EASA

AIRWORTHINESS DIRECTIVE

AD No.: 2015-0150



Date: 23 July 2015

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 EU 748/2012, Part 21.A.3B. In accordance with EU 1321/2014 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 [EU 1321/2014 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 AIRBUS | Holder's Name: | Type/Model designation(s): A310 and A300-600 aeroplanes | | | | |
|---------------------------|---|---|--|--|--|--|
| TCDS Number: | EASA.A.172 | | | | | |
| Foreign AD: | Not applicable | | | | | |
| Supersedure: | Supersedure: This AD supersedes EASA AD 2014-0097-E dated 23 April 2014. | | | | | |
| ATA 53 | 53 Fuselage – Aft Cargo Door Sill Beam Area – Inspection | | | | | |
| Manufacturer(s): | er(s): Airbus (formerly Airbus Industrie) | | | | | |
| Applicability: | Airbus A300-600 and A310 aeroplanes, all certified models, all manufacturer serial numbers on which Airbus modification (mod) 05438 has been embodied in production, except aeroplanes on which Airbus mod 12046 has also been embodied in production. | | | | | |
| Reason: | During accomplishment of Maintenance Review Board Report (MRBR) task 531625-01-1 on an A300-600 aeroplane having accumulated more than 25 000 flight cycles (FC) since aeroplane first flight, multiple fatigue cracks were found on the following parts: - Aft cargo door sill beam Part Number (P/N) A53973085210 - Lock fitting P/N A53978239002 - Torsion box plate P/N A53973318206. | | | | | |
| | Prompted by these findings, a stress analysis was performed during which it was discovered that there is no dedicated scheduled maintenance task to inspect the affected area for fatigue damage. | | | | | |
| | This condition, if not detected and corrected, could lead to failure of multiple lock fittings, possibly resulting in loss of the cargo door in flight and consequent explosive decompression of the aeroplane. | | | | | |
| | To address this unsafe condition, Airbus issued Alert Operators Transmission (AOT) A53W005-14 providing instructions for inspection of the affected area. | | | | | |
| | Consequently, EASA issued Emergency AD 2014-0097-E to require repetitive ultrasonic (US) inspections or detailed inspections (DET) of the aft cargo door sill beam external area, and/or a one-time High Frequency Eddy Current | | | | | |

| | (HFEC) inspection of the aft cargo door sill beam internal structure and, depending on findings, accomplishment of corrective action(s). | | | | |
|-----------------------------------|--|--|--|--|--|
| | Since that AD was issued, the results of further analysis have indicated that repetitive HFEC inspections need to be introduced. | | | | |
| | For the reasons described above, this AD retains the requirements of EASA AD 2014-0097-E, which is superseded, and requires repetitive HFEC inspections of the concerned areas. The first HFEC inspection terminates the repetitive US/DET inspections. | | | | |
| Effective Date: | 06 August 2015 | | | | |
| Required Action(s) and Compliance | Required as indicated, unless accomplished previously: | | | | |
| Time(s): | For the purpose of this AD, the following groups of aeroplanes are defined: | | | | |
| | Table 1 – Aeroplane Group Definitions | | | | |
| | Group | Aerop | plane condition(s) | | |
| | 1 | | accomplished in accordance with the IT A53W005-14 [paragraph (3) of | | |
| | 2 | the instructions of Airbus aeroplane had accumula | ACCOMPLISHED IN ACCORDANCE WITH AOT A53W005-14 and the ted more than 18 000 FC on 25 April of EASA AD 2014-0097-E]. | | |
| | 3 No HFEC inspection was accomplished (aeroplane not affected by Airbus AOT A53W005-14) and the aeroplane had accumulated 18 000 FC or less on 25 April 2014 [the effective date of EASA AD 2014-0097-E]. | | | | |
| | Re-statement of the requirements of EASA AD 2014-0097-E: | | | | |
| | Within the compliance time as specified in Table 2 of this AD, as applicable, and, thereafter, at intervals not to exceed 275 FC, accomplish an US inspection or DET of the aft cargo door sill beam external area in accordance with the instructions of Airbus AOT A53W005-14. | | | | |
| | Table 2 – Threshold for Initial Inspection | | | | |
| | (on 25 | umulated since ane first flight April 2014 [the effective EASA AD 2014-0097-E]) | Compliance Time | | |
| | 30 000 | FC or more | Within 50 FC after 25 April 2014 [the effective date of EASA AD 2014-0097-E] | | |
| | | FC or more, but less 000 FC | Within 275 FC after 25 April 2014 [the effective date of EASA AD 2014-0097-E] | | |
| | Less th | an 18 000 FC | Before exceeding 18 275 FC since aeroplane first flight | | |
| | is found, | | d by paragraph (1) of this AD, any crack Airbus for approved repair instructions accordingly. | | |

| | (3) Accomplishment of a HFEC inspection in accordance with the instructions of Airbus AOT A53W005-14, and, depending on findings, accomplishment of applicable corrective action(s) before next flight after that HFEC inspection in accordance with approved Airbus instructions, constitutes terminating action for the repetitive US/DET inspections as required by paragraph (1) of this AD for that aeroplane. (4) Within 30 days following the initial US inspection or DET as required by paragraph (1) of this AD, report the inspection results, including no findings, to Airbus. | | |
|--------------------|--|---|--|
| | New requirements of this AD: | | |
| | (5) In addition to the inspections as required by paragraph (1) of this AD, within the compliance time as defined in Table 3 of this AD, as applicable to aeroplane group, and, thereafter, at intervals not to exceed 4 600 FC, accomplish a HFEC inspection of the concerned areas in accordance with the instructions of Airbus SB A310-53-2139 or SB A300-53-6179, as applicable. | | |
| | Table 3 – HFEC Inspection Threshold | | |
| | | Group | Compliance Time |
| | | 1 | Within 4 600 FC after the HFEC inspection in accordance with Airbus AOT A53W005-14 |
| | | 2 | Within 2 000 FC after the effective date of this AD |
| | | 3 | Before exceeding 13 000 FC since aeroplane first flight, or within 2 000 FC after the effective date of this AD, whichever occurs later |
| | For Group 2 and Group 3 aeroplanes, accomplishment of the first HFEC inspection as required by paragraph (5) of this AD constitutes terminating action for the repetitive US/DET inspections required by paragraph (1) of this AD. (6) If during any inspection as required by paragraph (5) of this AD, any crack is found, before next flight, contact Airbus for approved repair instructions and, within the compliance time specified therein, accomplish the repair accordingly. | | |
| | | | |
| Ref. Publications: | Airbus AOT A53W005-14 original issue dated 22 April 2014 or Revision 01 dated 29 April 2014. | | |
| | Airbus SB A300-53-6179 original issue dated 12 December 2014. | | |
| | Airbus SB A310-53-2139 original issue dated 12 December 2014. | | |
| | 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. | |
| | | | vas posted on 10 June 2015 as PAD 15-081 for consultation until 015. No comments were received during the consultation period. |
| | | | regarding this AD should be referred to the Safety Information Certification Directorate, EASA. E-mail: <u>ADs@easa.europa.eu</u> . |
| | | this AD, p AIRBUS - | uestion concerning the technical content of the requirements in lease contact: - EIAW (Airworthiness Office) ntinued.airworthiness-wb.external@airbus.com |