


EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2013-0174</p> <p>Date: 02 August 2013</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>	
<p>Design Approval Holder's Name: AGUSTAWESTLAND S.p.A.</p>	<p>Type/Model designation(s): AW139 helicopters</p>
TCDS Number:	EASA.R.006
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA AD 2013-0124 dated 05 June 2013.
ATA 30	Ice and Rain Protection – Full Icing Protection System / Cable Inspection – Tail Rotor Distributor Replacement
Manufacturer(s):	AgustaWestland S.p.A. (formerly Agusta S.p.A.) and AgustaWestland Philadelphia Corporation (formerly Agusta Aerospace Corporation)
Applicability:	AW139 helicopters with serial numbers (S/N) from S/N 31201 to S/N 31453 inclusive, S/N 31455, S/N 31462, S/N 31463 and from S/N 41201 to S/N 41327 inclusive, if equipped with Full Ice Protection System (FIPS) (Kit Part Number (P/N) 4G3000F00211).
Reason:	<p>An event of arcing inside some components of the FIPS has been reported. The results of the subsequent technical investigation indicated that improper insulation of one of the main rotor electrical cables was the likely cause for this arcing.</p> <p>This condition, if not detected and corrected, could lead to other events of arcing, possibly resulting in fire and consequent damage to the helicopter and injury to occupants.</p> <p>To address this potential unsafe condition, AgustaWestland published Bollettino Tecnico (BT) 139-324 (for in-service helicopters and equivalent documentation for newly-built helicopters), providing instructions for inspection of helicopters equipped with the FIPS, and EASA issued AD 2013-0090 to require a one-time inspection of the main and tail rotor electrical cables and, depending on findings, accomplishment of applicable corrective actions.</p> <p>Since that AD was issued, the results of additional investigations prompted AgustaWestland to revise BT 139-324 to introduce more refined insulation limits and to remove the inspection of tail rotor (TR) cables. In addition,</p>

	<p>AgustaWestland issued BT 139-330 (for in-service helicopters and equivalent documentation for newly-built helicopters) including instructions to replace the Tail Rotor Distributor (TRD) with an improved part that has increased dielectric strength.</p> <p>EASA issued AD 2013-0124, which superseded EASA AD 2013-0090, partially retaining its requirements and additionally requiring installation of the improved TRD. EASA AD 2013-0124 no longer required inspecting the cables of the TR slip ring P/N 4G6420V00151 or P/N 4G6420V00152. In addition, as an alternative to the inspection, this AD gave possibility for a FIPS de-activation, in accordance with applicable helicopter Master Minimum Equipment List (MMEL), and re-activation.</p> <p>Since issuance of EASA AD 2013-0124, it has been identified that, with the issuance of AgustaWestland BT 139-324, AgustaWestland amended the list of helicopters that are potentially affected by the unsafe condition.</p> <p>For the reasons described above, this AD supersedes EASA AD 2013-0124, retaining its requirements, and amending the Applicability through inclusion of additional helicopter serial numbers.</p> <p>This AD is still considered an interim action and further AD action may follow.</p>						
Effective Date:	09 August 2013						
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Within the compliance times as specified in Table 1 of this AD, as applicable to helicopter S/N, accomplish an inspection and an insulation test of Main Rotor (MR) electrical cables Part Number (P/N) 3G9F12A01011, P/N 3G9F12A01012 (pre BT 139-259) or P/N 3G9F12A01311 (post BT 139-259), in accordance with the instructions of AgustaWestland BT 139-324.</p> <p style="text-align: center;">Table 1</p> <table border="1"> <thead> <tr> <th>Affected helicopters</th><th>Compliance time</th></tr> </thead> <tbody> <tr> <td>From S/N 31201 to S/N 31421 inclusive and from S/N 41201 to S/N 41277 inclusive, below defined as "Group A helicopters"</td><td>Within 30 flight hours (FH) or 7 days, whichever occurs first after 25 April 2013 [the effective date of EASA AD 2013-0090]</td></tr> <tr> <td>From S/N 31422 to S/N 31453 inclusive, S/N 31455, S/N 31462, S/N 31463 and from S/N 41277 to S/N 41327 inclusive, below defined as "Group B helicopters"</td><td>Within 30 FH or 7 days, whichever occurs first after the effective date of this AD</td></tr> </tbody> </table> <p>(2) If, during the actions as required by paragraph (1) of this AD, any discrepancy is detected, before next flight, accomplish the applicable corrective actions in accordance with the instructions of AgustaWestland BT 139-324.</p> <p>(3) From 25 April 2013 [the effective date of EASA AD 2013-0090] (for Group A helicopters of Table 1) or from the effective date of this AD (for Group B helicopters of Table 1), installation of any part as indicated in paragraph (1) is allowed, provided it is new, or it has passed the inspection and the insulation test as required by paragraph (1) of this AD, as applicable.</p> <p>(4) Within 90 days after the effective date of this AD, replace the Tail Rotor Distributor (TRD) with Vendor P/N 3230-A1-1 (AgustaWestland P/N 4G3060V00452) with an improved part in accordance with the instructions of AgustaWestland BT 139-330.</p>	Affected helicopters	Compliance time	From S/N 31201 to S/N 31421 inclusive and from S/N 41201 to S/N 41277 inclusive, below defined as "Group A helicopters"	Within 30 flight hours (FH) or 7 days, whichever occurs first after 25 April 2013 [the effective date of EASA AD 2013-0090]	From S/N 31422 to S/N 31453 inclusive, S/N 31455, S/N 31462, S/N 31463 and from S/N 41277 to S/N 41327 inclusive, below defined as "Group B helicopters"	Within 30 FH or 7 days, whichever occurs first after the effective date of this AD
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	<p>(5) From the effective date of this AD, do not install a TRD with Vendor P/N 3230-A1-1 (AgustaWestland P/N 4G3060V00452).</p> <p>(6) As an alternative to the actions as required by paragraphs (1), (2) and (4) of this AD, it is allowed to de-activate the FIPS and operate the helicopter in accordance with the provisions of the applicable helicopter MMEL. At any time after the FIPS has been de-activated, FIPS re-activation is possible, provided that, before next flight after FIPS re-activation, the FIPS is inspected and tested as required by paragraph (1) of this AD, and, depending on findings, corrected as required by paragraph (2) of this AD, and the improved TRD is installed as required by paragraph (4) of this AD.</p> <p>Note: A Partial Removal kit allows a temporary de-installation of some FIPS components when the FIPS kit is not to be used, and their re-installation when necessary.</p> <p>(7) From the effective date of this AD, for helicopters equipped with a Partial Removal kit P/N from 4G3000F00311 to 4G3000F00319 inclusive, FIPS re-installation is possible, provided that, before next flight after FIPS re-installation, the FIPS is inspected and tested as required by paragraph (1) of this AD, and, depending on findings, corrected as required by paragraph (2) of this AD, and the improved TRD is installed as required by paragraph (4) of this AD.</p>
Ref. Publications:	<p>AgustaWestland BT 139-324, original issue dated 09 April 2013 or rev. A dated 04 June 2013.</p> <p>AgustaWestland BT 139-330, original issue dated 04 June 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"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 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. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: ADs@easa.europa.eu. 4. For any question concerning the technical content of the requirements in this AD, please contact AgustaWestland S.p.A.: E-mail: aw139.mbx@agustawestland.com.