



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0111; Product Identifier 2017-NM-059-AD;

Amendment 39-19312; AD 2018-12-08]

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) 2017-07-07, which applied to certain Airbus Model A330-200, A330-300, A340-200, and A340-300 series airplanes. AD 2017-07-07 required repetitive inspections of certain fastener holes, and related investigative and corrective actions if necessary. This AD retains the requirements of AD 2017-07-07 and expands the applicability. This AD was prompted by a report of cracking at fastener holes located at frame (FR) 40 on the lower shell panel junction. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, 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 Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0111.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0111; 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 address for the Docket Office (telephone: 800-647-5527) is 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 20590.

FOR FURTHER INFORMATION CONTACT: Vladimir Ulyanov, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax: 206-231-3229.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2017-07-07, Amendment 39-18845 (82 FR 18547, April 20, 2017) (“AD 2017-07-07”). AD 2017-07-07 applied to certain Airbus Model A330-200, A330-300, A340-200, and A340-300 series airplanes with manufacturer serial numbers (MSN) 0176 through 0915 inclusive. The NPRM published in the Federal Register on February 20, 2018 (83 FR 7117). The NPRM was prompted by a report of cracking at fastener holes located at frame FR40 on the lower shell panel junction. The NPRM proposed to retain the requirements of AD 2017-07-07 and expand the applicability. We are issuing this AD to detect and correct cracking at FR40 on the lower shell panel junction; such cracking could lead to reduced structural integrity of the fuselage.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2017-0063, dated April 12, 2017 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Airbus Model A330-200, A330-300, and A340-200 series airplanes, and Model A340-312 and -313 airplanes. The MCAI states:

During full scale fatigue test of the Frame (FR) 40 to fuselage skin panel junction, fatigue damage was found.

Corrective actions consisted of in-service installation of an internal reinforcing strap on the related junction, as currently required by DGAC [Direction Générale de l'Aviation Civile] France AD 1999-448-126(B), which refers to Airbus Service Bulletin (SB) A340-53-4104 Revision 02, and [DGAC] AD 2001-070(B), which refers to Airbus SB A330-53-3093 Revision 04; retrofit improvement of internal reinforcing strap fatigue life through recommended Airbus SB A330-53-3145; and introducing a design improvement in production through Airbus mod 44360.

After those actions were implemented, cracks were found on both left-hand (LH) and right-hand (RH) sides on internal strap, butt strap, keel beam fitting, or forward fitting FR40 flange. These findings were made during embodiment of a FR40 web repair on an A330 aeroplane, and during keel beam replacement on an A340 aeroplane, where the internal strap was removed and a special detailed inspection (SDI) was performed on several holes.

This condition, if not detected and corrected, could affect the structural integrity of the centre fuselage of the aeroplane.

Prompted by these findings, Airbus issued SB A330-53-3215 and SB A340-53-4215, providing inspection instructions. Consequently, EASA issued AD 2014-0136 [which corresponds to FAA AD 2017-07-07] to require repetitive SDI (rototest) of 10 fastener holes located at the FR40 lower shell panel junction on both LH and RH sides and, depending on findings, accomplishment of applicable corrective action(s).

Since that [EASA] AD was issued, prompted by the results of complementary fatigue analyses, it was determined that post-mod 55792 aeroplanes could be also affected by crack initiation and propagation at this area of the fuselage. These analyses demonstrated that post-mod 55792 aeroplanes must follow the same maintenance program as aeroplanes in post-mod 55306 and pre-mod 55792 configuration. Consequently, Airbus published SB A330-53-3215 Revision 02 and SB A340-53-4215 Revision 02 to expand the Effectivity accordingly.

For the reasons described above, this [EASA] AD retains the requirements of EASA AD 2014-0136, which is superseded, which now also apply to aeroplanes in post-mod 55792 configuration [the applicability identifies airplanes in post-mod 44360 configuration].

AD 2017-07-07 includes Model A340-211 airplanes in its applicability. Airbus Model A340-211 airplanes are not identified in the applicability of this AD because those airplanes are not affected by the identified unsafe condition. All of those airplanes are in the pre-Airbus modification 44360 configuration. The MCAI also does not include Model A340-211 airplanes in its applicability.

