


EASA	COMMENT RESPONSE DOCUMENT
	<p style="text-align: center;">EASA PAD No. 13-125 [Published on 21 August 2013 and officially closed for comments on 18 September 2013]</p>

Commenter 1: Avianca – Marcio Righi – 22.08.2013

Comment # 1

In order to clarify any doubts about the PAD 13-125, OCEANAIR (ONE) has concerned to meet all requirements, therefore would like to notify that on page 4, NOTE 3, mentions the Airbus SB A320-32-1407 as the reference to reconnection of LGCIU interlink, nevertheless, this SB does not have any instruction to accomplishment of this procedure.

In attention to this subject, ONE has contacted AIRBUS to request further information regarding the references to reconnection of LGCIU interlink 429, and as described in the e-mail [quoted below], it is expected to be issued until the end of September 2013.

“In response to the above subject, Airbus would like to provide you with the following information: Please be advised that the normal lead time for SB issuance is 3 months. Of course due to the urgency of the above issue, we will make every effort to have this SB made available to operators at the earliest opportunity. Unfortunately at the moment we cannot provide a clear target date for this but realistically, I would assume to have this SB available by end of September 2013”.

Expecting that our comment will contribute to AD issuance, ONE remains waiting for the references to continue with the fleet modification.

EASA response:

Comment agreed.

SB A320-32-1407 provides instructions for MLG door actuator -14 only. The meaning of this note is to indicate that as soon as the aircraft is fitted with MLG door actuators -14, the reconnection is possible. A separate Airbus SB will be issued to provide the necessary instructions.

The PAD has been revised to remove “in accordance with the instructions of Airbus SB A320-32-1407.”

Commenter 2: Lufthansa Technik AG – Stefan Spiesmacher – 23.08.2013

Comment # 2

In the eighth paragraph of section “Reason” the PAD states: “[...] repetitive checks of messages are not effective for aeroplanes fitted with landing gear control interface unit (LGCIU) **interlink communication** ARINC 429 [...], **in combination with LGCIUs 80-178-02-88012 or 80-178-03-88013** in both positions **and MLG**

door actuators **post** MOD 153655 [...] installed.” (my emphasis and markings). As Airbus MOD 153655 introduces the MLG Door Actuator PN 114122014, which is introduced as a terminating action with this very AD, I suspect, it should read **pre** MOD 153655 instead.

Technically speaking, the interlink communication in combination with two LGCIUs of the PNs stated above render *any* check of the respective messages ineffective, regardless of the type of MLG door actuator installed. Therefore, the reference to the MLG door actuator PN in the sentence quoted above might be omitted altogether.

Furthermore I'd like to comment on paragraph (16) of section “Required Action(s) and Compliance Time(s)”: the paragraph essentially states, that only the installation of PN 114122014 is a terminating action for the AD. As there might be future evolutions of the MLG door actuator, resulting in new part numbers, I'd kindly like to suggest adding “or any subsequent PN” (or a similar description) to the requirement. Alternatively, a negative reference to the PNs listed in Table 1 may serve the same cause.

EASA response:

Comment on Reason paragraph is agreed. The PAD has been revised and corrected accordingly.

EASA concurs that, whatever the MLG door actuator fitted on aircraft in combination with LGCIU interlink, no message will be generated. However, the new MLG door actuator design that Airbus has qualified should not prevent the gear to fully extend in case of actuator failure. No changes have been made to the revised PAD in response to this comment.

At time of AD issuance, EASA can only declare the parts that are affected. For any later approved parts, it is the responsibility of the DAH to demonstrate compliance with the existing AD, which could lead to AD revision and/or AMOC approval(s). No changes have been made to the revised PAD in response to this comment.

Commenter 3: Easy Jet – Michael Foster – 27.08.2013

Comment # 3

Under the “Reason:” paragraph for PAD 13-125, with the 8th paragraph it is stated:

“In addition, following a recent occurrence with a gear extension problem, the result of additional analyses by Airbus revealed that the CFDS expected specific messages may not be 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 MOD 39303, or in service through Airbus SB A320-32-1409), in combination with LGCIUs 80-178-02-88012 or 80-178-03-88013 in both positions and MLG door **actuators post MOD 153655 (SB 32-1407 – SB 114122-32-105)** installed”.

