



Airworthiness Directive

AD No.: 2017-0193

Issued: 29 September 2017

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-BK117 helicopters

Effective Date: 13 October 2017

TCDS Number(s): EASA.R.010

Foreign AD: Not applicable

Supersedure: This AD supersedes Luftfahrt-Bundesamt (LBA) AD 97-276 dated 25 September 1997.

ATA 63 – Main Rotor Drive – Main Rotor Mast – Inspection

Manufacturer(s):

Eurocopter Deutschland GmbH, Eurocopter Hubschrauber GmbH, Messerschmitt-Bölkow-Blohm GmbH

Applicability:

MBB-BK117 A-1, MBB-BK117 A-3, MBB-BK117 A-4, MBB-BK117 B-1, MBB-BK117 B-2 and MBB-BK117 C-1 helicopters, all serial numbers (s/n).

Reason:

Cracks were detected in the rotor mast flange of a BO105 helicopter. It was determined that, due to similarity of design, the same defect could develop on MBB-BK117 helicopters.

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

To address this unsafe condition, Eurocopter Deutschland (ECD) issued Alert Service Bulletin (ASB) ASB-MBB-BK 117-10-114, providing inspection instructions, and LBA issued AD 97-276 requiring repetitive inspections.



Since that AD was issued, Airbus Helicopters (AH) determined that the reinforced rotor mast part number (P/N) 4639 305 095 (which is part of rotor mast assembly P/N 4639 205 016) is not affected by this unsafe condition, and revised ASB-MBB-BK 117-10-114 accordingly.

For the reason described above, this AD partially retains the requirements of LBA AD 97-276, which is superseded, and requires repetitive inspections only for helicopters equipped with rotor mast P/N 4639 305 002, which is part of rotor mast assembly P/N 4639 205 011.

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

Required as indicated, unless accomplished previously:

Note 1: For the purpose of this AD, Group 1 helicopters are equipped with a rotor mast assembly having P/N 4639 205 011 (including rotor mast P/N 4639 305 002). Group 2 helicopters are not equipped with a rotor mast assembly having P/N 4639 205 011.

Repetitive Inspection:

(1) For Group 1 helicopters: Before next flight after 25 September 1997 [the effective date of LBA AD 97-276] and, thereafter, at intervals not exceeding 100 flight hours, visually inspect the rotor mast flange in accordance with the instructions of AH ASB-MBB-BK 117-10-114 Revision 1.

Corrective Action(s):

(2) If, during any inspection as required by paragraph (1) of this AD, as applicable, any crack is found, before next flight, contact AHD for applicable instructions and accomplish those instructions accordingly.

Credit:

(3) Inspection(s) and corrective action(s), accomplished on a helicopter before the effective date of this AD in accordance with the instructions of the original issue of ASB-MBB-BK 117-10-114, are acceptable to comply with the initial requirements of paragraphs (1) and (2) of this AD for that helicopter.

Terminating Action:

(4) None.

Parts Installation:

(5) For Group 1 and Group 2 helicopters: From the effective date of this AD, it is allowed to install (see Note 2 of this AD) on any helicopter a rotor mast assembly P/N 4639 205 011, or a main gearbox (MGB) equipped with a rotor mast assembly P/N 4639 205 011, provided the rotor mast is new, or provided that, before installation, the rotor mast flange passes an inspection in accordance with the instructions of AH ASB-MBB-BK 117-10-114 Revision 1. Following installation, the rotor mast flange must be inspected as required by paragraph (1) of this AD.

Note 2: For the purpose of this AD, removing a rotor mast assembly or MGB from a helicopter and re-installing that rotor mast assembly or MGB on the same helicopter does not constitute 'installation'.



Ref. Publications:

ECD ASB-MBB-BK 117-10-114 original issue dated 27 August 1997, or AH ASB MBB-BK117-10-114 Revision 1 dated 28 July 2017.

The use of later approved revisions of this 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. This AD was posted on 29 August 2017 as PAD 17-118 for consultation until 26 September 2017. 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:
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