



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2024-0027; Project Identifier AD-2023-01202-T; Amendment 39-22653; AD 2024-01-02]

RIN 2120-AA64

Airworthiness Directives; Lockheed Martin Corporation/Lockheed Martin

Aeronautics Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Lockheed Martin Corporation/Lockheed Martin Aeronautics Company Model 382, 382B, 382E, 382F, 382G, and 382J airplanes; and Model C-130A, HP-C-130A, EC-130Q, 282-44A-05 (C-130B), C-130B, and C-130H airplanes. This AD was prompted by the determination that certain aft fuselage sloping longerons may have been exposed to excessively hot forming temperatures for excessive amounts of time, which will reduce the mechanical properties of the longerons and affect their static strength. This AD requires, for certain airplanes, a records review to determine if a conductivity check has been performed on the longerons and to determine if the check was measured at least every four inches. This AD also requires, for certain airplanes, an inspection and applicable repairs. This AD also prohibits installation of affected parts under certain conditions. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive comments on this 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 [regulations.gov](https://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.

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) by searching for and locating Docket No. FAA-2024-0027; 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, any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Fred Caplan, Aviation Safety Engineer, FAA, 1701 Columbia Avenue, College Park, GA 30337; telephone 404-474-5507; email 9-ASO-ATLACO-ADs@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA previously issued AD 2023-11-10, Amendment 39-22456 (88 FR 41308, June 26, 2023) (AD 2023-11-10), for all Lockheed Martin Corporation/Lockheed Martin Aeronautics Company Model 382, 382B, 382E, 382F, 382G, and 382J airplanes; and Model C-130A, HP-C-130A, EC-130Q, 282-44A-05 (C-130B), C-130B, and C-130H

airplanes. AD 2023-11-10 requires, for certain airplanes, a review of the airplane maintenance records to determine if the left or right aft fuselage sloping longeron, having part number (P/N) 342986-(), has been replaced on or after December 31, 2012. AD 2023-11-10 also requires a conductivity check on certain aft fuselage sloping longerons and applicable on-condition actions, and prohibits the installation of certain aft fuselage sloping longerons under certain conditions. Lockheed determined that those longerons may have been exposed to excessively hot forming temperatures for excessive amounts of time during manufacturing. Exposure to the higher temperatures and extended time will reduce the mechanical properties of the longerons and affect their static strength. If both aft fuselage sloping longerons are understrength, the structural integrity of the airplane would be reduced below limit load, which could lead to failure of both longerons.

Lockheed engineering analysis has since identified an increased minimum acceptable hardness (above that required by AD 2023-11-10) necessary to maintain a positive margin of safety from fuselage station (FS) 750 to FS 770. In addition, Lockheed Martin engineering analysis has since identified the vertical flange as the critical location, and this location was not previously tested. As a result, Lockheed Martin Aeronautics Company issued Alert Service Bulletin A382-53-70, dated November 20, 2023, to provide procedures for a conductivity check and hardness test, as applicable, for all affected airplanes, except for Model 382J airplanes.

Lockheed has advised that related testing has been completed on all Model 382J airplanes (there are currently five total Model 382J airplanes), and that the test results have adequately determined that the aft fuselage sloping longerons meet specifications and the unsafe condition does not currently exist on Model 382J airplanes. Those airplanes are therefore not included in paragraph (g) of this AD. However, the parts

installation limitation in paragraph (h)(2) of this AD does apply to the Model 382J airplanes.

The FAA is issuing this AD to address a defective aft fuselage sloping longeron, which could eventually fail, resulting in reduced structural integrity of the airplane and possible loss of control of the airplane.

FAA's Determination

The FAA is issuing this AD because the agency has determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

AD Requirements

For airplanes (except Model 382J airplanes) on which the left- or right-hand aft fuselage sloping longeron, P/N 342986-(), was replaced on or after December 31, 2012, and for airplanes (except Model 382J airplanes) on which a review of the airplane maintenance records cannot conclusively determine whether the part has been replaced, this AD requires a review of the airplane maintenance records to determine if a conductivity check has been performed on both left- and right-hand aft fuselage sloping longerons part number 342986-(), from fuselage station (FS) 750 to FS 770, as specified in Lockheed Martin Aeronautics Company Alert Service Bulletin A382-53-69, dated April 12, 2023, and to determine if the check was measured at least every four inches. This AD also requires, for certain airplanes, an inspection of the airplane and applicable repairs that must be done using a method approved by the Manager, FAA East Certification Branch. The inspection could include a conductivity check, a hardness test, and a verification that results are within certain values.

