


<b>EASA</b>	<b>EMERGENCY AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2013-0225-E</b></p> <p><b>Date: 20 September 2012</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 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>	
<p><b>Design Approval Holder's Name :</b></p> <p>AGUSTAWESTLAND S.p.A.</p>	<p><b>Type/Model designation(s) :</b></p> <p>A109, AW109, A119 and AW119 helicopters</p>
TCDS Number:	EASA.R.005
Foreign AD:	Not applicable
Supersedure:	None
<b>ATA 64</b>	<b>Tail Rotor – Tail Rotor Drive Shaft Line Nut – Inspection</b>
Manufacturer(s):	AgustaWestland S.p.A (formerly Agusta S.p.A.).
Applicability:	<p>A109A, A109All and A109C helicopters, all serial numbers (S/N);</p> <p>A109E helicopters, all S/N up to S/N 11832 inclusive, except S/N 11796, from 11808 to S/N 11810 inclusive and from S/N 11812 to 11829 inclusive;</p> <p>A109K2 helicopters, all S/N;</p> <p>A109LUH helicopters, all S/N;</p> <p>A109S helicopters, all S/N;</p> <p>AW109SP helicopters, all S/N up to S/N 22316 inclusive, except S/N 22284, 22286, 22307 and 22308;</p> <p>A119 and AW119MKII helicopters, all S/N up to AW119MKII S/N 14811 inclusive, except 14805 and 14807.</p>
Reason:	<p>Occurrences were reported of two in-service AW109SP helicopters, where during scheduled inspection on the tail rotor drive shaft line, one nut Part Number (P/N) MS21042L4 that connects the Thomas coupling with the splined adapter was found cracked.</p> <p>The subsequent technical investigation identified that the reported cracks of the nuts are the results of a production deficiency (causing hydrogen embrittlement) at the nut supplier.</p> <p>This condition, if not detected and corrected, could lead to failure of the tail rotor function, resulting in loss of control of the helicopter.</p>

	<p>To address this unsafe condition, AgustaWestland issued seven Bollettino Tecnico (BT), BT 109EP-130, BT 109-136, BT 109K-58, BT 109L-066, BT 109S-055, BT 109SP-069 and BT 119-61 for all helicopters that are potentially affected.</p> <p>For the reasons described above, this AD requires a one-time inspection of each P/N MS21042L4 nut installed on the tail rotor drive shaft line and replacement of each affected nut with a serviceable part having a different P/N.</p>						
Effective Date:	21 September 2013						
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Before next flight after the effective date of this AD, inspect each nut P/N MS21042L4 and, within the compliance time specified in Table 1 of this AD, depending on findings, as applicable, replace each nut P/N MS21042L4 with a serviceable part in accordance with the instructions of the applicable BT.</p> <p>Note: For the purpose of this AD, the applicable BT is the one mentioned in Ref. Publications of this AD for the affected helicopter model.</p> <p style="text-align: center;">Table 1 – Nut replacement</p> <table border="1" data-bbox="606 869 1348 1075"> <thead> <tr> <th data-bbox="606 869 874 913">Finding</th> <th data-bbox="874 869 1348 913">Compliance time</th> </tr> </thead> <tbody> <tr> <td data-bbox="606 913 874 963">Nut is cracked</td> <td data-bbox="874 913 1348 963">Before next flight</td> </tr> <tr> <td data-bbox="606 963 874 1075">Nut is not cracked</td> <td data-bbox="874 963 1348 1075">Within 10 flight hours or 30 days, whichever occurs first after the effective date of this AD</td> </tr> </tbody> </table> <p>(2) From the effective date of this AD, do not install a nut having a P/N MS21042L4 on the tail rotor drive shaft line of any helicopter.</p>	Finding	Compliance time	Nut is cracked	Before next flight	Nut is not cracked	Within 10 flight hours or 30 days, whichever occurs first after the effective date of this AD
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Nut is cracked	Before next flight						
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Ref. Publications:	<p>AgustaWestland BT 109EP-130 dated 20 September 2013.  AgustaWestland BT 109-136 dated 20 September 2013.  AgustaWestland BT 109K-58 dated 20 September 2013.  AgustaWestland BT 109L-066 dated 20 September 2013.  AgustaWestland BT 109S-055 dated 20 September 2013.  AgustaWestland BT 109SP-069 dated 20 September 2013.  AgustaWestland BT 119-61 dated 20 September 2013.</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 results of the safety assessment have indicated the need for immediate publication and notification, without the full public consultation process.</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: Agusta S.p.A. Customer Support  Via del Gregge, 100 - 21015 Lonate Pozzolo (VA) – Italy  Telephone + 39 0331 664600 ; Fax: + 39 0331 664684  E-mail: <a href="mailto:custserv@agustawestland.com">custserv@agustawestland.com</a>.</li> </ol>						