Airworthiness Directive

AD No.: 2021-0122

Issued: 06 May 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 GmbH

Type/Model designation(s):
MBB-BK117 helicopters

Effective Date: 20 May 2021
TCDS Number(s): EASA.R.010
Foreign AD: Not applicable
Supersedure: None

ATA 05 – Time Limits / Maintenance Checks – Airworthiness Limitation Section – Tension Torsion Straps – Storage Life Limit

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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

Applicability:
MBB-BK117 A-1, MBB-BK117 A-3, MBB-BK117 A-4, MBB-BK117 B-1, MBB-BK117 B-2, MBB-BK117 C-1, MBB-BK117 C-2 and MBB-BK117 D-2 helicopters, all serial numbers.

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

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

Lord TT-Strap: TT-Straps, having P/N J17322-1, P/N 117-14111 or P/N B622M10T1001.

The ASB: Airbus Helicopters (AH) Alert Service Bulletin (ASB) MBB-BK117-10A-133, ASB MBB-BK117 C-2-62A-014, or ASB MBB-BK117 D-2-62A-008, as applicable.

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

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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: 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-Straps, as defined in this AD, eligible for installation, and having a storage life not exceeding 5 years.

Reason:

It has been determined that ageing of the elastomeric material of certain TT-Straps, during the period since manufacturing date up to first flight on a helicopter, may affect its structural characteristics.

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

To address this potential unsafe condition, AHD issued the ASB, providing instructions to implement limits for storage life, as defined in this AD, 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-Straps, 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:

Replacement:

(1) Within the compliance time as specified 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 ASB.

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Table 1 – TT-Strap Replacement (see Note 1 of this AD)

Storage Life	Total Life	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 2 months 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 2 months, whichever occurs later after the effective date of this AD, but not exceeding the SLL
	20 years or more	Within 2 months after the effective date of this AD, but not exceeding the SLL

Note 1: Unless specified otherwise, the storage life and total life calendar time periods indicated in Table 1 of this AD are those accumulated, on the effective date of this AD, by the affected TT-Strap.

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, it is allowed to install on any helicopter a Lord TT-Strap, provided the first flight of that helicopter after that installation is accomplished before the storage life of that TT-Strap exceeds 5 years and that, following installation, the TT-strap is replaced before exceeding the SLL.

Ref. Publications:

AH ASB MBB-BK117-10A-133 original issue dated 20 March 2021, and revision 1 dated 06 May 2021.

AH ASB MBB-BK117 C-2-62A-014 original issue dated 20 March 2021, and revision 1 dated 06 May 2021.

AH ASB MBB-BK117 D-2-62A-008 original issue dated 20 March 2021, and revision 1 dated 06 May 2021.

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 31 March 2021 as PAD 21-051 for consultation until 28 April 2021. No comments were received during the consultation period.

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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, 86609 Donauwörth, Federal Republic of Germany, Telephone: + 33 (0)4 42 85 97 97;
Web portal: https://keycopter.airbushelicopters.com > Technical Request Management
E-mail: customersupport.helicopters@airbus.com.

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