


EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2012-0176</p> <p>Date: 07 September 2012</p> <p>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.</p>
<p>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].</p>	
Design Approval Holder's Name : AIRBUS	Type/Model designation(s) : A300, A310, A300-600 and A300-600ST aeroplanes
TCDS Number:	France TCDS N° 145 and EASA.A.014
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA AD 2006-0372R1 dated 29 November 2010, EASA AD 2007-0195 dated 19 July 2007, EASA AD 2010-0250 dated 29 November 2010 and EASA AD 2010-0251 dated 29 November 2010.
ATA 57	Wings – Main Landing Gear Rib 5 Aft Bearing Forward Lug Bushes – Inspection / Replacement
Manufacturer(s):	Airbus (formerly Airbus Industrie)
Applicability:	A300, A310, A300-600 and A300-600ST aeroplanes, all certified models, all manufacturer serial numbers.
Reason:	<p>Several cases of corrosion of the Main Landing Gear (MLG) Rib 5 aft fitting forward lug have been reported on A310 family aeroplanes. In some instances, corrosion pits caused the cracking of the forward lug.</p> <p>This condition, if not detected and corrected, may lead to the complete failure of the fitting and thus could affect the structural integrity of the MLG installation.</p> <p>EASA ADs 2006-0372R1, 2007-0195, 2010-0250 and 2010-0251 were issued to address this condition and required a repetitive inspection programme of the MLG Rib 5 fitting forward lugs and, as terminating action, the embodiment of mandatory design change (bushes with increased interference fit).</p> <p>MLG Rib 5 forward lug on A320 family aeroplanes is a similar design to the A300/A300-600/A310 family. Since those ADs were issued, on two A321 aeroplanes, post modification (bushes with increased interference fit) MLG Rib 5 forward lugs were reportedly found ruptured. One other case was due to a sealant discrepancy that led to water ingress and consequently corrosion initiation, leading to cracking. Subsequent investigation results have shown that a remaining defect, not removed during the repair, had propagated, resulting in rupture of the lug.</p>

	<p>For the reasons stated above, this new AD retains the requirements of EASA ADs 2006-0372R1, 2007-0195, 2010-0250 and 2010-0251, which are superseded, expands the applicability to all models and series of A300, A310, A300-600 and A300-600ST aeroplanes, and requires:</p> <ul style="list-style-type: none"> - for aeroplanes not yet modified or repaired, implementation of Modification Service Bulletin (SB) A300-57-0249, A310-57-2090, A300-57-6106, or A300-57-9019, all at Revision 3, and - for aeroplanes which already embody that modifications, at original issue or revision 01 or 02 of the applicable SB, or have MLG Ribs already repaired in accordance with Airbus repair instruction R57240221 or R57249121, implementation of an additional inspection programme and associated corrective action(s).
Effective Date:	21 September 2012
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>Note 1: On the effective date of this AD, the status of a MLG Rib 5 may be different, depending on Left Hand (LH) and Right Hand (RH) side of the aeroplane. Required actions applied are dependent on this status.</p> <p>Paragraphs (1), (2), (3), (4), (5), (6), (7), (8) and (9) of this AD are applicable to aeroplanes (Group 1 aeroplanes) on which Airbus SB A300-57-0249, A310-57-2090, A300-57-6106, or A300-57-9019, as applicable to aeroplane model, at original issue, Revision 01, or Revision 02, has not been embodied in service [Airbus modification (mod.) 13329/13348/19619]] and to aeroplanes with MLG Ribs 5 not repaired in accordance with Airbus repair instruction R57240221 or R57249121.</p> <p><u>Restatement of EASA AD 2007-0195 and EASA AD 2010-0250 requirements:</u></p> <ol style="list-style-type: none"> (1) For A300-600, A310 and A300B4/C4/F4 series aeroplanes, before accumulating 12 000 flight cycles (FC) since first flight, or since MLG Rib 5 replacement, as applicable, or within 100 FC after the latest detailed visual inspection (DVI), or within 675 FC (A300 aeroplanes) or 825 FC (A310 aeroplanes) after the latest ultrasonic inspection accomplished in accordance with the instructions of Airbus Alert Service Bulletin (ASB) A300-57A0248, A310-57A2088 or A300-57A6105, at original issue, as applicable to aeroplane model, accomplish a Detailed Visual Inspection (DVI) or an ultrasonic inspection of the LH and RH MLG Rib 5 aft bearing forward lugs in accordance with the instructions of Airbus SB A300-57-0251, A310-57-2091 or SB A300-57-6107, at original issue, as applicable to aeroplane model. (2) After the inspection as required by paragraph (1) of this AD, accomplish a DVI at intervals not to exceed 100 FC, or an ultrasonic inspection at intervals not to exceed 675 FC (A300 aeroplanes) or 825 FC (A310 aeroplanes), as applicable, of the LH and RH MLG Rib 5 aft bearing forward lugs in accordance with the instructions of Airbus SB A300-57-0251, A310-57-2091 or SB A300-57-6107, at original issue, as applicable to aeroplane model. (3) If, during any ultrasonic inspection as required by paragraph (1) or (2) of this AD, a discrepancy is detected, before next flight, report the finding to Airbus and accomplish concurrently a one-time DVI in accordance with the instructions of Airbus SB A300-57-0251, A310-57-2091 or SB A300-57-6107, at original issue, as applicable to aeroplane model. (4) If, during the DVI as required by paragraph (3) of this AD, crack is not detected, repeat the DVI at intervals not to exceed 100 FC in accordance with the instructions of Airbus SB A300-57-0251, A310-57-2091 or SB A300-57-6107, at original issue, as applicable to aeroplane model. (5) If, during a DVI as required by paragraph (1), (2), (3) or (4) of this AD, a crack is detected, before next flight, contact Airbus for approved repair

