EASA PAD No.: 14-041

## **EASA**

## NOTIFICATION OF A PROPOSAL TO ISSUE AN **AIRWORTHINESS DIRECTIVE**

Date: 19 February 2014

PAD No.: 14-041

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks'

<b>Design Approval</b> ATR-GIE AVIONS RÉGIONAL	Holder's Name: S de TRANSPORT	Type/Model designation(s): ATR 72 and 42 aeroplanes				
TCDS Number:	EASA.A.084					
Foreign AD:	Not applicable					
Supersedure:	None					
ATA 28	Fuel – Fuel Probes – Inspection / Replacement					
Manufacturer(s):	ATR-GIE Avions de Transport Régional (formerly Aerospatiale – Aeritalia, Aerospatiale – Alenia, Aerospatiale ATR – ALENIA, EADS ATR – Alenia).					
Applicability:	<ul> <li>a) ATR 42 and ATR 72 aeroplanes, all certified models, all Manufacturer Serial Numbers (MSN) qualified for Extended range Twin OPerationS (ETOPS) in accordance with ATR Mod. 04711, or</li> </ul>					
	<ul> <li>b) ATR 42 aeroplanes, all certified models, all MSN, except aeroplanes which are:</li> </ul>					
	- modified in acco	ordance with ATR Mod 04650, or				
		cordance with ATR Service Bulletin (SB) 3 or SB ATR42-28-0034, as applicable to the aeroplane				
	c) ATR 72 aeropland are :	es, all certified models, all MSN, except aeroplanes whi				
	- modified in accordance with ATR Mod 04686, or					
		cordance with ATR SB ATR72-28-1013, SB 2 or SB ATR72-28-1023, as applicable to the aeroplane				
Reason:	A significant number of fuel probes installed on ATR aeroplanes failed during production tests and several occurrences of fuel quantity indication malfunctions were recently reported on in service aeroplanes.					
	The subsequent inves	The subsequent investigation, conducted on the failed parts, confirmed a loss				

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of ground connection on the terminal block of the fuel probe, due to an incorrect application of wiring instructions in production during fuel probe manufacturing between June 2011 and August 2013. The investigation identified a batch of parts, suspected to be affected by this manufacturing defect. Some of these probes were delivered as spares, and operators may have installed these probes on their in-service aeroplanes.

In case an affected fuel probe is installed on each wing of an aeroplane, being not equipped with an independent fuel low level measurement system or an aeroplane operated in accordance with ETOPS rules, the defected fuel probes could indicate a higher fuel quantity value than the real quantity of the on-board fuel.

This condition, if not detected and corrected, could lead to an undetected fuel starvation and consequent dual engine in-flight flame out.

For the reasons described above, this AD requires the identification and replacement of the affected fuel probes.

## Effective Date:

[TBD: 14 days after final AD issue date]

## Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

- (1) Within 5 000 flight hours or 24 months, whichever occurs first after the effective date of this AD, accomplish the following actions:
  - (1.1) Identify the Part Number (P/N) and serial number (S/N) of the fuel probes installed on the aeroplane, in accordance with the instructions of ATR Aircraft Maintenance Manual (AMM) Job Instruction Card (JIC) 28-42-72 RAI 10000 001.

A review of aeroplane maintenance records is acceptable to make the identification as required by paragraph (1.1) of this AD, provided those maintenance records can be relied upon for that purpose, and the P/N and S/N of the fuel probes can be conclusively identified from that review.

(1.2) Following the identification required by paragraph (1.1) of this AD, replace any fuel probe, having a P/N and S/N as listed in Table 1 of this AD with a serviceable part in accordance with the instructions of ATR AMM JIC 28-42-72 RAI 10000 001.

Note: For the purpose of this AD, a serviceable fuel probe is a part which is either:

- not listed in Table 1 of this AD, or
- listed in Table 1 of this AD, but having control tag "C" marked on the part identification plate.
- (3) From the effective date of this AD, installation of fuel probe with a P/N and S/N listed in Table 1 of this AD on an aeroplane is allowed, only provided that the control tag "C" is marked on the fuel probe identification plate.

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	Table 1 – Affected Fuel Probes					
		Affected aeroplanes	P/N	N S/N		
			766-046-2	1046 to 1083		
			766-047-2	1154 to 1214		
		ATR 42	766-048-2	1150 to 1197		
			768-055-0	1156 to 1227		
			798-038-0	1150 to 1238		
			766-793-1	1469 to 1826		
			766-795-2	1661 to 2093		
		ATR 72	766-796-2	1722 to 2152		
		AIR 72	766-797-2	1663 to 2051		
			766-983-1	2200 to 2652		
			768-100-0	1151 to 1876		
Ref. Publications:	ATR42/72 AMM JIC 28-42-72 RAI 10000 001.					
Remarks:	<ol> <li>This Proposed AD will be closed for consultation on 19 March 2014.</li> <li>Enquiries regarding this PAD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: ADs@easa.europa.eu.</li> <li>For any question concerning the technical content of the requirements in this PAD, please contact:         ATR - GIE Avions de Transport Régional, Continued Airworthiness Service Tel.: +33 (0)5 62 21 62 21 - Fax: +33 (0) 5 62 21 67 18;         E-mail: continued.airworthiness@atr.fr.</li> </ol>					