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| <b>EASA</b>   | <b>AIRWORTHINESS DIRECTIVE</b>  |
|    | <p><b>AD No.: 2009-0039</b></p> <p><b>Date: 19 February 2009</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><br/>EUROCOPTER</p>  | <p><b>Type/Model designation(s) :</b><br/>AS 350 and AS 355 helicopters</p>   |
| <p>TCDS Numbers: EASA.R.008 &amp; EASA.R.146</p>  |   |
| <p>Foreign AD: Not applicable</p>   |   |
| <p>Supersedure: This AD supersedes EASA AD 2007-0138R2 dated 03 February 2009</p>   |   |
| <b>ATA 64</b>   | <b>Tail Rotor - Tail Rotor Blades Skin - Inspection / Repair</b>  |
| <p>Manufacturer(s): EUROCOPTER (formerly EUROCOPTER-FRANCE, AEROSPATIALE)</p>   |   |
| <p>Applicability:</p>   | <p>EUROCOPTER helicopter models:</p> <ul style="list-style-type: none"> <li>- AS 350 B, BA, BB, B1, B2, B3 and D</li> <li>- AS 355 E, F, F1, F2, N and NP</li> </ul> <p>all serial numbers, if equipped with tail rotor blades, Part Number (P/N) :</p> <ul style="list-style-type: none"> <li>- 355A12-0031-01/ -02/ -03/ -04/ -05/ -06/ -07/ -08/ -09/ -11/ -12/ -13/ -14.</li> <li>- 355A12-0040-00/ -01/ -02/ -03/ -04/ -05/ -07/ -08.</li> <li>- 355A12-0050-00/ -01/ -02/ -03/ -04/ -05.</li> </ul>   |
| <p>Reason:</p>  | <p>EASA AD 2006-0235-E was issued following reports of separation of tail rotor blade trailing edge section in flight due to cracks in the blade skin. The cracks started in the trailing edge tab-to-airfoil attachment area and then grew quickly because of the aerodynamic loads. Ultimately, the skin could be torn to such an extent that part of the blade trailing edge separated from the blade. The imbalance caused by the loss of this blade section was significant, possibly causing the Tail Gear Box to become separated from the tail boom.</p> <p>This condition, if not corrected, could result in loss of control of the helicopter.</p> <p>AD 2007-0138R2 (superseding AD 2006-0235-E and taking over its requirements) required the accomplishment of revision 3 of the associated EUROCOPTER Service Bulletins (SB) No. 05.00.38 and 05.00.40:</p> |

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|  | <p>-To alleviate maintenance for tail rotor blades repaired as per Repair Sheet (FR) CN 376.</p> <p>-To introduce a time-limit to comply with Repair Sheet CN 376.</p> <p>-To clarify actions of the in-depth check.</p> <p>-To maintain the monitoring measures for certain blades P/N 355A12-0050-() on which it was found that cracks were related to repairs carried out in the trailing edge area.</p> <p>- To add Repair Sheet FR CN 453 and to extend the repair accomplishment timescale accordingly.</p> <p>This AD takes over the requirements of AD 2007-0138R2, which is superseded, and extends the AD applicability to AS 355NP helicopters.</p>   |
| Effective Date:                            | 05 March 2009  |
| Required action(s) and Compliance Time(s): | <p><b>Requirements of AD 2006-0235-E</b></p> <p>1. From 10 August 2006 (effective date of AD 2006-0235-E), at each check after the last flight of the day (ALF check) and not exceeding 10 flight hours between two successive checks, visually inspect the zone A of the rotor blades in order to verify the absence of cracks. This inspection should be carried out as instructed in paragraph (§) 2.B.1. of EUROCOPTER Alert Service Bulletin (ASB) No. 05.00.40 Revision 2 for AS350 helicopters or EUROCOPTER ASB No. 05.00.38 Revision 2 for AS 355 helicopters.</p> <p><b>Note:</b> This check can be carried out by an appropriately trained pilot.</p> <p>2. If any crack is detected in zone A, according to the blade part number, before next flight do all corrective actions as instructed in § 2.B.2. of EUROCOPTER ASB No.05.00.40 Revision 2 for AS350 helicopters or EUROCOPTER ASB No. 05.00.38 Revision 2 for AS 355 helicopters.</p> <p><b>Requirements of AD 2007-0138R2</b></p> <p>3. Unless already accomplished, no later than 31 March 2009, accomplish the instructions of Repair Sheet FR CN 376 or FR CN 453 on tail rotor blades P/N 355A12-0050-00/-01/-02/-03/-04/-05 with serial numbers listed in § 2.B.2.a. of EUROCOPTER ASB No. 05.00.40 Revision 3 or ASB No. 05.00.38 Revision 3 and on blades with serial numbers below 8419, for which the annotation “repaired as per Work Card 64.10.00.872” or “repaired as per Work Card 64.10.20.712” is recorded on the log card.</p> <p>4. As of 18 May 2007 (effective date of AD 2007-0138R2), no person shall install tail rotor blades whose P/N are listed in the applicability section of this AD on any EUROCOPTER AS 350 and AS 355 helicopters, unless they have been inspected and repaired, as necessary, in accordance with § 2.B.1 of the applicable EUROCOPTER ASB No.05.00.40 Revision 3 (for AS350) or No. 05.00.38 Revision 3 (for AS 355).</p> <p>5. The accomplishment of FR CN 376 on tail rotor blades in accordance with EUROCOPTER ASB No. 05.00.40 Revision 2 or ASB No. 05.00.38 Revision 2 is acceptable to comply with the requirements of § 3. and 4. of this AD.</p> |
| Ref. Publications:                         | <p>EUROCOPTER AS 350 Alert Service Bulletin No. 05.00.40 Revision 3</p> <p>EUROCOPTER AS 355 Alert Service Bulletin No. 05.00.38 Revision 3.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>  |
| Remarks:                                   | <p>1. If requested and appropriately substantiated, EASA can accept Alternative Methods of Compliance for this AD.</p>   |

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|  | <ol style="list-style-type: none"><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 Airworthiness Directive 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:<br/>EUROCOPTER (STDI) - Aéroport de Marseille Provence<br/>13725 Marignane Cedex - France.<br/>Tel: +33 (0) 4 42 85 97 97 - Fax: +33 (0) 4 42 85 99 66.<br/>E-mail: <a href="mailto:Directive.technical-support@eurocopter.com">Directive.technical-support@eurocopter.com</a></li></ol> |
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