



## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2025-0208; Project Identifier MCAI-2024-00555-A; Amendment 39-23044; AD 2025-10-10]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Pilatus Aircraft Ltd. Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is superseding Airworthiness Directive (AD) 2023-26-05, which applied to certain Pilatus Aircraft Ltd. (Pilatus) Model PC-24 airplanes. AD 2023-26-05 required periodic replacement of affected titanium threaded bolts, a one-time inspection of the rudder mass balance arm and other elements of the rudder trim tab installation for correct attachment, damage (gouges), cracks, deformation, surface finish, and corrosion on any surrounding parts and, depending on findings, the accomplishment of applicable corrective actions. Since the FAA issued AD 2023-26-05, it was determined that some batches of titanium bolts had variations in the microstructure that could affect the fatigue characteristics. This AD requires replacing affected short rudder-trim control rod assemblies with serviceable rudder-trim control rod assemblies having threaded steel bolts and prohibits the installation of affected parts. 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-2025-0208; 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, the mandatory continuing airworthiness information (MCAI), 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 European Union Aviation Safety Agency (EASA) material identified in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); website: [easa.europa.eu](https://easa.europa.eu). You may find this material on the EASA website at [ad.easa.europa.eu](https://ad.easa.europa.eu).

- You may view this material 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](https://www.regulations.gov) under Docket No. FAA-2025-0208.

**FOR FURTHER INFORMATION CONTACT:** Doug Rudolph, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (816) 329-4059; email: [doug.rudolph@faa.gov](mailto:doug.rudolph@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Background**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2023-26-05, Amendment 39-22648 (88 FR 90091, December 29, 2023), (AD 2023-26-05). AD 2023-26-05 applied to certain Pilatus Model PC-24 airplanes. AD 2023-26-05 required periodic replacement of affected titanium threaded bolts, a one-time inspection of the rudder mass balance arm and other elements of the rudder trim tab installation for correct attachment, damage (gouges), cracks, deformation, surface finish, and corrosion on any surrounding parts and, depending on findings, accomplishment of applicable corrective actions. The FAA issued AD 2023-26-05 to address certain batches of titanium bolts having variations in the microstructure that could affect the fatigue characteristics.

If not corrected, the unsafe condition could lead to failure of the titanium threaded bolts with consequent damage to the rudder and rudder trim tab, which could result in loss of rudder control and reduced or loss of control of the airplane. EASA Emergency AD 2023-0219-E identified the affected parts as titanium threaded bolts, part number (P/N) 527.20.24.489, installed on the rudder trim tab short control rods.

The NPRM was published in the *Federal Register* on February 24, 2025 (90 FR 10467). The NPRM was prompted by AD 2024-0181R1, dated September 24, 2024 (EASA AD 2024-0181R1) (also referred to as the MCAI), issued by EASA, which is the Technical Agent for the Member States of the European Union. The MCAI states that the titanium threaded bolts at the forward end of the short rudder trim tab actuating rods may be subject to unexpectedly high oscillating loads due to aerodynamic forces acting on the rudder trim tab. This condition could lead to failure of the bolt and consequent damage to the rudder and rudder trim tab, possibly resulting in loss of rudder control and reduced or

loss of control of the airplane. The MCAI also states that variations in the structures of the replacement titanium bolt batches could affect their fatigue characteristics.

EASA AD 2024-0181R1 retains the actions of EASA Emergency AD 2023-0219-E. EASA AD 2024-0181R1 amends paragraph (1) of EASA Emergency AD 2023-0219-E to clarify the required action and to modify its compliance time.

In the NPRM, the FAA proposed to require replacing affected short rudder-trim control rod assemblies with serviceable rudder-trim control rod assemblies having threaded steel bolts and would prohibit the installation of affected parts, as specified in EASA AD 2024-0181R1. The FAA is issuing this AD to address the unsafe condition on these products.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-0208.

## **Discussion of Final Airworthiness Directive**

### **Comments**

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

### **Conclusion**

These products have been approved by the civil aviation authority of another country and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, that authority has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data, considered any comments received, 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.

