



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2019-0318; Product Identifier 2019-NM-015-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus SAS 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 SAS Model A330-200 Freighter, A330-200, and A330-300 series airplanes. This proposed AD was prompted by an analysis conducted on Airbus SAS Model A330-200 Freighter, A330-200, and A330-300 series airplanes that identified structural areas that are susceptible to widespread fatigue damage (WFD). This proposed AD would require reinforcement modifications of various structural parts of the fuselage, and applicable related investigative and corrective actions if necessary, as specified in an European Aviation Safety Agency (EASA) AD, which will be incorporated by reference. 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 the material identified in this proposed AD that will be incorporated by reference (IBR), contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 89990 1000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); Internet [www.easa.europa.eu](http://www.easa.europa.eu). You may find this IBR material on the EASA website at <https://ad.easa.europa.eu>. You may view this IBR material 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 in the AD docket on the Internet at <http://www.regulations.gov>.

### **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-2019-0318; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations (telephone

800-647-5527) is listed above. Comments will be available in the AD docket shortly after receipt.

**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:**

**Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2019-0318; Product Identifier 2019-NM-015-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM 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 NPRM.

**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 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 design approval holders (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.

The EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2018-0276R1, dated January 11, 2019; corrected January 15, 2019 (“EASA AD 2018-0276R1”) (also referred to as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all Airbus SAS Model A330-200 Freighter, A330-200, and A330-300 series airplanes.

The MCAI states:

An analysis conducted on [Airbus SAS] A330 aeroplanes identified structural areas which are susceptible to widespread fatigue damage (WFD).

This condition, if not corrected, could lead to crack initiation and undetected propagation, reducing the structural integrity of the aeroplane, possibly resulting in rapid depressurisation and consequent injury to occupants.

To address this potential unsafe condition, Airbus developed a number of modifications (Mod) and published associated Service Bulletins (SB) for embodiment in service, to provide instructions to reinforce the various structural parts of the fuselage. Consequently, EASA issued AD 2016-0207 to require accomplishment of these modifications and reinforcements. Since that [EASA] AD was issued, Airbus developed new Mods for A330-223F and A330-243F aeroplanes and issued associated SBs accordingly. In addition, for certain required modifications, upper thresholds in flight hours (FH) have been defined and

the Applicability of some required actions was redefined to certain aeroplane configurations.

For the reasons described above, EASA issued AD 2018-0276, retaining the requirements of EASA AD 2016-0207, which was superseded, requiring new actions [modifications] for A330-200F aeroplanes, introducing references to the related Airbus SBs, and amending some compliance times (see Table 3 – Applicability of this AD). Since that [EASA] AD was issued, prompted by operator comments, it was determined that there was need to clarify the compliance time for aeroplanes that, for Action 9, were modified by using a previous revision of Airbus SB A330-53-3238. Consequently, this [EASA] AD is revised, introducing paragraph (6) to clarify this specific scenario. In addition, Note 2 of this [EASA] AD is corrected to clarify that the instructions of each SB are applicable for certain configurations, not limited to those MSN [manufacturer serial number] listed in the Effectivity of the SB.

This revised [EASA] AD is republished to correct an error in one of the compliance times for Action 14.

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Airbus SAS Model A330-200 Freighter, A330-200, and A330-300 series airplanes. The NPRM published in the Federal Register on September 19, 2017 (82 FR 43715). The NPRM was prompted by an evaluation by the DAH indicating that certain fuselage structures are subject to WFD. The NPRM proposed to require reinforcement modifications of various structural parts of the fuselage, and related investigative and corrective actions if necessary. Since we issued the NPRM, Airbus SAS developed new modifications for Model A330-200 Freighter series airplanes and issued associated service information. In addition, for certain required modifications, upper thresholds in flight hours have been defined and the applicability of certain

required actions was redefined to certain airplane configurations. In light of these changes, we have withdrawn the NPRM published on September 19, 2017 and have issued this NPRM for public comment.

#### **Related IBR Material Under 1 CFR part 51**

EASA AD 2018-0276R1 describes procedures for reinforcement modifications of various structural parts of the fuselage, and applicable related investigative and corrective actions if necessary. This material 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, and it is publicly available through the EASA website.

#### **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 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 the same type design.

#### **Proposed Requirements of this NPRM**

This proposed AD would require accomplishing the actions specified in EASA AD 2018-0276R1 described previously, as incorporated by reference, except for any differences identified as exceptions in the regulatory text of this AD and except as discussed under "Differences Between this Proposed AD and the MCAI."

