


EASA	AIRWORTHINESS DIRECTIVE	
	AD No.: 2013-0103	
	Date: 02 May 2013	
<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 EU 748/2012, Part 21.A.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>		
Design Approval Holder's Name:	Type/Model designation(s):	
EUROCOPTER	EC 225 LP helicopters	
TCDS Number:	EASA R.002	
Foreign AD:	Not applicable	
Supersedure:	This AD supersedes EASA AD 2007-0180-E dated 29 June 2007.	
ATA 62	Main Rotor – Blade Leading Edge Protective Strip – Check	
Manufacturer(s):	Eurocopter	
Applicability:	EC 225 LP helicopters, all serial numbers, if equipped with Main Rotor Blades (MRB) Part Number (P/N) 332A11.0050.00 or P/N 332A11.0055.00 or P/N 332A11.0050.02 or P/N 332A11.0055.02, all serial numbers.	
Reason:	<p>Significant de-bonding of the stainless steel protective strip was found on a MRB installed on a helicopter.</p> <p>The initial investigation revealed rapidly progressing de-bonding, which is suspected to be caused by water seepage through a crack detected in the leading edge stainless steel protective strip.</p> <p>This condition, if not detected and corrected, could lead to loss of the MRB stainless steel protective strip resulting in excessive vibrations induced by rotor blade weight unbalance and forced landing of the helicopter.</p> <p>To address this unsafe condition, Eurocopter issued Alert Service Bulletin (ASB) EC225 05A010 to provide instructions to check the MRB protective strip to detect any de-bonding.</p> <p>Consequently, EASA issued AD 2007-0180-E to require repetitive inspections of the MRB leading edge stainless steel protective strip, and depending on findings, accomplishment of applicable corrective action(s).</p> <p>Since that AD was issued, Eurocopter developed modification MOD 0740714, improving the MRB tip cap design by replacement of its leading edge stainless steel protective strip with new leading edge Nickel-Cobalt protective strip and resulting in re-identification of the modified MRB with a new P/N. MRB P/N</p>	

	<p>332A11.0050.00 or P/N 332A11.0055.00 modified in accordance with MOD 0740714 is re-identified as P/N 332A11.0050.02 or P/N 332A11.0055.02 respectively. Nevertheless, these MRB P/N 332A11.0050.02 and P/N 332A11.0055.02 are still susceptible to de-bonding of the main leading edge stainless steel protective strip and therefore require the same inspections to be applied.</p> <p>For the reasons described above, this AD retains the requirements of EASA AD 2007-0180-E, which is superseded, but applies to an extended population of MRB P/N.</p>									
Effective Date:	07 May 2013									
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Initially, within the threshold specified in Table 1 of this AD, as applicable to MRB P/N, and, thereafter, at intervals not to exceed 85 flight hours (FH), visually inspect and tap test the leading edge stainless steel protective strip on each MRB in accordance with the instructions of paragraph 2.B of Eurocopter ASB EC225 05A010.</p> <p style="text-align: center;">Table 1 Inspection Threshold</p> <table border="1" data-bbox="571 819 1445 1070"> <thead> <tr> <th>MRB P/N</th> <th>Compliance time</th> </tr> </thead> <tbody> <tr> <td>332A11.0050.00 and 332A11.0055.00</td> <td>Within 15 FH after 03 July 2007 [the effective date of EASA AD 2007-0180-E]</td> </tr> <tr> <td>332A11.0050.02 and 332A11.0055.02</td> <td>Within 15 FH after the effective date of this AD</td> </tr> </tbody> </table> <p>(2) If, during any visual inspection and tap test as required by paragraph (1) of this AD, any of the conditions is found, as specified in table 2 of this AD, within 15 FH after detection and, thereafter, at intervals not to exceed 15 FH, tap test the affected area of the MRB leading edge protective strip in accordance with the instructions of paragraph 2.B.2.b or 2.B.2.c or 2.B.2.d, as applicable, of Eurocopter ASB EC225 05A010.</p> <p style="text-align: center;">Table 2 – Possible discrepancies</p> <table border="1" data-bbox="571 1335 1445 1630"> <tbody> <tr> <td>Open de-bonding of blade leading edge, located outside the area D at the end of the blade main section on the blade tip cap side (see Figure 1 of Eurocopter ASB EC225 05A010), within the permissible criteria defined in Aircraft Maintenance Manual (MMA) Task 62-10-00-211.</td> </tr> <tr> <td>Cut in the blade root polyurethane protective strip and no de-bonding of the area (Figure 2 of Eurocopter ASB EC225 05A010).</td> </tr> <tr> <td>Crack of blade leading edge, within the permissible criteria defined in MMA Task 62-10-00-211.</td> </tr> </tbody> </table> <p>(3) If, during any visual inspection or tap test as required by paragraph (1) or paragraph (2) of this AD, blind or open de-bonding or crack beyond the permissible criteria defined in MMA Task 62-10-00-211 is found on the leading edge stainless steel protective strip of a MRB, before next flight, replace the affected MRB with a serviceable part.</p> <p>(4) Replacement of a MRB, as required by paragraph (3) of this AD, with a serviceable part P/N 332A11.0050.00 or P/N 332A11.0055.00 or P/N 332A11.0050.02 or P/N 332A11.0055.02 does not constitute terminating action for the repetitive inspections required by paragraph (1) or (2) of this AD.</p> <p>(5) Inspections and corrective actions, accomplished before the effective date of this AD in accordance with the instructions of Eurocopter ASB EC 225</p>	MRB P/N	Compliance time	332A11.0050.00 and 332A11.0055.00	Within 15 FH after 03 July 2007 [the effective date of EASA AD 2007-0180-E]	332A11.0050.02 and 332A11.0055.02	Within 15 FH after the effective date of this AD	Open de-bonding of blade leading edge, located outside the area D at the end of the blade main section on the blade tip cap side (see Figure 1 of Eurocopter ASB EC225 05A010), within the permissible criteria defined in Aircraft Maintenance Manual (MMA) Task 62-10-00-211.	Cut in the blade root polyurethane protective strip and no de-bonding of the area (Figure 2 of Eurocopter ASB EC225 05A010).	Crack of blade leading edge, within the permissible criteria defined in MMA Task 62-10-00-211.
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	<p>05A010 at Revision 0 or Revision 1, are acceptable to comply with the requirements of paragraphs (1), (2) and (3) of this AD. After the effective date of this AD, inspections and corrective actions must be accomplished in accordance with the instructions of Eurocopter ASB EC225 05A010 at Revision 2 or later approved revisions.</p> <p>(6) From the effective date of this AD, installation of a MRB P/N 332A11.0050.00 or P/N 332A11.0055.00 or P/N 332A11.0050.02 or P/N 332A11.0055.02 is allowed, provided the MRB is new or overhauled, or, before release to service of the helicopter, the MRB has passed the visual inspection and tap test of its leading edge stainless steel protective strip in accordance with the instructions of paragraph 2.B of Eurocopter ASB EC225 05A010.</p>
Ref. Publications:	<p>Eurocopter ASB EC225 05A010 at Revision 2 dated 22 April 2013.</p> <p>The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.</p>
Remarks:	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication. 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 (STDI) – Aéroport de Marseille Provence 13725 Marignane Cedex, France; telephone +33 (4) 42 85 97 97; facsimile +33 (4) 42 85 99 66; E-mail: Directive.technical-support@eurocopter.com.