



Airworthiness Directive

AD No.: 2019-0024

Issued: 04 February 2019

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 GmbH

Type/Model designation(s):

BO105 helicopters

Effective Date: 11 February 2019

TCDS Number(s): EASA.R.011

Foreign AD: Not applicable

Supersedure: None

ATA 05 – Airworthiness Limitation Section – TT-Straps – Storage Life Limit

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; Eurocopter Canada Ltd, formerly Messerschmitt-Bölkow-Blohm Helicopter Canada Ltd

Applicability:

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

Definitions:

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

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

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

The applicable ASB: Airbus Helicopters (AH) Alert Service Bulletin (ASB) BO105-10A-129 and AH ASB BO105 LS-10A-017, as applicable.



Cure date: The cure date of a TT-Strap can be determined using the information provided in the applicable ASB, or contacting AHD for applicable instructions.

Storage life: Calendar time accumulated by a TT-Strap since cure date up to the first flight after first installation on a helicopter, including the calendar time accumulated 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: Calendar time accumulated by a TT-Strap since cure date, which is the sum of storage life and time in service.

The SLL: Service life limit (SLL), as applicable to the part, identified in the Airworthiness Limitation Section of the applicable Aircraft Maintenance Manual.

Serviceable part: Lord TT-Strap, as defined in this AD, having a storage life not exceeding 5 years.

Reason:

It has been determined that aging of the elastomeric material, since manufacturing up to its first flight, may affect the structural characteristics of a TT-Strap.

This condition, if not corrected, could lead to premature failure of a TT-Strap, possible resulting in loss of control of the helicopter.

To address this potential unsafe condition, AHD issued the applicable ASB, providing instructions to implement limits for storage life of certain TT-Straps.

For the reason described above, this AD requires implementation of those storage life limits, and provides conditions for installation of parts. This AD also requires removal from service of Bendix TT-Strap, as defined in this AD, and prohibits (re)installation of those straps.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Within the compliance as identified in Table 1 of this AD, as applicable, replace each Lord TT-Strap and Bendix TT-Strap with a serviceable part in accordance with the instructions of the applicable ASB.



Table 1 – Compliance Time

Storage Life on the effective date of this AD	Total life on the effective date of this AD	Compliance Time
5 years or less	Not relevant	Before exceeding the SLL, or before the storage life exceeds 5 years, whichever occurs first
More than 5 years	17 years or less	Before the total life exceeds 17 years, or within 8 weeks after the effective date of this AD, whichever occurs later, but not exceeding the SLL
	More than 17 years, but less than 20 years	During the next helicopter periodical inspection or within 8 weeks, whichever occurs later after the effective date of this AD, but not exceeding the SLL
	20 years or more	Within 8 weeks after the effective date of this AD, but not exceeding the SLL

Parts Installation:

- (2) From the effective date of this AD, do not install on any helicopter a Bendix TT-Strap.
- (3) From the effective date of this AD, installation on any helicopter of a Lord TT-Strap is allowed, provided the first flight of that helicopter after that installation is accomplished before the storage life of that Lord TT-Strap exceeds 5 years.

Ref. Publications:

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 08 January 2019 as PAD 19-002 for consultation until 22 January 2019. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
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](#).



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.

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