EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2009-0065R1 **Date: 08 September 2009** 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 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 :	Not applicable
Revision :	This AD revises and replaces EASA AD 2009-0065 dated 13 March 2009.
ATA 53	**Fuselage – Rear Structure / Tail Boom – Pre-Flight Check / Inspection**
Manufacturer(s):	Eurocopter Deutschland GmbH, Eurocopter ESPANA 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, if an aft ring frame Part Number (P/N) L535A3501230 is installed.
Reason:	During a pre-flight check on an EC135 helicopter, a crack was detected on the ring frame that connects the tail rotor Fenestron housing to the rear structure tube (tail boom). The crack ran alongside one rivet row over about one third of the circumference of the ring frame. This condition, if not corrected, could lead to crack propagation remaining undetected, possibly resulting in loss of the Fenestron structure and consequent loss of control of the helicopter. To address and correct this unsafe condition, EASA issued Emergency AD 2008-0190-E that required the amendment of the basic Flight Manual (FLM), the accomplishment of repetitive pre-flight checks, a one-time inspection and corrective actions. Based on in-service feedback, Eurocopter Deutschland (ECD) revised Alert Service Bulletin (ASB) EC135-53A-022 to introduce a repetitive visual inspection. For the reason described above, EASA AD 2009-0065 was issued, retaining the requirements of EASA AD 2008-0190-E, which was superseded, expanding the applicability to include EC 135 helicopters manufactured in Spain and adds a repetitive inspection of the rear fuselage structure (tail boom) area for cracks. ECD has recently developed a modification (reinforcement) of the aft ring frame, including P/N change, for both production and in-service application.

	Consequently, AD 2009-0065 is revised to remove helicopters that have a new or modified aft ring frame installed from the Applicability of this AD and to introduce modification of the aft ring frame as optional terminating action for the repetitive checks and inspections required by this AD.
Effective Date:	27 March 2009
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Before next flight after the effective date of this AD, amend the FLM, Section 4 Pre-Flight Check, by inserting page 6 or 7, as applicable to helicopter model, of ECD EC135 ASB EC135-53A-022 into the FLM, and inform the flight crew accordingly. (2) Before next flight after the effective date of this AD and thereafter before each first flight of a day, accomplish the visual check of the rear structure tube in accordance with the instructions of ECD ASB EC135-53A-022. The pilot is allowed to accomplish this check as part of the regular pre-flight checks. (3) Initially, within the time period indicated in Table 1 of this AD, as applicable, and thereafter at intervals not to exceed 100 flight hours (FH) (+ 10 FH tolerance), accomplish a visual inspection in accordance with the instructions of ECD ASB EC135-53A-022. Table 1

Flight Hours (FH) accumulated since new	**Initial Inspection Compliance Time**
100 FH or less	Prior to accumulating 100 FH (+ 10 FH tolerance) since new
More than 100 FH	Within 25 FH (+ 5 FH tolerance) after the first check as required by paragraph (2) of this AD

(4) If, during any check or inspection as required by paragraph (2) or (3) of this AD, cracks are detected within the ring frame as specified in the ASB, before further flight, replace the ring frame with a serviceable part.

(5) Installation of a P/N L535A3501230 ring frame as replacement part does not constitute terminating action for the repetitive check/inspection requirements of this AD.

(6) Modification (reinforcement) of the ring frame on a helicopter, in accordance with ECD Service Bulletin (SB) EC135-53-023, including P/N change to L535H2120302, constitutes terminating action for the repetitive check/inspection requirements of this AD for that helicopter.

Ref. Publications:	Eurocopter Deutschland ASB EC135-53A-022 Revision 1 dated 16 December 2008. Eurocopter Deutschland SB EC135-53-023 Revision 0 dated 19 August 2009. 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 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, Fax: + 49 (0)906-71 4111.