

Airworthiness Directive AD No.: 2010-0227R1

Issued: 07 April 2017 Note: This Airworthiness Directive (AD) is issued by EASA, acting in

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):** EC 135 and EC635 helicopters

Effective Date: Revision 1: 07 April 2017 Original Issue: 17 November 2010

TCDS Number(s): EASA.R.009

Foreign AD: Not applicable

Revision: This AD revises AD 2010-0227 dated 03 November 2010 (including its Correction dated 08 November 2010), which superseded EASA AD 2008-0064R1 dated 15 April 2008.

ATA 67 – Rotorcraft Flight Control – Tail Rotor Rod and Ball Pivot – Inspection / Replacement

Manufacturer(s):

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

Applicability:

EC135 P1(CDS), EC135 P1(CPDS), EC135 P2(CPDS), EC135 P2+, EC135 T1(CDS), EC135 T1(CPDS), EC135 T2(CPDS), EC135 T2+, EC635 T1(CPDS), EC635 P2+ and EC635 T2+ helicopters, all serial numbers.

Reason:

In 2007, an accident occurred with an EC135 helicopter in Japan. Preliminary investigation results appeared to indicate that loss of control was due to failure of the tail rotor control rod. ECD issued an Alert Service Bulletin (ASB) to address this unsafe condition, instructing operators to inspect the affected control rod, Part Number (P/N) L672M2005207, and the respective attachments, and EASA issued Emergency AD 2007-0301-E, subsequently superseded by AD 2007-0313, to require repetitive inspections and, depending on findings, the replacement of the tail rotor control rod and ball pivot, only for helicopters not equipped with an Automatic Flight Control System (AFCS).



After review of the inspection results, it became apparent that the requirements should also apply to helicopters equipped with AFCS. Furthermore, different inspection intervals had to be applied, depending on the installed part numbers. Consequently, EASA issued AD 2008-0064 (later revised) to require those actions.

After EASA AD 2008-0064R1 was issued, ECD developed a new P/N L672M2006101 tail rotor control rod, installation of which constituted terminating action for the repetitive inspections. Consequently, EASA issued AD 2010-0227, retaining the requirements of AD 2008-0064R1, which was superseded, and requiring the replacement of the P/N L672M2005207 tail rotor control rod with the new P/N L672M2006101 tail rotor control rod, not later than 17 November 2011. Repetitive inspections of the ball pivot P/N 92-201-00 and P/N 92-207-00 were still required.

Recently, following a review of data and feedback received from in service helicopters, it has been determined that the repetitive inspections of the ball pivot are no longer required to address the unsafe condition. The repetitive inspection of the ball pivot are now included in Chapter 05 of the Aircraft Maintenance Manual.

For the reason described above, this AD is revised to remove the requirement for repetitive inspections of the control rod P/N L627M2005207, which utilization is no longer allowed, and of the ball pivot. This AD also contains some editorial changes to meet current AD writing standards, without affecting the technical content or requirements.

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

Required as indicated, unless accomplished previously:

Note 1: For the purpose of this AD, Group 1 are helicopters that, on 17 November 2010 [the effective date of the original issue of this AD], have P/N L672M2005207 tail rotor control rod installed. Group 2 are helicopters that, on 17 November 2010 [the effective date of the original issue of this AD], do not have P/N L672M2005207 tail rotor control rod installed.

Ball Pivot Inspection:

- (1) Within 50 flight hours (FH) after 18 April 2008 [the effective date of EASA AD 2008-0064R1] inspect the ball pivot P/N 92-201-00 in accordance with the instructions of ECD ASB EC135-67A-017.
 - (1.1) [DELETED]
 - (1.2) [MERGED WITH PARAGRAPH (1) OF THIS AD].
- (2) Within 100 FH or 43 days, whichever occurs first after 18 April 2008 [the effective date of EASA AD 2008-0064R1], inspect ball pivot P/N 92-207-00 in accordance with the instructions of ECD ASB EC135-67A-017.

Corrective Action:

(3) If damage is detected on the ball pivot (either P/N 92-201-00 or P/N 92-207-00) during any inspection, before next flight, replace the ball pivot and the tail rotor control rod with serviceable parts. In either case inform AHD.



(4) [DELETED].

Control Rod Replacement:

- (5) For Group 1 helicopters (see Note 1 of this AD): Within the next 400 FH or 12 months, whichever occurs first after 17 November 2010 [the effective date of the original issue of this AD], replace the P/N L672M2005207 tail rotor control rod with a P/N L672M2006101 tail rotor control rod in accordance with the instructions of ECD Service Bulletin (SB) EC135-67-018.
- (6) [DELETED].

Parts Installation:

- (7) Do not install a P/N L672M2005207 tail rotor control rod on any helicopter, as applicable:
 - (7.1) For Group 2 helicopters: From 17 November 2010 [the effective date of the original issue of this AD].
 - (7.2) For Group 1 helicopters: After modification of a helicopter as required by paragraph (5) of this AD.

Ref. Publications:

ECD ASB EC135-67A-017 Revision 3 dated 26 July 2010, or Airbus Helicopters ASB EC135-67A-017 Revision 4 dated 03 April 2017.

ECD SB EC135-67-018 Revision 1 dated 15 May 2008.

The use of later approved revisions of these 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. The required actions and the risk allowance have granted the issuance of a Final AD with Request for Comments, postponing the public consultation process after publication.
- 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, 86607 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 Requests Management or e-mail: customersupport.helicopters@airbus.com.