This AD also prohibits installation of affected parts under certain conditions.

Impact on Intrastate Aviation in Alaska

In light of the heavy reliance on aviation for intrastate transportation in Alaska, the FAA fully considered the effects of this AD (including costs to be borne by affected operators) from the earliest possible stages of AD development. This AD is based on those considerations, and was developed with regard to minimizing the economic impact on operators to the extent possible, consistent with the safety objectives of this AD. In any event, the Federal Aviation Regulations require operators to correct an unsafe condition identified on an airplane to ensure operation of that airplane in an airworthy condition. The FAA has determined in this case that the requirements are necessary and the indirect costs would be outweighed by the safety benefits of the AD.

Justification for Immediate Adoption and Determination of the Effective Date

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C. 551 *et seq.*) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for “good cause,” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies forgoing notice and comment prior to adoption of this rule because numerous understrength aft fuselage sloping longerons have been found on military airplanes of the same type design, and it is likely that understrength longerons are also installed on in-service airplanes. The possibility of both longerons being understrength violates fail-safe design. If both aft fuselage sloping longerons are understrength, the structural integrity of the airplane would be reduced

below limit load, which could lead to failure of both longerons and result in loss of the airplane. Accordingly, notice and opportunity for prior public comment are impracticable and contrary to the public interest pursuant to 5 U.S.C. 553(b)(3)(B).

In addition, the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days, for the same reasons the FAA found good cause to forgo notice and comment.

Comments Invited

The FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under ADDRESSES. Include Docket No. FAA-2024-0027 and Project Identifier AD-2023-01202-T at the beginning of your comments. The most helpful comments reference a specific portion of the final rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of

your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Fred Caplan, Aviation Safety Engineer, FAA, 1701 Columbia Avenue, College Park, GA 30337; telephone 404-474-5507; email 9-ASO-ATLACO-ADs@faa.gov. Any commentary that the FAA receives that is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Regulatory Flexibility Act

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

Costs of Compliance

The FAA estimates that this AD affects 36 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Records review	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$3,060
Inspection *	Up to 20 work-hours X \$85 per hour = Up to \$1,700	\$0	Up to \$1,700	Up to \$61,200

* The inspection could include a conductivity check, a hardness test, and a verification that results are within certain values.

The FAA has received no definitive data on which to base the cost estimates for the on-condition repair specified in this 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.

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 is not a "significant regulatory action" under Executive Order 12866.

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 adding the following new airworthiness directive:

2024-01-02 Lockheed Martin Corporation/Lockheed Martin Aeronautics Company:

Amendment 39-22653; Docket No. FAA-2024-0027; Project Identifier

AD-2023-01202-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD affects AD 2023-11-10, Amendment 39-22456 (88 FR 41308, June 26, 2023) (AD 2023-11-10).

(c) Applicability

This AD applies to the airplanes identified in paragraphs (c)(1) through (3) of this AD.

(1) All Lockheed Martin Corporation/Lockheed Martin Aeronautics Company Model 382, 382B, 382E, 382F, and 382G airplanes, certificated in any category.

(2) All Lockheed Martin Corporation/Lockheed Martin Aeronautics Company Model 382J airplanes, certificated in any category.

(3) All airplanes specified in paragraphs (c)(3)(i) through (xi) of this AD, type certificated in the restricted category.

(i) LeSEA Model C-130A airplanes (transferred from Central Air Services, Inc.), Type Certificate Data Sheet (TCDS) A34SO, Revision 1.

(ii) T.B.M., Inc., Model C-130A airplanes, TCDS A39CE, Revision 3.

(iii) Western International Aviation, Inc., Model C-130A airplanes, TCDS A33NM.

(iv) USDA Forest Service Model C-130A airplanes, TCDS A15NM, Revision 4.

(v) Snow Aviation International, Inc., Model C-130A airplanes, TCDS TQ3CH, Revision 1.

(vi) International Air Response (transferred from Rogers Helicopters, Inc., and Heavylift Helicopters Inc.) Model C-130A airplanes, TCDS A31NM, Revision 3.

