



Airworthiness Directive

AD No.: 2016-0134

Issued: 08 July 2016

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:

AIRBUS HELICOPTERS DEUTSCHLAND GmbH

Type/Model designation(s):

MBB-BK 117 helicopters

Effective Date: 22 July 2016

TCDS Number(s): EASA.R.010

Foreign AD: Not applicable

Revision: None

ATA 65 – Tail Rotor Drive – Tail Rotor Gearbox Housing – Inspection

Manufacturer(s):

Airbus Helicopters Deutschland GmbH (formerly Eurocopter Deutschland GmbH, Eurocopter Hubschrauber GmbH, Messerschmitt-Bölkow-Blohm GmbH), Airbus Helicopters Inc. (formerly American Eurocopter LLC), Eurocopter Canada Ltd. (formerly Messerschmitt-Bölkow-Blohm Helicopter Canada Ltd.)

Applicability:

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, MBB-BK117 C-2 and MBB-BK117 C-2e helicopters, all serial numbers (s/n).

Reason:

A crack was found in the tail rotor gearbox housing (hereafter referred to as “the housing” in this AD) of a MBB-BK117 C-2 helicopter. Investigations identified that high vibrations caused by tail rotor imbalance were a contributing factor to the crack.

This condition, if not detected and corrected, could lead to the loss of tail rotor gearbox and subsequently loss of control of the helicopter.

To address this potential unsafe condition, Airbus Helicopters Deutschland GmbH (AHD) issued Alert Service Bulletin (ASB) MBB-BK117-30A-119 and ASB MBB-BK117 C-2-65A-007, as applicable to



helicopter model (hereafter collectively referred to as “the applicable ASB” in this AD), providing inspection instructions.

For the reason described above, this AD requires repetitive inspections of the housing and, depending on findings, housing replacement.

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

- (1) Within 100 flight hours (FH) after the effective date of this AD, and, thereafter, at intervals not to exceed 100 FH (see Note of this AD), visually inspect the housing in accordance with the instructions of section 3.B of the applicable ASB.

Note: A non-cumulative tolerance of 10 FH may be applied to the compliance times specified in FH in paragraph (1) of this AD to allow synchronization of the required inspections with other maintenance tasks for which a non-cumulative tolerance is already granted in the applicable Maintenance Manual.

- (2) In addition to the inspections as required by paragraph (1) of this AD, in case of maintenance action involving dynamic balancing of the tail rotor with a value of more than 1.0 inch per second, before next flight, visually inspect the housing in accordance with the instructions of section 3.B of the applicable ASB.
- (3) If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, any crack is found on a housing, before next flight, replace that housing in accordance with the instructions of section 3.B of the applicable ASB.
- (4) From the effective date of this AD, it is allowed to install on any helicopter a housing, provided that, prior to installation, that housing has passed an inspection in accordance with the instructions of section 3.B of the applicable ASB.
- (5) Accomplishment of corrective action on a helicopter, as required by paragraph (3) this AD, does not constitute terminating action for the repetitive inspections required by paragraph (1) or (2) of this AD for that helicopter.

Ref. Publications:

Airbus Helicopters ASB MBB-BK117-30A-119 original issue, dated 24 May 2016.

Airbus Helicopters ASB MBB-BK117 C-2-65A-007 original issue, dated 24 May 2016.

The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.



2. This AD was posted on 08 June 2016 as PAD 16-084 for consultation until 06 July 2016. No comments were received during the consultation period.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters Deutschland GmbH, Industriestrasse 4, 86607 Donauwörth, Federal Republic of Germany
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