[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0427; Directorate Identifier 2013-NM-218-AD; Amendment 39-18316; AD 2015-22-11]

RIN 2120-AA64

Airworthiness Directives; Lockheed Martin Corporation/Lockheed Martin Aeronautics Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2011-09-04 for all Lockheed Martin Corporation/Lockheed Martin Aeronautics Company Model 382, 382B, 382E, 382F, and 382G airplanes. AD 2011-09-04 required repetitive inspections for damage to the lower surface of the center wing box (CWB), and corrective actions if necessary. This new AD adds related investigative actions, and corrective actions if necessary. This AD was prompted by an evaluation by the design approval holder (DAH) that indicated that the CWB is subject to widespread fatigue damage (WFD). We are issuing this AD to detect and correct fatigue cracking of the lower surface of the CWB, which could result in structural failure of the wings.

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].

The Director of the Federal Register approved the incorporation by reference of a certain other publication listed in this AD as of June 22, 2011 (76 FR 28626, May 18, 2011).

ADDRESSES: For service information identified in this AD, 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; Internet http://www.lockheedmartin.com/ams/tools/TechPubs.html. 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. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2014-0427.

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-2014-0427; 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 AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Carl Gray, Aerospace Engineer, Airframe Branch, ACE-117A, FAA, Atlanta Aircraft Certification Office, 1701 Columbia Avenue, College Park, GA 30337; telephone 404-474-5554; fax 404-474-5605; email: carl.w.gray@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2011-09-04, Amendment 39-16666 (76 FR 28626, May 18, 2011). AD 2011-09-04 applied to all Lockheed Martin Corporation/Lockheed Martin Aeronautics Company Model 382, 382B, 382E, 382F, and 382G airplanes. The NPRM published in the Federal Register on July 1, 2014 (79 FR 37248). The NPRM was prompted by an evaluation by the DAH that indicated that the CWB is subject to WFD. The NPRM proposed to continue to require repetitive inspections for any damage of the lower surface of the CWB, and corrective actions if necessary. The NPRM also proposed to require replacement of the CWB, and to add, for the repetitive inspections, concurrent related investigative actions, and corrective actions if necessary. We are issuing this AD to detect and correct fatigue cracking of the lower surface of the CWB, which could result in structural failure of the wings.

Actions Since Issuance of the NPRM (79 FR 37248, July 1, 2014)

The CWB replacement, proposed in the NPRM (79 FR 37248, July 1, 2014), has been removed from this final rule, and is instead required by AD 2015-18-02, Amendment 39–18260 (80 FR 52941, September 2, 2015). We determined that the proposed compliance time for the CWB replacement would not adequately address the unsafe condition, because the risk of undetected WFD rises rapidly for CWBs that have accumulated 50,000 total flight hours. Therefore, for airplanes over the 50,000-flight-hour threshold, AD 2015-18-02 provides a shorter grace period than that proposed in the NPRM. In this AD, we have removed paragraph (k) of the proposed AD and Note 1 to paragraph (k) of the proposed AD, and redesignated subsequent paragraphs accordingly.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments to the NPRM (79 FR 37248, July 1, 2014) related to the proposed inspection requirements, and the FAA's response to those comments. Since this AD does not include the CWB replacement proposed in paragraph (k) of the NPRM, this AD does not address comments regarding the CWB replacement. Those comments are addressed in AD 2015-18-02, Amendment 39–18260 (80 FR 52941, September 2, 2015).

Support for the NPRM (79 FR 37248, July 1, 2014)

Lynden Air Cargo (Lynden) stated that it concurs that the proposed inspections are beneficial and enhance safety.

Request to Revise Proposed Applicability

Lynden questioned whether the FAA considered the safety risk factor for "restricted category type certificated Model C-130A through H airplanes" and whether those airplanes should be included in the applicability.

We did consider the safety risk factor for those airplanes. The FAA issued restricted-category type certificates only for Model C-130A and C-130B airplanes, and these are low-usage airplanes. The wings on Model C-130A airplanes are different from those of other models; the CWBs have previously been replaced on all Model C-130A airplanes. There are no civil registered Model C-130B airplanes in service. We might consider further rulemaking for Model C-130 airplanes. We have not changed this AD regarding this issue.

