



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-1503; Project Identifier AD-2023-00197-A; Amendment 39-22566; AD 2023-20-07]

RIN 2120-AA64

Airworthiness Directives; Epic Aircraft, LLC Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Epic Aircraft, LLC Model E1000 airplanes. This AD was prompted by improperly rigged flap position switches. This AD requires installing a secondary full position limit switch to the flap system, installing a switch ramp on the flap actuator, and modifying the take-off position switch rigging. 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 of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1503; 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.

Material Incorporated by Reference:

- For service information identified in this final rule, contact Epic Aircraft, LLC, 22590 Nelson Road, Bend, OR 97701; phone: (541) 639-4603; email: info@epicaircraft.com; website: epicaircraft.com.

- You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at regulations.gov under Docket No. FAA-2023-1503.

FOR FURTHER INFORMATION CONTACT: Anthony Caldejon, Aviation Safety Engineer, FAA, 3960 Paramount Boulevard, Lakewood, CA 90712; phone: (206) 231-3534; email: anthony.v.caldejon@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 certain Epic Aircraft, LLC Model E1000 airplanes. The NPRM published in the *Federal Register* on July 21, 2023 (88 FR 47084). The NPRM was prompted by a report that during a production ground test, the flap position switches were not properly rigged and allowed the actuator to travel beyond the commanded flaps' full (fully extended) position. The flap actuator could overrun the flaps' fully extended position if the full position microswitch is either missing or not rigged properly, resulting in an uncertified flap configuration. This condition, if not addressed, could result in loss of control of the airplane.

In the NPRM, the FAA proposed to require installing a secondary full position limit switch to the flap system, installing a switch ramp on the flap actuator, and modifying the take-off position switch rigging.

The FAA is issuing this AD to address the unsafe condition on these products.

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 Epic Aircraft Service Bulletin SB-0034, Revision B, issued December 22, 2022. This service information specifies procedures for installing a secondary full position limit switch to the flap system to prevent over-travel. This service information also specifies procedures for installing a switch ramp on the flap actuator to improve reliability and modifying the take-off position switch rigging. In addition, this service information specifies procedures for checking the flap-to-wing clearances, adjusting clearances as needed, and contacting Epic Aircraft if clearance and travel limits cannot be met. 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.

Differences Between this AD and the Service Information

The service information specifies contacting the manufacturer if the clearance and travel limits are exceeded during the check of the flap-to-wing clearances, but this AD does not require that action. This AD requires adjusting the flap-to-wing clearances until they do not exceed the specified travel limits.

Costs of Compliance

The FAA estimates that this AD affects 29 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 a secondary full position limit switch to the flap system	1 work-hour X \$85 per hour = \$85	\$587	\$672	\$19,488
Install a switch ramp on the flap actuator	1 work-hour X \$85 per hour = \$85	\$54	\$139	\$4,031
Modify rigging	4 work-hours X \$85 per hour = \$340	\$0	\$340	\$9,860

The FAA has no data to determine the costs to accomplish the corrective action of adjusting the flap-to-wing clearances or the number of airplanes that may require this corrective action.

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators.

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:

2023-20-07 Epic Aircraft, LLC: Amendment 39-22566; Docket No. FAA-2023-1503; Project Identifier AD-2023-00197-A.

(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 Epic Aircraft, LLC Model E1000 airplanes, serial numbers K003 through K032 inclusive, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code 2750, TE Flap Control System.

(e) Unsafe Condition

This AD was prompted by a report that during a production ground test, the flap position switches were not properly rigged and allowed the actuator to travel beyond the commanded flaps' full (fully extended) position. The FAA is issuing this AD to prevent the flap actuator from overrunning the flaps' fully extended position if the full position microswitch is either missing or not rigged properly, resulting in an uncertified flap configuration. The unsafe condition, if not addressed, could result in loss of control of the airplane.

(f) Compliance

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

(g) Required Actions

Within 12 months after the effective date of this AD, install a secondary full position limit switch to the flap system, install a switch ramp on the flap actuator, and modify the take-off position switch rigging in accordance with steps 5 through 13 of the Instructions section in Epic Aircraft Service Bulletin SB-0034, Revision B, issued December 22, 2022 (Epic SB-0034, Revision B). Where Epic SB-0034, Revision B, specifies to discard a switch block, this AD requires removing that part from service. If, during the accomplishment of step 12, the flap-to-wing clearances exceed the specified travel limits, before further flight, adjust the flap-to-wing clearances until they do not exceed the specified travel limits. Where Epic SB-0034, Revision B, specifies to contact Epic Aircraft if clearance and travel limits cannot be met, this AD does not require that action.

Note 1 to paragraph (g): Information regarding the flap-to-wing travel limits may be found in Epic E1000 Maintenance Manual SK05000000, Revision A, dated April 13, 2020.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, West Certification 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 branch, send it to the attention of the person identified in paragraph (i)(1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(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.

(i) Additional Information

(1) For more information about this AD, contact Anthony Caldejon, Aviation Safety Engineer, FAA, 3960 Paramount Boulevard, Lakewood, CA 90712; phone: (206) 231-3534; email: anthony.v.caldejon@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (j)(3) and (4) of this AD.

(j) 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) Epic Aircraft Service Bulletin SB-0034, Revision B, issued December 22, 2022.

(ii) [Reserved]

(3) For service information identified in this AD, contact Epic Aircraft, LLC, 22590 Nelson Road, Bend, OR 97701; phone: (541) 639-4603; email: info@epicaircraft.com; website: epicaircraft.com.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

(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, email: fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on September 29, 2023.

Victor Wicklund, Deputy Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2023-22962 Filed: 10/17/2023 8:45 am; Publication Date: 10/18/2023]