Airworthiness Directive

AD No.: 2017-0177

Issued: 14 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-BK 117 helicopters

Effective Date: 28 September 2017

TCDS Number(s): EASA.R.010

Foreign AD: Not applicable

Supersedure: None

ATA 25 – Equipment & Furnishing – Outboard Load System – Inspection / Replacement

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Manufacturer(s):
Airbus Helicopters Deutschland GmbH (formerly Eurocopter Deutschland GmbH), Airbus Helicopters Inc. (formerly American Eurocopter LLC)

Applicability:
MBB-BK 117 C-2 helicopters, all serial numbers (s/n) except C-2e variant, and MBB-BK 117 D-2 helicopters, all s/n.

Reason:
In response to Human External Cargo requirements, it was determined to establish a life limit for the adapter forward (FWD) of the outboard load system, and to introduce inspections of other components of that system. For MBB-BK 117 C-2 helicopters, it was also determined that a modification of the outboard load system is required.

Failure to accomplish the modification, to implement the life limit or to accomplish the inspections, may lead to detachment of an external load or person from the helicopter hoist, possibly resulting in personal injury, or injury to persons on the ground.

Consequently, Airbus Helicopters (AH) issued Alert Service Bulletin (ASB) MBB-BK117 C-2-85A-042 and ASB MBB-BK117 D-2-85A-003, providing dedicated instructions.

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For the reason described above, this AD requires a modification of the outboard load system of MBB-BK 117 C-2 helicopters, repetitive inspections of the outboard load system and its components, and implementation of the new life limit for the adapter FWD.

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

Required as indicated, unless accomplished previously:

Note 1: AH ASB MBB-BK117 C-2-85A-042 and ASB MBB-BK117 D-2-85A-003 are hereafter collectively referred to as “the applicable ASB” in this AD.

Note 2: For the purpose of this AD, the applicable ASB provides the definition of “hoist cycle”, as well as an acceptable method to determine the hoist cycles accumulated by the adapter FWD.

Note 3: For the purpose of this AD, an adapter FWD has Part Number (P/N) B851M0010101 or P/N D851M2044101, and an adapter AFT has P/N B851M0010101, P/N D851M2042101, or P/N D851M2043101.

Note 4: For the purpose of this AD, a Group 1 helicopter is a MBB-BK 117 C-2 helicopter equipped with an adapter FWD having P/N B851M0010101, or with an adapter AFT having P/N B851M0010101. A Group 2 helicopter is equipped with an adapter FWD having P/N D851M2044101, and with an adapter AFT having P/N D851M2042101 and/or P/N D851M2043101.

Repetitive Inspections:

(1) Before an adapter FWD exceeds 12 000 hoist cycles (see Note 2 of this AD) since first installation on a helicopter, or within 2 months after the effective date of this AD, whichever occurs later, and, thereafter, at intervals not to exceed 50 hoist cycles, inspect the external load system in accordance with the instructions of the applicable ASB.

(2) Before an adapter FWD exceeds 1 800 hoist cycles (see Note 2 of this AD) since first installation on a helicopter, or within 6 months after the effective date of this AD, whichever occurs later, and, thereafter, at intervals not to exceed 1 800 hoist cycles, inspect the external load system in accordance with the instructions of the applicable ASB.

Corrective Action(s):

(3) If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, any defect is found on a component of the external load system, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the applicable ASB.

Modification and Re-identification:

(4) For Group 1 helicopters: Concurrently with the first inspection as required by paragraph (1) or (2) of this AD, as applicable, modify and re-identify the adapter FWD and adapter AFT in accordance with the instructions of section 3.B.4 and 3.B.5 of ASB MBB-BK117 C-2-85A-042.

(5) Replacing on a helicopter an adapter FWD with an adapter FWD having P/N D851M2044101, or replacing an adapter AFT with an adapter AFT having P/N D851M2042101 or P/N D851M2043101, as applicable, is an acceptable method to comply with the requirements of

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paragraph (4) of this AD for that helicopter. Replacement of the adapter FWD and adapter AFT can be accomplished in accordance with the instructions of the applicable maintenance manual.

Replacement (Life Limit):

(6) Before an adapter FWD exceeds 12 000 hoist cycles (see Note 2 of this AD) since first installation on a helicopter, or within 5 months after the effective date of this AD, whichever occurs later, and, thereafter, before an adapter FWD exceeds 12 000 hoist cycles since first installation on a helicopter, replace the adapter FWD with a serviceable one, in accordance with the instructions of the ASB.

Part Installation:

(7) From the effective date of this AD, it is allowed to install an adapter FWD having P/N D851M2044101 on a helicopter, provided the part has not exceeded 12 000 hoist cycles (see Note 2 of this AD) since first installation on a helicopter.

(8) Do not install on any helicopter an adapter FWD having P/N B851M0010101, or an adapter AFT having P/N B851M0010101, as required by paragraph (8.1) or (8.2) of this AD, as applicable (see Note 4 of this AD).

(8.1) For Group 1 helicopters: After modification of the helicopter as required by paragraph (4) of this AD, or as specified in paragraph (5) of this AD, as applicable.

(8.2) For Group 2 helicopters: From the effective date of this AD.

Recording AD Compliance:

(9) For an Aircraft Maintenance Programme (AMP) that incorporates the maintenance tasks and life limitations as specified in paragraphs (2) and (6) of this AD, that action ensures (see Note 5 of this AD) the continued accomplishment of those tasks and limitations. Consequently, for a helicopter to which that AMP applies, it is not necessary that accomplishment of individual action is recorded for demonstration of AD compliance on a continued basis.

Note 5: For affected MBB-BK 117 helicopters registered in Europe, complying with the approved AMP, as specified in paragraph (9) of this AD, as applicable, is required by Commission Regulation (EU) 1321/2014, Part M.A.301, paragraph 3.

Ref. Publications:

AH ASB MBB-BK117 C-2-85A-042 original issue, dated 24 July 2017.

AH ASB MBB-BK117 D-2-85A-003 original issue, dated 24 July 2017.

The use of later approved revisions of these 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.

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2. This AD was posted on 09 August 2017 as PAD 17-109 for consultation until 06 September 2017. No comments were received during the consultation period.

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

4. For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters Deutschland GmbH, Industriestrasse 4,
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