EASA AD No.: 2008-0175-E

EASA EMERGENCY AIRWORTHINESS DIRECTIVE AD No.: 2008-0175-E Date: 16 September 2008 Note: This Emergency 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 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].

| Type Approval Holder's Name : | | Type/Model designation(s) : | |
|-------------------------------|--|-------------------------------|--|
| Eurocopter Deutschland GmbH | | EC 135 and EC 635 helicopters | |
| TCDS Number : | EASA.R.009 | | |
| Foreign AD : | AD: Not applicable | | |
| Supersedure : | None | | |
| ATA 63 | Main Rotor Drive – Main Transmission Mast Bearing Retainer Bolts – Inspection / Modification | | |
| Manufacturer(s): | Eurocopter Deutschland GmbH (ECD) | | |
| Applicability: | 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 | | |
| Reason: | One operator has reported the occurrence of unusual vibrations during the start phase of the main rotor on one helicopter. These vibrations stopped after the application of torque. The troubleshooting accomplished by the maintenance personnel showed that six of the eight attachment screws of the lower hub-shaft bearing support had loosened. After inspection of the affected operator's fleet, the attachments screws of the lower hub-shaft bearing support were found loosened on the main transmissions of two additional helicopters. The lower hub-shaft bearing consists of a ball bearing and a roller bearing. The outer race of the roller bearing is fixed to the housing with screws. Should all attachment screws become loose, the outer race of the roller bearing might separate, which would constitute an unsafe condition. In such case, however, the axial guidance of the rotor hub-shaft would still be ensured. | | |
| | For the reasons described above, this new EASA Emergency AD requires the inspection of the main transmission attachment hardware and installation of locking washers in accordance with the instructions of ECD Alert Service Bulleti (ASB) No. EC135-63A-013 Revision 02. | | |
| Effective Date: | 18 September 2008 | | |

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| | Required as indicated, unless already accomplished: | |
|--|---|--|
| Required Action(s) and Compliance Time(s): | (1) After the effective date of this AD, when unusual vibrations are detected during the start or the end phase of the main rotor's running, within 3 flight cycles after detection, inspect the attachment hardware and install locking washers in accordance with Section 3.B of ECD ASB No. EC135-63A-013 Revision 02. | |
| | (2) Unless accomplished as required by paragraph (1) of this AD, within the next 50 flight hours (FH) after the effective date of this AD, but not later than 31 March 2009, inspect the attachment hardware and install locking washers in accordance with Section 3.B of ECD ASB No. EC135-63A-013 Revision 02. | |
| | (3) For helicopters that have already been modified, prior to the effective date of this AD, in accordance with ECD ASB No. EC135-63A-013 at original issue or Revision 01, within 400 FH (+/- 10%) after the effective date of this AD, inspect the attachment hardware and install locking washers in accordance with Section 3.B of ECD ASB No. EC135-63A-013 Revision 02. | |
| | (4) After the effective date of this AD, no person shall install a main transmission on a helicopter, unless it has been modified in accordance with Section 3.B of ECD ASB No. EC135-63A-013 Revision 02. | |
| Ref. Publications: | Eurocopter Deutschland EC135 Alert Service Bulletin No. EC135-63A-013 Revision 02 dated 12 September 2008. | |
| | The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD. | |
| Remarks : | If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. | |
| | The safety assessment has requested not to implement the full consultation process and an immediate publication and notification. | |
| | Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA; E-mail: ADs@easa.europa.eu. | |
| | For any question concerning the technical content of the requirements in this AD, please contact: Eurocopter Deutschland GmbH P.O. Box 80 11 40 D-81663 München, Federal Republic of Germany Telephone: + 49 (0) 151 14 22 89 76, Fax: + 49 (0) 89 6000-4111 E-mail maintransmission@eurocopter.com | |

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