[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0023; Directorate Identifier FAA-2013-CE-048-AD]

RIN 2120-AA64

Airworthiness Directives; M7 Aerospace LLC Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain M7 Aerospace LLC Models SA26-T, SA26-AT, SA226-AT, SA226-T, SA226-T(B), SA226-TC, SA227-AC (C-26A), SA227-AT, SA227-TT, SA227-BC (C-26A), SA227-CC, and SA227-DC (C-26B) airplanes. This proposed AD was prompted by reports of jamming of the aileron control cable chain in the pilot and copilot control columns due to inadequate lubrication and maintenance of the chain. This proposed AD would require repetitively replacing and lubricating the aileron chain, sprocket, and bearings in the control columns. We are proposing this AD to correct the unsafe condition on these products.

DATES: We must receive comments on this proposed 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 http://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.

For service information identified in this proposed AD, contact M7 Aerospace LP, 10823 NE Entrance Road, San Antonio, Texas 78216; phone: (210) 824-9421; fax: (210) 804-7766; Internet: http://www.m7aerospace.com; email: none. 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.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating it in Docket No. FAA-2014-0023; 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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Andrew McAnaul, Aerospace Engineer, FAA, ASW-150 (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:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2014-0023; Directorate Identifier FAA-2013-CE-048-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We received a report of the aileron system temporarily jamming in flight on an M7 Aerospace LLC Model SA227-DC (C-26B) airplane. The flight crew took corrective action by reversing the control wheel, which unjammed the aileron controls and allowed the aircraft to return to the airport safely.

Investigation revealed that the aileron control cable chain in the copilots control column was dry (no lubrication) and was binding on the sprocket. A lack of lubrication and wear on the chain bearings caused the chain to ride on the tip of the sprocket and jam between the tip of the sprocket and inside wall of the control column. A second operator reported finding an un-lubricated aileron control chain with a bound link that was almost frozen. An inspection of an aileron control chain provided by an operator that lubricates the chains and replaces them at 10,000 hours time-in-service revealed small metal particles within the grease. These particles were believed to be coming from the sprocket.

Investigation also revealed that there is conflicting information in the maintenance manual that instructs to apply both corrosion inhibitor and lubricant that are incompatible. The figure in the maintenance manual related to lubricating the aileron control chain points to the aileron rather than the pilot and copilot control columns.

This condition, if not corrected, could result in jamming of the aileron control cable chain in the pilot and copilot control columns, which could result in loss of control.

Relevant Service Information

We reviewed M7 Aerospace LLC SA26 Series Service Bulletin 26-27-001 R2; SA226 Series Service Bulletin 226-27-074 R2; SA227 Series Service Bulletin 227-27-054 R2; and SA227 Series Commuter Category Service Bulletin CC7-27-026 R2, all dated October 23, 2013. The service information describes procedures for repetitively replacing and lubricating the aileron control cable chain, sprocket, and bearings, and checking the aileron control cable tension.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs.

Proposed AD Requirements

This proposed AD would require accomplishing the actions specified in the service information described previously.

Costs of Compliance

We estimate that this proposed AD affects 360 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replacing and lubricating the aileron chain, sprocket, and bearings in the control columns	20 work-hours X $85 per hour = $1,700	$1,935	$3,635	$1,308,600

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 determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Is not a "significant rule" under the 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.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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):

M7 Aerospace LLC: Docket No. FAA-2014-0023; Directorate Identifier FAA-2013-CE-048-AD.

(a) **Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(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-TT, SA227-BC (C-26A), SA227-CC, and SA227-DC (C-26B) airplanes, all serial numbers; Model SA26-T airplanes, serial numbers T26-2 through T26-99; and Model SA26-AT airplanes, serial numbers AT26-100 through AT26-180E, certificated in any category.

(d) **Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code: 27, Flight Controls.

(e) **Unsafe Condition**

This AD was prompted by reports of jamming of the aileron control cable chain in the pilot and copilot control columns. We are issuing the AD to prevent jamming of the aileron control cable chain, which could result in loss of control.

(f) **Compliance**

Comply with this AD by doing the actions specified in paragraph (g) through paragraph (h) of this AD, including all subparagraphs, unless already done.

(g) **Initially Replace and Lubricate the Aileron Control Cable Chain, Sprocket, and Bearings**

Initially replace and lubricate the aileron control cable chain, sprocket, and bearings, and check the aileron control cable tension based on the conditions and compliance times in paragraphs (g)(1), (g)(2), and (g)(3) of this AD, including all subparagraphs. The corrosion preventative must be removed from the chain (but not the cable) and the required actions must be done following the Accomplishment Instructions in M7 Aerospace LLC SA26 Series Service Bulletin 26-27-001 R2, dated October 23,

2013; M7 Aerospace LLC SA226 Series Service Bulletin 226-27-074 R2, dated October 23, 2013; M7 Aerospace LLC SA227 Series Service Bulletin 227-27-054 R2, dated October 23, 2013; and M7 Aerospace LLC SA227 Series Commuter Category Service Bulletin CC7-27-026 R2, dated October 23, 2013, as applicable. Criteria for the term "properly lubricated" is included in paragraphs 5a, 5b, and 5c of the Accomplishment Instructions section of M7 Aerospace LLC SA26 Series Service Bulletin 26-27-001 R2, dated October 23, 2013, and paragraphs 6a, 6b, and 6c of the Accomplishment Instructions section of M7 Aerospace LLC SA226 Series Service Bulletin 226-27-074 R2, dated October 23, 2013; M7 Aerospace LLC SA227 Series Service Bulletin 227-27-054 R2, dated October 23, 2013; and M7 Aerospace LLC SA227 Series Commuter Category Service Bulletin CC7-27-026 R2, dated October 23, 2013.

