



Airworthiness Directive

AD No.: 2020-0257

Issued: 17 November 2020

Note: 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:

AIRBUS HELICOPTERS DEUTSCHLAND GmbH

Type/Model designation(s):

MBB-BK117 helicopters

Effective Date: 01 December 2020

TCDS Number(s): EASA.R.010

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2018-0283 dated 20 December 2018.

ATA 67 – Rotors Flight Control – Main 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 and MBB-BK117 D-2 helicopters, all serial numbers.

Definitions:

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

The applicable ASB: Airbus Helicopters (AH) Alert Service Bulletin (ASB) MBB-BK117 C-2-67A-028 and ASB MBB-BK117 D-2-67A-015, as applicable.

Affected part: Main rotor actuators (MRA) having Part Number (P/N) B673M30A1002 or P/N D673M30A1003.

Serviceable part: An MRA which is not an affected part; or an affected part which has accumulated less than 12 months since new or since last overhaul, as applicable; or an affected part that, within 12 months before installation, has passed an inspection (no defects found) in accordance with the instructions of Section 3.B.2 of the applicable 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:

An occurrence was reported on an AHD EC135 helicopter of increased control force in the collective axis. Subsequent inspections identified that a nut on a piston of the MRA had cracked and separated from the piston rod.

This condition, if not detected and corrected, could lead to loss of control of the helicopter, possibly resulting in damage to the helicopter and/or injury to occupants.

Due to similarity of design, this condition may also affect MBB-BK117 C-2 and D-2 helicopters.

To address this potential unsafe condition, AH issued ASB MBB-BK117 C-2-67A-026 and MBB-BK117 D-2-67A-008, providing instructions to visually inspect the affected parts. Consequently, EASA issued AD 2018-0283 to require a one-time inspection of the affected parts and reporting of inspection results to AHD.

Since that AD was issued, it was determined that repetitive inspections of affected parts are necessary, and AH issued the applicable ASB, as defined in this AD, accordingly.

For the reason described above, this AD supersedes EASA AD 2018-0283, and requires repetitive inspections of affected parts. This AD also provides criteria to allow installation of an affected part.

This AD is considered interim action and further AD action may follow.

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

Required as indicated, unless accomplished previously:

Repetitive Inspections:

- (1) For Group 1 helicopters: Before an affected part exceeds 12 months since new, or since last overhaul, or within 3 months after the effective date of this AD, whichever occurs later, and, thereafter, at intervals not to exceed 12 months (see Note 1 of this AD), inspect each nut on each piston (see Note 2 of this AD) of the affected part in accordance with the instructions of Section 3.B.2 of the applicable ASB.

Note 1: A non-cumulative tolerance of 3 months may be applied to the initial threshold and to the repetitive inspection 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 Aircraft Maintenance Manual.

Note 2: An affected part includes 3 pistons, each one having one nut.

Corrective Actions:

- (2) If, during any inspection as required by paragraph (1) of this AD, any damage or finding, as identified in the applicable ASB, is detected, before next flight, contact AHD for approved instructions and accomplish those instructions accordingly.

- (3) Replacement of an affected part on a helicopter with a serviceable part in accordance with the instructions of the applicable Aircraft Maintenance Manual is an acceptable alternative method to comply with the requirements of paragraph (2) of this AD for that helicopter.

Alternative Method of Compliance:

- (4) Inspection of an affected part on a helicopter, accomplished in accordance with the instructions of AH ASB MBB-BK117 C-2-67A-026 or ASB MBB-BK117 D-2-67A-008, as applicable, is an acceptable alternative method to accomplish the inspections as required by paragraph (1) of this AD for that helicopter.

Terminating Action:

- (5) None.

Parts Installation:

- (6) For Group 1 and Group 2 helicopters: From the effective date of this AD, it is allowed to install an affected part on any helicopter, provided it is a serviceable part, as defined in this AD.

Ref. Publications:

AH ASB MBB-BK117 C-2-67A-028 original issue dated 07 July 2020.

AH ASB MBB-BK117 D-2-67A-015 original issue dated 07 July 2020.

The use of later approved revisions of the above-mentioned 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 13 October 2020 as PAD 20-167 for consultation until 10 November 2020. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
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](#). This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
5. For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters Deutschland GmbH, Industriestrasse 4, 86609 Donauwörth,



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