### EASA

# **AIRWORTHINESS DIRECTIVE**



#### AD No.: 2013-0236

#### Date: 25 September 2013

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.

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].

**Design Approval Holder's Name:** AQUILA AVIATION GmbH

Not applicable

## **Type/Model designation(s):** AT01 aeroplanes

TCDS Number: EASA.A.527

Foreign AD:

Supersedure: None

ATA 28	Fuel – Fuel Tank Opening / Bore Hole Sealing – Inspection / Repair
Manufacturer(s):	AQUILA Aviation GmbH
Applicability:	Model AT01 aeroplanes, serial numbers (S/N) from AT01-100 up to AT01-299 inclusive, and
	Model AT01-100 aeroplanes, S/N from AT01-100A/B/C-300 up to AT01-100A/B/C-312 inclusive.
Reason:	During repair in the wing tank area it was discovered that, when the tank is filled to a maximum level, fuel can soak into the upper shell sandwich of the wings. This can be detected from damaged finishing of the upper wing shells or from yellow discoloured bonding wire insulation.
	The root cause is a defective sealing of a tapped through bore hole at the inside of the fuel tank openings in combination with prolonged periods at maximum fuel level.
	This condition, if not detected and corrected, could cause long-term structural degradation of the wing structure.
	To address this potential unsafe condition, AQUILA issued Service Bulletin (SB)-AT01-027 providing instructions for the inspection and sealing of tapped bore holes inside both fuel tank openings.
	For the reasons described above, this AD requires repetitive inspections of the wing tank area and, depending on findings, corrective actions.
Effective Date:	09 October 2013

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Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously:
	(1) Within 100 flight hours (FH) or 3 months after the effective date of this AD, whichever occurs first, and, thereafter, at intervals not to exceed 12 months, accomplish a visual inspection of the left hand (LH) and right hand (RH) wing tank areas in accordance with the instructions of AQUILA SB-AT01-027 Issue A.02.
	(2) Concurrent with the initial inspection as required by paragraph (1) of this AD, seal the tapped through bore holes inside the LH and RH fuel tank openings in accordance with the instructions of AQUILA SB-AT01-027 Issue A.02.
	(3) If, during any subsequent inspection as required by paragraph (1) of this AD, a tapped through bore hole inside the LH or RH fuel tank opening is found to be sealed improperly, within 100 FH or 3 months, whichever occurs first after detecting the improper sealing, renew the sealing of the affected bore hole in accordance with the instructions of AQUILA SB- AT01-027 Issue A.02.
	(4) If, during any inspection as required by paragraph (1) of this AD, the upper wing shells show damaged finishing in the tank areas, before next flight, contact AQUILA for approved repair instructions and, within the compliance time defined in those instructions, accomplish the repair accordingly.
	(5) Accomplishment of corrective actions as required by paragraph (3) or (4) of this AD does not constitute terminating action for the repetitive inspections required by paragraph (1) of this AD.
	(6) After accomplishment of the initial inspection and sealing as required, respectively, by paragraphs (1) and (2) of this AD, compliance with the requirements of this AD can be demonstrated by:
	(6.1) Revising as follows the approved Aircraft Maintenance Programme (AMP) and standard practices on the basis of which the operator or the owner ensures the continuing airworthiness of each operated aeroplane:
	Incorporate the repetitive 12-month visual inspection of the LH and RH wing tank areas specified in AQUILA SB-AT01-027 Issue A.02,
	and (6.2) Complying with the approved AMP described in paragraph (6.1) of this AD.
Ref. Publications:	AQUILA SB-AT01-027, Issue A.02, dated 15 August 2013.
	AQUILA Model AT01 MM-AT01-1020-100, Revision 24, dated 15 August 2013.
	AQUILA Model AT01-100 MM-AT01-1020-110, Revision A.02, dated 26 August 2013.
	The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.
Remarks:	<ol> <li>If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> </ol>
	<ol> <li>This AD was posted on 22 August 2013 as PAD 13-126 for consultation until 19 September 2013. No comments were received during the consultation period.</li> </ol>
	<ol> <li>Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: <u>ADs@easa.europa.eu</u>.</li> </ol>
	<ol> <li>For any question concerning the technical content of the requirements in this AD, please contact: AQUILA Aviation GmbH, E-mail: <u>maintenance@aquila-aviation.de</u>.</li> </ol>