


<b>EASA</b>	<b>EMERGENCY AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2011-0038-E</b> <b>[Corrected: 08 March 2011]</b></p> <p><b>Date: 04 March 2011</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> EUROCOPTER</p>	<p><b>Type/Model designation(s) :</b> AS 350 and AS 355 helicopters</p>
TCDS Number :	EASA.R.008, EASA.R.146
Foreign AD :	Not applicable
Supersedure:	This AD supersedes EASA Emergency AD 2010-0082-E dated 27 April 2010, including the Correction dated 28 April 2010.
<b>ATA 65</b>	<b>Tail Rotor Drive – Tail Gearbox (TGB) Control Lever – Inspection / Rework / Replacement</b>
Manufacturer(s):	Eurocopter (formerly Eurocopter-France, Aerospatiale)
Applicability:	AS 350 B, BA, BB, B1, B2, and D helicopters, all serial numbers, and AS 355 E, F, F1, F2 and N helicopters, all serial numbers, if equipped with TGB control lever Part Number (P/N) 350A33-1058-00, P/N 350A33-1058-01, P/N 350A33-1058-02, or P/N 350A33-1058-03.
Reason:	<p>An accident occurred involving an AS 350 B2 helicopter; the cause of the accident was the failure of control lever P/N 350A33-1058-03. Initial investigations on site showed that the area of failure of the control lever was similar to that in cases encountered previously where it was demonstrated that the crack was due to non-compliant installation.</p> <p>Therefore Eurocopter issued Safety Information Notice (SIN) No. 2106-S-65 on 29 October 2009, to remind operators of the installation procedure and of the checking instructions which are applicable following installation of the control lever.</p> <p>Concerning the latest case, further investigations have not formally concluded non-compliant installation of the TGB control lever; only a few surface anomalies were revealed.</p> <p>This condition, if not detected and corrected, could reduce the structural strength of the TGB control lever, possibly causing failure of the lever, which could result in reduced control of the helicopter.</p> <p>Eurocopter have defined local reworking of the area concerned in order to remove any surface anomalies which could induce the formation of cracks</p>

