

Airworthiness Directive

Issued: 20 March 2018

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: 27 March 2018

TCDS Number(s): EASA.R.010

Foreign AD: Not applicable

Supersedure: None

ATA 62 – Main Rotor – Blades Thimble – Inspection

Manufacturer(s):

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

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.

Definitions:

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

The ASB: Airbus Helicopters (AH) Alert Service Bulletin (ASB) MBB-BK117-10A-137.

Affected 'angle 0' parts: Main rotor (M/R) blades as identified in section 1.A.1 paragraph c) of the ASB.

Affected 'angle 1' parts: M/R blades as identified in section 1.A.1 paragraph b) of the ASB.

Groups: Group 1 helicopters are those with an affected 'angle 0' or 'angle 1' part installed. Group 2 helicopters are those that do not have an affected 'angle 0' or 'angle 1' part installed.



Reason:

As a result of re-investigation of the M/R blade loop area, reduced thresholds and intervals for the inspection of the M/R blades thimble have been determined.

Failure to accomplish the inspection at the reduced intervals may result in failure of a M/R blade, possibly resulting in reduced control of the helicopter.

To address this potential unsafe condition, AH issued the ASB, providing instructions for inspection at reduced thresholds and intervals.

For the reason described above, this AD requires implementing the new thresholds and intervals.

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

Required as indicated, unless accomplished previously:

Repetitive Inspections:

(1) For Group 1 helicopters: Before exceeding the thresholds as identified in Table 1 of this AD, as applicable, and, thereafter, at intervals not to exceed the values as identified in Table 2 of this AD, as applicable, inspect each M/R blade thimble in accordance with the instructions of the ASB.

Affected Parts	Compliance Time
Angle 0	Within 600 (*) flight hours (FH), or within 100 FH after the effective date of this AD, whichever occurs later, without exceeding 1 600 FH
Angle 1	Within 100 (*) FH, or within 50 FH after the effective date of this AD, whichever occurs later, without exceeding 950 FH

Table 1 – Inspection Threshold (see Notes 1 and 2 of this AD)

Affected Parts	Compliance Time
Angle 0	Within 300 (*) FH, or within 100 FH after the effective date of this AD, whichever occurs later, without exceeding 600 FH, and, thereafter, at intervals not to exceed 300 (*) FH
Angle 1	Within 100 (*) FH, or within 50 FH after the effective date of this AD, whichever occurs later, without exceeding 200 FH, and, thereafter, at intervals not to exceed 100 (*) FH

Note 1: Unless otherwise specified, the FH specified in Table 1 of this AD are those accumulated since first installation of an affected M/R blade on a helicopter. Unless otherwise specified, the FH specified in Table 2 of this AD are those accumulated since the previous M/R blade thimble inspection.



Note 2: A non-cumulative tolerance of 10% may be applied to the values marked with (*) in Table 1 and Table 2 of this AD to allow synchronization of each inspection with other maintenance tasks for which a non-cumulative tolerance is already granted in the applicable Maintenance Manual.

Corrective Actions:

(2) If, during any inspection as required by paragraph (1) of this AD, any crack or anomaly is detected, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the ASB.

Terminating Action:

(3) Accomplishment of corrective action(s) on a helicopter, as required by paragraph (2) of this AD, does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter.

Parts Installation:

(4) For Group 1 and Group 2 helicopters: From the effective date of this AD, it is allowed to install an affected 'angle 0' or 'angle 1' part on a helicopter, provided that, following installation, the M/R blade is inspected as required by this AD.

Recording AD Compliance:

(5) Amending the Aircraft Maintenance Programme (AMP), on the basis of which the operator or the owner ensures the continuing airworthiness of each operated helicopter, to incorporate the thresholds and intervals as identified in Table 1 and Table 2 of this AD, as applicable, ensures (see Note 3 of this AD) continued accomplishment of the tasks as required by paragraphs (1) and (2) of this AD for that helicopter. Consequently, after revising the AMP, it is not necessary that accomplishment of individual action is recorded for demonstration of AD compliance on a continued basis.

Note 3: For affected helicopters registered in Europe, complying with the approved AMP, as specified in paragraph (5) of this AD, is required by Commission Regulation (EU) <u>1321/2014</u>, Part M.A.301, paragraph 3.

Ref. Publications:

AH ASB MBB-BK117-10A-137 original issue dated 19 February 2018.

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. This AD was posted on 01 march 2018 as PAD 18-030 for consultation until 15 march 2018. 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: <u>ADs@easa.europa.eu</u>.



4. For any question concerning the technical content of the requirements in this AD, please contact:
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