

EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2010-0058</p> <p>Date: 30 March 2010</p> <p>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.</p>
<p>This AD is issued in accordance with EC 1702/2003, Part 21A.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].</p>	
<p>Type Approval Holder's Name :</p> <p>Eurocopter Deutschland GmbH</p>	<p>Type/Model designation(s) :</p> <p>EC 135 and EC 635 series helicopters and MBB-BK 117 C-2 helicopters</p>
<p>TCDS Number : EASA.R.009 and EASA.R.010</p>	
<p>Foreign AD : Not applicable</p>	
<p>Supersedure : This AD supersedes Luftfahrt-Bundesamt (LBA) Germany AD D-2008-178 and AD D-2008-179, both dated 31 May 2008.</p>	
ATA 67	Rotor Flight Controls – Tail Rotor, Cyclic and Collective Control Levers – Inspection / Repair
Manufacturer(s):	Eurocopter Deutschland GmbH, Eurocopter Espana S.A. and American Eurocopter LLC
Applicability:	<p>EC 135 P1(CDS), EC 135 P1(CPDS), EC 135 P2(CPDS), EC 135 P2+, EC 135 T1(CDS), EC 135 T1(CPDS), EC 135 T2(CPDS), EC 135 T2+, EC 635 T1(CPDS), EC 635 P2+, and EC 635 T2+ helicopters, all serial numbers (s/n), and</p> <p>MBB-BK 117 C-2 helicopters, all s/n.</p>
Reason:	<p>During accomplishment of an inspection on a MBB BK117 C-2, bearings were detected which had not been correctly fixed. This condition, if not detected and corrected, may cause the affected control lever to shift in the axial direction. Under unfavourable circumstances, the lever might get into contact with the helicopter structure, possibly resulting in reduced control of the helicopter.</p> <p>As some bearings of the EC 135 and MBB-BK 117 C-2 type designs are fixed with the same procedure, they are equally affected by safety concern. To address and correct this unsafe condition, LBA Germany issued AD D-2008-178 (for EC135/EC635) and LBA AD D-2008-179 (for MBB-BK 117 C-2) that require the inspection and, when improper bonding is detected, replacement or repair of the affected bearings. More recently, a modification has been developed by Eurocopter Deutschland (ECD) that allows extending the inspection interval.</p> <p>In line with EASA AD Policy (document C.Y001-01 dated 28 July 2008), and for</p>

