

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-9120; Directorate Identifier 2016-CE-024-AD; Amendment 39-18738; AD 2016-25-12]

RIN 2120-AA64

Airworthiness Directives; M7 Aerospace LLC

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all M7 Aerospace LLC Models SA226-AT, SA226-T, SA226-T(B), SA226-TC, SA227-AC (C-26A), SA227-AT, SA227-BC (C-26A), SA227-CC, SA227-DC (C-26B), and SA227-TT airplanes. This AD was prompted by corrosion and stress corrosion cracking of the pitch trim actuator upper attach fittings of the horizontal stabilizer front spar. This AD requires repetitive inspections with replacement of fittings as necessary. We are issuing this AD to correct the unsafe condition on these products.

DATES: This AD is effective January 12, 2017.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of January 12, 2017.

ADDRESSES: For service information identified in this final rule, contact M7 Aerospace LLC, 10823 NE Entrance Road, San Antonio, Texas 78216; phone: (210) 824-9421; fax: (210) 804-7766; Internet: <http://www.elbitsystems-us.com>; email: MetroTech@M7Aerospace.com. You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call 816-329-4148. It is also available on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9120.

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-2016-9120; 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 Document 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: Andrew McAnaul, Aerospace Engineer, FAA, ASW-143 (c/o San Antonio MIDO), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; phone: (210) 308-3365; fax: (210) 308-3370; email: andrew.mcanaul@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 all M7 Aerospace LLC Models SA226-AT, SA226-T, SA226-T(B), SA226-TC, SA227-AC (C-26A), SA227-AT, SA227-BC (C-26A), SA227-CC, SA227-DC (C-26B), and SA227-TT airplanes. The NPRM published in the Federal Register on September 13, 2016 (81 FR 62845). The NPRM was prompted by reports of multiple SA226 and SA227 airplanes with corrosion and/or stress corrosion cracks in the pitch trim actuator upper attach fittings of the horizontal stabilizer front spar. The NPRM proposed to require repetitive inspections of the pitch trim actuator upper attach fittings for corrosion and/or cracking in the bolt holes and the web/flange radius with replacement of fittings as necessary. This condition, if not corrected, could cause jamming and/or loss of control of the horizontal stabilizer, which could result in partial or complete loss of airplane pitch control. We are issuing this AD to correct the unsafe condition on these products.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM 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 for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information Under 1 CFR Part 51

We reviewed M7 Aerospace LLC Service Bulletin (SB) 226-27-081 R1, M7 Aerospace LLC SB 227-27-061 R1, and M7 Aerospace LLC SB CC7-27-033 R1, all revised June 27, 2016. In combination for the different applicable models, the service information describes procedures for detailed visual, liquid penetrant, ultrasound, and high frequency eddy current inspections of the pitch trim actuator upper attach fittings for corrosion and cracking in the bolt holes and the web/flange radius, and replacement if necessary for applicable airplane models. 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.

Costs of Compliance

We estimate that this AD affects 300 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
Inspect pitch trim actuator upper attach fittings	16 work-hours × \$85 per hour = \$1,360	Not applicable	\$1,360	\$408,000

We estimate the following costs to do any necessary replacements that would be required based on the results of the inspection. We have no way of determining the number of aircraft that might need these replacements:

On-Condition Costs

Action	Labor cost	Parts cost	Cost per product
Replace 2 fittings	8 work-hours × \$85 per hour = \$680	\$4,900	\$5,580

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):



2016-25-12 M7 Aerospace LLC: Amendment 39-18738; Docket No. FAA-2016-9120; Directorate Identifier 2016-CE-024-AD.

(a) Effective Date

This AD is effective January 12, 2017.

(b) Affected ADs

None.

(c) Applicability

This AD applies to M7 Aerospace LLC Models SA226-AT, SA226-T, SA226-T(B), SA226-TC, SA227-AC (C-26A), SA227-AT, SA227-BC (C-26A), SA227-CC, SA227-DC (C-26B), and SA227-TT airplanes, all serial numbers, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 5510, Horizontal Stabilizer Structure.