(vii) Heavylift Helicopters, Inc., Model C-130B airplanes, TCDS A35NM, Revision 1.

(viii) Hawkins & Powers Aviation, Inc., Model HP-C-130A airplanes, TCDS A30NM, Revision 1.

(ix) Coulson Aviation (USA), Inc., Model EC-130Q and C-130H airplanes, TCDS T00019LA, Revision 4.

(x) Lockheed-Georgia Company Model 282-44A-05 (C-130B) airplanes, TCDS A5SO.

(xi) Surplus Model C-130A airplanes.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by the determination that certain aft fuselage sloping longerons may have been exposed to excessively hot forming temperatures for excessive amounts of time, which will reduce the mechanical properties of the longerons and affect their static strength. The FAA is issuing this AD to address the possibility of both aft sloping longerons being understrength, which would reduce the structural integrity of the airplane below limit load (i.e., maximum load to be expected in service) and could lead to failure of both longerons. The unsafe condition, if not addressed, could result loss of the airplane.

(f) Compliance

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

(g) Records Review and Applicable Actions

For airplanes identified in paragraphs (c)(1) and (3) of this AD on which the left- or right-hand aft fuselage sloping longeron, P/N 342986-(), was replaced on or after December 31, 2012, and airplanes identified in paragraphs (c)(1) and (3) of this AD on which a review of the airplane maintenance records cannot conclusively determine whether the part has been replaced: Do the actions specified in both paragraphs (g)(1) and (2) of this AD.

(1) Within 35 days after the effective date of this AD, review the airplane maintenance records to determine if a conductivity check has been performed on both left- and right-hand aft fuselage sloping longerons part number 342986-(), from fuselage station (FS) 750 to FS 770, as specified in Lockheed Martin Aeronautics Company Alert Service Bulletin A382-53-69, dated April 12, 2023, and to determine if the check was measured at least every four inches.

(2) Within 90 days after the effective date of this AD, inspect the airplane and do all applicable repairs using a method approved by the Manager, FAA East Certification Branch.

(h) Parts Installation Limitation

(1) For airplanes identified in paragraphs (c)(1) and (3) of this AD: As of the effective date of this AD, no person may install an aft fuselage sloping longeron part number 342986-() on any airplane, unless all applicable actions specified in paragraph (g) of this AD have been accomplished. The parts installation limitation required by this paragraph replaces the parts installation limitation required by paragraph (n)(1) of AD 2023-11-10.

(2) For airplanes identified in paragraph (c)(2) of this AD: As of the effective date of this AD, no person may install an aft fuselage sloping longeron part number 342986-() on any airplane, unless a conductivity check has been performed on the aft fuselage

sloping longeron, from fuselage station (FS) 750 to FS 770, using a method approved by the Manager, FAA, East Certification Branch. The parts installation limitation required by this paragraph replaces the parts installation limitation required by paragraph (n)(2) of AD 2023-11-10.

(i) Special Flight Permit

Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the airplane to a location where the actions required by this AD can be performed, but special flight permits may not be issued to operate the airplane after the actions required by this AD have identified an aft fuselage sloping longeron that does not meet the applicable requirements, unless the operator contacts the Manager, East Certification Branch, FAA, for specific limitations that must be followed and complies with those limitations.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, East Certification 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 certification office, send it to the attention of the person identified in paragraph (k)(1) of this AD.

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

(k) Related Information

(1) For more information about this AD, contact Fred Caplan, Aviation Safety Engineer, FAA, 1701 Columbia Avenue, College Park, GA 30337; telephone 404-474-5507; email 9-ASO-ATLACO-ADs@faa.gov.

(2) For Lockheed service information identified in this AD that is not incorporated by reference, contact Lockheed Martin Corporation/Lockheed Martin Aeronautics Company, Airworthiness Office, Dept. 6A0M, Zone 0252, Column P-58, 86 S Cobb Drive, Marietta, GA 30063; telephone 770-494-5444; fax 770-494-5445; email ams.portal@lmco.com. You may view this service information 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.

(I) Material Incorporated by Reference

None.

Issued on January 4, 2024.

Ross Landes,
Deputy Director for Regulatory Operations, Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2024-00300 Filed: 1/5/2024 11:15 am; Publication Date: 1/9/2024]