	the reasons described above, this AD retains the requirements of the LBA ADs, which are superseded, and requires implementation of a modification that introduces new washers and bushings, which allows for extended inspection intervals. In accordance with ECD standard practice, a deviation of up to 10% of compliance time is allowed, although not accumulative.								
Effective Date:	13 April 2010								
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>Restatement of the requirements of LBA AD D-2008-178 and D-2008-179:</p> <p>(1) Within 50 flight hours (FH) or 1 month, whichever occurs first after 31 May 2008 [the effective date of the LBA AD, as applicable to helicopter type] inspect the affected levers in accordance with the instructions of ECD Alert Service Bulletin (ASB) EC135-67A-019 or ASB MBB BK117 C-2-67A-010, as applicable to helicopter type.</p> <p>(2) Thereafter, at intervals as indicated in Table 1 of this AD, repeat the inspection in accordance with the instructions of ECD ASB EC135-67A-019 or ASB MBB BK117 C-2-67A-010, as applicable to helicopter type.</p> <table border="1"> <tr> <th colspan="2">Table 1</th></tr> <tr> <th>Helicopter Type</th><th>Repetitive Inspection Intervals</th></tr> <tr> <td>EC 135 and EC 635</td><td>not exceeding 800 FH or 12 months (+10%), whichever occurs first</td></tr> <tr> <td>MBB-BK 117 C-2</td><td>not exceeding 600 FH or 12 months (+10%), whichever occurs first</td></tr> </table> <p>(3) If, during any inspection as required by paragraphs (1) or (2) of this AD, improper bonding is detected, before next flight, replace the affected bearings or accomplish a bonding repair, in accordance with the instructions of ECD ASB EC135-67A-019 or ASB MBB BK117 C-2-67A-010, as applicable to helicopter type. Replacement or repair as required by this paragraph does not constitute terminating action for the repetitive inspections required by paragraph (2) of this AD.</p> <p>New requirements introduced by this AD:</p> <p>(4) Within 12 months after the effective date of this AD, modify the affected levers by retrofit of washers and bushings in accordance with the instructions of ECD ASB EC135-67A-019 Revision 3 or ASB MBB BK117 C-2-67A-010 Revision 3, as applicable to helicopter type.</p> <p>Modification of a helicopter as required by this paragraph constitutes terminating action for the repetitive inspections required by paragraph (2) of this AD for that helicopter.</p> <p>EC 135 and EC 635 series helicopters with s/n 0830 and up, and MBB-BK 117 C-2 helicopters with s/n 9311 and up, will be modified prior to delivery in accordance with the requirements of paragraph (4) of this AD.</p> <p>(5) After modification of a helicopter as required by paragraph (4) of this AD, or after helicopter first flight, as applicable, at intervals indicated in Table 2 of</p>	Table 1		Helicopter Type	Repetitive Inspection Intervals	EC 135 and EC 635	not exceeding 800 FH or 12 months (+10%), whichever occurs first	MBB-BK 117 C-2	not exceeding 600 FH or 12 months (+10%), whichever occurs first
Table 1									
Helicopter Type	Repetitive Inspection Intervals								
EC 135 and EC 635	not exceeding 800 FH or 12 months (+10%), whichever occurs first								
MBB-BK 117 C-2	not exceeding 600 FH or 12 months (+10%), whichever occurs first								

this AD, inspect the levers in accordance with the instructions of ECD ASB EC135-67A-019 Revision 3 or ASB MBB BK117 C-2-67A-010 Revision 3, as applicable to helicopter type.

Table 2	
Helicopter Type	Initial and Repetitive Inspection Intervals
EC 135 and EC 635	not exceeding 800 FH or 36 months (+10%), whichever occurs first
MBB-BK 117 C-2	not exceeding 600 FH or 24 months (+10%), whichever occurs first

- (6) If, during any inspection as required by paragraph (5) of this AD, improper bonding is detected, before next flight, replace the affected bearings or accomplish a bonding repair in accordance with the instructions of ECD ASB EC135-67A-019 Revision 3 or ASB MBB BK117 C-2-67A-010 Revision 3, as applicable to helicopter type.
- (7) **Installation on a helicopter of a spare lever or lever assembly that has been delivered prior to 16 December 2009:** Within 50 FH after installation, but not before accumulating 10 FH after installation, accomplish a one-time inspection of the replacement part in accordance with the instructions of ECD ASB EC135-67A-019 Revision 3 or ASB MBB BK117 C-2-67A-010 Revision 3, as applicable to helicopter type.
- (8) If improper bonding is detected during the inspection as required by paragraph (7) of this AD, before next flight, replace the affected part(s) or accomplish a bonding repair in accordance with the instructions of ECD ASB EC135-67A-019 Revision 3 or ASB MBB BK117 C-2-67A-010 Revision 3, as applicable to helicopter type.
- (9) Repair or replacement as required by paragraph (6) or (8) of this AD does not constitute terminating action for the repetitive inspections required by paragraph (5) of this AD.

Ref. Publications:

Eurocopter Deutschland GmbH ASB EC135-67A-019 Revision 3, dated 16 December 2009, and ASB MBB BK117 C-2-67A-010 Revision 3, dated 08 February 2010.

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. This AD was posted on 10 March 2010 as PAD 10-025 for consultation until 24 March 2010. No comments were received during the consultation period.
3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail ADs@easa.europa.eu.
4. For any question concerning the technical content of the requirements in this AD, please contact Eurocopter Deutschland GmbH, Industriestrasse 4, 86607 Donauwörth, Federal Republic of Germany. Telephone: + 49 (0)151-1422 8976; Facsimile: + 49 (0)906-71 4111.