



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2017-1085; Product Identifier 2016-SW-094-AD; Amendment 39-19603; AD 2019-06-05]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Helicopters Deutschland GmbH Helicopters**

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

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for Airbus Helicopters Deutschland GmbH (Airbus Helicopters) Model MBB-BK 117 A-1, MBB-BK 117A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, MBB-BK 117 B-2, MBB-BK 117 C-1, and MBB-BK 117 C-2 helicopters. This AD requires repetitive inspections of the tail rotor (T/R) gearbox housing. This AD was prompted by a report that a crack was found in a T/R gearbox housing. The actions of this AD are intended to correct an 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 certain documents listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final 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 [http://www.helicopters.airbus.com/website/en/ref/Technical-Support\\_73.html](http://www.helicopters.airbus.com/website/en/ref/Technical-Support_73.html). You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-1085.

### **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-2017-1085; 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 AD, the European Aviation Safety Agency (EASA) AD, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for Docket Operations (phone: 800-647-5527) 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.

**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](mailto:david.hatfield@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

On September 10, 2018, at 83 FR 45578, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 by adding an AD that would apply to Airbus Helicopters Model MBB-BK 117 A-1, MBB-BK 117A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, MBB-BK 117 B-2, MBB-BK 117 C-1, and MBB-BK 117 C-2 helicopters. The NPRM proposed to require a repetitive cleaning and visual inspection of the T/R gearbox housing for a crack, and replacing the T/R gearbox if there is a crack. The proposed requirements were intended to detect a crack in a T/R gearbox housing, which could result in the loss of the T/R gearbox and subsequent loss of helicopter control.

The NPRM was prompted by EASA AD No. 2016-0134, dated July 8, 2016, issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for Airbus Helicopters Model MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, MBB-BK 117 B-2, MBB-BK 117 C-1, MBB BK 117 C-2, and MBB-BK 117 C-2e helicopters. EASA advises that a crack was found in the T/R gearbox housing of a Model MBB-BK117 C-2 helicopter. According to EASA, investigations determined high vibrations caused by T/R imbalance were a contributing factor to the crack. EASA states that this condition, if not detected and corrected, could lead to the loss of the T/R gearbox and subsequent loss of control of the helicopter. As a result, the EASA AD requires repetitive inspections of the T/R gearbox housing and replacing the housing if a crack is found.

## **Comments**

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM.

## **FAA's Determination**

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to our bilateral agreement with the European Union, EASA has notified us of the unsafe condition described in the EASA AD. We are issuing 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 helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

## **Differences Between this AD and the EASA AD**

The EASA AD applies to Model MBB-BK117 C-2e helicopters, and this AD does not because it is not an FAA type-certificated model. The EASA AD allows a non-cumulative tolerance of 10 hours time-in-service for the inspections, and this AD does not. The EASA AD requires performing the inspection after a certain maintenance action and before a T/R gearbox housing is installed, and this AD does not.

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

We reviewed Airbus Helicopters Alert Service Bulletin (ASB) MBB-BK117-30A-119, Revision 0, dated May 24, 2016, for Model MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, MBB-BK 117 B-2, and MBB-BK 117 C-1 helicopters and ASB MBB-BK117 C-2-65A-007, Revision 0, dated May 24, 2016, for

MBB-BK 117 C-2 helicopters. This service information specifies an initial and repetitive inspections of the T/R gearbox housing for cracks.

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.

### **Costs of Compliance**

We estimate that this AD affects 176 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD. Labor costs are estimated at \$85 per work-hour.

Inspecting the T/R gearbox requires 1 work-hour for an estimated cost of \$85 per helicopter and \$14,960 for the U.S. fleet per inspection cycle. Replacing the T/R gearbox requires 4.5 work-hours and parts cost \$69,219 for an estimated cost of \$69,602 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.

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 helicopters identified in this rulemaking action.

### **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 that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866;
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; 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.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

### **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):

2019-06-05 **Airbus Helicopters Deutschland GmbH**: Amendment 39-19603; Docket No. FAA-2017-1085; Product Identifier 2016-SW-094-AD.

#### **(a) Applicability**

This AD applies to Airbus Helicopters Deutschland GmbH Model MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, MBB-BK 117 B-2, MBB-BK 117 C-1, and MBB-BK 117 C-2 helicopters, certificated in any category.

#### **(b) Unsafe Condition**

This AD defines the unsafe condition as a crack in a tail rotor (T/R) gearbox housing. This condition could result in the loss of the T/R gearbox and subsequent loss of helicopter control.

#### **(c) Effective Date**

This AD becomes effective [INSERT DATE 35 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 (TIS) and thereafter at intervals not to exceed 100 hours TIS, clean and visually inspect the T/R gearbox housing for a crack in the area depicted in Figure 1 of Airbus Helicopters Alert Service Bulletin (ASB) MBB-BK117-30A-119, Revision 0, dated May 24, 2016, or ASB MBB-BK117 C-2-65A-007, Revision 0, dated May 24, 2016, as applicable to your model helicopter. If there is a crack, replace the T/R gearbox before further flight.

**(f) Special Flight Permits**

Special flight permits are prohibited.

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

(1) The Manager, Safety Management Section, 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, we suggest 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 (EASA)

AD No. 2016-0134, dated July 8, 2016. You may view the EASA AD on the Internet at <http://www.regulations.gov> in Docket No. FAA-2017-1085.

**(i) Subject**

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

**(j) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference 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) Airbus Helicopters Alert Service Bulletin (ASB) MBB-BK117-30A-119, Revision 0, dated May 24, 2016.

(ii) Airbus Helicopters ASB MBB-BK117 C-2-65A-007, Revision 0, dated May 24, 2016.

(3) For Airbus Helicopters service information identified in this AD, 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 [http://www.helicopters.airbus.com/website/en/ref/Technical-Support\\_73.html](http://www.helicopters.airbus.com/website/en/ref/Technical-Support_73.html).

(4) You may view this service information at 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.

(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 Fort Worth, Texas, on March 20, 2019.

Lance T. Gant,

Director, Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2019-06022 Filed: 4/1/2019 8:45 am; Publication Date: 4/2/2019]