

# Airworthiness Directive AD No.: 2021-0011 Issued: 12 January 2021

Note: 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):** EC135 and EC635 helicopters

Effective Date:	31 January 2021
TCDS Number(s):	EASA.R.009
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA AD 2017-0199 dated 11 October 2017.

# ATA 25 – Equipment / Furnishings – Outboard Load System – Inspection / Modification

# Manufacturer(s):

Airbus Helicopters Deutschland GmbH (AHD), formerly Eurocopter Deutschland GmbH, Eurocopter España S.A.

#### **Applicability:**

EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+, EC135 T3, EC635 P2+, EC635 P3, EC635 T1, EC635 T2+ and EC635 T3 helicopters, all serial numbers up to 1276 inclusive.

# **Definitions:**

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

The inspection ASB: Airbus Helicopters (AH) Alert Service Bulletin (ASB) EC135-85A-069.

The modification ASB: AH ASB EC135-85A-081.

**Affected hook assembly**: Hook assemblies, having Part Number (P/N) 44301-420 or P/N 44301-423, installed on an affected hoist.

**Affected hoist**: Goodrich hoists, having P/N 44301-10-2, P/N 44301-10-5, P/N 44301-10-6, P/N 44301-10-10, P/N 44301-10-11, P/N 44301-10-12, or P/N 44301-10-13, equipped with an affected hook assembly.



**Serviceable hoist**: A hoist which is not an affected hoist (see Note 1 of this AD)

Note 1: A Goodrich hoist, having P/N 44301-10-2, P/N 44301-10-5, P/N 44301-10-6, P/N 44301-10-10, P/N 44301-10-11, P/N 44301-10-12, or P/N 44301-10-13, is a serviceable hoist, if equipped with a non-affected hook assembly (which includes hoist hook assemblies having P/N 44301-425-103 or P/N 44301-425).

**Groups**: Group 1 helicopters are those that have an affected hoist installed. Group 2 helicopters are those that do not have an affected hoist installed.

#### Reason:

An occurrence was reported where the hook separated from the hoist cable. Investigation determined that failure of the internal retaining ring of the hook, in combination with a permanent compression set of the elastomeric energy absorber, caused the separation.

This condition, if not corrected, may lead to detachment of an external load or person from the helicopter hoist, possibly resulting in personal injury, or injury to persons on the ground.

To address this potential unsafe condition, AH issued the inspection ASB to provide inspection instructions, and EASA issued AD 2017-0199 to require repetitive inspections of the hook assembly and, depending on findings, replacement of the elastomeric energy absorber. That AD also required replacement of the retaining ring.

Since that AD was issued, an updated hook assembly has been designed, installation of which constitutes terminating action for the repetitive inspections. AH issued the modification ASB, providing applicable instructions.

For the reason described above, this AD retains the requirements of EASA AD 2017-0199, which is superseded, and requires modification of the hoist. This AD also provides criteria to allow installation of an affected hoist.

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

Required as indicated, unless accomplished previously:

# **Repetitive Inspections / Part Replacement:**

(1) For Group 1 helicopters: Within 3 months after 25 October 2017 [the effective date of EASA AD 2017-0199], and, thereafter, at intervals not exceeding 6 months, inspect each affected hook assembly and replace the retaining ring in accordance with the instructions of the inspection ASB.

# **Corrective Actions**:

(2) If, during any inspection as required by paragraph (1) of this AD, any permanent compression, as identified in the inspection ASB, is found on the elastomeric energy absorber, before next hoist operation, replace that elastomeric energy absorber in accordance with the instructions of the inspection ASB.



#### Modification:

(3) For Group 1 helicopters: Within 8 months after the effective date of this AD, modify the affected hoist in accordance with the instructions of the modification ASB.

# Alternative Method of Compliance:

(4) Replacement of an affected hoist on a helicopter with a serviceable hoist, as defined in this AD, is an acceptable alternative method to comply with the requirements of paragraph (3) of this AD for that helicopter. The hoist replacement can be accomplished in accordance with the instructions of the applicable Aircraft Maintenance Manual.

# Terminating Action:

(5) Modification of a helicopter as required by paragraph (3) of this AD, or as described in paragraph (4) of this AD, as applicable, constitutes terminating action for the repetitive inspections and retaining ring replacements as required by paragraph (1) of this AD for that helicopter.

#### Part Installation:

- (6) For Group 1 helicopters: From 25 October 2017 [the effective date of EASA AD 2017-0199], and until modification of the helicopter as required by paragraph (3) of this AD, or as described in paragraph (4) of this AD, as applicable, it is allowed to install an affected hoist on a helicopter, provided that the hook assembly has accumulated 6 months or less since its date of manufacture, or that, within 6 months prior to hoist installation, the retaining ring was replaced and the affected hook assembly passed an inspection in accordance with the instructions of the inspection ASB. Following installation, the affected hook assembly must be inspected and the retaining ring replaced as required by paragraph (1) of this AD.
- (7) For Group 2 helicopters: From the effective date of this AD, do not install an affected hoist on any helicopter.

#### **Ref. Publications:**

AH ASB EC135-85A-069 original issue dated 02 August 2017.

AH ASB EC135-85A-081 original issue dated 29 October 2020.

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 27 November 2020 as PAD 20-189 for consultation until 25 December 2020. 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: <u>ADs@easa.europa.eu</u>.



- 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 <u>EU aviation safety</u> 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.
- 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: <u>https://keycopter.airbushelicopters.com</u> > Technical Request Management E-mail: <u>customersupport.helicopters@airbus.com</u>.

