

## COMMENT RESPONSE DOCUMENT

**EASA PAD No. 19-092**

**[Published on 23 May 2019 and officially closed for comments on 20 June 2019]**

EASA statement: Since PAD 19-092 was issued, Airbus revised the AOT (Revision 2) to further expand the list of affected parts (one additional unit) and to clarify the reading of s/n (a 0 (zero) might be present at the beginning of the s/n).

### **Commenter 1: American Airlines – Richard Castle – 31/05/2019**

#### **Comment # 1**

Subject PAD, issued 23 May 2019, proposes compliance with Airbus AOT A32L012-18 Revision 1. The revised AOT introduces more Free Fall Actuator serial numbers into the affected batch and these “new” serial numbers are listed on Appendices 4 and 5 of the AOT.

Appendix 4 of the AOT includes serial numbers that were subject of previous DGAC AD’s 95-187-020(B) and 95-189-032(B) both dated September 27, 1995. The affected serial numbers are shown in attached Lucas Aerospace SB AR024-A32-001.

Since this new PAD is including serial numbers that were affected by a previous AD, American Airlines believes that the old DGAC AD’s should be superseded when the new AD is issued. We suggest this is added to the Supersedure statement prior to releasing the new AD.

#### **EASA response:**

***Comment not agreed. These old ADs cannot be superseded as EASA has no evidence the actions required by the old ADs – which are addressing different unsafe conditions – have been accomplished on the affected FFAs.***

***No changes have been made to the Final AD in response to this comment.***

**Commenter 2: Delta Air Lines – Heather Goetz – 14/06/2019****Comment # 2**

Reference:

/1/ EASA PAD 19-092

/2/ Airbus Retrofit Information Letter (RIL) LR32M18008932 R01; dated 17May19

/3/ Triumph Service Bulletin AR2404-32-L3409-1 REV Original; dated 21Feb11

/4/ Airbus Alert Operations Transmission (AOT) A32L012-18 REV 01; dated 16May19

A. After reviewing reference documents /1/, Delta Air Lines is submitting the following comments to reference /1/:

Delta requests that the “Required Action(s) and Compliance Time(s) Table 1 and Table 2 be revised to the following:

FFA Installed	Compliance Time (flight hours (FH) or calendar time, whichever occurs first)
Affected FFA in AOT Appendix 3, 4 or 5	Within 90 days after the effective date of this AD.

Delta maintains that there is no need to break up the initial compliance times in Table 1 per AOT Appendix. Given the date of manufacture for the A330-200/-300 fleet, the risk of having a failure after approximately 14 years of operating the aircraft is relatively low given that only one occurrence of this failure has occurred in-flight; recognizing that the FFA is a secondary system only utilized in the event of a green hydraulic failure. Additionally, this minimizes risk for noncompliance due to test planning should an actuator from a different AOT Appendix list be installed at different positions on the same aeroplane.

Delta also requests that repetitive testing intervals be calculated in cycles instead of flight hours in Table 2 for landing gear actuators as they are only operated at take-off and landing.

Delta requests that only those items detailed in section 4.2.2 Inspection Requirements of Ref /3/ be made mandatory within the final AD, in “Identification / Inspections” and “Corrective Action(s)”.

Delta requests that the “Terminating Action” language be revised to state the following: Replacement of an affected FFA, as defined in this AD, with a serviceable FFA not listed within AOT A32L012-18 REV 01 constitutes terminating action for the repetitive tests of the free fall system of each landing gear, as required by paragraph (1).

This revised terminating action statement better supports the Part(s) Installation section of the AD that prohibits installation of affected FFA on any aeroplane from the effective date of the AD as well as the ‘Solution’ section of RIL LR32M18008932 R01 that states that ‘Any FFA PN AR02404 that



fails the operational test will be upgraded into PN TY3409-01A according to Triumph SB AR02404-32-L3409-1. This SB reinforces FFA with support rings to avoid magnet detachment.'

