[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0560; Directorate Identifier 2016-NM-172-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all Airbus Model A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes. This proposed AD was prompted by reports of cracking in the drainage holes on the lower skin panel in the center wing box between frames (FR) 42 and FR 46. This proposed AD would require repetitive rotating probe inspections for cracking of the trellis boom drainage holes, the holes in the stringers bottom, and the holes of the inner pump, and corrective actions if necessary. We are proposing this AD to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.

- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Airbus SAS, Airworthiness Office – EAW, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone: +33 5 61 93 36 96; fax: +33 5 61 93 44 51; email: account.airworth-eas@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.

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-2017-0560; 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 proposed 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. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-227-2125; fax: 425-227-1149.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2017-0560; Directorate Identifier 2016-NM-172-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

Fatigue damage can occur locally, in small areas or structural design details, or globally, in widespread areas. Multiple-site damage is widespread damage that occurs in a large structural element such as a single rivet line of a lap splice joining two large skin panels. Widespread damage can also occur in multiple elements such as adjacent frames or stringers. Multiple-site damage and multiple-element damage cracks are typically too

small initially to be reliably detected with normal inspection methods. Without intervention, these cracks will grow, and eventually compromise the structural integrity of the airplane. This condition is known as widespread fatigue damage (WFD). It is associated with general degradation of large areas of structure with similar structural details and stress levels. As an airplane ages, WFD will likely occur, and will certainly occur if the airplane is operated long enough without any intervention.

The FAA's WFD final rule (75 FR 69746, November 15, 2010) became effective on January 14, 2011. The WFD rule requires certain actions to prevent structural failure due to WFD throughout the operational life of certain existing transport category airplanes and all of these airplanes that will be certificated in the future. For existing and future airplanes subject to the WFD rule, the rule requires that DAHs establish a limit of validity (LOV) of the engineering data that support the structural maintenance program. Operators affected by the WFD rule may not fly an airplane beyond its LOV, unless an extended LOV is approved.

The WFD rule (75 FR 69746, November 15, 2010) does not require identifying and developing maintenance actions if the DAHs can show that such actions are not necessary to prevent WFD before the airplane reaches the LOV. Many LOVs, however, do depend on accomplishment of future maintenance actions. As stated in the WFD rule, any maintenance actions necessary to reach the LOV will be mandated by airworthiness directives through separate rulemaking actions.

In the context of WFD, this action is necessary to enable DAHs to propose LOVs that allow operators the longest operational lives for their airplanes, and still ensure that

WFD will not occur. This approach allows for an implementation strategy that provides flexibility to DAHs in determining the timing of service information development (with FAA approval), while providing operators with certainty regarding the LOV applicable to their airplanes.

On April 22, 2011, we issued AD 2011-10-06, Amendment 39-16687 (76 FR 27227, May 11, 2011) ("AD 2011-10-06"), applicable to all Airbus Model A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes. That AD currently requires:

- Cold working of trellis boom drainage holes;
- Repetitive detailed or rotating probe inspections for cracking in the drainage holes on the lower skin panel in the center wing box between FR 42 and FR 46, and corrective actions if necessary, including repair; and
- Repetitive eddy current inspections for cracking of the upper corner angle fitting and the vertical tee fitting at left and right FR 40, and corrective actions if necessary, including repair and replacement of the internal angle fitting.

AD 2011-10-06 was prompted by European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, AD 2009-0057 to identify and correct an unsafe condition. The identified unsafe condition is cracking of trellis boom drainage holes, the holes in the stringers bottom, and the holes of the inner pump, which could result in reduced structural integrity of the wings.

Since issuance of AD 2011-10-06, EASA has issued EASA AD 2016-0196, dated September 30, 2016 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for all Airbus Model A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes. The MCAI states:

> DGAC France issued AD F-1992-106-132R7 to require certain inspections and modifications which addressed JAR/FAR [Joint Aviation Requirements/Federal Aviation Regulations] 25-571 requirements, related to damage-tolerance and fatigue evaluation of structure. Following the Extended Design Service Goal activities as part of the Structure Task Group for the Airbus A310 program, EASA published AD 2007-0053, which replaced DGAC France AD F-1992-106-132R7.
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> After EASA issued AD 2007-0053R1, the thresholds and the intervals of Airbus Service Bulletins (SB) A310-57-2050 and A310-57-2064 were updated, prompting EASA to issue AD 2009-0057 [which corresponds to FAA AD 2011-10-06] and [EASA] AD 2007-0053 was revised (R2) accordingly. EASA AD 2009-0057 also required the accomplishment of the actions specified in Airbus SB A310-57-2048 at Revision 01.
>
> After EASA issued AD 2009-0057, in the frame of the Widespread Fatigue Damage campaign, new analysis has indicated the need for additional work included in Revision 03 of Airbus SB A310-57-2050.
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> For the reason described above, this new [EASA] AD retains the requirements of EASA AD 2009-0057, which is superseded, and requires inspection and corrective actions as specified in Airbus SB A310-57-2050 Revision 04.

