



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2025-0213; Project Identifier MCAI-2024-00385-T; Amendment
39-23115; AD 2025-17-05]

RIN 2120-AA64

Airworthiness Directives; Airbus SAS Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2017-14-14, which applied to all Airbus SAS Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes. AD 2017-14-14 required repetitive inspections for cracking in the cabin floor beam junction at certain fuselage frame locations and repair if necessary. Since the FAA issued AD 2017-14-14, further analysis determined that the compliance times for the inspections must also be based on flight hours. This AD continues to require the actions in AD 2017-14-14, revises compliance times, and adds a provision for optional modifications. The FAA is 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 a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-0213; 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 final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For European Union Aviation Safety Agency (EASA) material identified in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu. You may find this material on the EASA website at ad.easa.europa.eu.

- You may view this material at the FAA, Airworthiness Products Section, Operational Safety 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 at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-0213.

FOR FURTHER INFORMATION CONTACT: Timothy Dowling, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3667; email: timothy.p.dowling@faa.gov.

SUPPLEMENTARY INFORMATION:**Background**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2017-14-14, Amendment 39-18958 (82 FR 33002, July 19, 2017) (AD 2017-14-14). AD 2017-14-14 applied to all Airbus SAS Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes. AD 2017-14-14 required repetitive

inspections for cracking in the cabin floor beam junction at certain fuselage frame locations and repair if necessary. The FAA issued AD 2017-14-14 to detect and correct cracking in the cabin floor beam junction at certain fuselage frame locations, which could result in reduced structural integrity of the airplane.

The NPRM was published in the *Federal Register* on February 27, 2025 (90 FR 10801). The NPRM was prompted by AD 2024-0128, dated July 3, 2024 (EASA AD 2024-0128) (also referred to as “the MCAI”), issued by EASA, which is the Technical Agent for the Member States of the European Union. The MCAI states that the manufacturer developed a modification that restores the fatigue potential at each location (junction) by doing cold-working at the cabin floor beam and fitting junction for airplanes with a pre-mod 155607 configuration. The manufacturer also developed optional modification instructions for airplanes with a post-mod 155607 configuration. These modifications can be used to extend the compliance time for an inspection cycle. In addition, further analysis determined that the compliance times for the inspections must also be based on flight hours.

In the NPRM, the FAA proposed to continue to require the actions in AD 2017-14-14 and to revise compliance times and add a provision for optional modifications, as specified in EASA AD 2024-0128. The FAA is issuing this AD to address the unsafe condition on these products.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-0213.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from an individual who supported the NPRM without change.

The FAA received additional comments from an anonymous commenter and ProTech Aero Services Limited (ProTech). The following presents the comments received on the NPRM and the FAA's response to each comment.

Request to Confirm Use of Later Revisions Is Allowed

ProTech requested the FAA confirm that the proposed AD would allow the use of later-approved revisions of the material specified in EASA AD 2024-0128, as acceptable for compliance with the AD requirements.

This AD does allow the use of later-approved revisions of the material referenced in EASA AD 2024-0128 as acceptable for compliance with the required actions. This AD adopts the "Ref. Publications" section of EASA AD 2024-0128, which includes the current version of the referenced material as well as later approved revisions.

Request to Consider Alternatives to Repetitive Inspections

The anonymous commenter suggested that the FAA should explore the feasibility of design modifications or reinforcements to eliminate the need for repetitive inspections. The commenter stated design improvements can provide long-term solutions to structural issues.

The FAA acknowledges the commenter's concern. The FAA evaluated the available information and determined that the actions required by this AD are sufficient to address the unsafe condition. However, under the provisions of paragraph (j)(1) of this AD, any person may request approval of an alternative method of compliance (AMOC), including design improvements or other alternatives, if the proposal provides an acceptable level of safety. The FAA has not changed this AD in this regard.

Request to Reduce Inspection Intervals

The anonymous commenter requested that the FAA reduce the inspection intervals proposed in the NPRM. The commenter reasoned that frequent inspections have been shown to identify structural issues before they escalate.

The FAA does not agree to reduce the inspection intervals. A full-scale fatigue test campaign was performed on a Model A321 airframe, and the test results were used to determine an appropriate inspection interval. The FAA also considered the safety implications, parts availability, and normal maintenance schedules for timely accomplishment of the repetitive inspections. In consideration of all of these factors, the FAA determined that the compliance time, as proposed, represents an appropriate interval in which the affected cabin floor beam junctions can be inspected in a timely manner within the fleet, while still maintaining an adequate level of safety. If additional data are presented that would justify a shorter compliance time, the FAA may consider further rulemaking. The FAA has not changed this AD in this regard.

Request to Confirm Non-Destructive Testing (NDT) Methods Were Considered

The anonymous commenter asked whether the FAA has considered mandating advanced NDT methods such as ultrasonic or eddy current inspections. The commenter asserted that advanced NDT methods would enhance detection of subsurface cracks.

The FAA is aware of those NDT inspections and requires such inspections where appropriate or necessary for detecting cracks. It was determined that detailed inspections are sufficient for addressing the unsafe condition of this AD. However, under the provisions of paragraph (j)(1) of this AD, any person may request approval of an AMOC to use other types of inspections if the proposal provides an acceptable level of safety. The FAA has not changed this AD in this regard.