instructions and accomplish those instructions accordingly, within the time period specified in those instructions.

Restatement of EASA AD 2006-0372R1 requirements:

- (6) For **A300B2 series aeroplanes**, before accumulating 12 000 FC since first flight, or since MLG Rib 5 replacement, as applicable, or within 100 FC after the latest DVI accomplished in accordance with the instructions of Airbus ASB A300-57A0248, and, thereafter, at intervals not to exceed 100 FC, accomplish a DVI of the LH and RH wing MLG Rib 5 aft bearing forward lugs in accordance with the instructions of Airbus ASB A300-57A0248, at original issue.
- (7) If, during any DVI as required by paragraph (6) of this AD, a crack is detected, before next flight, contact Airbus for approved repair instructions and accomplish those instructions accordingly, within the time period specified in those instructions.

Restatement of EASA AD 2010-0251 requirements:

Note 2: Airbus SB A300-57-0249 Revision 3, SB A310-57-2090 Revision 3, SB A300-57-6106 Revision 3, or SB A300-57-9019 Revision 3 have been revised at Revision 03 to include changes to instructions for bush installation and paint/sealing process.

- (8) For **A300-600, A310, A300-600ST and A300B4/C4/F4 series aeroplanes**, within 30 months after the effective date of this AD, install new bushes with increased interference fit in the gear Rib 5 aft bearing forward lug on RH and LH wings in accordance with the instructions of Airbus SB A300-57-0249 Revision 3, SB A310-57-2090 Revision 3, SB A300-57-6106 Revision 3, or SB A300-57-9019 Revision 3, as applicable to aeroplane model.
- (9) Modification of a MLG Rib 5 on an aeroplane as required by paragraph (8) of this AD constitutes terminating action for the inspection requirements of paragraphs (1), (2), (3) and (4) of this AD for that MLG Rib 5.
- (10) Repair of a MLG Rib 5 in accordance with Airbus repair instruction R57240425 or R57249389, as applicable to aeroplane model, constitutes terminating action for the inspection requirements of paragraphs (1), (2), (3) and (4) of this AD for that MLG Rib 5.
- (11) For **A300B2 series aeroplanes**, repair of a MLG Rib 5 in accordance with Airbus repair instruction R57240425 constitutes terminating action for the repetitive inspection requirements as required by paragraph (6) of this AD for that MLG Rib 5.

New requirements of this AD: Paragraphs (12), (13), (14), (15), (16) and (17) of this AD are applicable to aeroplanes (Group 2 aeroplanes) on which Airbus SB A300-57-0249, A310-57-2090, A300-57-6106, or A300-57-9019, as applicable to aeroplane model, at original issue, Revision 01, or Revision 02, has been embodied in service, and to aeroplanes with MLG Rib 5 already repaired in accordance with Airbus repair instruction R57240221 or R57249121.