The compliance time ranges between 20,000 flight cycles or 65,400 flight hours and 20,800 flight cycles or 68,300 flight hours, depending on airplane utilization and configuration. The repetitive inspection interval ranges between 14,000 flight cycles or 95,200 flight hours and 24,600 flight cycles or 98,700 flight hours, depending on airplane utilization and configuration. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0111.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comment received. Kenneth Ciallella supported the NPRM.

Explanation of Changes Made to this AD

We have revised this AD to refer to Airbus Service Bulletin A330-53-3215, Revision 03, dated January 22, 2018, as the appropriate source of service information for the required actions. This service information incorporates minor editorial changes which

have no effect on airplanes that have incorporated prior revisions of this service information. We have revised table 1 to paragraph (g)(1) of this AD and paragraphs (g), (g)(1), (g)(2), (h), (h)(1), (h)(2), and (i) of this AD to specify Airbus Service Bulletin A330-53-3215, Revision 03, dated January 22, 2018, as the appropriate source of service information for accomplishing the required actions in those paragraphs.

We have revised paragraph (j) of this AD to give credit for using Airbus Service Bulletin A330-53-3215, Revision 02, dated November 23, 2016, to accomplish the required actions before the effective date of this AD.

Conclusion

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

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR part 51

Airbus has issued Airbus Service Bulletin A330-53-3215, Revision 03, dated January 22, 2018 (“A330-53-3215, R3”) and Airbus Service Bulletin A340-53-4215, Revision 02, dated November 23, 2016. This service information describes procedures for repetitive rototest inspections of certain fastener holes, and related investigative and

corrective actions if necessary. These documents are distinct since they apply to different airplane models. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 99 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
42 work-hours X \$85 per hour = \$3,570	\$0	\$3,570	\$353,430

We estimate the following costs to do any necessary repairs that would be required based on the results of the required inspections. We have no way of determining the number of aircraft that might need these repairs:

Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
46 work-hours X \$85 per hour = \$3,910	\$2,358	\$6,268

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

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.

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) 2017-07-07, Amendment 39-18845 (82 FR 18547, April 20, 2017), and adding the following new AD:

2018-12-08 Airbus: Amendment 39-19312; Docket No. FAA-2018-0111; Product Identifier 2017-NM-059-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2017-07-07, Amendment 39-18845 (82 FR 18547, April 20, 2017) (“AD 2017-07-07”).

(c) Applicability

This AD applies to the airplanes, certificated in any category, identified in paragraphs (c)(1) and (c)(2) of this AD, all manufacturer serial numbers on which Airbus Modification 44360 has been embodied in production.

(1) Airbus Model A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes.

(2) Airbus Model A340-212, -213, -312, and -313 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Reason

This AD was prompted by a report of cracking at fastener holes located at frame (FR) 40 on the lower shell panel junction. We are issuing this AD to detect and correct cracking at FR40 on the lower shell panel junction; such cracking could lead to reduced structural integrity of the fuselage.

(f) Compliance

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

(g) Compliance Times for the Actions Required by Paragraph (h) of This AD

Accomplish the actions required by paragraph (h) of this AD at the times specified in paragraphs (g)(1) and (g)(2) of this AD, as applicable.

(1) For airplanes having serial numbers 0176 through 0915 inclusive: Within the compliance times defined in table 1 to paragraph (g)(1) of this AD, and, thereafter, at intervals not to exceed the compliance times defined in Airbus Service Bulletin A330-53-3215, Revision 03, dated January 22, 2018 (“A330-53-3215, R3”); or Airbus Service Bulletin A340-53-4215, Revision 02, dated November 23, 2016 (“A340-53-4215, R2”); as applicable, depending on airplane utilization and configuration. As of the effective date of this AD, where paragraph 1.E. “Compliance,” of A330-53-3215, R3 specifies weight variant (WV) 050 in the condition column of table 1, configuration 003, for the purposes of this AD, WV060 and WV080 are also included.

Table 1 to Paragraph (g)(1) of this AD – Compliance Time for Initial Inspection

	Compliance time (whichever occurs later, A or B)
A	Before exceeding the compliance time “threshold” defined in table 1 of A330-53-3215, R3; or A340-53-4215, R2; as applicable, depending on airplane utilization and configuration and to be counted from airplane first flight.
B	For Model A330 airplanes: Within 2,400 flight cycles or 24 months, whichever occurs first after May 25, 2017 (the effective date of AD 2017-07-07). For Model A340 airplanes: Within 1,300 flight cycles or 24 months, whichever occurs first after May 25, 2017 (the effective date of AD 2017-07-07).

