EASA	EMERGENCY AIRWORTHINESS DIRECTIVE
	AD No.: 2012-0085-E **Date: 17 May 2012** 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].

Design Approval Holder's Name:	**Type/Model designation(s):**
Eurocopter Deutschland GmbH	EC 135 and EC 635 helicopters

TCDS Number:	EASA.R.009
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA AD 2012-0041R1 dated 15 March 2012.

ATA 62	**Main Rotor System – Main Rotor Hub – Inspection / Replacement**
Manufacturer(s):	Eurocopter Deutschland GmbH (ECD), Eurocopter España S.A., Eurocopter S.A.
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:	During a periodical inspection of an EC 135 helicopter, a crack was detected on the lower hub-shaft flange of a main rotor hub (MRH) shaft. The investigation is on-going and the cause of the cracking has not been determined yet. This condition, if not detected, could lead to further crack propagation, possibly resulting in main rotor hub failure and consequent loss of the helicopter. To address this condition, EASA issued AD 2012-0041-E. Since issuance of that AD, further cracks have been detected on the lower hub shaft flange of two other helicopters during accomplishment of the pre-flight checks. In addition, it has been determined that the identification of deformed safety pins may not be sufficient to detect the cracks on the MRH shaft. To address this condition, ECD developed new inspection procedures. For the reasons described above, this AD requires: Repetitive pre-flight visual inspections of the main rotor blades attachment area in the upper and lower hub-shaft flanges, and repetitive visual inspection on the

	upper and lower hub-shaft flanges and the blade bolt area. This AD also requires reporting of any findings to ECD. This AD is considered to be an interim action and further AD action may follow.
Effective Date:	18 May 2012
Required Action(s) and Compliance Time(s):	Required as indicated, unless already accomplished: (1) Within 3 days after the effective date of this AD and thereafter, before each flight, accomplish a pre-flight visual inspection in accordance with the instructions of section 3.B.Part 1 of ECD Alert Service Bulletin (ASB) No. EC135-62A-029 Revision 1. The flight duration between 2 pre-flight inspections **must not** exceed 6 Flight Hours (FH). Note: The repetitive pre-flight inspections of this AD may be accomplished by the flight crew or the pilot-owner in accordance with the provisions of Part M and Part 145. Compliance of each pre-flight inspection as required by paragraph (1) of this AD should be recorded in the log book of the helicopter. (2) Upon accumulation of 400 FH by the MRH since first MRH installation on a helicopter, or within 10 FH, whichever occurs later after the effective date of this AD, and, thereafter, at intervals not to exceed 10 FH, perform: a visual inspection of the upper and lower hub-shaft flanges in accordance with the instructions of section 3.B.Part 2 of ECD ASB No. EC135-62A-029 Revision 1, and a visual inspection of blade bolt area in accordance with section 3.B.Part 3 of ECD ASB No. EC135-62A-029 Revision 1. (3) If, during any of the inspections required by paragraph (1) and (2) of this AD, cracks are detected, before next flight, replace the MRH with a serviceable unit. (4) Replacement of a MRH as required by paragraph (3) of this AD does not constitute terminating action for the repetitive inspections as required by paragraph (1) and (2) of this AD. (5) Within 1 week after replacement of the MRH as required by paragraph (3) of this AD, report the findings and send the removed MRH for further investigation to ECD. (6) From the effective date of this AD, do not install a MRH that has accumulated more than 400 FH since first installation on an helicopter unless it has successfully passed the inspections as required by paragraph (2) of this AD.
Ref. Publications:	Eurocopter Deutschland ASB No. EC135-62A-029 Revision 1, dated 16 May 2012. 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. The results of the safety assessment have indicated the need for immediate publication and notification, without the full public consultation process. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive 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.