Delta requests that language be added to the final AD to allow for credit for accomplishment of actions completed prior to the AD effective date.

B. After reviewing reference document /3/, Delta Air Lines is submitting the following comments to reference /3/:

Delta requests that reference /3/ be updated with the following corrections:

- Section 1(L) References: Correct CMM reference for P/N TY3409-01A from 32-33-20 to 32-33-18.
- Section 1(M) Other Publications Affected: Correct CMM reference for P/N TY3409-01A from 32-33-20 to 32-33-18.
- Step 3B(10) Accomplishment Instructions: Correct to read as follows:

WAS: Put an applicable length of the shrink sleeving M230536-106-8 on the soldered connection of the white wire that was soldered on the diode (D4). Apply sufficient heat to shrink the shrink sleeving (8).

IS: Put an applicable length of the shrink sleeving M23053-6-106-8 on the soldered connection of the white wire that was soldered on the diode (D4). Apply sufficient heat to shrink the shrink sleeving (8).

- Step 3B(13) Accomplishment Instructions: Correct to read as follows:

WAS: Put an applicable length of the shrink sleeving M230536-106-8 on the soldered connection of the white wire that was soldered on the diode (D5). Apply sufficient heat to shrink the shrink sleeving (8).

IS: Put an applicable length of the shrink sleeving M23053-6-106-8 on the soldered connection of the white wire that was soldered on the diode (D5). Apply sufficient heat to shrink the shrink sleeving (8).

- Step(s) 3C(7), Step 3C(11), Step 3C(15), Step 3C(19) Accomplishment Instructions: Verify torque values provided in Nm and lbf-in are correct.

155 Nm = 1371 lbf in not 1327 lbf in

165 Nm = 1460 lbf in not 1770 lbf in

- Step 3C(24) Accomplishment Instructions: Correct to read as follows:

WAS: Do the tests as written in the Testing and Fault Isolation section of the Goodrich Component Maintenance Manual 32-33-20.

IS: Do the tests as written in the Testing and Fault Isolation section of the Goodrich Component Maintenance Manual 32-33-18.

- Step 3C(29) Accomplishment Instructions: Correct to read as follows:

WAS: Apply the primer and the white paint (as written in REPAIR section of the Goodrich Component Maintenance Manual 32-33-20) to the new motor assemblies and repair the paint that was damaged during the installation of the new motors.

IS: Apply the primer and the white paint (as written in REPAIR section of the Goodrich Component Maintenance Manual 32-33-18) to the new motor assemblies and repair the paint that was damaged during the installation of the new motors.



- Step 3C(30) Accomplishment Instructions: Correct to read as follows:

WAS: Do the tests that follow as written in the Testing and Fault Isolation section of the Goodrich Component Maintenance Manual 32-33-20 after the paint is applied.

IS: Do the tests that follow as written in the Testing and Fault Isolation section of the Goodrich Component Maintenance Manual 32-33-18 after the paint is applied.

- C. After reviewing reference document /4/, Delta Air Lines is submitting the following comments to reference /4/:

Delta requests that only those items detailed in section 4.2.2 Inspection Requirements be made mandatory within the final AD, in “Identification / Inspections” and “Corrective Action(s)”.

Delta requests, after reviewing section 4.3, Spares and Tooling, that Airbus AMM 32-33-18-400-801-A section 4(C) be updated to correct the tool callout for the Left Hand MLG Rigging Pin Tool from P/N DNSA 20208080 to P/N 98DNSA20208080.

Delta requests that AMM 32-33-18 and 32-33-19 be updated to reflect the operational check contained within AOT A32L012-18 REV 01 Appendix 1.

Delta requests that tool P/N 97F32001001000, Control Unit-Leg Free Fall Actuator be inspected or that carriers be notified that during a mock-up for EASA AD 2019-0063, Delta observed that the labels A and B on the tool were reversed.

Delta requests that an alternate cotter pin P/N MS24665-151 be used instead of P/N MS24665-153 per the A330 IPC.