Request to Revise Repair Approval Procedures

Safair requested that we revise the NPRM (79 FR 37248, July 1, 2014) to authorize the DAH or designated engineering representative (DER) to develop and approve repairs under international operator support agreements with the state-of-registration civil authorities.

We agree with the commenter's request. We have revised paragraphs (h), (i)(1)(ii), (j), and (k)(1) of this AD to require that certain repairs, alternative compliance times, and inspection methods be approved in accordance with the procedures specified in paragraph (m) of this AD, which allows DER approval for repairs as specified in new paragraph (m)(3) of this AD.

Request to Require a Report of Inspection Findings

Noting that the NPRM (79 FR 37248, July 1, 2014) would not require inspection reports, Safair suggested that Lockheed build a database of inspection findings. The commenter asserted that the data would not be collected unless mandated.

It is not necessary to require operators to report inspection findings, as the Atlanta Aircraft Certification Office (ACO) already maintains a database for tracking repairs. The database includes repair reports from the U.S. as well as DER reports for airplanes outside of the U.S. We have not changed this AD in this regard.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (79 FR 37248, July 1, 2014) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (79 FR 37248, July 1, 2014).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Related Service Information under 1 CFR part 51

We reviewed Lockheed Service Bulletin 382-57-85 (82-790), Revision 3, dated July 8, 2013, including Appendix A, Revision 3, dated July 8, 2013, and Appendixes B, C, D, E, F, and G, all Revision 1, all dated March 8, 2007. The service information describes procedures for inspecting the lower surface of the CWB. 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 of this AD.

Costs of Compliance

We estimate that this AD affects 15 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection [retained action from AD 2011-09-04, Amendment 39-16666 (76 FR 28626, May 18, 2011)]	2,000 work-hours X $85 per hour = $170,000 per inspection cycle	N/A	$170,000 per inspection cycle	$2,550,000 per inspection cycle

We have received no definitive data that would enable us to provide cost estimates for the related investigative actions specified in this AD.

We estimate the following costs to do any necessary repair that would be required. We have no way of determining the number of aircraft that might need this repair:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Repair [retained from AD 2011-09-04, Amendment 39-16666 (76 FR 28626, May 18, 2011)]	1,000 to 3,000 work-hours X $85 per hour = $85,000 to $255,000	$30,000	$115,000 to $285,000

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 have determined that 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) Is not a "significant rule" under 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.

Adoption of 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 removing Airworthiness Directive (AD) 2011-09-04, Amendment 39-16666 (76 FR 28626, May 18, 2011), and adding the following new AD:

2015-22-11 Lockheed Martin Corporation/Lockheed Martin Aeronautics Company: Amendment 39-18316; Docket No. FAA-2014-0427; Directorate Identifier 2013-NM-218-AD.

(a) Effective Date

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

(b) Affected ADs

This AD replaces AD 2011-09-04, Amendment 39-16666 (76 FR 28626, May 18, 2011).

(c) Applicability

This AD applies to all Lockheed Martin Corporation/Lockheed Martin Aeronautics Company Model 382, 382B, 382E, 382F, and 382G airplanes, certificated in any category.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by an evaluation by the design approval holder (DAH) that indicated the center wing box (CWB) is subject to widespread fatigue damage (WFD). We are issuing this AD to detect and correct fatigue cracking of the lower surface of the CWB, which could result in structural failure of the wings.