Request to Require Inspection Reporting

The anonymous commenter stated that operators should be required to report all findings of cracks to the FAA to facilitate data collection and trend analysis. The commenter reasoned that reports aid in identifying patterns and prevent issues.

The FAA does not agree to require reporting. In certain cases, the FAA might determine that additional information (i.e., data collection) is needed to understand the

problem and develop appropriate mitigation for an unsafe condition. In this case, because the safety concern was found during a full-scale fatigue test campaign, the unsafe condition was identified and a corrective action was developed without the need to require additional operator reports. However, an operator may still choose to send relevant inspection information to the FAA. The FAA has not changed this AD in this regard.

Request to Mitigate the Financial Impact

The anonymous commenter asked the FAA what measures will be taken to mitigate the economic impact of the proposed inspections on small operators. The commenter stated that small operators may face financial challenges in complying with frequent inspections.

The FAA acknowledges the commenter's concern and recognizes that this AD imposes certain operational costs on operators. Under certain circumstances, the airplane manufacturer might provide financial relief, but the FAA does not provide economic mitigation to small operators. The FAA has not changed this AD in this regard.

Conclusion

These products have been approved by the civil aviation authority of another country and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, that authority has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on this product. Except for minor editorial changes, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Material Incorporated by Reference Under 1 CFR Part 51

The FAA reviewed EASA AD 2024-0128, which specifies procedures for inspections for cracking on the frame to cabin floor beam junction at certain fuselage frame locations (frames 35.1 and 35.2, left- and right-hand sides), repairs, and optional modifications to extend an inspection interval. 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.

Costs of Compliance

The FAA estimates that this AD affects 494 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Retained actions from AD 2017-14-14	Up to 8 work-hours X \$85 per hour = \$680 per inspection cycle	None	Up to \$680 per inspection cycle	Up to \$335,920 per inspection cycle

Estimated costs for optional actions

Labor cost	Parts cost	Cost per product
Up to 135 work-hours X \$85 per hour = \$11,475	Up to \$7,510	Up to \$18,985

The FAA estimates the following costs to do any necessary on-condition actions that would be required based on the results of any required actions. The FAA has no way of determining the number of aircraft that might need these on-condition actions:

Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
Up to 50 work-hours X \$85 per hour = \$4,250	\$1,600	\$5,850

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.

The FAA is 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

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) Will not affect intrastate aviation in Alaska, and
- (3) 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 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:

a. Removing Airworthiness Directive (AD) 2017-14-14, Amendment 39-18958 (82 FR 33002, July 19, 2017); and

b. Adding the following new AD:

2025-17-05 Airbus SAS: Amendment 39-23115; Docket No. FAA-2025-0213; Project Identifier MCAI-2024-00385-T.

(a) Effective Date

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

(b) Affected ADs

This AD replaces AD 2017-14-14, Amendment 39-18958 (82 FR 33002, July 19, 2017) (AD 2017-14-14).

(c) Applicability

This AD applies to all Airbus SAS Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes, certificated in any category.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by a determination from fatigue testing on the Model A321 airframe that cracks could develop in the cabin floor beam junction at certain fuselage frame locations. The FAA is issuing this AD to address cracking in the cabin floor beam junction at certain fuselage frame locations. The unsafe condition, if not addressed, could result in reduced structural integrity of the airplane.

(f) Compliance

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

(g) Requirements

Except as specified in paragraphs (h) and (i) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2024-0128, dated July 3, 2024 (EASA AD 2024-0128).

(h) Exceptions to EASA AD 2024-0128

(1) Where EASA AD 2024-0128 refers to “13 June 2016 [the effective date of EASA AD 2016-0105],” this AD requires using August 23, 2017 (the effective date of AD 2017-14-14).

(2) Where EASA AD 2024-0128 refers to its effective date, this AD requires using the effective date of this AD.

(3) This AD does not adopt the “Remarks” section of EASA AD 2024-0128.

(4) Where paragraph (2) of EASA AD 2024-0128 specifies an option to “contact Airbus for approved repair instructions and, within the compliance time specified therein, accomplish those instructions accordingly”, this AD requires replacing that text with “the crack must be repaired before further flight using a method approved by the Manager, AIR-520, Continued Operational Safety 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”.

(i) No Reporting Requirement

Although the material referenced in EASA AD 2024-0128 specifies to submit certain information (inspection report sheet) to the manufacturer, this AD does not include that requirement.

(j) Additional AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, AIR-520, Continued Operational Safety 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 responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the Continued Operational Safety Branch, send it to the attention of the person identified in paragraph (k) of this AD and email to: AMOC@faa.gov.

(i) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(ii) AMOCs approved previously for AD 2017-14-14 are approved as AMOCs for the corresponding provisions of EASA AD 2024-0128 that are required by paragraph (g) of this AD.

(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, AIR-520, Continued Operational Safety Branch, FAA; or EASA; or Airbus SAS’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 (i) and (j)(2) of this AD, if any material 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.

(k) Additional Information

For more information about this AD, contact Timothy Dowling, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3667; email: timothy.p.dowling@faa.gov.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the material listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this material as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2024-0128, dated July 3, 2024.

(ii) [Reserved]

(3) For EASA material identified in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu. You may find this material on the EASA website at ad.easa.europa.eu.

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety 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 material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.

Issued on August 19, 2025.

Lona C. Saccomando,
Acting Deputy Director, Integrated Certificate Management Division,
Aircraft Certification Service.
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