



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0910; Project Identifier 2018-CE-044-AD; Amendment 39-21378; AD 2021-01-02]

RIN 2120-AA64

Airworthiness Directives; M7 Aerospace LLC Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for M7 Aerospace LLC Models SA26-AT and SA26-T airplanes. This AD was prompted by reports of the airplane power lever linkage detaching from the TPE331 engine propeller pitch control (PPC) shaft. This AD requires repetitively inspecting the PPC for proper torque and making any necessary corrections until the replacement of the PPC assembly and the installation of a secondary retention feature (safety wire) are done. The FAA is issuing this AD to address the unsafe condition on these products.

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 (IBR) of a certain publication listed in this AD as of May 5, 2017 (82 FR 15982, March 31, 2017).

ADDRESSES: For service information identified in this final rule, contact Honeywell International Inc., 111 S 34th Street, Phoenix, Arizona 85034-2802; phone: 855-808-6500; email: AeroTechSupport@honeywell.com; internet: <https://aerospace.honeywell.com/en/services/maintenance-and-monitoring>. You may

view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 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 at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0910.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0910; 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 address for Docket Operations is 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: Jonas Perez, Aerospace Engineer, Fort Worth ACO Branch, FAA, 10101 Hillwood Parkway, Fort Worth, Texas 76177-1524; phone: 817-222-5145; fax: 817-222-5960; email: jonas.perez@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to M7 Aerospace LLC Models SA26-AT and SA26-T airplanes. The NPRM published in the *Federal Register* on October 14, 2020 (85 FR 64993). The NPRM was prompted by reports of the airplane power lever linkage detaching from the TPE331 engine PPC shaft. In the NPRM, the FAA proposed to require repetitively inspecting the PPC for proper torque and making any necessary corrections until the replacement of the PPC assembly and the installation of a secondary retention feature (safety wire) are done. The FAA is issuing this AD to prevent uncommanded change to the engine power settings with consequent loss of control.

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the costs.

Conclusion

The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. This AD is adopted as proposed in the NPRM.

Related Service Information under 1 CFR Part 51

The FAA reviewed Honeywell International Inc. Service Bulletin TPE331-72-2190, dated December 21, 2011, which contains procedures for replacing or reworking the propeller pitch control assembly, incorporating a threaded hole in the splined end of the shouldered shaft, and reassembling the propeller pitch control assembly. Honeywell International Inc. Service Bulletin TPE331-72-2190, dated December 21, 2011, was previously approved for IBR on May 5, 2017 (82 FR 15982, March 31, 2017). 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 ADDRESSES.

Other Related Service Information

The FAA also reviewed paragraph j. of M7 Aerospace SA26 Series Maintenance Manual Temporary Revision 4-02, dated July 22, 2020, which contains information related to the installation of the secondary retention feature (safety wire) on the airplane PPC lever and the PPC assembly.

Costs of Compliance

The FAA estimates that this AD affects 55 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
Install secondary retention feature (safety wire)	1 work-hour X \$85 per hour = \$85	\$10	\$95	\$5,225
Inspect PPC lever	1 work-hour X \$85 per hour = \$85 per inspection cycle	\$0	\$85	\$4,675 per inspection cycle
Repair, replace, and/or rework PPC lever input shaft	19 work-hours X \$85 per hour = \$1,615	\$1,000	\$2,615	\$143,825

The FAA estimates the following costs to do any adjustment that would be required based on the results of the inspection. The FAA has no way of determining the number of aircraft that might need the adjustment:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Correct attachment of the PPC lever	1 work-hour X \$85 per hour = \$85	\$0	\$85

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:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) 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 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:
2021-01-02 M7 Aerospace LLC: Amendment 39-21378; Docket No. FAA-2020-0910; Project Identifier 2018-CE-044-AD.

(a) Effective Date

This airworthiness directive (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 M7 Aerospace LLC Model SA26-AT and SA26-T airplanes, all serial numbers, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 61, Propellers/propulsors.

(e) Unsafe Condition

This AD was prompted by reports of the airplane power lever linkage detaching from the TPE331 engine propeller pitch control (PPC) shaft. The FAA is issuing this AD to address detachment of the power lever linkage to the TPE331 engine PPC shaft, which could result in uncommanded change to the engine power settings with consequent loss of control.

(f) Compliance

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

(g) PPC Lever Inspection

(1) Within 100 hours time-in-service (TIS) after the effective date of this AD and thereafter at intervals not to exceed 100 hours TIS, inspect the security of the PPC lever by pulling the PPC lever upward by hand to ensure it does not detach from the PPC input shaft. If the PPC lever detaches during any inspection, before further flight, comply with paragraphs (h) and (i) of this AD.

(2) The replacement/re-identification required by paragraph (h) of this AD and the installation of the secondary retention feature (safety wire) required by paragraph (i) of this AD terminate the repetitive inspections of the PPC lever attachment required by paragraph (g)(1) of this AD.

(h) Replace and Inspect the PPC Assembly

Within 600 hours TIS after the effective date of this AD or within 12 months after the effective date of this AD, whichever occurs first, unless required before further flight

by paragraph (g)(1) of this AD, do the actions in either paragraph (h)(1) or (2) of this AD in accordance with the Accomplishment Instructions in Honeywell International Inc. Service Bulletin TPE331-72-2190, dated December 21, 2011, except you are not required to report information to the manufacturer.

(1) Replace the PPC assembly with the applicable new design PPC assembly.

(2) Inspect the splined end of the shouldered shaft for the presence and condition of a threaded hole and, before further flight, repair or replace the cam assembly or rework the PPC assembly, as necessary, and re-identify the shouldered shaft.

(i) Secondary Retention Feature (Safety Wire)

Before further flight after completing the actions required by paragraph (h) of this AD, install the secondary retention feature (safety wire) on the airplane PPC lever and the PPC assembly.

Note 1 to paragraph (i): Paragraph j. of M7 Aerospace SA26 Series Maintenance Manual Temporary Revision 4-02, dated July 22, 2020, contains information related to installation of the secondary retention feature (safety wire).

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Section, Small Airplane Standards 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 local Flight Standards District 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 local flight standards district office/certificate holding district office.

(k) Related Information

For more information about this AD, contact Jonas Perez, Aerospace Engineer, Fort Worth ACO Branch, FAA, 10101 Hillwood Parkway, Fort Worth, Texas 76177-1524; phone: 817-222-5145; fax: 817-222-5960; email: jonas.perez@faa.gov.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference 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 May 5, 2017 (82 FR 15982, March 31, 2017).

(i) Honeywell International Inc. Service Bulletin TPE331-72-2190, dated December 21, 2011.

(ii) [Reserved]

(4) For Honeywell service information identified in this AD, contact Honeywell International Inc., 111 S. 34th Street, Phoenix, Arizona 85034-2802; phone: 855-808-6500; email: AeroTechSupport@honeywell.com; internet: <https://aerospace.honeywell.com/en/services/maintenance-and-monitoring>.

(5) You may view this service information at FAA, FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call 816-329-4148.

(6) 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, email: fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on December 28, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service

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