


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2009-0003R1</b></p> <p><b>Date: 13 January 2009</b></p> <p>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</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></p> <p>EUROCOPTER</p>	<p><b>Type/Model designation(s) :</b></p> <p>SA 330 and AS 332 helicopters</p>
<p>TCDS Number : EASA.R.002</p>	
<p>Foreign AD : Not applicable</p>	
<p>Revision / Supersedure : This AD revises and replaces EASA Emergency AD 2009-0003-E dated 06 January 2009, which superseded EASA AD 2008-0162-E dated 26 August 2008.</p>	
<b>ATA 30</b>	<b>Ice and Rain Protection – Main Rotor Blade De-Icing System – Modification / Inspection / Replacement</b>
Manufacturer(s):	Eurocopter (formerly Eurocopter France)
Applicability:	SA 330 F, SA 330 G, SA 330 J, AS 332 C, AS 332 C1, AS 332 L and AS 332 L1 helicopters, all serial numbers, if equipped with main rotor blade de-icing system distributor retaining clamps Part Number (P/N) 225000-18454 or P/N D18454.
Reason:	<p>Two cases of failure have been reported of the screw that secures the main rotor blade de-icing system distributor retaining clamp (named the clamp later on). Subsequent analysis revealed that these failures were the result of interference, causing the screw to bend, due to insufficient clearance between the screw and clamp during assembly. In addition, it was found that some screws did not have a lock-wiring hole in the screw head, preventing the use of lock-wiring to ensure proper locking of the screw head and the nut.</p> <p>As failure and subsequent detachment of the clamp attachment screw can lead to damage of the main- or tail rotor blades and may cause injury to persons on the ground, DGAC France issued AD F-2008-008 to require inspection of the affected screws. This AD was later superseded by DGAC France Emergency AD UF-2008-029 and thereafter by EASA Emergency AD 2008-0162-E, the compliance times of which have expired.</p> <p>More recently, a new case of failure of the clamp attachment screw has been reported after having complied with the instructions of AD 2008-0162-E and the lock-wire which is intended to secure the attachment screw, retained the clamp until the screw failure was discovered. Later examinations showed this failure was caused by non-conformity of the hardness of the affected screw.</p>

	<p>For the reason described above, this AD retains the requirements of EASA AD 2008-0162-E, which is superseded, and requires the installation of a supplementary lock-wire to ensure the clamp is retained pending replacement of the screw or the screw hardness condition has been verified to be correct. Pending corrective action on the screw, this AD also requires repetitively inspecting the integrity of the affected screws and retaining clamps.</p> <p>This AD has been revised to correct the Applicability and delete any reference to AS 332 L2 helicopters. The AS 332 L2 model should not have been included, since these helicopters are not equipped with the main rotor blade de-icing system that is the subject of this AD.</p>
Effective Date:	08 January 2009
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p><b>RE-STATEMENT OF REQUIREMENTS OF EASA AD 2008-0162-E:</b></p> <p><b>1. Installed Equipment:</b></p> <p><b>1.1 On helicopters equipped with a main rotor blade de-icing system distributor retaining clamp fitted with an attachment screw that is not welded to the barrel:</b></p> <p>Within 50 flight hours (FH) or 3 months after 19 June 2008 [the effective date of DGAC France AD F-2008-008], whichever occurs first, perform the inspections in accordance with the instructions of paragraph 2.B. of Eurocopter AS332 Alert Service Bulletin (ASB) No. 30.00.66 revision 1 or SA330 ASB No. 30.20 revision 1, as applicable to the helicopter version.</p> <p><b>1.2 On helicopters equipped with a main rotor blade de-icing system distributor retaining clamp fitted with an attachment screw that is welded to the barrel:</b></p> <p>Within 20 FH or 1 month after 28 August 2008 [the effective date of EASA AD 2008-0162-E], whichever occurs first, perform the inspections in accordance with the instructions of paragraph 2.B. of Eurocopter AS332 ASB No. 30.00.66 revision 1 or SA330 ASB No. 30.20 revision 1, as applicable to the helicopter version.</p> <p><b>1.3 Interpretation of the inspection results:</b></p> <p>Depending on findings, before next flight, accomplish the following action(s) in accordance with the instructions given in paragraph 2.B. of the referenced EUROCOPTER ASB, as applicable to the helicopter version:</p> <ul style="list-style-type: none"> <li>- If there is any interference between the screw head and the clamp, rework the clamp.</li> <li>- If there is a crack in the screw shank, replace the screw.</li> <li>- If there is no lock-wiring hole in the head of screw not welded to the barrel, drill a hole and lock the screw.</li> </ul> <p><b>2. Non-installed equipment</b></p> <p>After 28 September 2008, no person shall install a main rotor blade de-icing system distributor retaining clamp fitted with an attachment screw on a helicopter, unless it has been inspected and corrected in accordance with the requirements of paragraphs 1.1, 1.2 and 1.3 of this AD, as applicable.</p> <p><b>NEW REQUIREMENTS INTRODUCED BY THIS AD:</b></p> <p><b>3.</b> Within 10 FH after the effective date of this AD, lock-wire the clamp attachment in accordance with paragraphs 2.B.1 and 2.B.5 of Eurocopter AS332 ASB No. 30.00.66 revision 2 or SA330 ASB No. 30.20 revision 2, as applicable to the helicopter version.</p> <p><b>4.</b> Pending compliance with the conformity action as required by paragraph 5</p>

