DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39
RIN 2120–AA64

Airworthiness Directives; Airbus Airplanes

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

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Airbus Model A330–200, –200 Freighter, and –300 series airplanes; and Model A340–200 and –300 series airplanes. This AD was prompted by reports that cracks were found on an adjacent hole of certain frames of the center wing box (CWB). This AD requires removing fasteners, doing a rototest inspection of fastener holes, installing new fasteners, oversizing the holes and doing rototest inspections for cracks if necessary, and repairing any cracking that is found. We are issuing this AD to detect and correct cracking on certain holes of certain frames of the CWB that could affect the structural integrity of the airplane.

DATES: This AD becomes effective June 13, 2016.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of June 13, 2016.

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. For information on the availability of this material at the FAA, call 425–227–1121. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA–2015–4808.

Examine the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov 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 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.


SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Airbus Model A330–200, –200 Freighter, and –300 series airplanes; and Model A340–200 and –300 series airplanes. The NPRM published in the Federal Register on November 2, 2015 (80 FR 67348) (“the NPRM”). We are issuing this AD to detect and correct cracking on certain holes of certain frames of the CWB, which could affect the structural integrity of the airplane.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2014–0149, dated June 13, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or “MC–III”). We are issuing this AD to detect and correct cracking on certain holes of certain frames of the CWB, which could affect the structural integrity of the airplane.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2014–0149, dated June 13, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or “MC–III”), to correct an unsafe condition for certain Airbus Model A330–200, –200 Freighter, and –300 series airplanes; and Model A340–200 and –300 series airplanes. The MC–III states:

1. During accomplishment of A330 Airworthiness Limitation Item (ALI) task 57–11–04 on the rear fitting of the Frame (FR) 40 between stringers 38 and 39 on both [left-hand] LH/ [right-hand] RH sides, cracks were found on an adjacent hole. After reaming at second oversize of the subject hole, the crack was still present.

   Other crack findings on this adjacent hole have been reported on A330 and A340–200/300 aeroplanes as a result of sampling inspections.

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

   For the reasons described above, this [EASA] AD requires removal of the fasteners and repetitive rototest inspections of fastener holes at FR40 vertical web located above Center Wing Box (CWB) lower panel reference and/or below CWB lower panel reference on both sides and, depending on findings, accomplishment of the applicable corrective actions.

   Note: These holes affected by this [EASA] AD are different from the ones affected by EASA AD 2009–0001 [http://ad.easa.europa.eu/blob/easa_ad_2009_0001.pdf/AD_2009-0001_i].

   Required actions also include oversizing certain holes, installing new fasteners, and repairing any cracking that is found. The initial compliance times range from 13,500 to 50,000 flight cycles, or 57,000 to 162,000 flight hours, depending on airplane operation and utilization. The repetitive compliance times are 7,400 flight cycles/24,300 flight hours or 5,950 flight cycles/40,400 flight hours from ALI embodiment. You may examine the MC–III in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA–2015–4808.

Change Made to the Format of Paragraph (g) of This AD

At the request of the Office of the Federal Register, we have revised the format of paragraph (g) of this AD by converting the table to text. This change to the format does not affect the requirements of that paragraph.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comment received. The commenter, Bowen Gass, supported the NPRM.

Conclusion

We reviewed the relevant data, considered 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 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 the following service information. The service information describes procedures for removing the fasteners and doing a repetitive rototest inspection of fastener holes at FR40 vertical web on both sides, installing new fasteners in transition fit, and oversizing the holes.


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 35 airplanes of U.S. registry. We also estimate that it will take about 78 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 $2,322,850. per inspection cycle, or $6,630 per product, per inspection cycle. In addition, we estimate that any necessary follow-on actions will take about 98 work-hours and require parts costing $136,400, for a cost of up to $144,730 per product. We have no way of determining the number of aircraft that might need this action.

Authority for This Rulemaking


We are issuing this rulemaking under the authority described in “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency's authority.

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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

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):


(a) Effective Date

This AD becomes effective June 13, 2016.

(b) Affected ADs

None.

(c) Applicability

This AD applies to the airplanes identified in paragraphs (c)(1) and (c)(2) of this AD, certificated in any category, all manufacturer serial numbers, except those on which Airbus Modification (Mod) 55792 or Mod 55306 has been embodied in production, and except those on which Airbus Repair Instruction R57115092 has been embodied in production, and except those on which Airbus Modification (Mod) 55792 or Mod 55306 has been embodied in production, and except those on which Airbus Repair Instruction R57115092 has been embodied in service on both right-hand (RH) and left-hand (LH) sides.

(1) Airbus Model A330–200 and –300 series airplanes in post-mod 55306 configuration: At the later of the times specified in paragraphs (g)(1)(i) and (g)(1)(ii) of this AD, inspect below the CWB lower panel reference, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330–57–3114, dated March 12, 2013.


(ii) Within 2,400 flight cycles or 24 months after the effective date of this AD, whichever occurs first.

(2) For Model A330–200 series airplanes in post-mod 44360 and pre-mod 49202 configuration: At the later of the times specified in paragraphs (g)(2)(i) and (g)(2)(ii) of this AD, inspect below the CWB lower panel reference, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330–57–3116, dated March 12, 2013.


