


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2012-0076</b></p> <p><b>Date: 02 May 2012</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></p> <p>AgustaWestland S.p.A.</p>	<p><b>Type/Model designation(s) :</b></p> <p>AB139 and AW139 helicopters</p>
TCDS Number:	EASA.R.006
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA AD 2012-0030 dated 17 February 2012.
<b>ATA 64</b>	<b>Tail Rotor – Tail Rotor Blades – Inspection / Replacement</b>
Manufacturer(s):	AgustaWestland S.p.A (formerly Agusta S.p.A.), AgustaWestland Philadelphia Corporation (formerly Agusta Aerospace Corporation).
Applicability:	AB139 and AW139 helicopters, all serial numbers.
Reason:	<p>In early 2011, an occurrence was reported of tail rotor (T/R) dynamic unbalance on an AW139 helicopter.</p> <p>Pending the results of the investigation for that occurrence, EASA issued AD 2011-0081 to require, as a precautionary measure, repetitive inspections of the T/R blades and, in case of findings, the accomplishment of applicable corrective actions.</p> <p>After that AD was issued, on 19 August 2011, a fatal accident occurred with another AW139 helicopter, possibly caused by cracks in a T/R blade.</p> <p>This condition, if not detected and corrected, could lead to a T/R structural failure, resulting in loss of control of the helicopter.</p> <p>To address this condition, EASA AD 2011-0156-E was issued to require repetitive inspections of T/R blade Part Number (P/N) 3G6410A00131 or P/N 4G6410A00131 and to set life limits for those blades.</p> <p>Since EASA AD 2011-00156-E was issued, improved design T/R blades with P/N 3G6410A00132 and P/N 4G6410A00132 have been developed and can be installed on a helicopter.</p> <p>EASA issued AD 2012-0030 which added repetitive inspections of the improved T/R blades and accomplishment of corrective actions in case of discrepancy. It also imposed life limits to the improved T/R blades (improved</p>

	<p>T/R blades and “original” T/R blades have different life limits).</p> <p>Since EASA AD 2012-0030 was issued, another version of improved T/R blades, with different materials, has been developed and can be installed on a helicopter. These new blades are identified with P/N 3G6410A00133 and P/N 4G6410A00133.</p> <p>For the reasons described above, this AD retains the inspection requirements of EASA AD 2012-0030, which is superseded, and indicates interim life limits to the new version of improved T/R blades (each T/R blade P/N has its own life limit).</p> <p>Note: Where this AD refers to life limits for the parts, AgustaWestland specifies quarantine limits in their Bollettino Tecnico (BT).</p>
Effective Date:	16 May 2012
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless already accomplished:</p> <p><b>For helicopters equipped with T/R blades P/N 3G6410A00131 or P/N 4G6410A00131:</b></p> <ol style="list-style-type: none"> <li>(1) Within 25 Flight Hours (FH) after 25 August 2011 [the effective date of EASA AD 2011-0156-E], and, thereafter, at intervals not to exceed 25 FH, inspect the T/R blades in accordance with the instructions of Part I of Agusta Alert Bollettino Tecnico (BT) 139-265.</li> <li>(2) From 25 August 2011 [the effective date of EASA AD 2011-0156-E], for T/R blades that had not yet accumulated 600 FH or 1 500 flight cycles (FC), whichever occurs first since first installation on a helicopter, prior to or upon accumulation of 600 FH or 1 500 FC by the blade, whichever occurs first, replace each T/R blade with a serviceable unit.</li> </ol> <p><b>For helicopters equipped with T/R blades P/N 3G6410A00132 or P/N 4G6410A00132:</b></p> <ol style="list-style-type: none"> <li>(3) Within 25 FH after 02 March 2012 [the effective date of EASA AD 2012-0030], and, thereafter, at intervals not to exceed 25 FH, inspect the T/R blades in accordance with the instructions of Part I of Agusta BT 139-285.</li> <li>(4) From 02 March 2012 [the effective date of the AD 2012-0030], for T/R blades that have not yet accumulated 1 200 FH or 3 200 FC, whichever occurs first since first installation on a helicopter, prior to or upon accumulation of 1 200 FH or 3 200 FC by the blade, whichever occurs first, replace each T/R blade with a serviceable unit.</li> </ol> <p><b>For helicopters equipped with T/R blades P/N 3G6410A00133 or P/N 4G6410A00133:</b></p> <ol style="list-style-type: none"> <li>(5) Within 25 FH after the effective date of this AD, and, thereafter, at intervals not to exceed 25 FH, inspect the T/R blades in accordance with the instructions of Part I of Agusta BT 139-286.</li> <li>(6) From the effective date of this AD, for T/R blades that have not yet accumulated 10 000 FC since first installation on a helicopter or 3 years since removal from the sealed wrap, whichever occurs first, prior to or upon accumulation of 10 000 FC by the blade or 3 years since removal from the sealed wrap (calendar time limit has to be counted from the date the blade sealed wrap is opened for the first time), replace each T/R blade with a serviceable unit.</li> </ol> <p><b>Requirements valid for all T/R blade P/Ns:</b></p> <ol style="list-style-type: none"> <li>(7) If, during any inspection as required by paragraph (1) or (3) or (5), any discrepancy is detected, before next flight, contact AgustaWestland for corrective actions and accomplish those actions within the specified compliance time.</li> <li>(8) For any T/R blade where the FC, accumulated since first installation on a helicopter, cannot be determined, the FH accumulated by the T/R blade</li> </ol>

	<p>since first installation on a helicopter must be multiplied by a factor of 4 (four), as described in Agusta Alert BT 139-265, BT 139-285 and BT 139-286, to determine the replacement time for that blade, as required by paragraph (2) or (4) or (6) of this AD, as applicable.</p> <p><b>Note:</b> For the purpose of this AD, a serviceable T/R blade is a T/R blade P/N 3G6410A00131 or P/N 4G6410A00131 that has not yet accumulated 600 FH or 1 500 FC since first installation on a helicopter, <b>or</b> a T/R blade P/N 3G6410A00132 or P/N 4G6410A00132 that has not yet accumulated 1 200 FH or 3 200 FC since first installation on a helicopter, <b>or</b> a T/R blade P/N 3G6410A00133 or P/N 4G6410A00133 that has not yet accumulated 10 000 FC since first installation on a helicopter or 3 years since removal from the sealed wrap.</p> <p>(9) From the effective date of this AD, do not install on any helicopter a T/R blade unless the T/R blade is in compliance with the requirements of this AD.</p> <p>(10) From the effective date of this AD, T/R blades P/N 3G6410A00132 or P/N 4G6410A00132 or P/N 3G6410A00133 or P/N 4G6410A00133 cannot be installed in combination with T/R blades P/N 3G6410A00131 or P/N 4G6410A00131 on the same helicopter.</p>
Ref. Publications:	<p>AgustaWestland Alert BT 139-265, original issue dated 25 August 2011.</p> <p>AgustaWestland BT 139-285, original issue dated 11 February 2012.</p> <p>AgustaWestland BT139-286, original issue dated 12 April 2012.</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 required action 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 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. E-mail: <a href="mailto:aw139.mbx@agustawestland.com">aw139.mbx@agustawestland.com</a>.</li> </ol>