


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2013-0078</b></p> <p><b>Date: 22 March 2013</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 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>	
<b>Design Approval Holder's Name:</b>	<b>Type/Model designation(s):</b>
AGUSTAWESTLAND S.p.A.	AB 212 helicopters
<b>TCDS Number:</b>	ENAC Italy SO/A375
<b>Foreign AD:</b>	Not applicable
<b>Supersedure:</b>	This AD supersedes EASA AD 2011-0068-E dated 18 April 2011.
<b>ATA 62</b>	<b>Main Rotor – Main Rotor Hub Inboard Strap Fitting – Inspection / Replacement</b>
<b>Manufacturer(s):</b>	AgustaWestland S.p.A. (formerly Agusta S.p.A.)
<b>Applicability:</b>	AB 212 helicopters, all serial numbers.
<b>Reason:</b>	<p>Bell Helicopter has determined that main rotor hub inboard strap fittings may have been manufactured not in accordance with approved design requirements, thus resulting more fragile, with possible development of cracks.</p> <p>This condition, if not detected and corrected, could result in failure of the fitting, loss of a main rotor blade, and subsequent loss of control of the helicopter.</p> <p>Due to the design commonality, the possibility that inboard strap fitting assemblies manufactured by Bell Helicopter have been installed on AgustaWestland helicopters cannot be excluded.</p> <p>FAA issued Emergency AD 2010-24-51, addressing this unsafe condition on Bell 212 helicopters, and requiring the replacement of the affected main rotor hub inboard strap fittings with part number (P/N) 212-010-103-007.</p> <p>Consequently, AgustaWestland issued Alert Bollettino Tecnico (BT) 212-201. Prompted by the initial FAA AD and the AgustaWestland BT, EASA issued AD 2010-0240-E to require the same actions for AgustaWestland AB 212 helicopters.</p> <p>After discovering that three additional fittings from a different manufacturing batch had the same type of cracking as was found on the fitting installed on the accident helicopter, the FAA issued Emergency AD 2010-24-52 for the Bell 212 helicopters, superseding AD 2010-24-51, expanding the Applicability to include the additional strap fittings. Prompted by the new FAA AD, AgustaWestland issued Alert BT 212-201 Revision A and EASA issued AD 2010-0243-E, retaining the requirements of EASA AD 2010-0240-E, which was superseded, and requiring the same actions for AgustaWestland AB 212 helicopters.</p>

	<p>After the FAA determined that additional serial-numbered main rotor hub inboard strap fittings might fracture as a result of the same production non-conformity, AD 2010-24-52 was superseded by AD 2010-25-51 to apply to these additional fittings and to require, for the additional serial-numbered fittings, a magnetic particle inspection (MPI).</p> <p>Consequently, AgustaWestland issued Alert BT 212-201 Revision C to introduce an MPI for the additional fittings and EASA issued AD 2010-0246-E (later revised) to require those inspections for the additional fittings, retaining the requirements of EASA AD 2010-0243-E, which was superseded.</p> <p>Later on, it was determined that additional fittings had not been manufactured in accordance with the approved manufacturing processes and controls. Prompted by these findings, Bell issued Revision A of Alert Service Bulletin 212-10-142 to extend the applicability, including other inboard strap fittings serial numbers. In total, eight cracked fittings have been found.</p> <p>FAA issued AD 2011-08-01, adopted by EASA, applicable to Bell 212 helicopters, retaining the requirements of AD 2010-25-51, which was superseded, expanding the applicability to require performing an MPI for a crack on the additional serial-numbered fittings.</p> <p>Consequently, AgustaWestland issued Alert BT 212-201 Revision D to extend the applicability, including other inboard strap fittings serial numbers.</p> <p>EASA issued AD 2011-0068-E, superseding AD 2010-0246R1, and requiring the identification and inspection (MPI) of certain other serial-numbered P/N 212-010-103-007 main rotor hub inboard strap fittings and their replacement, as necessary.</p> <p>More recently, FAA issued AD 2013-03-16 on Bell 212 helicopters and other Bell helicopter models, to reduce the compliance time for performing an MPI of some serial-numbered fittings by requiring an MPI for all applicable serial-numbered fittings within 25 hours time-in-service or 15 days.</p> <p>This AD, which supersedes EASA AD 2011-0068-E partially retaining its requirements, requires an initial MPI of inboard strap fittings P/N 212-010-103-005/-007 except those having serial numbers with prefixes D, E, EM, F, G, J, K, L, N, R or V and repetitive magnetic particle inspections of all the main rotor hub inboard strap fittings with P/N 212-010-103-005 or P/N 212-010-103-007, regardless of prefixes and serial numbers, as well as the accomplishment of the applicable corrective actions.</p>					