## **Material Incorporated by Reference Under 1 CFR Part 51**

The FAA reviewed EASA AD 2024-0181R1, which specifies replacing an affected part, short rudder-trim control rod assembly P/N 527.20.24.464, which has threaded titanium bolts, with a serviceable part, short rudder-trim control rod assembly P/N 527.20.24.069, which has threaded steel bolts. EASA AD 2024-0181R1 prohibits the installation of an affected part on any airplane.

This material 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**

The FAA estimates that this AD affects 120 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

#### **Estimated costs**

| <b>Action</b>  | <b>Labor Cost</b>                    | <b>Parts Cost</b> | <b>Cost per product</b> | <b>Cost on U.S. operators</b> |
|--|--------------------------------------|-------------------|-------------------------|-------------------------------|
| Replacement of affected rudder-trim control rod assemblies | 8 work-hours x \$85 per hour = \$680 | \$288             | \$968                   | \$116,160                     |

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some 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**

The FAA has determined that 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:

a. Removing Airworthiness Directive 2023-26-05, Amendment 39-22648 (88 FR 90091, December 29, 2023); and

b. Adding the following new airworthiness directive:

**2025-10-10 Pilatus Aircraft Ltd.:** Amendment 39-23044; Docket No. FAA-2025-0208; Project Identifier MCAI-2024-00555-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**

This AD replaces AD 2023-26-05, Amendment 39-22648 (88 FR 90091, December 29, 2023) (AD 2023-26-05).

### **(c) Applicability**

This AD applies to Pilatus Aircraft Ltd. Model PC-24 airplanes, certificated in any category, as identified in European Union Aviation Safety Agency (EASA) AD 2024-0181R1, dated September 24, 2024 (EASA AD 2024-0181R1).

### **(d) Subject**

Joint Aircraft System Component (JASC) Code 2721, Rudder Tab Control System.

### **(e) Unsafe Condition**

This AD was prompted by a determination that the titanium threaded bolts installed at the forward end of the short rudder trim tab actuating rods could be subject to unexpectedly high oscillating loads due to aerodynamic forces acting on the rudder trim tab. The FAA is issuing this AD to address the unsafe condition. The unsafe condition, if not addressed, could result in failure of the titanium threaded bolts with consequent

damage to the rudder and rudder trim tab, which could result in loss of rudder control and reduced or loss of control of the airplane.

**(f) Compliance**

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

**(g) Required Actions**

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2024-0181R1.

**(h) Exceptions to EASA AD 2024-0181R1**

(1) Where EASA AD 2024-0181R1 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where EASA AD 2024-0181R1 requires compliance in terms of flight hours, this AD requires using hours time-in-service.

(3) Where paragraph (1) of EASA AD 2024-0181R1 specifies “as required by EASA AD 2023-0219-E”, this AD requires replacing that text with “as required by AD 2023-26-05.”

(4) Where the material identified in EASA AD 2024-0181R1 specifies to “discard” certain parts, this AD requires replacing that text with “remove from service.”

(5) This AD does not adopt the Remarks section of EASA AD 2024-0181R1.

**(i) Alternative Methods of Compliance (AMOCs)**

The Manager, International Validation 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 International Validation Branch, mail it to the address identified in paragraph (j) of this AD and email to: AMOC@faa.gov. If mailing information, also submit information by email. 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. Only Global AMOC letter 731-24-00656, dated July 24, 2024, approved for AD 2023-26-05, is approved as an AMOC for the corresponding provisions of this AD.

**(j) Additional Information**

For more information about this AD, contact Doug Rudolph, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (816) 329-4059; email: [doug.rudolph@faa.gov](mailto:doug.rudolph@faa.gov).

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the material listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this material as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2024-0181R1, dated September 24, 2024.

(ii) [Reserved]

(3) For EASA material identified in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); website: [easa.europa.eu](http://easa.europa.eu). You may find this EASA Emergency AD on the EASA website at [ad.easa.europa.eu](http://ad.easa.europa.eu).

(4) You may view this material 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 material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA,

visit [www.archives.gov/federal-register/cfr/ibr-locations](http://www.archives.gov/federal-register/cfr/ibr-locations) or email

[fr.inspection@nara.gov](mailto:fr.inspection@nara.gov).

Issued on May 22, 2025.

Steven W. Thompson,  
Acting Deputy Director, Compliance & Airworthiness Division,  
Aircraft Certification Service.  
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