## EASA

## **AIRWORTHINESS DIRECTIVE**

AD No.: 2012-0119

## Date: 04 July 2012

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 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].

Type Approval Holder's Name :		Type/Model designation(s) :			
AIRBUS		A318, A319, A320 and A321 aeroplanes			
TCDS Number:	EASA.A.064				
Foreign AD:	Not applicable				
Supersedure:	This AD supersedes DGAC France AD F-2005-108 (EASA approval 2005-6026) dated 28 June 2005.				
ATA 28	Fuel System – Magnetic Fuel Level Indicators – Inspection / Replacement / Repair				
Manufacturer(s):	Airbus (formerly Airbus Industrie)				
Applicability:	Airbus A318-111, A318-112, A318-121, A318-122, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-111, A320-211, A320-212, A320-214, A320-215, A320-216, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, all manufacturer serial numbers.				
Reason:	<ul> <li>In 2005, several in-service occurrences were reported of finding wear and/or detachment of the top stop of magnetic fuel level indicators (MFLI), either observed during tank maintenance activities, or on MFLI returned to the MFLI manufacturer. The investigation results indicated that the wear of the top stop retaining 'S' shaped wire had been caused by repetitive impact with the float, resulting in complete detachment of the top stop.</li> <li>This condition, if not detected and corrected, could lead an MFLI top stop to come into contact with a probe, which could, in the event of a lightning strike,</li> </ul>				
	create an ignition source in the fuel tank vapour space, possibly resulting in a fuel tank explosion and consequent loss of the aeroplane.				
	DGAC France issued AD F identification (by inspection (3508802-xx series with the the top stop retained by a "	-2005-108 (EASA approval 2005-6026) to require a) and replacement of the affected metallic MFLI e 'S' shaped retaining wire) with a metallic MFLI with trapped wire', or with a composite MFLI.			
	Since that AD was issued, it has been identified that the inspection procedure				

	(visual check) detailed in Airbus Service Bulletin (SB) A320-28-1138 was not fully effective, and that affected MFLI could still be fitted on aeroplanes which have passed the inspection in accordance with the instructions of this SB.						
	For the reasons described above, this AD, which supersedes DGAC France AD F-2005-108, requires a one-time inspection (improved method) to identify the type of MFLI installed and, depending on findings, replacement or repair, as applicable. This AD also prohibits the installation of the affected MFLI on any aeroplane as replacement parts.						
Effective Date:	18 July 2012						
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously:						
	(1) At the next scheduled fuel tank entry after the effective date of this AD, or within 49 000 flight hours after 16 July 2005 [the effective date of DGAC France AD F-2005-108], whichever occurs later, perform a special detailed inspection of the wing tank to determine which type of MFLI are installed in accordance with the instructions of Airbus SB A320-28-1209.						
	A review of aeroplane maintenance records is acceptable to make this determination, in lieu of the instructions of Airbus SB A320-28-1209, provided that the P/N and the type of the installed MFLI can be conclusively identified from that review.						
		Table 1 – Affected MFLI Part Numbers					
		3508802-24	3508802-28	3508802-75			
		3508802-25	3508802-34	3508802-76			
		3508802-26	3508802-39	3508802-91			
		3508802-27	3508802-74				
	Note: The affected MFLI have the 'S' shaped lock-wire design.         (2) If a MFLI, identified as required by paragraph (1) of this AD, is installed with the 'S' shaped lock-wire design (Part Number (P/N) listed in Table 1 of this AD), within the compliance time defined in paragraph (1) of this AD, replace the affected MFLI with a serviceable part and accomplish the corrective actions (repair), as applicable, in accordance with the instructions of Airbus SB A320-28-1209.         For the purpose of this AD, a serviceable part is a composite MFLI, or a metallic MFLI with the top stop retained by a 'trapped wire', as applicable to the location listed in Table 2 of this AD.         Table 2 - Metallic MFLI with the top stop retained by a 'trapped wire', including applicable location (FIN)         MFLI P/N       Applicable Location (FIN)         3508802-35       56/57QM         3508802-37       60/61QM         3508802-38       62/63QM						
	(3) Aeropl in proc listed i by the	anes on which Airb luction, and on whi n Table 1 of this AI requirement of par	ous modification (m ch no wing tank MF D, has been made s agraph (1) of this A	od) 27496 has b FLI replacement since first flight, D.	een embodied with a P/N are not affected		

	(4) After the effective date of this AD, do not install on any aeroplane a MFLI with a P/N listed in Table 1 of this AD	
Ref. Publications:	Airbus SB A320-28-1209 original issue dated 12 December 2011. The use of later approved revisions of this document 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 23 April 2012 as PAD 12-033 and republished on 02 May 2012 as PAD 12-033R1 for consultation until 21 May 2012. The Comment Response Document can be found at <u>http://ad.easa.europa.eu</u>.</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: AIRBUS – Airworthiness Office – EIAS, Fax +33 5 61 93 44 51, E-mail: <u>account.airworth-eas@airbus.com</u>.</li> </ol>	