Effective Date:	29 March 2013					
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Before next flight after 26 November 2010 [the effective date of EASA AD 2010-0246-E], accomplish the following actions concurrently:</p> <p>(1.1) Identify the serial number (s/n) of the P/N 212-010-103-007 main rotor hub (MRH) inboard strap fittings installed on the helicopter.</p> <p>(1.2) If the s/n matches one of those listed in Table 1 of this AD, replace the MRH inboard strap fitting with a serviceable part, in accordance with the instructions of AgustaWestland Alert BT 212-201 Revision C, Revision D, Revision E or Revision F.</p> <p style="text-align: center;">Table 1 - affected fittings s/n</p> <table><tr><td>A-9956 through A-10005 inclusive</td></tr><tr><td>SH-52, SH-54 and SH-55</td></tr><tr><td>SH-57 through SH-65 inclusive</td></tr><tr><td>SH-67, SH-69, SH-70, SH-71 and SH-73</td></tr><tr><td>SH-103, SH-112, SH-113, SH-137 and SH-139</td></tr></table>	A-9956 through A-10005 inclusive	SH-52, SH-54 and SH-55	SH-57 through SH-65 inclusive	SH-67, SH-69, SH-70, SH-71 and SH-73	SH-103, SH-112, SH-113, SH-137 and SH-139
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	<p>(2) Within 25 flight hours (FH) or 15 days, whichever occurs first after the effective date of this AD, accomplish an MPI of each P/N 212-010-103-005 and P/N 212-010-103-007 inboard strap fitting, except those having serial numbers with prefixes D, E, EM, F, G, J, K, L, N, R or V, in accordance with the instructions of AgustaWestland Alert BT 212-201 Revision F.</p> <p>(2.1) If any crack is detected, before next flight, remove the affected inboard strap fitting and replace with a serviceable part.</p> <p>(2.2) If no crack is detected, before installing the fitting on a helicopter, re-identify the fitting with suffix FM in accordance with the instructions of AgustaWestland Alert BT 212-201 Revision F.</p> <p>(3) An inboard strap fittings having successfully passed the MPI and marked with suffix FM in accordance with the instructions of AgustaWestland Alert BT 212-201 Revision C, Revision D, or Revision E, is acceptable to comply with the requirements of paragraph (2) of this AD.</p> <p>(4) For all P/N 212-010-103-005 and P/N 212-010-103-007 inboard strap fittings, during the next scheduled 1 200 FH torsion-tension (TT) strap replacement after the effective date of this AD, and thereafter, at intervals not to exceed 1 200 flight hours or 24 months, whichever occurs first, accomplish an MPI in accordance with the instructions of AgustaWestland Alert BT 212-201 Revision F.</p> <p>(5) If, during any MPI as required by paragraph (4) of this AD, any crack is detected, before next flight, replace the affected inboard strap fitting with a serviceable part.</p> <p>(6) From the effective date of this AD, do not install on any helicopter a P/N 212-010-103-005 or P/N 212-010-103-007 MRH inboard strap fitting, except those having serial numbers with prefixes D, E, EM, F, G, J, K, L, N, R or V, unless the strap fitting has passed the MPI and has been re-identified with suffix FM in accordance with the instructions of AgustaWestland Alert BT 212-201 Revision C, Revision D, Revision E, or Revision F.</p>
Ref. Publications:	<p>AgustaWestland Alert BT 212-201 Revision C dated 10 December 2010, Revision D dated 15 April 2011, Revision E dated 19 March 2013 and Revision F dated 21 March 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"> <li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>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..</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: AgustaWestland S.p.A. Customer Support - Via del Gregge, 100 - 21015 Lonate Pozzolo (VA) – Italy Telephone + 39 0331 664873; Fax: + 39 0331 664680; E-mail: <a href="mailto:absereng@agustawestland.com">absereng@agustawestland.com</a>.</li> </ol>