendment 39-16410 (75 FR 53857, September 2, 2010); and
b. Adding the following new AD:

**Airbus Helicopters (Type Certificate Previously Held by Eurocopter France):**

Docket No. FAA-2021-0092; Project Identifier MCAI-2020-01501-R.

**a) Comments Due Date**

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

**b) Affected Airworthiness Directives (ADs)**

This AD removes AD 2010-16-51, Amendment 39-16410 (75 FR 53857, September 2, 2010).

**c) Applicability**

This AD applies to Airbus Helicopters (type certificate previously held by Eurocopter France) Model SA330J helicopters, certificated in any category, with main gearbox (MGB) oil cooling fan (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.

**d) Subject**

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

**e) Reason**

This AD was prompted by the development of an improved MGB fan rotor shaft bearing design. 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 paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD No. 2020-0171, dated July 28, 2020 (EASA AD 2020-0171).

(h) Exceptions to EASA AD 2020-0171

(1) Where EASA AD 2020-0171 refers to its effective date, this AD requires using the effective date of this AD.

(2) The “Remarks” section of EASA AD 2020-0171 does not apply to this AD.

(3) Where EASA AD 2020-0171 refers to flight hours (FH), this AD requires using hours time-in-service.

(4) Where EASA AD 2020-0171 requires measuring for play, this AD requires measuring the gap between each MGB fan rotor blade and the upper section of the guide vane bearing housing.

(5) Where “The ASB” service information referenced in EASA AD 2020-0171 specifies to return certain parts to Airbus Helicopters, this AD requires removing those parts from service instead.

(6) While “The ASB” service information referenced in EASA AD 2020-0171 specifies completing the response form in Appendix 4, this AD does not contain that requirement.

(i) No Reporting Requirement

Although the service information referenced in EASA AD 2020-0171 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(j) Special Flight Permit

Special flight permits, as described in 14 CFR 21.197 and 21.199, are not allowed.
(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Strategic Policy Rotorcraft Section, 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 Strategic Policy Rotorcraft Section, send it to: Manager, Strategic Policy Rotorcraft Section, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110. Information may be emailed to: 9-ASW-FTW-AMOC-Requests@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) Related Information

(1) For EASA AD 2020-0171, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this EASA AD on the EASA website at https://ad.easa.europa.eu. You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110. This material may be found in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0092.

(2) For more information about this AD, contact Mahmood Shah, Aerospace Engineer, Certification Section, Fort Worth ACO Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5538; email Mahmood.g.shah@faa.gov.