(e) Unsafe Condition

This AD was prompted by corrosion and stress corrosion cracking of the pitch trim actuator upper attach fittings of the horizontal stabilizer front spar. We are issuing this AD to prevent jamming and/or loss of control of the horizontal stabilizer, which could result in partial or complete loss of airplane pitch control.

(f) Compliance

Comply with paragraphs (g)(1) and (2) of this AD using the following service bulletins and within the compliance times specified, unless already done:

(1) For Models SA226-AT, SA226-T, SA226-T(B), and SA226-TC: M7 Aerospace LLC Service Bulletin (SB) 226-27-081 R1, revised June 27, 2016; or

(2) For Models SA227-AC (C-26A), SA227-AT, SA227-BC (C-26A), and SA227-TT: M7 Aerospace LLC SB 227-27-061 R1, revised June 27, 2016; or

(3) For Models SA227-CC and SA227-DC (C-26B): M7 Aerospace LLC SB CC7-27-033 R1, revised June 27, 2016.

(g) Actions

(1) Within the next 600 hours time-in-service (TIS) after January 12, 2017 (the effective date of this AD) or within the next 12 months after January 12, 2017 (the effective date of this AD), whichever occurs first, and repetitively thereafter at intervals not to exceed every 5,000 hours TIS or

5 years, whichever occurs first, perform the inspection of the pitch trim actuator upper attach fittings following section 2.A. and return to service following section 2.C. of the Accomplishment Instructions of the service bulletins identified in paragraph (f)(1), (2), or (3) of this AD, as applicable.

(2) If any corrosion or cracks are found as a result of any inspection in paragraph (g)(1) of this AD, before further flight, replace the fitting following section 2.B. and return to service following section 2.C. of the Accomplishment Instructions of the service bulletins identified in paragraph (f)(1), (2), or (3) of this AD, as applicable.

(h) Credit for Actions Accomplished in Accordance With Previous Service Information

This AD allows credit for inspection or replacement of the pitch trim actuator upper attach fittings required in paragraph (g)(1) and (2) of the AD, if done before January 12, 2017 (the effective date of this AD), following the procedures in the Accomplishment Instructions of the applicable service information listed in paragraphs (h)(1) through (3) of this AD:

(1) For Models SA226-AT, SA226-T, SA226-T(B), and SA226-TC: M7 Aerospace LLC Service Bulletin (SB) 226-27-081, Issued: April 13, 2016; or

(2) For Models SA227-AC (C-26A), SA227-AT, SA227-BC (C-26A), and SA227-TT: M7 Aerospace LLC SB 227-27-061, Issued: April 13, 2016; or

(3) For Models SA227-CC and SA227-DC (C-26B): M7 Aerospace LLC SB CC7-27-033, Issued: April 13, 2016.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Fort Worth Airplane Certification Office, 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 (i) 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 Andrew McAnaul, Aerospace Engineer, FAA, ASW-143 (c/o San Antonio MIDO), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; phone: (210) 308-3365; fax: (210) 308-3370; email: andrew.mcanaul@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) M7 Aerospace LLC Service Bulletin (SB) 226-27-081 R1, revised June 27, 2016.

(ii) M7 Aerospace LLC SB 227-27-061 R1, revised June 27, 2016.

(iii) M7 Aerospace LLC SB CC7-27-033 R1, revised June 27, 2016.

(3) For M7 Aerospace LLC service information identified in this AD, contact M7 Aerospace LLC, 10823 NE Entrance Road, San Antonio, Texas 78216; phone: (210) 824-9421; fax: (210) 804-7766; Internet: <http://www.elbitsystems-us.com>; email: MetroTech@M7Aerospace.com.

(4) You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call 816-329-4148.

(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 Kansas City, Missouri, on November 30, 2016.

Melvin Johnson,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.