EASA AD No.: 2015-0017

# EASA

## **AIRWORTHINESS DIRECTIVE**

AD No.: 2015-0017

Date: 04 February 2015

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, 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 EU 748/2012, Part 21.A.3B. In accordance with 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 [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].

| Design Approval Holder's Name: AIRBUS HELICOPTERS DEUTSCHLAND GmbH |  | Type/Model designation(s): BO105 helicopters |
|--|--|--|
| TCDS Number:   | EASA.R.011   |  |
| Foreign AD:  | Not applicable   |  |
| Supersedure:   | This AD supersedes EASA AD 2014-0235 dated 27 October 2014.  |  |
| ATA 80   | Equipment / Furnishings – Rescue Hoist Control Grip – Inspection / Replacement   |  |
| Manufacturer(s):   | Eurocopter Deutschland Gmbh (ECD), Eurocopter Hubschrauber GmbH, Messerschmitt-Bölkow-Blohm GmbH, Messerschmitt-Bölkow-Blohm Helicopter Canada Limited, Eurocopter Canada (ECL)  |  |
| Applicability:   | BO105 A, BO105 C, BO105 D, BO105 S and BO105 LS A-3 helicopters, all variants, all serial numbers, if equipped with a rescue hoist system Part Number (P/N) 105-81100, P/N 105-81103 or P/N105-811011.   |  |
| Reason:  | An uncommanded hoist cable cut occurred on an MBB-BK117 C-1 helicopter.  Prompted by this occurrence, a design review was conducted of the BO105 hoist control grip with coiled cable and it was found that mechanical damage in the harness of the control grip could cause an uncommanded deployment of the cable cutter function.             |  |
|  | This condition, if not detected and corrected, could lead to unintended load release, possibly resulting in injury to a human load or to persons on the ground.  |  |
|  | To address this unsafe condition, Airbus Helicopters Deutschland (AHD) issued Alert Service Bulletins (ASB) BO105-80A-150 and ASB BO105 LS-80A-036 to provide instructions for inspection and replacement of the hoist control grip with coiled cable. A new time between overhaul (TBO) has been introduced for control grip with coiled cable. |  |
|  | EASA AD 2014-0235 was issued to require regular visual checks and repetitive inspections of the control grip with coiled cable, and, in case of findings, replacement of the control grip and/or coiled cable. That AD also required deactivation of the cable cutter function and prohibited use of the hoist for model BO105 A helicopters.    |  |

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Since that AD was issued, AHD developed instructions for the deactivation of the cable cutter function of the hoist control grip which are published in AHD ASB BO105-80A-150 and AHD ASB BO105 LS-80A-036, both at Revision 1. AHD also issued temporary Flight Manual (FM) revisions associated to the deactivation of the cable cutter function for most BO105 helicopter models (except model BO105 D / variants BO105 D and BO105 DS).

For the reasons described above, this AD retains the requirements of EASA AD 2014-0235, which is superseded, requires amendment of the applicable FM and prohibits hoist operation for model BO105 D / variants BO105 D and BO105 DS helicopters.

### Effective Date:

10 February 2015

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

Required as indicated, unless accomplished previously:

### Re-statement of the requirements of EASA AD 2014-0235:

For model BO105 C, BO105 D, BO105 S and BO105 LS A-3 helicopters:

(1) Before the next hoist operation after 10 November 2014 [the effective date of EASA AD 2014-0235] and, thereafter, at intervals not to exceed 30 days, inspect the control grip with coiled cable of the hoist in accordance with the instructions of ASB BO105-80A-150 or ASB BO105 LS-80A-036, as applicable to helicopter model.

Note 1: A non-cumulative tolerance of 10% may be applied to the repetitive inspection interval specified in paragraph (1) of this AD.

(2) After the initial inspection as required by paragraph (1) of this AD, during the pre-flight check before each hoist operation, accomplish a visual check of the control grip with coiled cable in accordance with the instructions of ASB BO105-80A-150 or ASB BO105 LS-80A-036, as applicable.

Note 2: The check required by paragraph (2) of this AD may be carried out by the pilot as part of the pre-flight check as defined in the relevant Flight Manual.

- (3) If, during any inspection as required by paragraph (1), or check as required by paragraph (2) of this AD, as applicable, any damage is detected on the control grip or coiled cable, before the next hoist operation, replace the control grip and/or coiled cable, as applicable, with a serviceable part in accordance with the instructions of ASB BO105-80A-150 or ASB BO105 LS-80A-036, as applicable.
- (4) For control grips with coiled cable which, on the effective date of this AD, have exceeded 10 years since first installation on a helicopter or since last overhaul, as applicable, within 9 months after the effective date of this AD, replace the affected control grip with coiled cable with new or overhauled parts in accordance with the instructions of ASB BO105-80A-150 or ASB BO105 LS-80A-036, as applicable.
- (5) Within 3 months after 10 November 2014 [the effective date of EASA AD 2014-0235], deactivate the cable cutter function of the control grip in accordance with approved instructions from AHD, or do not operate the hoist after that date. The instructions of AHD ASB BO105-80A-150 Revision 1, or AHD ASB BO105 LS-80A-036 Revision 1, as applicable to helicopter model, are an acceptable method to deactivate the cable cutter function of the control grip.

For model BO105 A helicopters:

(6) From 10 November 2014 [the effective date of EASA AD 2014-0235], do not operate the hoist on any model BO105 A helicopter.

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### New requirements of this AD:

(7) Before the next hoist operation after the effective date of this AD, amend the helicopter FM to incorporate the temporary revision as specified in Table 1 of this AD, as applicable to helicopter variant.

Table 1 – FM Temporary Revisions

| Helicopter Model / Variant                     | Flight Manual Revision     |
|--|----------------------------|
| BO105 C / C23 and<br>BO105 S / CS              | BO105 C/CS TempRev 1       |
| BO105 C / CB, CB-4 and<br>BO105 S / CBS, CBS-4 | BO105 CB/CBS TempRev 1     |
| BO105 C / CB-5 and<br>BO105 S / CBS-5          | BO105 CB-5/CBS-5 TempRev 1 |
| BO 105 D / DB, DB-4, DBS,<br>DBS-4             | BO105 DB/DBS TempRev 1     |
| BO105 D / DBS-5                                | BO105 DBS-5 TempRev 1      |
| BO105 LS A-3                                   | BO105 LS A-3 TempRev 1     |

(8) From the effective date of this AD, do not operate the hoist on any model BO105 D / variant BO105 D or BO105 DS helicopter.

### Ref. Publications:

AHD ASB BO105-80A-150 original issue dated 27 October 2014, or Revision 1 dated 02 February 2015.

AHD ASB BO105 LS-80A-036 original issue dated 27 October 2014, or Revision 1 dated 02 February 2015.

AHD BO105 C/CS TempRev 1, EASA approved on 29 January 2015.

AHD BO105 CB/CBS TempRev 1, EASA approved on 29 January 2015.

AHD BO105 CB-5/CBS-5 TempRev 1, EASA approved on 29 January 2015.

AHD BO105 DB/DBS TempRev 1, EASA approved on 29 January 2015.

AHD BO105 DBS-5 TempRev 1, EASA approved on 29 January 2015.

AHD BO105 LS A-3 TempRev 1, EASA approved on 29 January 2015.

The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.

### Remarks:

- 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 Safety Information Section, Certification Directorate, EASA. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.
- 4. For any question concerning the technical content of the requirements in this AD, please contact:

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Telephone: + 49 (0)151 1422 8976; Facsimile: + 49 (0)906 71 4111.