(1) A review of the airplane records positively indicates that the aileron control cable chain in the pilot's and the copilot's control columns have been replaced and properly lubricated: At whichever of the compliance times specified in paragraphs (g)(1)(i) or (g)(1)(ii) of this AD that occurs later.

(i) On or before reaching 10,000 hours time-in-service (TIS) from the time of the last aileron control cable chain replacement or within 13 years from the date of the last aileron control cable chain replacement, whichever occurs first.

(ii) Within the next 24 months from the effective date of this AD.,

(2) A review of the airplane records positively indicates that the aileron control cable chain in the pilot's and the copilot's control columns have been replaced within the last 10,000 hours TIS, but proper lubrication cannot be verified: At whichever of the compliance times specified in paragraphs (g)(2)(i) or (g)(2)(ii) of this AD that occurs first.

(i) On or before reaching 10,000 hours TIS since the last replacement or within the next 1,000 hours TIS after the effective date of this AD, whichever occurs later.

(ii) Within the next 24 months from the effective date of this AD.

(3) A review of the airplane records does not positively indicate that the aileron control cable chain in the pilot's and the copilot's control columns have been replaced within the last 10,000 hours TIS: At the compliance times specified in paragraphs (g)(3)(i), (g)(3)(ii), (g)(3)(iii), and (g)(3)(iv) of this AD, as applicable.

(i) For airplanes with less than 10,000 hours TIS: At whichever of the compliance times specified in paragraphs (3)(i)(A) or (3)(i)(B) of this AD that occurs first:

(A) On or before reaching 10,000 hours TIS or within the next 1,000 hours TIS after the effective date of this AD, whichever occurs later.

(B) Within the next 24 months after the effective date of this AD.

(ii) For airplanes with 10,000 hours TIS or more but less than 20,001 hours TIS: Within the next 1,000 hours TIS after the effective date of this AD or within the next 12 calendar months after the effective date of this AD, whichever occurs first.

(iii) For airplanes with 20,001 hours TIS or more but less than 30,001 hours TIS: Within the next 750 hours TIS after the effective date of this AD or within the next 6 calendar months after the effective date of this AD, whichever occurs first.

(iv) For airplanes with 30,001 hours TIS or more: Within the next 400 hours TIS after the effective date of this AD or within the next 3 calendar months after the effective date of this AD, whichever occurs first.

(h) **Repetitively Replace and Lubricate the Aileron Control Cable Chain, Sprocket, and Bearings**

Replace and lubricate the aileron control cable chain, sprocket, and bearings, and check the aileron control cable tension repetitively thereafter at intervals not to exceed 10,000 hours TIS or 13 years after the date of the last aileron control cable chain replacement, whichever occurs first. The corrosion preventative must be removed from the chain (but not the cable) and the required actions must be done following the

Accomplishment Instructions in M7 Aerospace LLC SA26 Series Service Bulletin 26-27-001 R2, dated October 23, 2013; M7 Aerospace LLC SA226 Series Service Bulletin 226-27-074 R2, dated October 23, 2013; M7 Aerospace LLC SA227 Series Service Bulletin 227-27-054 R2, dated October 23, 2013; and M7 Aerospace LLC SA227 Series Commuter Category Service Bulletin CC7-27-026 R2, dated October 23, 2013, as applicable.

(i) **Credit for Actions Done Following Previous Service Information**

This AD allows credit for the actions required in paragraphs (g)(1) through (g)(3) of this AD, including all subparagraphs, if done before the effective date of this AD following M7 Aerospace LLC SA26 Series Service Bulletin 26-27-001, dated June 6, 2013, or Service Bulletin 26-27-001 R1, dated September 30, 2013; M7 Aerospace LLC SA226 Series Service Bulletin 226-27-074, dated June 6, 2013, or Service Bulletin 226-27-074 R1, dated September 30, 2013; M7 Aerospace LLC SA227 Series Service Bulletin 227-27-054, dated June 6, 2013, or Service Bulletin 227-27-054 R1, dated September 30, 203; and M7 Aerospace LLC SA227 Series Commuter Category Service Bulletin CC7-27-026, dated June 6, 2013, or Service Bulletin CC7-27-026 R1, dated September 30, 2013, as applicable.

(j) **Paperwork Reduction Act Burden Statement**

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of

information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(k) **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 the Related Information section 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.

(l) **Related Information**

(1) For more information about this AD, contact Andrew McAnaul, Aerospace Engineer, FAA, ASW-150 (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.

(2) For service information identified in this AD, contact M7 Aerospace LP, 10823 NE Entrance Road, San Antonio, Texas 78216; phone: (210) 824-9421; fax: (210) 804-7766; Internet: http://www.m7aerospace.com; email: none. 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.

Issued in Kansas City, Missouri, on January 14, 2014.

Earl Lawrence,
Manager, Small Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2014-01011 Filed 01/17/2014 at 8:45 am; Publication Date: 01/21/2014]