EASA AD No.: 2013-0132-E

EASA

EMERGENCY AIRWORTHINESS DIRECTIVE



AD No.: 2013-0132-E

Date: 25 June 2013

Note: This Emergency 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 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].

Design Approval Holder's Name: AIRBUS		Type/Model designation(s): A318, A319, A320 and A321 aeroplanes
TCDS Number:	EASA.A.064	
Foreign AD:	Not applicable	
Supersedure:	None	
ATA 32	Landing Gear – Main Landing Gear Door Actuator / Control Interface Unit Interlink – Inspection / Disconnection	
Manufacturer(s):	Airbus (formerly Airbus Indus	strie)
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:	Some operators reported slow operation of the main landing gear (MLG) of opening/closing sequence, leading to the generation of Centralized Fault Display System (CFDS) messages/ECAM warnings during the landing gear retraction or extension sequence. Investigations showed that the damping and associated retaining ring of the MLG door actuator deteriorate. The resultant debris increases the friction inside the actuator which can be sufficiently high to restrict opening of the MLG door by gravity, during oper of the landing gear alternate (free-fall) extension system.	
	This condition, if not detected and corrected, could prevent the full extension and/or down-locking of the MLG, possibly resulting in MLG collapse during landing and consequent damage to the aeroplane and injury to occupants.	
	(currently at R1) to require a Manual (AFM), repetitive che	safe condition, EASA issued AD 2011-0069 n amendment of the applicable Airplane Flight ecks of specific CFDS messages, and repetitive equence of the MLG door actuator and, dependin n.

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Since that AD was issued, following a recent occurrence with a gear extension problem, additional analyses by Airbus have revealed that the CFDS expected specific messages may be not generated and as a result, repetitive checks of messages are not effective for aeroplanes fitted with landing gear control interface unit (LGCIU) interlink communication ARINC 429 (applied in production through Airbus Modification (mod.) 39303, or in service through Airbus Service Bulletin (SB) A320-32-1409), in combination with certain LGCIUs and MLG door actuators installed.

For the reasons described above, this Emergency AD requires identification of the affected aeroplanes to establish the configuration and, for those aeroplanes, repetitive inspections of the opening sequence of the MLG door actuator and, depending on findings, replacement of the MLG door actuator.

This AD also provides optional terminating action by disconnection of the interlink for certain LGCIUs, or in-service modification of the aeroplane by installation of MLG actuator Part Number (P/N) 114122014 through Airbus SB A320-32-1407 (Airbus production mod. 153655).

Effective Date:

27 June 2013

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

Required as indicated, unless accomplished previously:

(1) Before exceeding 800 flight cycles (FC) since first flight of the aeroplane, or within 14 days after the effective date of this AD, whichever occurs later, determine the configuration (modification status) of the aeroplane and identify the P/N of left hand (LH) and right hand (RH) LGCIU and MLG door actuators.

A review of the aeroplane delivery - or maintenance records is acceptable for compliance with the requirements of paragraph (1) of this AD, provided the aeroplane configuration and installed components can be conclusively determined from that review.

Component name	P/N
L CCIII (IIII and DIII)	80-178-02-88012
LGCIU (LH and RH)	80-178-03-88013
	114122006
	114122007
MI C door octuator	114122009
MLG door actuator	114122010
	114122011
	114122012

Table 1 – Affected Components

- (2) If, during the determination and identification as required by paragraph (1) of this AD, the configuration of the aeroplane is established as post-mod. 39303 or post-SB A320-32-1409 (Interlink communication ARINC 429 installed), <u>and</u> a LGCIU <u>and</u> a MLG door actuator are installed with a P/N as listed in Table 1 of this AD, within the compliance time as defined in paragraph (1) of this AD, and thereafter at intervals not to exceed 8 calendar days or 5 FC, whichever occurs later, inspect the door opening sequence of the LH and RH MLG doors in accordance with the instructions of Airbus Alert Operator Transmission (AOT) A32N001-13.
- (3) If, during any inspection as required by paragraph (2) of this AD, any discrepancy is found, before next flight, replace the affected MLG door actuator in accordance with the instructions of Airbus AOT A32N001-13.
- (4) Replacement of a MLG door actuator as required by paragraph (3) of this

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	AD does not constitute terminating action for the repetitive inspections required by paragraph (2) of this AD, unless MLG door actuators P/N 114122014 are installed on both LH and RH sides in accordance with the instructions of Airbus SB A320-32-1407 (see also paragraph (5) of this AD).		
	(5) An aeroplane on which the LGCIU interlink is disconnected (Airbus mod.155522 applied in production, or modified in-service in accordance with the instructions of Airbus AOT A32N001-13), or on which MLG door actuators P/N 114122014 are installed on both LH and RH sides (Airbus mod.153655 applied in production, or modified in-service in accordance with the instructions of Airbus SB A320-32-1407) is not affected by the requirements of paragraphs (2) and (3) of this AD, provided that the aeroplane is not modified to a configuration as defined in paragraph (2) of this AD.		
	(6) Inspection of the door opening sequence of the LH and RH doors of the MLG of an aeroplane, as required by paragraph (2) of this AD, is an acceptable alternative method to comply with the requirements of paragraphs (2), (3) and (6) of EASA AD 2011-0069R1 for that aeroplane.		
Ref. Publications:	Airbus AOT A32N001-13 original issue, dated 24 June 2013.		
	Airbus SB A320-32-1409 original issue, dated 19 March 2013.		
	Airbus SB A320-32-1407 original issue, dated 14 May 2013.		
	The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.		
Remarks:	If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.		
	The results of the safety assessment have indicated the need for immediate publication and notification, without the full public consultation process.		
	 Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: ADs@easa.europa.eu. 		
	 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: account.airworth-eas@airbus.com. 		