



## Airworthiness Directive

**AD No.:** 2016-0002

**Issued:** 04 January 2016

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:** 18 January 2016

**TCDS Number(s):** EASA.R.010

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes EASA AD 2015-0045, dated 13 March 2015, including correction dated 02 April 2015.

### ATA 62 – Main Rotor – Main Rotor Blade Vibration Absorber – Modification

**Manufacturer(s):**

Airbus Helicopters Deutschland GmbH (AHD) (formerly Eurocopter Deutschland GmbH), Airbus Helicopters Inc. (formerly American Eurocopter LLC)

**Applicability:**

MBB-BK117 C-2, MBB-BK117 C-2e, MBB-BK117 D-2 and MBB-BK117 D-2m helicopters, all serial numbers (s/n).

**Reason:**

Heavy vibrations of the main rotor of an MBB-BK 117 C-2 helicopter were experienced in service. During subsequent disassembly of the vibration absorber, a bearing damage was detected.

This condition, if not corrected, could lead to the loss of balls from the ball bearing while the main rotor is turning, possibly resulting in damage to the helicopter and/or injury to persons on the ground.

Due to similarity of design, this condition may affect also MBB-BK 117 D-2 helicopters.



To address this unsafe condition, AHD issued Alert Service Bulletin (ASB) MBB-BK117 C-2-62A-009 and ASB MBB-BK117 D-2-62A-001 (hereafter referred to as “the applicable ASB” in this AD), to provide instructions for replacement of vibration absorber spacers and re-identification of main rotor blades (MRB) and vibration absorbers after modification. Consequently, EASA issued AD 2015-0045 (later corrected) to require accomplishment of modification and re-identification.

Since that AD was issued, it was found that re-identification of the parts, as instructed in the applicable ASB at original issue, leads to using the Part Number (P/N) of an existing MRB that has a different structural design. This could lead to erroneous part management and maintenance. Prompted by this findings, AHD issued Revision 1 of the applicable ASB to provide corrected instructions to re-identify parts, including those modified in accordance with the original issue of the applicable ASB, and to expand the applicability to include MBB-BK117 C-2e and D-2m helicopters.

For the reasons described above, this AD partially retains the requirements of EASA AD 2015-0045, which is superseded, expands the Applicability, and requires re-identification of any incorrectly re-identified part.

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

Required as indicated, unless accomplished previously:

**Partial re-statement of the requirements of EASA AD 2015-0045:**

- (1) Within 12 months after 27 March 2015 [the effective date of EASA AD 2015-0045], for helicopters equipped with one or more MRB P/N B621M1002101, or P/N B621M1002102, or P/N B621M1002103, or P/N D621M1002101, modify each MRB vibration absorber P/N B621M3001101 by replacing spacers with flanged spacers P/N B621M3007201 and re-identify the vibration absorber and the MRB to the corresponding new P/N in accordance with the instructions of the applicable ASB.
- (2) After modification of a helicopter as required by paragraph (1) of this AD, do not install on that helicopter a MRB P/N B621M1002101 (see Note), or P/N B621M1002102 (see Note), or P/N B621M1002103, or P/N D621M1002101, or a vibration absorber P/N B621M3001101, or a spacer P/N 117-801841.11.

Note: MRB P/N “B621M1002101 mod. i.a.w. ASB 62A-009”, or P/N “B621M1002102 mod. i.a.w. ASB 62A-009” are not affected by paragraph (2) of this AD and can be installed on an helicopter modified as required by paragraph (1) of this AD.

**New requirements of this AD:**

- (3) Within 12 months after 27 March 2015 [the effective date of EASA AD 2015-0045]:
  - (3.1) inspect each MRB P/N B621M1002104, to determine the s/n in accordance with the instructions of ASB MBB-BK117 C-2-62A-009 at Revision 1.



A review of the helicopter records is acceptable in lieu of the required inspection, provided those records are reliable and the s/n of the MRB can be positively determined from that review.

(3.2) If, during the inspection as required by paragraph (3.1) of this AD, an MRB P/N B621M1002104, having a s/n up to 3799 inclusive, is found, re-identify that MRB in accordance with the instructions of paragraph 3.B.2 of ASB MBB-BK117 C-2-62A-009 at Revision 1.

(4) From the effective date of this AD, do not install a MRB P/N B621M1002104, having a s/n up to 3799 inclusive, on an helicopter, unless it has been re-identified in accordance with the instructions of paragraph 3.B.2 of ASB MBB-BK117 C-2-62A-009 at Revision 1.

**Ref. Publications:**

AHD ASB MBB-BK117 C-2-62A-009 original issue dated 20 January 2015, or Revision 1 dated 28 October 2015.

AHD ASB MBB-BK117 D-2-62A-001 original issue dated 20 January 2015, or Revision 1 dated 28 October 2015.

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.
2. This AD was posted on 03 December 2015 as PAD 15-149 for consultation until 03 January 2016. 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](mailto: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, 86607 Donauwörth, Federal Republic of Germany  
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