(2) For all airplanes except those identified in paragraph (g)(1) of this AD: Before exceeding the applicable compliance time “threshold” defined in paragraph 1.E., “Compliance,” of A330-53-3215, R3; or A340-53-4215, R2; as applicable, depending on airplane utilization and configuration and to be counted from airplane first flight, and, thereafter, at intervals not to exceed the compliance times specified in paragraph 1.E.,

“Compliance” of A330-53-3215, R3; or A340-53-4215, R2; as applicable, depending on airplane utilization and configuration. Where paragraph 1.E. “Compliance,” of A330-53-3215, R3 specifies weight variant WV050 in the condition column of table 1, configuration 003, for the purposes of this AD, WV060 and WV080 are also included.

(h) Repetitive Inspections and Related Investigative and Corrective Actions

At the applicable compliance times specified in paragraph (g) of this AD: Accomplish a special detailed inspection of the 10 fastener holes located at FR40 lower shell panel junction on both left-hand and right-hand sides, in accordance with the Accomplishment Instructions of A330-53-3215, R3; or A340-53-4215, R2; as applicable.

(1) If, during any inspection required by the introductory text of paragraph (h) of this AD, any crack is detected, before further flight, accomplish all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of A330-53-3215, R3; or A340-53-4215, R2; as applicable, except where A330-53-3215, R3; or A340-53-4215, R2; specifies to contact Airbus for repair instructions, and specifies that action as “RC,” this AD requires repair before further flight using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or 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.

(2) If, during any inspection required by the introductory text of paragraph (h) of this AD, the diameter of a fastener hole is found to be outside the tolerances of the transition fit as specified in A330-53-3215, R3; or A340-53-4215, R2; as applicable; and

A330-53-3215, R3; or A340-53-4215, R2; specifies to contact Airbus for repair instructions, and specifies that action as “RC,” before further flight, repair using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or Airbus’s EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(3) Accomplishment of corrective actions, as required by paragraph (h)(1) of this AD, does not constitute terminating action for the repetitive inspections required by the introductory text of paragraph (h) of this AD.

(4) Accomplishment of a repair on an airplane, as required by paragraph (h)(2) of this AD, does not constitute terminating action for the repetitive inspections required by the introductory text of paragraph (h) of this AD for that airplane, unless the method approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or Airbus’s EASA DOA indicates otherwise.

(i) No Reporting Requirement

Although A330-53-3215, R3 and A340-53-4215, R2, specify to submit certain information to the manufacturer, and specify that action as “RC,” this AD does not include that requirement.

(j) Credit for Previous Actions

This paragraph provides credit for the inspections required by the introductory text of (h) of this AD and the related investigative and corrective actions required by paragraph (h)(1) of this AD, if those actions were performed before May 25, 2017 (the effective date of AD 2017-07-07), using Airbus Service Bulletin A330-53-3215, dated

June 21, 2013; or Revision 01, dated April 17, 2014; or Revision 02, dated November 23, 2016; or Airbus Service Bulletin A340-53-4215, dated June 21, 2013; or Revision 01, dated April 17, 2014; as applicable.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Section, Transport Standards Branch, 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 Section, send it to the attention of the person identified in paragraph (l)(2) of this AD. 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.

(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 Section, Transport Standards Branch, FAA; or EASA; or Airbus's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(3) Required for Compliance (RC): Except as required by paragraphs (g)(1), (g)(2), (h)(1), (h)(2), and (i) of this AD: If any service information contains procedures or

tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(l) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2017-0063, dated April 12, 2017, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0111.

(2) For more information about this AD, contact Vladimir Ulyanov, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax: 206-231-3229.

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

(m) 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.

(i) Airbus Service Bulletin A330-53-3215, Revision 03, dated January 22, 2018.

(ii) Airbus Service Bulletin A340-53-4215, Revision 02, dated November 23, 2016.

(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; fax: +33 5 61 93 45 80; email: airworthiness.A330-A340@airbus.com; Internet: <http://www.airbus.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(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 Des Moines, Washington, on June 6, 2018.

Michael Kaszycki,
Acting Director,
System Oversight Division,
Aircraft Certification Service.

[FR Doc. 2018-13220 Filed: 7/17/2018 8:45 am; Publication Date: 7/18/2018]