DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0620; Directorate Identifier 2013-NM-238-AD; Amendment 39-18102; AD 2015-03-06]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2007-22-10 for all Airbus Model A330-200, A330-300, A340-200, A340-300, A340-500, and A340-600 series airplanes. AD 2007-22-10 required repetitive inspections of the left-hand and right-hand wing main landing gear (MLG) rib 6 aft bearing lugs (forward and aft) to detect any cracks on the two lugs, and replacement if necessary. Since we issued AD 2007-22-10, we have received reports of additional cracking of the MLG rib 6 aft bearing forward lug. This new AD expands the applicability and reduces certain compliance times. We are issuing this AD to detect and correct cracking of the MLG rib 6 aft bearing lugs, which could result in collapse of the MLG upon landing.

DATES: This AD becomes effective March 25, 2015.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of March 25, 2015.

ADDRESSES: You may examine the AD docket on the Internet at http://www.regulations.gov/#!docketDetail;D=FAA-2014-0620; or in person at the Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

For service information identified in this AD, contact Airbus SAS, Airworthiness Office–EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email airworthiness.A330 A340@airbus.com; Internet http://www.airbus.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2014-0620.

SUPPLEMENTARY INFORMATION:

Discussion


The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2013-0271, dated November 14, 2013 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition. The MCAI states:

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 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 utilization 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 [EASA] 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.
You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov/#!documentDetail;D=FAA-2014-0620-0004.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comment received. The commenter, an anonymous individual, supported the NPRM (79 FR 52585, September 4, 2014).

Conclusion

We reviewed the available data, including the comment received, and determined that air safety and the public interest require adopting this AD as proposed, except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (79 FR 52585, September 4, 2014) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (79 FR 52585, September 4, 2014).

Related Service Information Under 1 CFR Part 51

We reviewed the following service bulletins:


The service information describes procedures for detailed inspections of the MLG rib 6 forward and aft lugs for cracking. This service information is reasonably available; see ADDRESSES for ways to access this service information.

Costs of Compliance

We estimate that this AD affects 81 airplanes of U.S. registry.

We estimate that it will take about 2 work-hours per product to comply with the basic requirements of this AD. The average labor rate is $85 per work hour. Required parts will cost about $0 per product. Based on these figures, we estimate the cost of this AD on U.S. operators to be $13,770, or $170 per product.

We have no definitive data that would enable us to provide a cost estimate for the on-condition actions specified in this AD.

Authority for This Rulemaking


We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.
Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:
1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov/#!docketDetail;D=FAA-2014-0620; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39–AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2007-22-10, Amendment 39-15246 (72 FR 61796, November 1, 2007; corrected November 16, 2007 (72 FR 64532)), and adding the following new AD:
2015-03-06 Airbus: Amendment 39-18102, Docket No. FAA-2014-0620; Directorate Identifier 2013-NM-238-AD.

(a) Effective Date

This AD becomes effective March 25, 2015.

(b) Affected ADs

This AD replaces AD 2007-22-10, Amendment 39-15246 (72 FR 61796, November 1, 2007; corrected November 16, 2007 (72 FR 64532)).

(c) Applicability

This AD applies to Airbus Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes; and Model A340-211, -212, -213 -311, -312, -313, -541, and -642 airplanes; certificated in any category; all manufacturer serial numbers.

(d) Subject

Air Transport Association (ATA) of America Code 57, Wings.

(e) Reason

This AD was prompted by reports of cracking of the main landing gear (MLG) rib 6 aft bearing forward lug. We are issuing this AD to detect and correct cracking of the MLG rib 6 aft bearing lugs, which could result in collapse of the MLG upon landing.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspections

Within 42 months since the airplane's 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: Do a detailed inspection for cracking of the left-hand and right-hand wing MLG rib 6 aft bearing lugs (forward and aft), in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-57-3096, Revision 05, dated October 17, 2013; (for Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes); A340-57-4104, Revision 04, dated October 17, 2013 (for Model A340-211, -212, -213, -311, -312, -313 airplanes); or A340-57-5009, Revision 03, dated October 17, 2013 (for Model A340-541 and -642 airplanes); as applicable. Repeat the inspections at the times specified in paragraphs (g)(1) through (g)(7) of this AD, as applicable.
(1) For Model A330-201, -202, -203, -223, and -243 airplanes, repeat the inspections at intervals not to exceed 300 flight cycles or 1,500 flight hours, whichever occurs first.

(2) For Model A330-223F and -243F airplanes, repeat the inspections at intervals not to exceed 300 flight cycles or 900 flight hours, whichever occurs first.

(3) For Model A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes, repeat the inspections at intervals not to exceed 300 flight cycles or 900 flight hours, whichever occurs first.

(4) For Model A340-211, -212, and -213 airplanes, repeat the inspections at intervals not to exceed 200 flight cycles or 800 flight hours, whichever occurs first.

(5) For Model A340-311 and -312 airplanes; and Model A340-313 airplanes (except weight variant (WV) 27), repeat the inspections at intervals not to exceed 200 flight cycles or 800 flight hours, whichever occurs first.

(6) For Model A340-313 (only WV27) airplanes, repeat the inspections at intervals not to exceed 200 flight cycles or 400 flight hours, whichever occurs first.

(7) For Model A340-541 and -642 airplanes, repeat the inspections at intervals not to exceed 100 flight cycles or 500 flight hours, whichever occurs first.

(h) Corrective Action

If any cracking is found during any inspection required by paragraph (g) of this AD, before further flight, replace the cracked MLG support rib using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature. Replacement of an MLG support rib does not terminate the repetitive inspections required by paragraph (g) of this AD.

(i) Credit for Previous Actions

This paragraph provides credit for the corresponding actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using the applicable service bulletin identified in paragraphs (i)(1) through (i)(12) of this AD.


(2) Airbus Service Bulletin A330-57A3096, Revision 01, dated April 18, 2007, which is not incorporated by reference in this AD.


(4) Airbus Service Bulletin A330-57-3096, Revision 03, dated October 24, 2012, which is not incorporated by reference in this AD.

(5) Airbus Service Bulletin A330-57-3096, Revision 04, dated February 6, 2013, which is not incorporated by reference in this AD.


(7) Airbus Service Bulletin A340-57-4104, Revision 01, dated August 13, 2007, which is not incorporated by reference in this AD.

(9) Airbus Service Bulletin A340-57-4104, Revision 03, dated October 24, 2012, which is not incorporated by reference in this AD.


(12) Airbus Service Bulletin A340-57-5009, Revision 02, dated October 24, 2012, which is not incorporated by reference in this AD.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: As of the effective date of this AD, for any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(k) Related Information


(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (l)(3) and (l)(4) of this AD.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.


(3) For service information identified in this AD, contact Airbus SAS, Airworthiness Office–EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96;
(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on February 2, 2015.
Dionne Palermo,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.