Should this read “actuators **pre** MOD 153655 (SB 32-1407 – SB 114122-32-105)” since this modification is terminating action so does not affect this scenario?

EASA response:

Comment agreed – see also answer to # 2 above. The PAD has been revised and corrected accordingly.

Commenter 4: TAP Maintenance & Engineering – João Guimarães – 30.08.2013**Comment # 4**

We indeed reviewed the PAD 13-125, which combines additional requirements to the ones of AD 2011-0069R1 and AD 2013-0132-E, and have only the following comment (in RED colour):

Field : REASON - Paragraph 8:

*In addition, following a recent occurrence with a gear extension problem, the result of additional analyses by Airbus revealed that the CFDS expected specific messages may not be 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 MOD 39303, or in service through Airbus SB A320-32-1409), in combination with LGCIUs 80-178-02-88012 or 80-178-03-88013 in both positions and **at least one** MLG door actuators ~~post~~ **pre** MOD 153655 (SB 32-1407 – SB 114122-32-105) installed.*

The post-mod 153655 – SB 32-1407 – SB 114122-32-104 is the terminating action for this AD requirements and thus, it should be written PRE and not POST. On the other hand, we would propose you to take into consideration our planning proposal (please see the **attached Engineering Report**) and state this planning flexibility in the **Required Action(s) and Compliance Time(s) – Paragraph (3)** i.e.:

- (3) *Thereafter, at intervals not to exceed 8 calendar days or 5 FC, whichever occurs later, check the CFDS messages recorded during each interval in accordance with the instructions of paragraph 4.2.1 of Airbus AOT A320-32A1390.*

NOTE: For planning purposes, it is acceptable if this requirement accomplishment is included in the weekly maintenance check. A maximum of 10% periodicity extension is allowed if an equal or higher periodicity reduction is applied in the next accomplishment, in accordance with LEAFLET N°26 – JAR OPS 1&3.

[Planning Proposal known to EASA]

EASA response:

Reason paragraph: comments already raised by comments # 2 and # 3 above. The suggestion to add “at least one” is also accepted. The PAD has been revised and corrected accordingly.

The comment regarding 10% periodicity extension is not agreed because, based on the risk assessment results, this would not be acceptable for this specific task. No changes have been made to the revised PAD in response to this comment.

Commenter 5: Air Canada – Stéphane Perron – 09.09.2013**Comment # 5**

Air Canada does not agree with the proposed terminating action in this proposed Airworthiness Directive for the following reasons:

- 1- Since the EASA has issued AD2011-0069R1 and AD2006-0112R1, Air Canada has only replaced one actuator following the inspection requirements at every 425

FC. For this single event the actuator was performing correctly per the criteria established, but a gouge on the chromed portion of the actuator piston.

2- The problem exposed and addressed by the EASA AD 2013-0132E, it is attributed (according to exchanges with the manufacturer of the LGCIU) to the change in logic in the fault indication when the ARINC link is activated. When the ARINC 429 link is installed between the 2 LGCIU, the CFDIU only displays faults when the door opening sequence takes more than 30s. This change of logic, when the 2 LGCIUs are connected with the ARINC, hides the drift in the performance of the gear door sequence. Therefore, in event that the latest actuator part number 114122014 has a constant drift in the opening times no warning(s) will appear during the interrogation of the CFDIU when the ARINC is activate. This literally hides a fault which could be addressed by maintenance before a hard fault happens and/or a landing gear jammed against the door.

3- Also, there is an important economical impact for the operators which have to scrap and replace the actuators part number 114122009. In our situation this part number represents over 70% of the units which are affected by this AD. Due to the fact that Air Canada has a low cycles per day operation there are no economical benefits within 3 years. In addition, with the timelines proposed by this Airworthiness Directive we would not have time to recover our investment.

4- As an operator, a 60 months implementation timeline raises questions about the benefits to safety or are they to the benefits of the manufacturer.

EASA response:

1: EASA confirms the terminating action, considering that the mitigation introduced by CFDS monitoring and functional testing of the doors are only sufficient to ensure fleet airworthiness in the short term.

2: See answer to comment # 2 above. No changes have been made to the revised PAD in response to this comment.

3: Comment understood. See also answer to point 4 below. No changes have been made to the revised PAD in response to this comment.

4: Comment understood. Based on the most recent analysis, the compliance time is to be reduced to 36 months. The revised PAD has been amended accordingly.