

Airworthiness Directive

AD No.: 2019-0313

Issued: 20 December 2019

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 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 (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

Type/Model designation(s):

AIRBUS HELICOPTERS DEUTSCHLAND GmbH

MBB-BK117 C-2 helicopters

Effective Date: 27 December 2019

TCDS Number(s): EASA.R.010

Foreign AD: Not applicable

Supersedure: None

ATA 67 – Rotors Flight Control – Tail Rotor Actuator – Inspection

Manufacturer(s):

Airbus Helicopters Deutschland GmbH (AHD), formerly Eurocopter Deutschland GmbH); and Airbus Helicopters Inc., formerly American Eurocopter LLC

Applicability:

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

Definitions:

For the purpose of this AD, the following definitions apply:

The ASB: Airbus Helicopters (AH) Alert Service Bulletin (ASB) MBB-BK117 C-2-67A-027 Revision 1

The bolt: Bolts, having Part Number (P/N) 5038-0010, connecting the cardan-pivot joint with the piston rod of the tail rotor actuator (TRA).

Affected part: TRA assemblies, having P/N B673M40A1002 (Liebherr P/N 5038A0000-01).

Serviceable part: An affected part having accumulated less than 300 flight hours (FH) time since first installation on a helicopter, or time since last repair, as applicable, or an affected part which, within 300 FH before installation, has passed an inspection (no discrepancy found) in accordance with the instructions of paragraph 3.B.2 of the ASB.



Groups: Group 1 helicopters are those that have an affected part installed. Group 2 helicopters are those that do not have an affected part installed.

Reason:

Occurrences have been reported of finding a heavily worn bolt connecting the cardan-pivot joint with the piston rod of the TRA assembly.

This condition, if not detected and corrected, could lead to bolt failure, possibly resulting in loss of control of the helicopter.

To address this potential unsafe condition, AH issued the ASB providing inspection instructions.

For the reason described above, this AD requires repetitive inspections of the affected parts and, depending on findings, accomplishment of the applicable corrective action(s). This AD also requires reporting of the inspection results.

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

Required as indicated, unless accomplished previously:

Repetitive Inspections:

(1) Group 1 helicopters: Within the compliance time as specified in Table 1 of this AD, as applicable, and, thereafter, at intervals not exceeding 300 flight hours (FH) (see Note 1 of this AD), inspect the affected part in accordance with the instructions of section 3.B.2 of the ASB.

Table 1 – Initial inspection (see Note 2 of this AD)

FH	Compliance Time
Less than 300	Within 330 FH
300 or more, but less than 600	During next scheduled maintenance action, or within 330 FH, whichever occurs first after the effective date of this AD, but not exceeding 710 FH
600 or more, but less than 1 000	During next scheduled maintenance action, or within 110 FH, whichever occurs first after the effective date of this AD, not exceeding 30 days after the effective date of this AD or 1055 FH, whichever occurs first
1 000 or more	During next scheduled maintenance action, or within 55 FH, whichever occurs first after the effective date of this AD, not exceeding 14 days after the effective date of this AD

Note 1: A non-cumulative tolerance of 30 FH may be applied to the repetitive inspections interval specified 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.



Note 2: Unless otherwise stated, the FH specified in Table 1 of this AD are those accumulated, on the effective date of this AD, by an affected part since first installation on a helicopter, or since last repair, whichever occurs later.

Corrective Action(s):

(2) If, during any inspection as required by paragraph (1) of this AD, the minimum measured diameter of the bolt is found to be less than 7.9 mm, accomplish the applicable corrective action(s) in accordance with the instructions of, and within the compliance time as identified in, sections 3.B.2 and 3.B.3 of the ASB.

Parts Installation:

(3) Group 1 and Group 2 helicopters: From the effective date of this AD, it is allowed to install on any helicopter of an affected part, provided it is a serviceable part, as defined in this AD, and that, following installation, the part is inspected and/or replaced, as applicable, as required by this AD (see Note 3 of this AD).

Note 3: Removal of an affected part from a helicopter and subsequent reinstallation of that affected part on the same helicopter, accomplished during a single maintenance visit, is not considered as 'install' as specified in paragraph (3) of this AD.

Reporting:

(4) Within 30 days after each inspection as required by paragraph (1) of this AD, or within 30 days after the effective date of this AD, whichever occurs later, report the inspection results (including no findings) to AHD. Using the Reply Form Sheet included in the ASB is an acceptable method to comply with this requirement.

Credit:

(5) Inspections and corrective actions, accomplished on a helicopter before the effective date of this AD in accordance with the instructions of the original issue of the ASB are acceptable to comply with the initial requirements of paragraph (1) and (2) of this AD for that helicopter.

Terminating Action:

(6) None.

Ref. Publications:

AH MBB-BK117 C-2-67A-027 original issue dated 09 December 2019, or Revision 1 dated 17 December 2019.

The use of later approved revisions of the above-mentioned document 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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.



3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.

- 4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the EU aviation safety reporting system.
- 5. For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters Deutschland GmbH, Industriestrasse 4, 86609 Donauwörth, Federal Republic of Germany, Telephone: + 33 (0)4 42 85 97 97;

Web portal: https://keycopter.airbushelicopters.com > Technical Request Management E-mail: customersupport.helicopters@airbus.com.