**EASA response:**

- A. Comment not agreed. FFA in Appendix 3 were affected by previous AD and the compliance time for these FFA are retained from previous AD. Giving 90 days after the effective date of this Final for all FFA would mean extending the compliance for FFA in Appendix 3, which cannot be done. The alignment of compliance times for all affected FFA installed on a specific aeroplane can be done at the next inspection, using the required interval.**

**As for the request that repetitive testing intervals be calculated in cycles instead of flight hours, in this specific case, the failure rate has been calculated using flight hours (FH), hence the compliance time in FH.**

**EASA confirm that the ‘Identification / Inspections’ and ‘Corrective Action(s):’ is to be accomplished using the instructions of paragraph 4.2.2. of the AOT but EASA also consider that there is no need to specify it in the Final AD as this obvious.**

**For the ‘Terminating Action’ aspect, the AD wording is standard and address the issue.**

**As for the requested ‘Credit’ paragraph for actions accomplished before the effective date of the Final AD, this is already present. Each EASA AD RACT paragraph starts with ‘Required as indicated, unless accomplished previously’, which serves that purpose.**

- B. The comments on Triumph SB AR2404-32-L3409-1 have been passed to Airbus, who will inform Triumph accordingly.**

- C. See EASA answer to this comment Point A. above. The other comments on Airbus (AOT) A32L012-18 have been passed to Airbus.**



*No changes have been made to the Final AD in response to this comment.*

**Commenter 3: Cathay Pacific Airways – Simon Hui – 19/06/2019**

**Comment # 3**

After reviewing subject PAD, CPA would like to clarify the correct interpretation on the requirement for testing an affected FFA in Appendix which has been tested per AOT A32L012-18 at original issue:

Referring to PAD, Table 1 – Inspection / Test Thresholds, the requirement is:

Within 1 600 FH or 5 months, whichever occurs first since previous test

Grace period: 90 days after 09 April 2019 [the effective date of EASA AD 2019-0063]

When looking at A32L012-18 Rev 01 dated 16-MAY-2019, the requirement is:

If the test requested by this AOT has already been performed on A/C at the issuance date of this revision, the next test must be performed before 09 July 2019 or before 1600 Flight Hours/5 Months counted from the last inspection (whichever occurs later).

The question is :

Grace period in PAD Table 1 is not mentioned in the AOT revision, and the wording ‘Whichever occurs later’ in AOT revision, on the other hand, is not mentioned in PAD.

CPA would like EASA to clarify what the correct interpretation should be.

**EASA response:**

***Comment acknowledged. EASA do not see any issue with text as specified in Final AD and in the AOT at revision 2. Basically, the grace period in the Final AD was introduced for not penalising operators which accomplished the initial test very early.***



*The Airbus AOT confirms that once the initial test is done, the next one, as required by this new Final AD, is to be accomplished 'Within 1 600 FH or 5 months, whichever occurs first since previous test' or within '90 days after 09 April 2019 [the effective date of EASA AD 2019-0063]', whichever occurs later (grace period).*

*No changes have been made to the Final AD in response to this comment.*

#### **Commenter 4: Iberia – Carlos Marjaliza Fernández – 24/06/2019**

##### **Comment # 4**

We're writing you regarding the issuance expected date for the AD of the PAD 19-092. As per AIB AOT A32L012-18, the limit for the a/c fitted with FFA listed on Appendix 5 is 3 months from AOT rev date (16/05/2019), that means the limit is 14/08/2019. However, the PAD states 90 days from AD effective date, so there's an important difference on the situation since we will be able to move the test after the summer.

We would like to have confirmation of when the AD will be issued and if the limit for Appendix 5 aircrafts will be kept as 90 days from AD effective date.

##### **EASA response:**

*Comment acknowledged. EASA confirm 'Within 90 days after the effective date of this AD'. This is specified in the Final AD.*

*No changes have been made to the Final AD in response to this comment.*

