



Airworthiness Directive

AD No.: 2021-0160

Issued: 05 July 2021

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:

AIRBUS HELICOPTERS DEUTSCHLAND GmbH

Type/Model designation(s):

MBB-BK117 D-3 helicopters

Effective Date: 19 July 2021

TCDS Number(s): EASA.R.010

Foreign AD: Not applicable

Supersedure: None

ATA 62 – Main Rotor System – Flex Control Unit Bearing Pin – Inspection / Modification

Manufacturer(s):

Airbus Helicopters Deutschland GmbH (AHD), formerly Eurocopter Deutschland GmbH

Applicability:

MBB-BK117 D-3 helicopters, all serial numbers, including MBB-BK117 D-2 that have been converted into MBB-BK117 D-3 through Airbus Helicopters (AH) Service Bulletin (SB) MBB-BK117 D-2-00-003.

Definitions:

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

The ASB: AH Alert SB (ASB) MBB-BK117 D-3-62A-002.

Affected part: Bearing pins, having part number (P/N) D622M0500206, except those marked with a letter 'M'.

Serviceable part: Bearing pins, eligible for installation, which are not an affected part.

Affected FCU: Flex Control Units, having P/N D622M0500101, except:

(1) those which are new (not previously installed) and have a serviceable part installed;



- (2) those which passed an inspection (no discrepancies found, as identified in the ASB) in accordance with the instructions of the ASB and have a serviceable part installed; and
- (3) those which, after failing an inspection in accordance with the instructions of the ASB, have been corrected in accordance with the instructions of the ASB, and have a serviceable part installed.

Serviceable FCU: Any FCU, eligible for installation, which is not an affected FCU.

Groups: Group 1 helicopters are those that have an affected part and/or an affected FCU installed. Groups 2 helicopters are those which are not Group 1.

Reason:

Occurrences were reported of finding a main rotor blade lead-lag damper in tilted position. Subsequent investigation results determined that the tolerances stack-up may lead to an insufficient clamping on the bearing pin.

This condition, if not detected and corrected, may lead to an unbalance of the main rotor system, possibly resulting in excessive vibration and consequent reduced control of the helicopter.

To address this potential unsafe condition, AH issued the ASB, providing instructions for inspection of affected FCU and reworking of affected parts.

For the reason described above, this AD requires a one-time inspection of the affected FCU and, depending on findings, accomplishment of applicable corrective action(s), and reworking of the affected part.

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

Required as indicated, unless accomplished previously:

Inspection:

- (1) For Group 1 helicopters: Within 55 flight hours after the effective date of this AD, inspect each affected FCU in accordance with the instructions of section 3.B.2 of the ASB.

Corrective Action(s):

- (2) If, during the inspection as required by paragraph (1) of this AD, any discrepancy, as identified in the ASB, is detected, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of section 3.B.2 of the ASB.

Modification:

- (3) For Group 1 helicopters: Before next flight after the inspection as required by paragraph (1) of this AD, rework each affected part and re-identify that part with a letter 'M' in accordance with the instructions of section 3.B.3 of the ASB. Replacing each affected part on an helicopter with a serviceable part is an acceptable alternative method to comply with the requirement of this paragraph for that helicopter; part replacement can be done in accordance with the instructions of the applicable Aircraft Maintenance Manual (AMM).



Part(s) Installation:

- (4) For Group 1 and Group 2 helicopters: From the effective date of this AD, do not install an affected FCU or an affected part on any helicopter.
- (5) For Group 1 and Group 2 helicopters: From the effective date of this AD, it is allowed to install a hexagonal screw P/N D622M0500207 on any helicopter, provided that installation is accomplished in accordance with the instructions of section 3.D of the ASB, or in accordance with the instructions of an AMM revision which includes the technical content of section 3.D of the ASB.

Ref. Publications:

AH ASB MBB-BK117 D-3-62A-002 original issue dated 29 June 2021.

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 Safety 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, 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.