	<p>and lead to reduced strength. Pending this rework, a visual inspection of the area was introduced by AS350 Alert Service Bulletin (ASB) 05.00.62 and AS355 ASB 05.00.57, to be accomplished during checks after the last flight of the day (ALF).</p> <p>To address and correct this unsafe condition, EASA AD 2010-0082-E was issued to require repetitive inspections of the affected control levers to detect cracks and, depending on findings, rework or replacement.</p> <p>During further investigation, Eurocopter found cracks on the area opposite of the already monitored one of the affected control levers. Consequently, Eurocopter have issued Revision 2 of AS350 ASB 05.00.62 and AS355 ASB 05.00.57, adding repetitive visual check followed in case of doubt by non destructive tests (e.g. dye penetrant inspection) of the opposite area with adjusted intervals according to helicopter Model.</p> <p>For the reasons described above, this new AD retains the requirements of EASA AD 2010-0082-E, which is superseded, and adds repetitive inspections of the opposite area of the control levers and, depending on findings, rework of the area inspected as per paragraph (1) or replacement.</p> <p>This AD correction is issued to publish the correct version of the two different versions of this AD that were inadvertently published and distributed on 04 March 2011, one of which was incorrect, and thereby avoiding the use of the incorrect one.</p>						
<p>Effective Date:</p>	<p>08 March 2011</p>						
<p>Required Action(s) and Compliance Time(s):</p>	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> <li>(1) Within 10 flight hours (FH) or during the ALF, whichever occurs first after 29 April 2010 [the effective date of EASA AD 2010-0082-E], and thereafter at intervals not to exceed 10 FH or during the ALF, whichever occurs first, visually inspect the affected control levers, in accordance with the instructions of paragraph 2.B.1.a of Eurocopter AS350 ASB 05.00.62 or AS355 ASB 05.00.57, as applicable to helicopter type.</li> <li>(2) If, during the inspections performed as required by paragraph (1) of this AD, no cracks are found, within 660 FH or 14 months, whichever occurs first after 29 April 2010 [the effective date of EASA AD 2010-0082-E], for each affected part, accomplish the instructions of paragraph 2.B.3 of Eurocopter AS350 ASB 05.00.62 or AS355 ASB 05.00.57, as applicable to helicopter type, or replace it with a reworked lever (marked with an "X") or with a reinforced control lever P/N 350A33-1526-00 or P/N 350A33-1524-00.</li> <li>(3) After the effective date of this AD, initially within the time indicated in Table 1 or Table 2 of this AD, as applicable to helicopter model, and thereafter at intervals indicated in Table 3 of this AD, as applicable to helicopter model, visually inspect the affected control levers, in accordance with the instructions of paragraph 2.B.4 of Eurocopter AS350 ASB 05.00.62 Revision 2, or AS355 ASB 05.00.57 Revision 2, as applicable to helicopter type.</li> </ol> <p style="text-align: center;">Table 1 - All helicopters, except AS 355 N</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">FH accumulated by the control lever</th> <th style="text-align: center;">Initial Inspection</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Less than 605 FH</td> <td style="text-align: center;">Before accumulating 660 FH since new or overhaul</td> </tr> <tr> <td style="text-align: center;">605 FH or more</td> <td style="text-align: center;">55 FH after the effective date of this AD</td> </tr> </tbody> </table>	FH accumulated by the control lever	Initial Inspection	Less than 605 FH	Before accumulating 660 FH since new or overhaul	605 FH or more	55 FH after the effective date of this AD
FH accumulated by the control lever	Initial Inspection						
Less than 605 FH	Before accumulating 660 FH since new or overhaul						
605 FH or more	55 FH after the effective date of this AD						

Table 2 - AS 355 N helicopters	
FH accumulated by the control lever	Initial Inspection
Less than 100 FH	Before accumulating 110 FH since new or overhaul
100 FH or more	10 FH after the effective date of this AD

Table 3 – Inspection Intervals	
Helicopter model	Compliance time interval
All, except AS 355 N	660 FH
AS 355 N	110 FH

(4) If, during any inspection as required by paragraphs (1) or (3) of this AD any crack is found, before next flight, contact Eurocopter and replace the affected control lever, in accordance with the instructions of paragraph 2.B.1.b 2) of Eurocopter AS350 ASB 05.00.62 Revision 2 or AS355 ASB 05.00.57 Revision 2, as applicable to helicopter type.

(5) After 29 April 2010 [the effective date of EASA AD 2010-0082-E], do not install a TGB control lever P/N 350A33-1058-00, P/N 350A33-1058-01, P/N 350A33-1058-02, or P/N 350A33-1058-03 on any helicopter, unless it has been reworked (marked with an "X") in accordance with the instructions of paragraph 2.B.3 of Eurocopter AS350 ASB 05.00.62 or AS355 ASB 05.00.57, as applicable to helicopter type.

(6) After installation of a reworked lever (marked with an "X") on a helicopter, the repetitive inspections of paragraph (1) are no longer required for that helicopter.

(7) After installation of a reinforced lever P/N 350A33-1526-00 or P/N 350A33-1524-00 on a helicopter, the repetitive inspections of paragraphs (1) and (3) are no longer required for that helicopter.

Ref. Publications:	Eurocopter AS350 ASB No. 05.00.62, Revision 2, and Eurocopter AS355 ASB No. 05.00.57, Revision 2, both dated 1 March 2011. The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.
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. Tel: +33 (0) 4 42 85 97 97 - Fax: +33 (0) 4 42 85 99 66. E-mail: <a href="mailto:Directive.technical-support@eurocopter.com">Directive.technical-support@eurocopter.com</a>.</li> </ol>