## **Explanation of Required Compliance Information**

In the FAA's ongoing efforts to improve the efficiency of the AD process, the FAA worked with Airbus and EASA to develop a process to use certain EASA ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. As a result, EASA AD 2018-0276R1 will be incorporated by reference in the FAA final rule. This proposed AD would, therefore, require compliance with the provisions specified in EASA AD 2018-0276R1, except for any differences identified as exceptions in the regulatory text of this proposed AD. Service information specified in EASA AD 2018-0276R1 that is required for compliance with EASA AD 2018-0276R1 will be available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0318 after the FAA final rule is published.

## **Differences Between this Proposed AD and the MCAI**

The MCAI provides lower-limit thresholds for accomplishment of certain actions. This proposed AD would additionally require obtaining instructions for further actions for airplanes already modified before the specified lower threshold is reached.

The compliance times for the modifications specified in this proposed AD for addressing WFD were established to ensure that discrepant structure is replaced before WFD develops in airplanes. Standard inspection techniques cannot be relied on to detect WFD before it becomes a hazard to flight. We will not grant any extensions of the compliance time to complete any AD-mandated service bulletin related to WFD without extensive new data that would substantiate and clearly warrant such an extension.



## Costs of Compliance

We estimate that this proposed AD affects 104 airplanes of U.S. registry. We estimate the following costs to comply with this proposed AD:

### Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Up to 413 work-hours X \$85 per hour = \$35,105	Up to \$125,190	Up to \$160,295	Up to \$16,670,680

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.

This proposed 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 and associated appliances to the Director of the System Oversight Division.

### **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 SAS:** Docket No. FAA-2019-0318; Product Identifier 2019-NM-015-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**

None.

#### **(c) Applicability**

This AD applies to all airplanes identified in paragraphs (c)(1) through (c)(3) of this AD, certificated in any category, all manufacturer serial numbers.

(1) Airbus SAS Model A330-223F and -243F airplanes.

(2) Airbus SAS Model A330-201, -202, -203, -223, and -243 airplanes.

(3) Airbus SAS Model A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes.

**(d) Subject**

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

**(e) Reason**

This AD was prompted by an analysis conducted on Airbus SAS Model A330-200 Freighter, -200, and -300 series airplanes that identified structural areas that are susceptible to widespread fatigue damage (WFD). We are issuing this AD to address this condition, which, if not corrected, could lead to crack initiation and undetected propagation, reducing the structural integrity of the airplane, possibly resulting in rapid depressurization and consequent injury to occupants.

**(f) Compliance**

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

**(g) Requirements**

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2018-0276R1, dated January 11, 2019; corrected January 15, 2019 (“EASA AD 2018-0276R1”).

**(h) Exceptions to EASA AD 2018-0276R1**

(1) The “Remarks” section of EASA AD 2018-0276R1 does not apply to this AD.

(2) Where paragraph (1) of EASA AD 2018-0276R1 specifies to modify the airplane in accordance with each applicable service bulletin as specified in Appendix 1 of EASA AD 2018-0276R1, this AD also requires the accomplishment of all applicable related investigative and corrective actions before further flight in accordance with each applicable service bulletin as specified in Appendix 1 of EASA AD 2018-0276R1.

(3) For airplanes already modified before the threshold specified in Table 2 of Appendix 1 of EASA AD 2018-0276R1 is reached, within 6 months after the effective date of this AD, obtain instructions for additional maintenance tasks (e.g., modifications/inspections) from and approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA); and accomplish those tasks within the compliance time specified therein.

**(i) No Reporting Requirement**

Although certain service information referenced in EASA AD 2018-0276R1 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

**(j) 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 (k)(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*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) *Required for Compliance (RC)*: For any service information referenced in EASA AD 2018-0276R1 that contains RC procedures and tests: Except as required by paragraphs (h)(3) and (j)(2) of this AD, RC 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.

**(k) Related Information**

(1) For information about EASA AD 2018-0276R1, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 89990 6017; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); Internet [www.easa.europa.eu](http://www.easa.europa.eu). You may find this EASA AD on the EASA website at <https://ad.easa.europa.eu>. You may view this EASA AD 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. EASA AD 2018-0276R1 may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0318.

(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.

Issued in Des Moines, Washington, on April 25, 2019.

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

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