



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-0493; Directorate Identifier 2014-NM-184-AD; Amendment 39-18283; AD 2015-20-05]

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 adopting a new airworthiness directive (AD) for certain Lockheed Martin Corporation/Lockheed Martin Aeronautics Company Model 188 series airplanes. This AD was prompted by an evaluation by the design approval holder (DAH) indicating that the upper and lower wing skin planks at the attachment of the main landing gear (MLG) ribs at certain wing-stations are subject to widespread fatigue damage (WFD). This AD requires an inspection (for cracking) and modification of the chordwise fastener rows of the upper and lower wing planks at the attachments to the MLG ribs at certain wing-stations. We are issuing this AD to prevent fatigue cracking of the upper and lower wing skin planks at the attachment of the MLG ribs, which could result in failure of the wing.

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: 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-2015-0493.

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-2015-0493; 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 (ACO), 1701 Columbia Avenue, College Park, GA 30337; phone: 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 by adding an AD that would apply to certain Lockheed Martin Corporation/Lockheed Martin Aeronautics Company Model 188 series airplanes. The NPRM published in the Federal Register on March 24, 2015 (80 FR 15525). The NPRM was prompted by an evaluation by the DAH indicating that the upper and lower wing skin planks at the attachment of the MLG ribs at certain wing-stations are subject to WFD. The NPRM proposed to require an inspection (for cracking) and modification of the chordwise fastener rows of the upper and lower wing planks at the attachments to the MLG ribs at certain wing-stations. We are issuing this AD to prevent fatigue cracking of the upper and lower wing skin planks at the attachment of the MLG ribs, which could result in failure of the wing.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (80 FR 15525, March 24, 2015) or on the determination of the cost to the public.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (80 FR 15525, March 24, 2015) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (80 FR 15525, March 24, 2015).

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 Martin Electra Service Bulletin 88/SB-721, dated April 30, 2014. This service information describes procedures for doing a bolt-hole eddy current (BHEC) inspection for cracking and repair of cracking. This service information also describes procedures for modification of the chordwise fastener rows of the upper and lower wing planks at the attachments to the MLG ribs at wing-station (WS) 167 and WS 209 by removing the original fasteners and replacing them with new first oversize fasteners of the same type or approved substitute type for original fasteners. 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 4 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 and Modification	560 work-hours X \$85 per hour = \$47,600	\$5,000	\$52,600	\$210,400

We have received no definitive data that will enable us to provide cost estimates for the on-condition actions 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.

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

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 adding the following new airworthiness directive (AD):

2015-20-05 Lockheed Martin Corporation/Lockheed Martin Aeronautics Company:

Amendment 39-18283; Docket No. FAA-2015-0493; Directorate Identifier 2014-NM-184-AD.

(a) Effective Date

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

(b) Affected ADs

None.

(c) Applicability

This AD applies to Lockheed Martin Corporation/Lockheed Martin Aeronautics Company Model 188A and 188C airplanes, certificated in any category, serial numbers 1001 and subsequent.

(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 indicating that the upper and lower wing skin planks at the attachment of the main landing gear (MLG) ribs at certain wing-stations are subject to widespread fatigue damage. We are issuing this AD to prevent fatigue cracking of the upper and lower wing skin planks at the attachment of the MLG ribs, which could result in failure of the wing.

(f) Compliance

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

(g) Inspection, Modification, and Corrective Action

At the later of the times specified in paragraphs (g)(1) and (g)(2) of this AD: Remove the chordwise fastener rows of the upper and lower wing planks at the attachments to the MLG ribs at wing-station (WS) 167 and WS 209; do a bolt-hole eddy current (BHEC) inspection to detect cracking of the fastener rows; and replace the original fasteners with new, first oversize fasteners; in accordance with the Accomplishment Instructions of Lockheed Martin Electra Service Bulletin 88/SB-721, dated April 30, 2014. If any cracking is found during any inspection required by this paragraph: Before further flight, repair the cracking, in accordance with the Accomplishment Instructions of Lockheed Martin Electra Service Bulletin 88/SB-721, dated April 30, 2014.

(1) At the applicable time specified table 1 of paragraph 1.E., “Compliance,” of Lockheed Martin Electra Service Bulletin 88/SB-721, dated April 30, 2014. Where table 1 of paragraph 1.E., “Compliance,” of Lockheed Martin Electra Service Bulletin 88/SB-721, dated April 30, 2014, specifies “Flt. Hrs,” this AD specifies “total flight hours.”

(2) Within 365 days or 600 flight hours after the effective date of this AD, whichever occurs first.

(h) No Reporting

Although Lockheed Martin Electra Service Bulletin 88/SB-721, dated April 30, 2014, specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(i) 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 (j) 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.

(j) Related Information

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

(k) 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.

(i) Lockheed Martin Electra Service Bulletin 88/SB-721, dated April 30, 2014.

(ii) Reserved.

(3) For Lockheed 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>.

(4) You may view this service information at 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.

(5) 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 September 18, 2015.

Dorr M. Anderson,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2015-24839 Filed: 10/1/2015 08:45 am; Publication Date: 10/2/2015]