AIRWORTHINESS DIRECTIVE

AD No.: 2013-0271

Date: 14 November 2013

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 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) : A330 and A340 aeroplanes

TCDS Number : EASA A.004, EASA A.015

Foreign AD : Not applicable

Supersedure : This AD supersedes EASA AD 2007-0247R1-E dated 07 September 2007, including the correction dated 04 October 2007.

ATA 57
Wings – Main Landing Gear Rib 6 Aft Bearing Lugs – Inspection / Replacement

Manufacturer(s): Airbus (formerly Airbus Industrie)


Reason: During Main Landing Gear (MLG) lubrication, a crack was visually found in the MLG rib 6 aft bearing forward lug on one A330 in-service aeroplane. The crack had extended through the entire thickness of the forward lug at approximately the 4 o’clock position (when looking forward). It has been determined that similar type of crack can develop on other aeroplane types that are listed in the Applicability paragraph.

This condition, if not detected and corrected, could affect the structural integrity of the MLG attachment.

To address this situation, Airbus issued inspection Service Bulletins (SB) A330-57-3096, A340-57-4104 and A340-57-5009 to instruct repetitive inspection of the gear rib lugs.

Prompted by these findings, EASA issued Emergency AD 2006-0364-E to require repetitive detailed visual inspections of the Left Hand (LH) and Right Hand (RH) wing MLG rib 6 aft bearing lugs. Later, EASA issued AD
EASA AD No: 2007-0247R1-E, which superseded EAD 2006-0364-E, to:
- expand the applicability to all A330 and A340 aeroplanes, because the interference fit bushes cannot be considered as a terminating action, owing to unknown root cause; and
- add a second parameter quoted in Flight Hours (FH) to the inspection interval in order to reflect the aeroplane utilisation in service.

EASA AD 2007-0247R1-E was republished to correct a typographical error.

Since the first crack finding and issuance of the inspection SBs and related ADs, six further cracks have been reported.

For the reasons described above, this AD, which supersedes EASA EAD 2007-0247 R1-E and retains its requirements, is issued to expand the applicability to the newly certified models A330-223F and A330-243F and to reduce the threshold further to the risk assessment of recent in-service experience.

Effective Date: 28 November 2013

Required Action(s) and Compliance Time(s): Required as indicated, unless accomplished previously:

(1) Before exceeding 42 months since aeroplane first flight, or since the last MLG support rib replacement, as applicable, or within 4 months after the effective date of this AD, whichever occurs later, and, thereafter, at intervals not to exceed the values specified in Table 1 of this AD, accomplish a detailed visual inspection of the LH and RH wing MLG rib 6 aft bearing lugs (forward and aft) to detect any cracks in accordance with the instructions of Airbus SB A330-57-3096 Revision 04 or SB A340-57-4104 Revision 03 or SB A340-57-5009 Revision 02, as applicable to aeroplane types and models.

Table 1 – Intervals

<table>
<thead>
<tr>
<th>Aeroplane Models</th>
<th>Interval (whichever occurs first)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flight Cycles</td>
</tr>
<tr>
<td>A330-223F, A330-243F</td>
<td>300</td>
</tr>
<tr>
<td>A340-211, A340-212, A340-213</td>
<td>200</td>
</tr>
<tr>
<td>A340-311, A340-312, A340-313 (except Weight Variant (WV) 27)</td>
<td>200</td>
</tr>
<tr>
<td>A340-313 (only WV27)</td>
<td>200</td>
</tr>
</tbody>
</table>

(2) If, during any inspection as required by paragraph (1) of this AD, a crack is detected, before next flight, replace the cracked MLG support rib in accordance with approved instructions from Airbus.

(3) Inspections and corrective actions, accomplished before the effective date of this AD in accordance with the instructions of Airbus SB A330-57-3096 at original issue, or Revision 01, or Revision 02, or Revision 03, or in
accordance with the instructions of Airbus SB A340-57-4104 at original issue, or Revision 01, or Revision 02, or in accordance with the instructions of Airbus SB A340-57-5009 at original issue, or Revision 01, as applicable to aeroplane type, are acceptable to comply with the initial requirements of paragraphs (1) and (2) of this AD.

After the effective date of this AD, the repetitive inspections and applicable corrective actions as required by paragraphs (1) and (2) of this AD must be accomplished in accordance with the instructions of Airbus SB A330-57-3096 Revision 04 or SB A340-57-4104 Revision 03 or SB A340-57-5009 Revision 02, as applicable.

(4) Replacement of a MLG support rib on an aeroplane, as required by paragraph (2) of this AD, does not constitute terminating action for the repetitive inspections as required by this AD for that aeroplane.

Ref. Publications:


Airbus SB A340-57-4104 at Original issue dated 05 December 2006, Revision 01 dated 13 August 2007, Revision 02 dated 05 September 2007, Revision 03 dated 24 October 2012.

Airbus SB A340-57-5009 at Original issue dated 05 December 2006, Revision 01 dated 13 August 2007, Revision 02 dated 24 October 2012.

The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.

2. This AD was posted on 24 September 2013 as PAD 13-0271 for consultation until 22 October 2013. No comments were received during the consultation period.

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 – Airworthiness Office – EIAl; E-mail: airworthiness.A330-A340@airbus.com.