Required actions include a repetitive rotating probe inspection for cracking of certain holes in the stringers bottom, inner pumps, and the trellis boom; and corrective actions, i.e., repair of holes where cracks are discovered.

The compliance times vary depending on airplane configuration. The earliest initial inspection compliance time is 11,400 total flight cycles or 57,300 total flight hours,

whichever occurs first. The latest initial compliance time is 38,700 total flight cycles or 77,500 total flight hours, whichever occurs first. The shortest repetitive interval is 6,200 flight cycles or 31,200 flight hours, whichever occurs first.

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-2017-0560.

Related Service Information under 1 CFR part 51

We reviewed Airbus Service Bulletin A310-57-2050, Revision 04, dated March 13, 2015. This service information describes procedures for repetitive rotating probe inspections for cracking of the trellis boom drainage holes, the holes in the stringers bottom, and the holes of the inner pump, and corrective actions. 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.

FAA's Determination and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products the same type design.

This proposed AD would not supersede AD 2011-10-06. Rather, we have determined that a stand-alone AD would be more appropriate to address the changes in

the MCAI. This proposed AD would require repetitive rotating probe inspections for cracking of the trellis boom drainage holes, the holes in the stringers bottom, and the holes of the inner pump, and corrective actions, if necessary. Accomplishment of the proposed actions would then terminate the actions required by paragraph (h) of AD 2011-10-06.

Costs of Compliance

We estimate that this proposed AD affects 8 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection	84 work-hours X $85 per hour = $7,140	$5,890	$13,030	$104,240

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

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.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:

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.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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 adding the following new airworthiness directive (AD):

Airbus: Docket No. FAA-2017-0560; Directorate Identifier 2016-NM-172-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD affects AD 2011-10-06, Amendment 39-16687 (76 FR 27227, May 11, 2011) ("AD 2011-10-06").

(c) Applicability

This AD applies to Airbus Model A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes, certificated in any category, all serial numbers.

(d) Subject

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

(e) Reason

This AD was prompted by reports of cracking in the drainage holes on the lower skin panel in the center wing box between frames (FR) 42 and FR 46. We are issuing this AD to detect and correct cracking of trellis boom drainage holes, the holes in the stringers

bottom, and the holes of the inner pump, which could result in reduced structural integrity of the wings.

(f) Compliance

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

(g) Rotating Probe Inspections and Corrective Actions

Except as provided by paragraph (h)(1) of this AD, before exceeding the applicable threshold or grace period, whichever occurs later, as defined in paragraph 1.E., "Compliance," of Airbus Service Bulletin A310-57-2050, Revision 04, dated March 13, 2015, accomplish the rotating probe inspection for cracking of the trellis boom drainage holes, the holes in the stringers bottom, and the holes of the inner pump, as applicable, and do all applicable corrective actions, as specified in, and in accordance with the Accomplishment Instructions of Airbus Service Bulletin A310-57-2050, Revision 04, dated March 13, 2015, except as required by paragraph (h)(2) of this AD. Do all applicable corrective actions before further flight. Repeat the inspection thereafter at intervals not to exceed those defined in paragraph 1.E., "Compliance," of Airbus Service Bulletin A310-57-2050, Revision 04, dated March 13, 2015.

(h) Exceptions to Service Information

(1) Where Airbus Service Bulletin A310-57-2050, Revision 04, dated March 13, 2015, specifies a grace period "after receipt of the Service Bulletin without exceeding previous Service Bulletin revision values," this AD requires compliance within the specified grace period after the effective date of this AD.

(2) Where Airbus Service Bulletin A310-57-2050, Revision 04, dated March 13, 2015, specifies to contact Airbus for appropriate action, and specifies that action as "RC" (Required for Compliance): Before further flight, accomplish corrective actions in accordance with the procedures specified in paragraph (l)(2) of this AD.

(i) No Terminating Action for Inspections

Accomplishing corrective actions on an airplane as required by paragraph (g) or (h)(2) of this AD does not constitute terminating action for the repetitive actions required by paragraph (g) of this AD.

(j) Terminating Action

Accomplishment of the initial inspection required by paragraph (g) of this AD constitutes terminating action for the actions required by paragraph (h) of AD 2011-10-06.

(k) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using the service information specified in Airbus Service Bulletin A310-57-2050, Revision 03, dated December 19, 2014.

(l) 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 manager of the International Branch, send it to the attention of the person identified in paragraph (m)(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: Except as required by paragraph (h)(2) 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.

(3) Required for Compliance (RC): Except as required by paragraph (h)(2) 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.

(m) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2016-0196, dated September 30, 2016, 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-2017-0560.

(2) For more information about this AD, contact Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-227-2125; fax: 425-227-1149.

(3) For service information identified in this AD, contact Airbus SAS, Airworthiness Office – EAW, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone: +33 5 61 93 36 96; fax: +33 5 61 93 44 51; email: account.airworth-eas@airbus.com; Internet: http://www.airbus.com. 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.

Issued in Renton, Washington, on June 9, 2017.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.
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