



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-6429; Directorate Identifier 2015-NM-117-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede Airworthiness Directive (AD) 2015-05-02, for certain Airbus Model A318, A319, A320, and A321 series airplanes. AD 2015-05-02 requires revising the maintenance or inspection program to incorporate new, more restrictive airworthiness limitations. Since we issued AD 2015-05-02, an evaluation by the design approval holder (DAH) indicates that principal structural elements and certain life limited parts are subject to widespread fatigue damage (WFD). This proposed AD would require revising the maintenance or inspection program, as applicable, to incorporate new or revised structural inspection requirements. We are proposing this AD to prevent fatigue cracking, accidental damage, or corrosion in principal structural elements, and WFD, which could result in reduced structural integrity of the airplane.

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 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: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Airbus, Airworthiness Office – EIAS, 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-2016-6429; 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: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; 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-2016-6429; Directorate Identifier 2015-NM-117-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

Structural fatigue damage is progressive. It begins as minute cracks, and those cracks grow under the action of repeated stresses. This can happen because of normal operational conditions and design attributes, or because of isolated situations or incidents

such as material defects, poor fabrication quality, or corrosion pits, dings, or scratches. Fatigue damage can occur locally, in small areas or structural design details, or globally. Global fatigue damage is general degradation of large areas of structure with similar structural details and stress levels. Multiple-site damage is global damage that occurs in a large structural element such as a single rivet line of a lap splice joining two large skin panels. Global 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, in a condition known as widespread fatigue damage (WFD). 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 February 25, 2015, we issued AD 2015-05-02, Amendment 39-18112 (80 FR 15152, March 23, 2015) (“AD 2015-05-02”) to supersede AD 2014-23-15, Amendment 39-18031 (80 FR 3871, January 26, 2015). AD 2015-05-02 requires revising the maintenance or inspection program, as applicable, to incorporate new, more restrictive airworthiness limitations on all Airbus Model A318, A319, A320, and A321 series airplanes.

Since we issued AD 2015-05-02, an evaluation by the DAH indicates that principal structural elements and certain life limited parts are subject to widespread fatigue damage WFD. This proposed AD would require revising the maintenance or inspection program, as applicable, to incorporate new or revised structural inspection requirements.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2015-0083, dated May 12, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition.

The MCAI states:

The airworthiness limitations for Airbus A320 family aeroplanes are currently included in Airbus A318/A319/A320/A321 Airworthiness Limitations Section (hereafter referred to as 'ALS') documents. The Damage Tolerant airworthiness limitation items are published in ALS Part 2, approved by EASA.

The instructions contained in the ALS Part 2 have been identified as mandatory actions for continued airworthiness. Failure to comply with these instructions could result in an unsafe condition.

Previously, EASA issued AD 2013-0147 (http://ad.easa.europa.eu/blob/easa_ad_2013_0147_superseded.pdf/AD_2013-0147_1) [which corresponds to FAA AD 2014-23-15, Amendment 39-18031 (80 FR 3871, January 26, 2015) to require accomplishment of all maintenance tasks as described in ALS Part 2 at Revision 02. The new ALS Part 2 Revision 03 [Issue October 27, 2014] includes new and/or more restrictive items and was approved on 27 October 2014.

For the reason described above, this [EASA] AD retains the requirements of EASA AD 2013-0147, which is superseded, and requires accomplishment of all maintenance tasks as described in ALS Part 2 at Revision 03.

The required action is revising the maintenance or inspection program to incorporate new or revised structural inspection requirements. The unsafe condition is fatigue cracking, accidental damage, or corrosion in principal structural elements, and WFD, which could result in reduced structural integrity of the airplane. 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-2016-6429.

Other Relevant Rulemaking

We have issued NPRM Docket FAA-2015-6539, Directorate Identifier 2015-NM-036-AD (80 FR 74723, November 30, 2015), for all Airbus Model A318-111 and -112 airplanes; Model A319-111, -112, -113, -114, and -115 airplanes; Model A320-211, -212, and -214 airplanes; and Model A321-111, -112, -211, -212, and -213 airplanes. That NPRM proposes to require repetitive inspections that reduce the compliance time for Task 712111-01, Detailed Inspection of Forward Engine Mount Installation. Therefore, Task 712111-01 is not included in this proposed AD.

Related Service Information under 1 CFR part 51

Airbus has issued Part 2, Damage Tolerant Airworthiness Limitation Items (DT - ALI), Revision 04, dated December 18, 2015, of the A318/A319/A320/A321 Airworthiness Limitation Section (ALS). The service information describes DT ALIs associated with WFD.

Airbus has also issued Part 2, Damage Tolerant Airworthiness Limitation Items (DT - ALI), Variation 4.2, dated January 15, 2016, of the A318/A319/A320/A321 Airworthiness Limitation Section (ALS). The service information describes DT ALIs associated with WFD.

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 of these same type designs.