(ii) Within 2,400 flight cycles or 24 months after the effective date of this AD, whichever occurs first.

(3) For Model A330–200 and –300 series airplanes in pre-mod 55306 and pre-mod 55792 configuration: At the later of the times specified in paragraphs (g)(3)(i) and (g)(3)(ii) of this AD, inspect above the CWB lower panel reference, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330–57–3115, dated April 4, 2013.


(ii) Within 2,400 flight cycles or 24 months after the effective date of this AD, whichever occurs first.

(4) For Model A340–200 and –300 series airplanes in pre-mod 44360 configuration: At the later of the times specified in paragraphs (g)(4)(i) and (g)(4)(ii) of this AD, inspect below the CWB lower panel reference, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A340–57–4123, dated March 12, 2013.

(i) At the applicable time specified in paragraph 1.E., “Compliance” of Airbus
(ii) Within 1,300 flight cycles or 24 months after the effective date of this AD, whichever occurs first.

(6) For Model A340–200 and –300 series airplanes in post-mod 54360 and pre-mod 49202 configuration: At the later of the times specified in paragraphs (g)(6)(i) and (g)(6)(ii) of this AD, inspect below the CFW lower panel reference, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A340–57–4125, dated March 12, 2013.


(ii) Within 1,300 flight cycles or 24 months after the effective date of this AD, whichever occurs first.

(b) Follow-on Actions: No Cracking

If no crack is found during any inspection required by paragraph (g) of this AD, do the actions specified in paragraphs (h)(1) and (h)(2) of this AD.

(1) Before further flight, install new fasteners in the transition fit, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraph (g) of this AD.

(2) Repeat the inspection required by paragraph (g) of this AD thereafter at the applicable time identified in paragraph 1.E., “Compliance,” of the applicable service information identified in paragraph (g) of this AD.

(i) Follow-on Actions for Crack Findings

If any crack is found during any inspection required by paragraph (g) of this AD: Before further flight, oversize the holes to the first oversize in comparison with the current hole diameter, and do a rotostest inspection for cracks, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraph (g) of this AD.

(1) If no cracking is found during the rotostest inspection required by paragraph (i) of this AD, do the actions specified in paragraphs (j)(1)(i) and (j)(1)(ii) of this AD.

(2) Before further flight: Install new fasteners in the transition fit, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraph (g) of this AD.

(l) Credit for Previous Actions

This paragraph provides credit for actions required by paragraphs (g) and (i) of this AD, if those actions were performed before the effective date of this AD using the applicable service information specified in paragraph (j)(1), (j)(2), (j)(3), (j)(4), (j)(5), (j)(6), (j)(7), (j)(8), or (j)(9) of this AD. This service information is not incorporated by reference in this AD.


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; 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 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 April 21, 2016.
Michael Kaszycki,
Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Part 39
RIN 2120–AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 737–300, –400, and –500 series airplanes. This AD was prompted by reports of fatigue cracking found at the left-side and right-side upper frames, at a certain area. This AD requires repetitive medium frequency eddy current (MFEC) inspections for cracking of the left-side and right-side upper frames, and repair (including open hole high frequency eddy current (HFEC) inspections for cracking of fastener holes) if necessary. This AD also provides an optional preventive modification, which terminates the repetitive inspections at the modified location. We are issuing this AD to detect and correct fatigue cracking of the upper frame, which can grow in size and result in a severed frame, leading to rapid decompression and consequent reduced structural integrity of the airplane.

DATES: This AD is effective June 13, 2016.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of June 13, 2016.


Examining the AD Docket


SUPPLEMENTARY INFORMATION:

Discussion
We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain The Boeing Company Model 737–300, –400, and –500 series airplanes. The NPRM published in the Federal Register on February 24, 2015 (80 FR 9667) ("the NPRM"). The NPRM was prompted by reports of fatigue cracking found at the left-side and right-side upper frame, at a certain area. The NPRM proposed to require repetitive MFEC inspections for cracking of the left-side and right-side upper frames, and repair (including open hole HFEC inspections for cracking of fastener holes) if necessary. The NPRM also provided an optional preventive modification that would terminate the repetitive inspections at the modified location. We are issuing this AD to detect and correct fatigue cracking of the upper frame, which can grow in size and result in a severed frame, leading to rapid decompression and consequent reduced structural integrity of the airplane.

Comments
We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA’s response to each comment.

Requests To Clarify Compliance Time
Europe Airpost and Boeing requested that we revise the NPRM to clarify the "Condition" column of table 1 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737–53A139, dated August 12, 2014, which specifies airplanes with certain flight cycles "on the original issue date of this service bulletin." The commenters questioned whether the corresponding compliance time should be "on the effective date of the AD."

For the reasons suggested by both commenters, we agree to add paragraph (i)(3) to this AD to state that the corresponding reference point is on the effective date of this AD, and we have included reference to paragraph (i)(3) in all appropriate paragraphs in this AD.

Request for Clarify Inspection Requirements
Boeing requested that we revise paragraph (g) of the proposed AD to address the inspection requirements in areas of an existing repair to eliminate cracking approved by a Boeing Organization Designation Authorization (ODA) via FAA Form 8110–9. Boeing explained that this condition is addressed in note (c) of table 1 of paragraph 1.E., "Compliance," of Boeing