



Airworthiness Directive

AD No.: 2021-0142

Issued: 17 June 2021

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 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 (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

AIRBUS HELICOPTERS DEUTSCHLAND

Type/Model designation(s):

BO105 helicopters

Effective Date: 01 July 2021

TCDS Number(s): EASA.R.011

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2019-0024 dated 04 February 2019, AD 2015-0042 dated 09 March 2015, AD 2013-0015 dated 16 January 2013 and AD 2010-0153 dated 27 July 2010; and Luftfahrt-Bundesamt (LBA) Germany AD 2001-281 dated 18 October 2001 and AD 76-136/2 dated 05 October 1978.

ATA 05 – Time Limits / Maintenance Checks – Airworthiness Limitations Section – Amendment

Manufacturer(s):

Airbus Helicopters Deutschland GmbH (AHD), formerly Eurocopter Deutschland GmbH, Eurocopter Hubschrauber Deutschland GmbH, Messerschmitt-Bölkow-Blohm GmbH; Eurocopter Canada Ltd, formerly Messerschmitt-Bölkow-Blohm Helicopter Canada Limited.

Applicability:

BO105 A, BO105 C, BO105 D, BO105 S, BO105 LS A-1 and BO105 LS A-3 helicopters, all variants, all serial numbers, including BO105 LS A-3 helicopters modified in accordance with EASA Supplemental Type Certificate (STC) 10039633, or previously LBA Germany STC EMZ NR. 0654/3058 (commercially known as "Superlifter").

Definitions:

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

The applicable ALS: AHD BO105 Aircraft Maintenance Manual (AMM) Chapter 101-15 - Airworthiness Limitations Section (ALS), Issue 2, Revision 31 (for BO105 A, BO105 C, BO105 D,



BO105 S and BO105 LS A-1 helicopters); AHD BO105 LS A-3 AMM Chapter 101-15 – ALS, Issue 4, Revision 7 (for BO105 LS A-3 helicopters); and AHD BO105 LS A-3 AMM Appendix 010, Issue 1, Revision 4 (for BO105 LS A-3 ‘Superlifter’ helicopters); as applicable.

The AMP: The approved Aircraft Maintenance Programme (AMP) on the basis of which the operator or the owner ensures the continuing airworthiness of each operated helicopter. For BO105 helicopters operated under EU regulation, compliance with the approved AMP is required by Commission Regulation (EU) [1321/2014](#), Part M.A.301, paragraph 3.

New and/or more restrictive limitations: This includes all limitations that are new and all limitations which were reduced, which were introduced into the ALS (as defined in this AD) since the previous ALS Revision that is currently incorporated in the AMP.

Bendix TT-strap: Tension-torsion (TT) straps, having Part Number (P/N) 2602559, P/N 2606576, P/N 2604067 or P/N 117-14110.

Lord TT-strap: TT-straps, having P/N J17322-1 or P/N 117-14111.

Cure date: The cure date of a TT-strap can be determined using the information provided in Airbus Helicopters (AH) Alert Service Bulletin (ASB) BO105-10A-129 or ASB BO105 LS-10A-017, as applicable, or by contacting AHD for applicable instructions.

Storage life: Calendar time accumulated by a TT-strap since cure date, including the calendar time accumulated after first installation on a helicopter, up to the date of first flight after first installation on a helicopter.

Time in service: Calendar time accumulated by a TT-strap since first flight after first installation on a helicopter.

Total life: Total calendar time accumulated by a TT-strap since cure date, which is the sum of storage life and time in service.

Reason:

The airworthiness limitations for AHD BO105 helicopters, which are approved by EASA, are currently defined and published in the AHD BO105 ALS documents. These instructions have been identified as mandatory for continued airworthiness.

Failure to accomplish these instructions could result in an unsafe condition.

Previously, EASA issued AD 2013-0015 to require accomplishment of all maintenance tasks as described in the BO105 A, BO105 C, BO105 D, BO105 S and BO105 LS A-1 ALS at Issue 2, Revision 27, in the BO105 LS A-3 ALS at Issue 4, Revision 4 and in the BO105 LS A-3 ‘Superlifter’ ALS at Issue 1, Revision 1, as applicable.

