



## Airworthiness Directive

**AD No.:** 2021-0050

**Issued:** 23 February 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):**

EC135 and EC635 helicopters

**Effective Date:** 09 March 2021

**TCDS Number(s):** EASA.R.009

**Foreign AD:** Not applicable

**Supersedure:** None

### ATA 64 – Tail Rotor – Blades – Replacement / Re-identification

**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 variants, all serial numbers.

**Definitions:**

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

**The applicable ASB:** Airbus Helicopters (AH) Alert Service Bulletin (ASB) EC135-04A-014 and ASB EC135H-04A-002, both at revision 1, as applicable.

**Groups:** Group 1 are EC135 P3, EC135 T3, EC635 P3 and EC635 T3 helicopters, all variants.  
Group 2 are helicopters which are not Group 1.

**Old P/N:** Tail rotor (TR) blades, having Part Number (P/N) L642A2002101, P/N L642A2002103 or P/N L642A2002111; and TR head assemblies, having P/N L642A2001054, P/N L642A0101051, P/N L642A0101052, P/N L642A0101053 or P/N L642A0101054.



**Affected part:** Any TR blade having P/N L642A2002101 or P/N L642A2002111, which is, or has been, operated on Group 1 helicopters.

**New P/N:** TR blades, having P/N L642A2002104 or P/N L642A2002112; and TR head assemblies, having P/N L642A0101055.

**Serviceable part:** Any old P/N TR blade or assembly, which has never been operated on a Group 1 helicopter; or an affected part, the total time in service of which has been recalculated as required by this AD; or a new P/N TR blade.

#### Reason:

A reduced life limit has been established for TR blades installed on Group 1 helicopters, due to the higher loads experienced in service.

Failure to implement this life limit could lead to failure of a TR blade, possibly resulting in loss of control of the helicopter.

To address this potential unsafe condition, AH issued the applicable ASB to provide instructions to implement this reduced life limit, including instructions to determine the time in service accumulated by a TR blade that has been operated on Group 1 helicopters.

For the reasons described above, this AD requires to recalculate the time in service for affected parts, and to implement the reduced life limit. This AD also prohibits (re)installation of certain P/N TR blades and TR head assemblies, and provides conditions for (re)installation of TR blades.

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

Required as indicated, unless accomplished previously:

##### Determination of Time In Service:

- (1) For Group 1 and Group 2 helicopters: Within 12 months after the effective date of this AD, but before exceeding 6 800 flight hours (FH) since first installation of that affected part on a helicopter, determine the time in service accumulated by each affected part, as defined in this AD, in accordance with the instructions of section 3.B.2 of the applicable ASB (see Note 1 of this AD).

Note 1: For a TR blade which has never been installed on a Group 1 helicopter, no determination of the time in service is required by paragraph (1) of this AD.

- (2) For Group 2 helicopters: For an affected part having accumulated less than 500 FH while operated on Group 1 helicopters, determining the time in service accumulated by that affected part in accordance with the instructions of section 3.B.4 of AH ASB EC135-04A-014 revision 1 is an acceptable method to comply with the requirements of paragraph (1) of this AD.
- (3) For Group 2 helicopters: For a TR blade having P/N L642A2002103 which has been operated on Group 1 helicopters, within 12 months after the effective date of this AD, but before exceeding 6 800 FH since first installation of that TR blade on a helicopter, contact AHD for instructions to



determine the time in service accumulated by that TR blade and accomplish those instructions accordingly.

**Part Replacement (Life Limitation):**

- (4) For Group 1 helicopters: Within 12 months after the effective date of this AD, but before exceeding 6 800 FH since first installation on a helicopter, replace each TR blade having P/N L642A2002103 with a serviceable part. Using the instructions of the applicable maintenance manual is an acceptable method to replace a part as required by this paragraph.
- (5) Following the determination of the time in service of an affected part as required by paragraph (1) of this AD, before the time in service of that affected part exceeds 6 800 FH, replace that part with a serviceable part TR blade (see Note 2 of this AD). Using the instructions of the applicable maintenance manual is an acceptable method to replace a part as required by this paragraph.

Note 2: The requirements of paragraph (5) of this AD do not apply to any affected part for which the time in service has been determined as specified in paragraph (2) of this AD.

- (6) For Group 1 and Group 2 helicopters: Before the time in service of a new P/N TR blade exceeds 6 800 FH, replace that TR blade with a serviceable part. Using the instructions of the applicable maintenance manual is an acceptable method to replace a part as required by this paragraph.

**Part(s) Installation:**

- (7) For Group 1 helicopters: From the effective date of this AD, do not install on any helicopter an old P/N, as defined in this AD (see Note 3 of this AD).

Note 3: The applicable ASB provides instructions to re-identify an old P/N into a new P/N.

- (8) For Group 2 helicopters: From the effective date of this AD, it is allowed to install on any helicopter an affected part, provided that the part has accumulated less than 500 FH while operated on Group 1 helicopters, and that the time in service accumulated by that part has been determined in accordance with the instructions of section 3.B.4 of AH ASB EC135-04A-014 revision 1.
- (9) For Group 2 helicopters: From the effective date of this AD, it is allowed to install on any helicopter a TR blade having P/N L642A2002103, provided that the time in service of that TR blade has been determined as required by paragraph (3) of this AD.

**Ref. Publications:**

AH ASB EC135-04A-014 revision 1 dated 21 December 2020.

AH ASB EC135H-04A-002 revision 1 dated 21 December 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 22 January 2021 as PAD 21-002 for consultation until 19 February 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](mailto: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  
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