	<p>of this AD, accomplish the following:</p> <ul style="list-style-type: none"> <li>- inspect the attachment screw for integrity at intervals not exceeding 10 FH in accordance with paragraph 2.B.7 of Eurocopter AS332 ASB No. 30.00.66 revision 2 or SA330 ASB No. 30.20 revision 2, as applicable to the helicopter version; and</li> <li>- each time a main rotor blade de-icing system distributor is installed, lock-wire the clamp attachment in accordance with paragraph 2.B.5 of Eurocopter AS332 ASB No. 30.00.66 revision 2 or SA330 ASB No. 30.20 revision 2, as applicable to the helicopter version.</li> </ul> <p>5. Within 8 months after the effective date of this AD, on helicopters equipped with a clamp which has <b>no batch number</b> marked after its part number, return the clamp to conformity in accordance with paragraph 5.1 or 5.2 below:</p> <p>5.1 Replace the attachment screw (variant with non-welded screw to its barrel) or the complete clamp (variant with welded screw to its barrel) with a serviceable part in accordance with paragraphs 2.B.1, 2.B.2, 2.B.3.d and 2.B.4 of Eurocopter AS332 ASB No. 30.00.66 revision 2 or SA330 ASB No. 30.20 revision 2, as applicable to the helicopter version.</p> <p>5.2 Verify that the hardness of the attachment screw is correct in accordance with paragraphs 2.B.1, 2.B.2 and 2.B.3.c of Eurocopter AS332 ASB No. 30.00.66 revision 2 or SA330 ASB No. 30.20 revision 2, as applicable to the helicopter version. In case of non-conformity, before next flight, comply with paragraph 3 of this AD and thereafter with paragraph 4 and, without exceeding the compliance time limit of paragraph 5, replace parts as stated in paragraph 5.1 of this AD.</p> <p>6. After accomplishment on a helicopter of the action as required by paragraph 5 of this AD, the checks and corrective actions of paragraphs 3 and 4 of this AD are no longer required for that helicopter.</p> <p>7. After the effective date of this AD, no person shall install a main rotor blade de-icing system distributor retaining clamp or an associated attachment screw on a helicopter, unless its conformity has been established in accordance with the requirements of this AD.</p>
Ref. Publications:	<p>Eurocopter AS332 ASB 30.00.66 Revision 2 dated 22 December 2008.</p> <p>Eurocopter SA330 ASB 30.20 Revision 2 dated 22 December 2008.</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 safety assessment has requested not to implement the full consultation process and an immediate publication and notification.</li> <li>3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management &amp; Research Section, Certification 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 (STDI) – Aéroport de Marseille Provence 13725 Marignane Cedex, France telephone +33 (4) 12 85 97 97, facsimile +33 (4) 42 85 99 66 E-mail: <a href="mailto:Directive.technical-support@eurocopter.com">Directive.technical-support@eurocopter.com</a></li> </ol>