DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters Deutschland GmbH Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for Airbus Helicopters Deutschland GmbH Model MBB-BK117 A-1, MBB-BK117 A-3, MBB-BK117 A-4, MBB-BK117 B-1, MBB-BK117 B-2, MBB-BK117 C-1, and MBB-BK117 C-2 helicopters. This proposed AD would require inspecting the tail gearbox (TGB) bellcrank attachment arm (arm) for a crack. This proposed AD was prompted by a report of a cracked TGB arm. The actions of this proposed AD are intended to address an 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 by any of the following methods:

- Federal eRulemaking Docket: Go to https://www.regulations.gov. Follow the online instructions for sending your comments electronically.
- Fax: 202-493-2251.
• **Mail:** Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.

• **Hand Delivery:** Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

**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-2020-0967; 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 proposed AD, the European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD, 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 service information identified in this proposed rule, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone 972-641-0000 or 800-232-0323; fax 972-641-3775; or at https://www.airbus.com/helicopters/services/technical-support.html. You may view the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177.

**FOR FURTHER INFORMATION CONTACT:** David Hatfield, Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email david.hatfield@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-2020-0967; Product Identifier 2018-SW-013-AD” 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
EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2018-0046, dated February 19, 2018, to correct an unsafe condition for Airbus Helicopters Deutschland GmbH (AHD) (formerly Eurocopter Deutschland GmbH, Eurocopter Hubschrauber GmbH, Messerschmitt-Bölkow-Blohm GmbH), Airbus Helicopters Inc. (formerly American Eurocopter LLC) Model MBB-BK117 A-1, MBB-BK117 A-3, MBB-BK117 A-4, MBB-BK117 B-1, MBB-BK117 B-2, MBB-BK117 C-1, and MBB-BK117 C-2 helicopters. The EASA AD advises that a crack was detected on a Model MBB-BK117 A-4 TGB arm and that this condition, if not corrected, could result in disconnection of the arm from the TGB and possible loss of control of the helicopter. To address this unsafe condition, the EASA AD requires an inspection of the TGB arm for a crack and for surface anomalies.

**FAA’s Determination**

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA’s bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA is proposing this AD after evaluating all known relevant information and determining that
an unsafe condition is likely to exist or develop on other products of the same type
design.

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


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.

**Proposed AD Requirements**

This proposed AD would require the following:

- Within 100 hours time-in-service, removing the surface coating from the TGB bellcrank attachment arm and using a 5X or higher power magnifying glass, dye-penetrant inspecting the TGB arm for a crack and for any dent, nick, and scratch.
  - If there is a crack, before further flight, replacing the TGB.
  - If there is a dent, nick, or scratch, before further flight, removing the surface material up to 0.2 mm using 80-grit abrasive paper and repeating the dye penetrant inspection. If there is a crack or if the damage cannot be removed, before further flight, replacing the TGB.
- If there is no crack and no dent, nick, or scratch, before further flight, finishing the surface with 600-grit or finer abrasive paper.

**Differences between this Proposed AD and the EASA AD**

The EASA AD requires operators to contact Airbus Helicopters if there is a crack or if there is damage that cannot be repaired by removing surface material. This proposed AD would require replacing the TGB instead.

**Costs of Compliance**

The FAA estimates that this proposed AD would affect 177 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.

Removing the surface protection and inspecting the TGB arm for a crack would take about 2 work-hours and the cost of materials would be minimal, for an estimated cost of $170 per helicopter and $30,090 for the U.S. fleet.

If required, reworking the TGB arm would take about 1 work-hour and the cost of materials would be minimal, for an estimated cost of $85 per helicopter. Replacing a TGB with a cracked arm would take about 4.5 work-hours and cost about $69,000 for required parts, for an estimated cost of $69,383 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, 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 adding the following new airworthiness directive:


(a) Applicability

This airworthiness directive (AD) applies to Airbus Helicopters Deutschland GmbH Model MBB-BK117 A-1, MBB-BK117 A-3, MBB-BK117 A-4, MBB-BK117 B-1, MBB-BK117 B-2, MBB-BK117 C-1, and MBB-BK117 C-2 helicopters, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a crack in a tail gearbox (TGB) bellcrank attachment arm. This condition could result in disconnection of the bellcrank attachment arm from the TGB and subsequent loss of control of the helicopter.

(c) Comments Due Date

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

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.
(e) Required Actions

Within 100 hours time-in-service:

(1) Remove the surface coating from the TGB bellerank attachment arm and using a 5X or higher power magnifying glass, dye-penetrant inspect the TGB arm for a crack and for any dent, nick, and scratch in the area shown in Figure 1 of Airbus Helicopters Alert Service Bulletin (ASB) MBB-BK117 C-2-65A-008 or ASB MBB-BK117-30A-120, each Revision 0 and dated January 31, 2018, as applicable to your model helicopter.

(2) If there is a crack, before further flight, replace the TGB.

(3) If there is a dent, a nick, or a scratch, before further flight, remove the surface material up to 0.2 mm using 80-grit abrasive paper and repeat the dye penetrant inspection. If there is a crack or if the damage cannot be removed, before further flight, replace the TGB.

(4) If there is no crack and no dent, nick, or scratch, before further flight, finish the surface with 600-grit or finer abrasive paper.

(f) Special Flight Permits

Special flight permits are prohibited.

(g) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: David Hatfield, Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email 9-ASW-FTW-AMOC-Requests@faa.gov.
(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, the FAA suggests that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

(h) Additional Information

The subject of this AD is addressed in European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD No. 2018-0046, dated February 19, 2018. You may view the EASA AD on the Internet at https://www.regulations.gov in the AD Docket.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 6520, Tail Rotor Gearbox.

Issued on October 19, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.
[FR Doc. 2020-23446 Filed: 10/23/2020 8:45 am; Publication Date: 10/26/2020]