(f) Compliance

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

(g) Retained Inspection, with Revised Service Information

This paragraph restates the actions required by paragraph (g) of AD 2011-09-04, Amendment 39-16666 (76 FR 28626, May 18, 2011), with revised service information. At the time specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD, whichever occurs latest: Do a nondestructive inspection of the lower surface of the CWB for any damage, in accordance with Lockheed Service Bulletin 382-57-85 (82-790), Revision 2, dated August 23, 2007, including Appendixes A, B, C, D, E, F, and G, all Revision 1, all dated March 8, 2007; or Lockheed Service Bulletin 382-57-85 (82-790), Revision 3, dated July 8, 2013, including Appendix A, Revision 3, dated July 8, 2013, and Appendixes B, C, D, E, F, and G, all Revision 1, all dated March 8, 2007. Repeat the inspections thereafter at intervals not to exceed 10,000 flight hours. As of the effective date of this AD, use only Lockheed Service Bulletin 382-57-85 (82-790), Revision 3, dated July 8, 2013, including Appendix A, Revision 3, dated July 8, 2013, and Appendixes B, C, D, E,

F, and G, all Revision 1, all dated March 8, 2007, for the actions required by this paragraph.

(1) Prior to the accumulation of 40,000 total flight hours on the center wing.

(2) Within 365 days after June 22, 2011 (the effective date of AD 2011-09-04, Amendment 39-16666 (76 FR 28626, May 18, 2011)).

(3) Within 10,000 flight hours on the CWB after the accomplishment of the inspection specified in paragraph (g) of this AD, if done before June 22, 2011 (the effective date of AD 2011-09-04, Amendment 39-16666 (76 FR 28626, May 18, 2011)).

(h) Retained Corrective Action, with Revised Repair Instructions

This paragraph restates the actions required by paragraph (h) of AD 2011-09-04, Amendment 39-16666 (76 FR 28626, May 18, 2011), with revised repair instructions. If any damage is found before the effective date of this AD during any inspection required by paragraph (g) of this AD: Before further flight, repair any damage, using a method approved by the Manager, Atlanta Aircraft Certification Office (ACO), FAA. If any damage is found as of the effective date of this AD, during any inspection required by paragraph (g) of this AD: Before further flight, repair using a method approved in accordance with the procedures specified in paragraph (m) of this AD.

(i) Retained Exceptions to Service Information Specifications, with Revised Repair Instructions

(1) This paragraph restates the exception specified in paragraph (i) of AD 2011-09-04, Amendment 39-16666 (76 FR 28626, May 18, 2011), with revised repair instructions. Lockheed Service Bulletin 382-57-85 (82-790), Revision 2, dated August 23, 2007, including Appendixes A, B, C, D, E, F, and G, all Revision 1, all dated March 8, 2007, specifies that operators may adjust thresholds and intervals, use alternative repetitive inspection intervals, and use alternative inspection methods, if

applicable. However, this AD requires the applicable approval specified in paragraph (i)(1)(i) or (i)(1)(ii) of this AD.

(i) Before the effective date of this AD: This AD requires that any alternative methods or intervals be approved by the Manager, Atlanta ACO. For any alternative methods or intervals to be approved by the Manager, Atlanta ACO, as required by this paragraph, the Manager's approval letter must specifically refer to this AD.

(ii) As of the effective date of this AD, this AD requires that any alternative methods or intervals be approved in accordance with the procedures specified in paragraph (m) of this AD.

(2) This paragraph restates the exception stated in paragraph (j) of AD 2011-09-04, Amendment 39-16666 (76 FR 28626, May 18, 2011), with no changes. Where Lockheed Service Bulletin 382-57-85 (82-790), Revision 2, dated August 23, 2007, including Appendixes A, B, C, D, E, F, and G, all Revision 1, all dated March 8, 2007, specifies that alternative repetitive inspection intervals may be used for cold-worked holes, this AD does not allow the longer interval. This AD requires that all cold-worked and non-cold-worked holes be reinspected at 10,000-flight-hour intervals.

(3) This paragraph restates the exception stated in paragraph (k) of AD 2011-09-04, Amendment 39-16666 (76 FR 28626, May 18, 2011), with no changes. Where Lockheed Service Bulletin 382-57-85 (82-790), Revision 2, dated August 23, 2007, including Appendixes A, B, C, D, E, F, and G, all Revision 1, all dated March 8, 2007, describes procedures for submitting a report of any damages, this AD does not require such action.