This proposed AD requires revisions to certain operator maintenance documents to include new actions (e.g., inspections). Compliance with these actions is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by this proposed AD, the operator might not be able to accomplish the actions described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance (AMOC) in accordance with the provisions of paragraph (k)(1) of this proposed AD. The request should include a description of changes to the required actions that will ensure the continued damage tolerance of the affected structure.

Differences Between this Proposed AD and the MCAI or Service Information

This proposed AD differs from the MCAI in that it specifies revising the maintenance or inspection program, as applicable, to incorporate the ALIs specified in Airbus A318/A319/A320/A321 ALS Part 2, Damage Tolerant Airworthiness Limitation Items (DT - ALI), Revision 04, dated December 18, 2015; and Airbus A318/A319/A320/A321 ALS Part 2, Damage Tolerant Airworthiness Limitation Items

(DT - ALI), Variation 4.2, dated January 15, 2016. The MCAI specifies incorporating the ALIs specified in Airbus A318/A319/A320/A321 ALS Safe Life Airworthiness Limitation Section (ALS), Part 2, Damage Tolerant Airworthiness Limitation Items (DT - ALI), Revision 03, Issue October 27, 2014. We have coordinated this change with EASA.

EASA has issued EASA Proposed Airworthiness Directive (PAD) 16-029, dated February 24, 2016, which specifies incorporating the ALI's in Airbus A318/A319/A320/A321 ALS Part 2, Damage Tolerant Airworthiness Limitation Items (DT - ALI), Revision 04, dated December 18, 2015; and Airbus A318/A319/A320/A321 ALS Part 2, Damage Tolerant Airworthiness Limitation Items (DT - ALI), Variation 4.2, dated January 15, 2016.

The MCAI specifies that if there are findings from the ALS inspection tasks, corrective actions must be accomplished in accordance with Airbus maintenance documentation. However, this proposed AD does not include that requirement. Operators of U.S.-registered airplanes are required by general airworthiness and operational regulations to perform maintenance using methods that are acceptable to the FAA. We consider those methods to be adequate to address any corrective actions necessitated by the findings of ALS inspections required by this proposed AD.

Airworthiness Limitations Based on Type Design

The FAA recently became aware of an issue related to the applicability of ADs that require incorporation of an ALS revision into an operator's maintenance or inspection program.

Typically, when these types of ADs are issued by civil aviation authorities of other countries, they apply to all airplanes covered under an identified type certificate (TC). The corresponding FAA AD typically retains applicability to all of those airplanes. In addition, U.S. operators must operate their airplanes in an airworthy condition, in accordance with 14 CFR 91.7(a). Included in this obligation is the requirement to perform any maintenance or inspections specified in the ALS, and in accordance with the ALS as specified in 14 CFR 43.16 and 91.403(c), unless an alternative has been approved by the FAA.

When a type certificate is issued for a type design, the specific ALS, including revisions, is a part of that type design, as specified in 14 CFR 21.31(c). The sum effect of these operational and maintenance requirements is an obligation to comply with the ALS defined in the type design referenced in the manufacturer's conformity statement. This obligation may introduce a conflict with an AD that requires a specific ALS revision if new airplanes are delivered with a later revision as part of their type design.

To address this conflict, the FAA has approved AMOCs that allow operators to incorporate the most recent ALS revision into their maintenance/inspection programs, in lieu of the ALS revision required by the AD. This eliminates the conflict and enables the operator to comply with both the AD and the type design.

However, compliance with AMOCs is normally optional, and we recently became aware that some operators choose to retain the AD-mandated ALS revision in their fleet-wide maintenance/inspection programs, including those for new airplanes delivered with later ALS revisions, to help standardize the maintenance of the fleet. To ensure that operators comply with the applicable ALS revision for newly delivered airplanes containing a later revision than that specified in an AD, we plan to limit the applicability

of ADs that mandate ALS revisions to those airplanes that are subject to an earlier revision of the ALS, either as part of the type design or as mandated by an earlier AD.

This proposed AD therefore applies to the airplanes identified in paragraph (c) of this proposed AD with an original certificate of airworthiness or original export certificate of airworthiness that was issued on or before the date of approval of the ALS revision identified in this proposed AD. Operators of airplanes with an original certificate of airworthiness or original export certificate of airworthiness issued after that date must comply with the airworthiness limitations specified as part of the approved type design and referenced on the type certificate data sheet.

Record of Ex Parte Communication

In preparation of AD actions, it is the practice of the FAA to obtain technical information and information on the operational and economic impact from design approval holders and aircraft operators. We discussed certain issues related to this NPRM in a recent meeting with Airlines for America (A4A). Shortly after this NPRM is published, we will post a summary of this meeting in the rulemaking docket. For information on locating the docket, see “Examining the AD Docket.”

Costs of Compliance

We estimate that this proposed AD affects 959 airplanes of U.S. registry.

The actions required by AD 2015-05-02, and retained in this proposed AD take about 2 work-hours per product, at an average labor rate of \$85 per work-hour. Based on these figures, the estimated cost of the actions that are required by AD 2015-05-02 is \$170 per product.

We also estimate that it would take about 2 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per

work-hour. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$163,030, or \$170 per product.

