EASA

AIRWORTHINESS DIRECTIVE



AD No.: 2013-0176

Date: 07 August 2013

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, 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 EU 748/2012, Part 21.A.3B. In accordance with EC 2042/2003 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 [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].

Design Approval Holder's Name: EUROCOPTER DEUTSCHLAND GmbH Type/Model designation(s):

EC 135, EC 635 and MBB-BK 117 C-2 helicopters

TCDS Numbers: EASA.R.

EASA.R.009 and EASA.R.010

Foreign AD: Not applicable

Supersedure: None

ATA 22	Auto Flight System – Longitudinal, Lateral and Yaw Actuator / Control Rod Attachment Hardware – Inspection / Replacement
Manufacturer(s):	Eurocopter Deutschland GmbH, Eurocopter España S.A., American Eurocopter LLC
Applicability:	EC 135 P1 (CDS), EC 135 P1 (CPDS), EC 135 P2+, EC 135 P2 (CPDS), EC 135 T1 (CDS), EC 135 T1 (CPDS), EC 135 T2+, EC 135 T2 (CPDS), EC 635 P2+, EC 635 T1 (CPDS) and EC 635 T2+ helicopters, all serial numbers (s/n), and MBB-BK 117 C-2 helicopters, all s/n.
Reason:	During installation work on a helicopter, it was found impossible to establish attachment hardware on a threaded blind borehole between the Smart Electro Mechanical Actuator (SEMA) and the control rod without play.
	The reason for this loose attachment hardware was an unfavourable adding of the tolerances of the individual attachment hardware elements. As a result, the screw pushed against the bottom of the threaded blind borehole on the SEMA and no clamping effect could be achieved on the screw head.
	This condition, if not detected and corrected, could lead (in the worst case scenario) to the loss of the concerned control axis, possibly resulting in loss of control of the helicopter.
	To address this potential unsafe condition, Eurocopter Deutschland GmbH (ECD) issued Alert Service Bulletin (ASB) No. EC135-22A-015 and ASB No. MBB BK117 C-2-22A-009.
	For the reasons described above, this AD requires a one-time inspection of the affected SEMAs for attachment hardware connected to the respective control rod to detect improper connection / play and, depending on findings, replacement of the affected hardware.

Effective Date:	21 August 2013
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously:
	(1) Within 50 flight hours after the effective date of this AD, inspect the attachment hardware connection between the relevant SEMA and the SEMA control rod in accordance with the instructions of ECD ASB EC135-22A-015 or ASB MBB BK117 C-2-22A-009, as applicable to helicopter type.
	(2) If, during the inspection as required by paragraph (1) of this AD, improper connection / play is detected, before next flight, correct the connection in accordance with the instructions of ECD ASB EC135-22A-015 or ASB MBB BK117 C-2-22A-009, as applicable to helicopter type.
	(3) From the effective date of this AD, installation of attachment hardware between the SEMA and the SEMA control rod must be established without play in accordance with the instructions of ECD ASB EC135-22A-015 or ASB MBB BK117 C-2-22A-009, as applicable to helicopter type.
	Note: The use of instructions specified in the EC 135 Aircraft Maintenance Manual (AMM), chapters 67-10-00, 4-9, 67-10-00, 4-10, 67-20-00, 4-12, 67-20-00, 4-13 and 67-20-00, 4-14; or MBB BK 117 C-2 AMM, chapter 22-10-00, 6-2, as applicable to helicopter type, is acceptable to comply with the requirements of paragraph (3) of this AD.
Ref. Publications:	ECD ASB EC135-22A-015 original issue, dated 13 May 2008, or Revision 01, dated 28 January 2013.
	ECD ASB MBB BK117 C-2-22A-009 original issue, dated 13 May 2008, or Revision 01, dated 03 August 2009.
	The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.
	EC 135 AMM Revision 10 or later.
	MBB BK 117 C-2 AMM Revision 12 or later.
Remarks:	 If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
	 This AD was posted on 28 June 2013 as PAD 13-089 for consultation until 26 July 2013. No comments were received during the consultation period.
	 Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: <u>ADs@easa.europa.eu</u>.
	 For any question concerning the technical content of the requirements in this AD, please contact: Eurocopter Deutschland GmbH, Industriestrasse 4, 86607 Donauwörth, Germany Telephone: +49 (0)151 1422 8976, Fax: +49 (0)906 71 4111.