After that AD was issued, AHD introduced a life limit for the TT-straps installed on the lifting system of LS A-3 helicopters, and EASA issued AD 2015-0042 to require implementation of that limit (pending introduction into the ALS). AHD also reduced the storage life limit for Bendix and Lord



TT-straps, as defined in this AD, and EASA issued AD 2019-0024 to implement that limit (pending ALS introduction).

Since those ADs were issued, AHD issued the applicable ALS, as defined in this AD, to incorporate those limits into the applicable ALS.

For the reason described above, this AD retains the requirements of EASA AD 2013-0015, AD 2015-0042 and AD 2019-0024, which are superseded, and requires accomplishment of the actions specified in the applicable ALS. This AD also supersedes EASA AD 2010-0153 and LBA Germany AD 76-136/2 and AD 2001-281, which are meanwhile obsolete, or the requirements of which have been incorporated into the applicable ALS.

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

Required as indicated, unless accomplished previously:

Replacement of Life Limited Parts:

- (1) From the effective date of this AD, accomplish the following actions, as applicable to helicopter model and depending on helicopter configuration.
 - (1.1) Replace each component before exceeding the applicable life limit, as specified in the applicable ALS.
 - (1.2) For helicopters equipped with a Bendix TT-strap or Lord TT-strap, as defined in this AD, which, on the effective date of this AD, has exceeded a storage life of 5 years: Replace that TT-strap before exceeding 17 years total life, but without exceeding the applicable life limit, as specified in the applicable ALS.
 - (1.3) For helicopters equipped with a Bendix TT-strap or Lord TT-strap, as defined in this AD, which, on the effective date of this AD, has exceeded a total life of 17 years: Replace that TT-strap within 2 months after the effective date of this AD, but without exceeding the applicable life limit, as specified in the applicable ALS.

Parts Installation:

- (2) From the effective date of this AD, do not install a Bendix TT-strap on any helicopter.

AMP Revision:

- (3) Within 12 months after the effective date of this AD, revise the approved AMP by incorporating the limitations described in the applicable ALS, depending on helicopter configuration.

Credit:

- (4) If, before the effective date of this AD, the AMP has been revised to incorporate the life limitations as specified in the BO105 A, BO105 C, BO105 D, BO105 S and BO105 LS A-1 ALS at Issue 2, Revision 27, in the BO105 LS A-3 ALS at Issue 4, Revision 4, or in the BO105 LS A-3 'Superlifter' ALS at Issue 1, Revision 1, as applicable, that action ensures the continued accomplishment of those limitations.



Consequently, for a helicopter to which that AMP applies, it is acceptable to accomplish the new and/or more restrictive limitations as specified in the applicable ALS, depending on helicopter configuration, within the compliance times as specified in the applicable ALS to comply with paragraph (1) of this AD.

For that AMP, it is acceptable to incorporate the new and/or more restrictive limitations as specified in the applicable ALS, depending on helicopter configuration, into the AMP to comply with paragraph (3) of this AD.

Recording AD Compliance:

- (5) When the AMP of a helicopter has been revised as required by paragraph (3) or (4) of this AD, as applicable, that action ensures continued accomplishment of the limitations as required by paragraph (1) of this AD for that helicopter. Consequently, after revising the AMP, as required by paragraph (3) or (4) of this AD, as applicable, it is not necessary that accomplishment of individual action is recorded for demonstration of AD compliance on a continued basis.

Ref. Publications:

AHD BO105 AMM Chapter 101-15 – ALS, Issue 2, Revision 31 dated 15 December 2020.

AHD BO105 LS A-3 AMM Chapter 101-15 – ALS, Issue 4, Revision 7 dated 27 November 2018.

AHD BO105 LS A-3 ('Superlifter') AMM Appendix 010, Issue 1, Revision 4 dated 24 May 2012.

AH ASB BO105-10A-129 original issue dated 03 December 2018.

AH ASB BO105 LS-10A-017 original issue dated 03 December 2018.

The use of later approved revisions of the above-mentioned 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 10 May 2021 as PAD 21-067 for consultation until 07 June 2021. 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. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#). This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be



installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.

5. 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, Telephone: + 49 (0)151 1422 8976
Web portal: <https://keycopter.airbushelicopters.com> > Technical Requests Management
E-mail: customersupport.helicopters@airbus.com.