Note 3: An aeroplane with the MLG Rib 5 forward lugs repaired on one wing, by installation of oversized interference fit bushes in accordance with Airbus repair Instruction R57240221 or R57249121, as applicable to aeroplane model, for the purposes of this AD, is a 'Group 2' aeroplane.

- (12) For **A300B4/C4/F4 series, A310, A300-600 and A300-600ST aeroplanes**, within the threshold indicated in Table 1 of this AD, as applicable, accomplish a DVI or an ultrasonic inspection of the LH and RH MLG Rib 5 aft bearing forward lugs in accordance with the instructions of Airbus SB A300-57-0255, A310-57-2101, A300-57-6112, or A300-57-9024, at original issue, as applicable to aeroplane model.

Table 1

Aeroplane Type	Compliance Time – Whichever occurs later
A300B4/C4/F4, A300-600 and A300-600ST	Within 2 500 FC after the modification or repair accomplishment, or Within 550 FC after the effective date of this AD
A310	Within 2 500 FC after the modification or repair accomplishment, or Within 775 FC after the effective date of this AD

- (13) After the inspection as required by paragraph (12) of this AD, at intervals not to exceed the value specified in Table 2 of this AD, as applicable, accomplish a DVI or a non-destructive test inspection (NDT) of the LH and RH MLG Rib 5 aft bearing forward lugs in accordance with the instructions of Airbus SB A300-57-0255, A310-57-2101, A300-57-6112, or A300-57-9024, at original issue, as applicable to aeroplane model.

Table 2

Aeroplane Type	DVI Interval	NDT Interval
A300B4/C4/F4, A300-600 and A300-600ST	550 FC	1 000 FC
A310	775 FC	1 300 FC

- (14) If, during any NDT as required by paragraph (12) or (13) of this AD, a discrepancy is detected, before next flight, report to Airbus and accomplish concurrently a one-time DVI in accordance with the instructions of Airbus SB A300-57-0255, A310-57-2101, A300-57-6112, or A300-57-9024, as applicable to aeroplane model.
- (15) If, during the DVI as required by paragraph (14) of this AD, no crack is detected, at intervals not to exceed 100 FC, repeat the DVI in accordance with the instructions of Airbus SB A300-57-0255, A310-57-2101, A300-57-6112, or A300-57-9024, at original issue, as applicable to aeroplane model.
- (16) If, during any DVI as required by paragraph (12), (13), (14) or (15) of this AD, as applicable, a crack is detected, before next flight, contact Airbus for approved repair instructions and accomplish those instructions accordingly.
- (17) Within 60 days after accomplishment of the inspection as required by paragraph (12) of this AD, report the inspection results (including no findings) to Airbus. For that purpose, inspection report sheet provided in Airbus SB A300-57-0255, A310-57-2101, A300-57-6112 or A300-57-9024 may be used, at original issue, as applicable to aeroplane model.

Ref. Publications:

Airbus ASB A300-57A0248 Original issue dated 12 December 2006,
Airbus SB A300-57-0249 Revision 3 dated 18 January 2012,
Airbus SB A300-57-0251 Original issue dated 08 August 2007, and
Airbus SB A300-57-0255 Original issue dated 13 January 2012.

Airbus ASB A310-57A2088 Original issue dated 06 November 2006,
Airbus SB A310-57-2090 Revision 3 dated 23 January 2012,
Airbus SB A310-57-2091 Original issue dated 22 May 2007, and
Airbus SB A310-57-2101 Original issue dated 13 January 2012.

Airbus ASB A300-57A6105 Original issue dated 12 December 2006,

	<p>Airbus SB A300-57-6107 Original issue dated 08 August 2007, Airbus SB A300-57-6106 Revision 3 dated 23 January 2012, and Airbus SB A300-57-6112 Original issue dated 13 January 2012.</p> <p>Airbus SB A300-57-9019 Revision 3 dated 18 January 2012, and Airbus SB A300-57-9024 Original issue dated 13 January 2012</p> <p>Airbus Repair Instructions R57240425 Issue A, 57249389 Issue A, R57240221 Issues A to G or R57249121 Issues A to G.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>
Remarks :	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. This AD was posted on 05 June 2012 as PAD 12-061 for consultation until 03 July 2012. The Comment Response Document can be found at http://ad.easa.europa.eu. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail ADs@easa.europa.eu. 4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS SAS – EIAW (Airworthiness Office, Telephone: + 33 5 61 18 41 39, Fax: + 33 5 61 93 44 51).