


EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2010-0189</p> <p>Date: 23 September 2010</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>Type Approval Holder's Name : Agusta S.p.A.</p>	<p>Type/Model designation(s) : AB139 and AW139 helicopters</p>
<p>TCDS Number : EASA.R.006</p>	
<p>Foreign AD : Not applicable</p>	
<p>Supersedure : None</p>	
ATA 34	Navigation – Modular Avionic Unit – Inspection / Replacement / Modification
<p>Manufacturer(s): Agusta S.p.A.</p>	
<p>Applicability: AB139 and AW139 helicopters, from serial number (S/N) 31005 to S/N 31157 included (except S/N 31007, S/N 31094 and S/N 31149) and from S/N 41001 to S/N 41023 included.</p>	
<p>Reason:</p> <p>The analysis of some in-flight emergency occurrences has led to identify salt water and external moisture as a contributory factor to the corrosion of Modular Avionic Units (MAU)2 module circuit card assemblies. In particular, Custom Input/Output modules have been verified to be susceptible to this type of corrosive agents.</p> <p>When exposed to high levels of moisture, MAU can cause the system to provide false indications or misleading data to be displayed to the flight crew. In addition, misleading data may cause disengagement of the flight director modes of the autopilot, or other alerting system anomalies. These failures and anomalies would significantly increase the workload of the flight crew and could ultimately lead to loss of control of the helicopter.</p> <p>The failure mode has been confirmed by an Air Accident Investigation Branch (AAIB) investigation on an incident where the triggering of false confusing warnings was reported onboard an Agusta AW139 engaged in off-shore operations.</p> <p>This AD requires the inspection of MAU1 and MAU2 modules and connectors to ensure there is no sign of corrosion, and the accomplishment of the applicable corrective actions, as necessary. Furthermore, this AD requires the modification of the MAU2 ventilation duct installation, in order to keep the MAU2 modules out of direct air flow coming from the ventilation duct outlet.</p>	

Effective Date:	07 October 2010
Required action(s) and Compliance Time(s):	<p>Required as indicated, unless already accomplished:</p> <ol style="list-style-type: none"> (1) Within 150 flight hours (FH) or 3 months, whichever occurs first, after the effective date of this AD, inspect the MAU1 and MAU2 Power Supply (PS) modules, Custom Input/Output (CSIO) modules and Control Input/Output (CIO) modules for structural integrity and to ensure that there is no sign of corrosion, and inspect all related connectors for any sign of corrosion, in accordance with the instructions of Agusta Bollettino Tecnico (BT) 139-166. (2) If any sign of corrosion on the connectors is found, clean the connectors before further installation, in accordance with the instructions of Agusta BT 139-166. (3) If any sign of corrosion or structural damage is found on a module, before next flight replace the module in accordance with the instructions of Agusta BT 139-166. (4) Within 150 flight hours (FH) or 3 months, whichever occurs first, after the effective date of this AD, modify the MAU2 ventilation duct, in accordance with the instructions of Agusta BT 139-166.
Ref. Publications:	<p>Agusta Alert Bollettino Tecnico 139-166 dated 06 April 2009.</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"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. The required actions and the risk allowance have granted the issuance of a Final AD with Request for Comments, postponing the public consultation process after publication. 3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu . 4. For any question concerning the technical content of the requirements in this AD, please contact Agusta S.p.A. E-mail: aw139.mbx@agustawestland.com .