(j) New Inspection and Corrective Actions

As of the effective date of this AD, concurrently with accomplishing the inspection required by paragraph (g) of this AD: Do all applicable related investigative actions, in accordance with Appendix A, Revision 3, dated July 8, 2013, of Lockheed

Service Bulletin 382-57-85 (82-790), Revision 3, dated July 8, 2013, including Appendix A, Revision 3, dated July 8, 2013, and Appendixes B, C, D, E, F, and G, all Revision 1, all dated March 8, 2007. If any cracking or damage is found during any related investigative action: Before further flight, repair all cracking and damage, using a method approved in accordance with the procedures specified in paragraph (m) of this AD.

(k) New Exceptions to Service Information Specifications

(1) Lockheed Service Bulletin 382-57-85 (82-790), Revision 3, dated July 8, 2013, including Appendix A, Revision 3, dated July 8, 2013, and Appendixes B, C, D, E, F, and G, all Revision 1, all dated March 8, 2007, specifies that operators may adjust thresholds and intervals, use alternative repetitive inspection intervals, and use alternative inspection methods. However, this AD requires that any alternative thresholds, intervals, or inspection methods be approved in accordance with the procedures specified in paragraph (m) of this AD.

(2) Where Lockheed Service Bulletin 382-57-85 (82-790), Revision 3, dated July 8, 2013, including Appendix A, Revision 3, dated July 8, 2013, and Appendixes B, C, D, E, F, and G, all Revision 1, all dated March 8, 2007, describes procedures for submitting a report of any damages, this AD does not require such action.

(l) Credit for Previous Actions

(1) This paragraph restates the credit provided in paragraph (l) of AD 2011-09-04, Amendment 39-16666 (76 FR 28626, May 18, 2011). This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before June 22, 2011 (the effective date of AD 2011-09-04), using Lockheed Service Bulletin 382-57-85 (82-790), Revision 1, dated March 8, 2007, which is not incorporated by reference in this AD.

(2) This paragraph restates the credit provided in paragraph (m) of AD 2011-09-04, Amendment 39-16666 (76 FR 28626, May 18, 2011). This paragraph

provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before June 22, 2011 (the effective date of AD 2011-09-04), using Lockheed Service Bulletin 382-57-85 (82-790), dated August 4, 2005, which is not incorporated by reference in this AD.

(m) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Atlanta ACO, 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 ACO, send it to the attention of the person identified in paragraph (n)(1) of this AD.

(2) 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.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD, if it is approved by a Delegated Engineering Representative (DER) for the Lockheed Martin Aeronautics Company who has been authorized by the Manager, Atlanta ACO, to make those findings. For a repair method to be approved, the repair approval must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(n) Related Information

(1) For more information about this AD, contact Carl Gray, Aerospace Engineer, Airframe Branch, ACE-117A, FAA, Atlanta Aircraft Certification Office, 1701 Columbia Avenue, College Park, GA 30337; telephone 404-474-5554; fax 404-474-5605; email: carl.w.gray@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (o)(5) and (o)(6) of this AD.

(o) Material Incorporated by Reference

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

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

(3) The following service information was approved for IBR on [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(i) Lockheed Service Bulletin 382-57-85 (82-790), Revision 3, dated July 8, 2013, including Appendix A, Revision 3, dated July 8, 2013, and Appendixes B, C, D, E, F, and G, all Revision 1, all dated March 8, 2007.

(ii) Reserved.

(4) The following service information was approved for IBR on June 22, 2011 (76 FR 28626, May 18, 2011).

(i) Lockheed Service Bulletin 382-57-85 (82-790), Revision 2, dated August 23, 2007, including Appendixes A, B, C, D, E, F, and G, all Revision 1, all dated March 8, 2007.

(ii) Reserved.

(5) For Lockheed Martin Corporation/Lockheed Martin Aeronautics Company service information identified in this AD, 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; Internet http://www.lockheedmartin.com/ams/tools/TechPubs.html.

(6) 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.

(7) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on October 29, 2015.

Jeffrey E. Duven,
Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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