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 removing Airworthiness Directive (AD) 2015-05-02, Amendment 39-18112 (80 FR 15152, March 23, 2015), and adding the following new AD:

Airbus: Docket No. FAA-2016-6429; Directorate Identifier 2015-NM-117-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 replaces AD 2015-05-02, Amendment 39-18112 (80 FR 15152, March 23, 2015) (“AD 2015-05-02”).

(c) Applicability

This AD applies to the Airbus airplanes identified in paragraphs (c)(1) through (c)(4) of this AD, certificated in any category, with an original certificate of airworthiness or original export certificate of airworthiness issued on or before January 15, 2016.

(1) Model A318-111, -112, -121, and -122 airplanes.

(2) Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes.

(3) Model A320-211, -212, -214, -231, -232, and -233 airplanes.

(4) Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 05, Periodic Inspections.

(e) Reason

This AD was prompted by an evaluation by the design approval holder (DAH) which indicates that principal structural elements and certain life limited parts are subject to widespread fatigue damage (WFD). We are issuing this AD to prevent fatigue cracking, accidental damage, or corrosion in principal structural elements, and WFD, which could result in reduced structural integrity of the airplane.

(f) Compliance

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

(g) Retained Maintenance or Inspection Program Revision, with No Changes

This paragraph restates the requirements of paragraph (n) of AD 2015-05-02, with no changes. Within 30 days after March 2, 2015 (the effective date of AD 2014-23-15, Amendment 39-18031 (80 FR 3871, January 26, 2015) (“AD 2014-23-15”)), revise the maintenance or inspection program, as applicable, to incorporate the Airworthiness Limitation Items (ALIs) specified in paragraphs (g)(1) and (g)(2) of this AD. The initial compliance time for accomplishing the actions is at the applicable time identified in the ALIs specified in paragraphs (g)(1) and (g)(2) of this AD; or within 4 months after March 2, 2015 (the effective date of AD 2014-23-15); whichever occurs later.

(1) Airbus A318/A319/A320/A321 ALS Part 1 - Safe Life Airworthiness Limitation Items, Revision 02, dated May 13, 2011.

(2) Airbus A318/A319/A320/A321 ALS Part 2 - Damage-Tolerant Airworthiness Limitation Items (DT ALI), Revision 02, dated May 28, 2013.

(h) Retained Limitation: No Alternative Actions, Intervals, and/or Critical Design Configuration Control Limitations (CDCCLs), with Exception

This paragraph restates the requirements of paragraph (o) of AD 2015-05-02, with an exception. Except as required by paragraph (i) of this AD, after accomplishing the revision required by paragraph (g) of this AD, no alternative actions (e.g., inspections), intervals, and/or CDCCLs may be used unless the actions, intervals, and/or CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (k)(1) of this AD.

(i) New Requirement of this AD: Maintenance or Inspection Program Revision

Within 60 days after the effective date of this AD, revise the maintenance or

inspection program, as applicable, to incorporate the ALIs specified in Airbus A318/A319/A320/A321 ALS Part 2, Damage Tolerant Airworthiness Limitation Items (DT - ALI), Revision 04, dated December 18, 2015; and Airbus A318/A319/A320/A321 ALS Part 2, Damage Tolerant Airworthiness Limitation Items (DT - ALI), Variation 4.2, dated January 15, 2016. The initial compliance time for accomplishing the actions is at the applicable time identified in the ALIs specified in Airbus A318/A319/A320/A321 ALS Part 2, Damage Tolerant Airworthiness Limitation Items (DT - ALI), Revision 04, dated December 18, 2015; and Airbus A318/A319/A320/A321 ALS Part 2, Damage Tolerant Airworthiness Limitation Items (DT - ALI), Variation 4.2, dated January 15, 2016; without exceeding the inspection intervals in the ALIs specified in the service information identified in paragraph (g)(2) of this AD, except for the ALI tasks identified in paragraphs (i)(1) through (i)(4) of this AD. Accomplishing these actions terminates the requirements of paragraph (g)(2) of this AD.

(1) Task 712111-01-1, “Detailed Inspection of Forward Engine Mount Installation.”

(2) Task 712111-01-2, “Detailed Inspection of Forward Engine Mount Installation.”

(3) Task 712111-01-3, “Detailed Inspection of Forward Engine Mount Installation.”

(4) Task 712111-01-4, “Detailed Inspection of Forward Engine Mount Installation.”

(j) New No Alternative Actions and/or Intervals

After accomplishing the revision required by paragraph (i) of this AD, no alternative actions (e.g., inspections) and/or intervals may be used unless the actions and/or intervals are approved as an AMOC in accordance with the procedures specified in paragraph (k)(1) of this AD.

(k) 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: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov.

(i) 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.

(ii) AMOCs approved previously for AD 2015-05-02, are approved as AMOCs for the corresponding provisions of paragraphs (g) and (h) of 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.

(1) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2015-0083, dated May 12, 2015, 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-2016-6429.

(2) For service information identified in this AD, contact Airbus, Airworthiness Office – EIAS, 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 May 3, 2016.

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

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