


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>	
	<p><b>AD No.: 2011-0111R1</b></p> <p><b>Date: 22 September 2011</b></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><b>Type Approval Holder's Name :</b> Eurocopter Deutschland GmbH</p>		<p><b>Type/Model designation(s) :</b> EC 135 helicopters</p>
TCDS Number:	EASA.R.009	
Foreign AD:	Not applicable	
Revision:	This AD revises EASA AD 2011-0111 dated 10 June 2011.	
<b>ATA 21</b>	<b>Air Conditioning – Mechanical Air Conditioning System – Inspection / Deactivation</b>	
Manufacturer(s):	Eurocopter Deutschland GmbH, Eurocopter España S.A., Eurocopter S.A.	
Applicability:	EC 135 P2+ and EC 135 T2+ helicopters, serial numbers 870, 872, 873, 879, 883, 884, 888, 893, 900, 905, 911, 914, 916, 917, 923 and 926, which are equipped with a mechanical air condition system with compressor bearing block Part Number (P/N) L210M1872105.	
Reason:	<p>During a recent pre-flight check of an EC 135 P2+ helicopter, metallic parts were found within the area of the air inlets of both engines. Subsequent inspection identified the debris as parts of the bearing cage of one of the ball bearings of the air conditioning compressor bearing block. Loose parts of the bearing cage damaged the compressor stage of one of the two engines to such an extent that a basic overhaul was necessary.</p> <p>As the affected mechanical air conditioning system was only recently introduced on the production line, only a limited number of helicopters are affected. No P/N L210M1872105 compressor bearing blocks have been supplied as spares.</p> <p>This situation, if not detected and corrected, could lead to further cases of bearing case failure, possibly resulting in loss of engine power and reduced control of the helicopter.</p> <p>To address this potential unsafe condition, EASA issued AD 2011-0111 to require repetitive inspections of the affected ball bearing and, depending on findings, deactivation of the mechanical air conditioning system.</p> <p>This AD has been revised to allow replacement of the affected compressor bearing block with an improved block, which constitutes an optional terminating action for the repetitive inspections required by this AD.</p>	

Effective Date:	Revision 1: 29 September 2011 Original issue: 24 June 2011						
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Within 25 flight hours (FH) or 14 days, whichever occurs first after 24 June 2011 [the effective date of the original issue of this AD], inspect the mechanical air conditioning system compressor bearing block upper bearing, in accordance with the instructions of Eurocopter Deutschland (ECD) Alert Service Bulletin (ASB) EC135-21A-013.</p> <p>(2) Thereafter, within the applicable intervals specified in Table 1 of this AD, depending on the results of the inspection as required by paragraph (1) of this AD, inspect the mechanical air conditioning system compressor bearing block upper bearing, in accordance with the instructions of the ECD ASB EC135-21A-013.</p> <p style="text-align: center;">Table 1</p> <table border="1" data-bbox="568 712 1423 1010"> <thead> <tr> <th data-bbox="568 712 979 819">Inspection results:</th> <th data-bbox="979 712 1423 819">Repeat Inspection Interval (+10% tolerance), whichever occurs first</th> </tr> </thead> <tbody> <tr> <td data-bbox="568 819 979 898">No detection of water, corrosion or leaking grease</td> <td data-bbox="979 819 1423 898">Not to exceed 100 FH or 3 months</td> </tr> <tr> <td data-bbox="568 898 979 1010">Detection of condensation water (small amounts of humidity) only</td> <td data-bbox="979 898 1423 1010">Not to exceed 25 FH or 28 days</td> </tr> </tbody> </table> <p>(3) If, during an inspection as required by paragraph (1) or (2) of this AD, water, corrosion or leaking grease is detected, before next flight, deactivate the air conditioning system in accordance with the instructions of ECD ASB EC135-21A-013.</p> <p>(4) Modification of a helicopter by replacing the mechanical air conditioning system compressor bearing block, P/N L210M1872105, with an improved block, P/N L210M1872107 or P/N L210M1872886, in accordance with the instructions of ECD Service Bulletin (SB) EC135-21-015, constitutes terminating action for the repetitive inspections required by this AD for that helicopter.</p>	Inspection results:	Repeat Inspection Interval (+10% tolerance), whichever occurs first	No detection of water, corrosion or leaking grease	Not to exceed 100 FH or 3 months	Detection of condensation water (small amounts of humidity) only	Not to exceed 25 FH or 28 days
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Ref. Publications:	<p>ECD ASB EC135-21A-013 original issue, dated 06 June 2011.</p> <p>ECD SB EC135-021-015 original issue, dated 12 July 2011.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>						
Remarks :	<ol style="list-style-type: none"> <li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>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.</li> <li>3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a></li> <li>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.</li> </ol>						