

Airworthiness Directive AD No.: 2017-0147

Issued: 10 August 2017

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:

AIRBUS HELICOPTERS DEUTSCHLAND GmbH

Type/Model designation(s): EC135 and EC635 helicopters

Effective Date: 24 August 2017

TCDS Number(s): EASA.R.009

Foreign AD: Not applicable

Supersedure: None

ATA 67 – Rotors Flight Control – Tail Rotor Controls – Modification

Manufacturer(s):

Airbus Helicopters Deutschland GmbH (AHD), formerly Eurocopter Deutschland GmbH (ECD), 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 (s/n).

Reason:

Several cases of insufficient clearance between a certain tail rotor control bearing connection and helicopter structure were detected during inspections of helicopters on the production line. Analysis indicated that the same condition could exist or develop on helicopters in service.

This condition, if not corrected, could lead, in case of unglued bearing, to blockage of the pedal controlling the tail rotor thrust and consequent loss of tail rotor control, possibly resulting in a forced landing with damage to the helicopter and injury to occupants.

To address this unsafe condition, Airbus Helicopters (AH) designed modification 4682, introducing a Teflon washer, which reduces the degree of freedom in case of drifting bearing at the affected connection, and issued Alert Service Bulletin (ASB) EC135-67A-031 to provide modification instructions.



For the reasons described above, this AD requires modification of the tail rotor control installation.

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

Required as indicated, unless accomplished previously:

Note 1: AH ASB EC135-67A-031 is hereafter referred to as "the ASB" in this AD.

Note 2: For the purpose of this AD, Group 1 helicopters have a s/n up to 1254, except s/n 1235. Group 2 helicopters have s/n 1235, or s/n 1255 or higher.

Modification:

(1) For Group 1 helicopters: Within 12 months after the effective date of this AD, modify the tail rotor control installation in accordance with the instructions of paragraphs 3.B.2 and 3.B.3 of the ASB.

Functional Test:

(2) Before next flight after the modification as required by paragraph (1) of this AD, accomplish a functional test in accordance with the instructions of paragraph 3.B.4 of the ASB.

Corrective Action(s):

- (3) If, during the functional test as required by paragraph (2) of this AD, a clearance of less than 1.5 millimetres (mm) at the upper stringer is detected, before next flight, accomplish the applicable corrective actions in accordance with the instructions of paragraph 3.B.4 of the ASB.
- (4) If, during the functional test as required by paragraph (2) of this AD, a clearance of less than 1.0 mm at the lower stringer is detected, before next flight, contact AHD for approved instructions and accomplish those instructions accordingly.

Tail Rotor Control Connection:

- (5) Following each disconnection of the tail rotor control on a helicopter, accomplish the subsequent connection of the tail rotor control on that helicopter in accordance with the instructions of paragraph 3.B.3 of the ASB as required by paragraph (5.1) or (5.2) of this AD, as applicable.
 - (5.1) For Group 1 helicopters: After modification of that helicopter as required by paragraph (1) of this AD.
 - (5.2) For Group 2 helicopters: From the effective date of this AD.
- (6) Connection of the tail rotor control on a helicopter, accomplished in accordance with Aircraft Maintenance Instructions which include the technical content of section 3.B.3 of the ASB, is an acceptable method to comply with the requirements of paragraph (5) of this AD for that helicopter.

Aircraft Maintenance Programme (AMP) Revision:

(7) Revise the approved AMP, on the basis of which the operator or the owner ensures the continuing airworthiness of each operated helicopter, by incorporating the requirements of



paragraph (5) of this AD, or the instructions as specified in paragraph (6) of this AD, as applicable, as required by paragraph (7.1) or (7.2) of this AD, as applicable.

- (7.1) For Group 1 helicopters: Within 12 months after modification of that helicopter as required by paragraph (1) of this AD.
- (7.2) For Group 2 helicopters: Within 12 months after the effective date of this AD.

Recording AD compliance

(8) When the AMP of a helicopter has been revised as required by paragraph (7) of this AD, that action ensures (see Note 3 of this AD) continued accomplishment of the task as required by paragraph (5) of this AD for that helicopter. Consequently, after revising the AMP, as required by paragraph (7) of this AD, it is not necessary that accomplishment of individual action is recorded for demonstration of AD compliance on a continued basis.

Note 3: For affected EC135 and EC635 helicopters registered in Europe, complying with the approved AMP, as specified in paragraph (7) of this AD, is required by Commission Regulation (EU) No. <u>1321/2014</u>, Part M.A.301, paragraph 3.

Ref. Publications:

AH ASB EC135-67A-031 original issue dated 30 March 2017.

The use of later approved revisions of this document 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 26 April 2017 as PAD 17-052 for consultation until 24 May 2017. The Comment Response Document can be found in the <u>EASA Safety Publications Tool</u>, 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: <u>ADs@easa.europa.eu</u>.
- 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: + 49 (0)151-1422 8976; Facsimile: + 49 (0)906-71 4111
 Web portal: <u>https://keycopter.airbushelicopters.com</u> > Technical Request Management E-mail: customersupport.helicopters@airbus.com

