

Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 24-102

Issued: 15 August 2024

Note: This Proposed Airworthiness Directive (PAD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name:

PILATUS AIRCRAFT Ltd

Type/Model designation(s):

PC-24 aeroplanes

Effective Date: [TBD - standard: 14 days after AD issue date]

TCDS Number(s): EASA.A.594

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2023-0219-E dated 19 December 2023.

ATA 27 – Flight Controls – Rudder Trim Tab Installation / Threaded Bolts – Replacement

Manufacturer(s):

Pilatus Aircraft Ltd (Pilatus)

Applicability:

Pilatus PC-24 aeroplanes, manufacturers serial numbers (MSN) 101 and up.

Definitions:

For the purpose of this AD, the following definitions apply:

The SB: Pilatus PC-24 Service Bulletin (SB) 27-010.

Affected part: A short rudder-trim control rod assembly having Part Number (P/N) 527.20.24.464.

Serviceable part: A short rudder-trim control rod assembly having P/N 527.20.24.069 .

Groups: Group 1 aeroplanes are those that have an affected part installed.

Group 2 are aeroplane are those that do not have an affected part installed. An aeroplane having

MSN 531 and up is a Group 2 aeroplane, provided that an affected part has not been installed in service on that aeroplane.

Reason:

It has been determined 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, if not corrected, can lead to failure of that bolt with consequent damage to the rudder and rudder trim tab, possibly resulting in loss of rudder control, and reduced or loss of control of the aeroplane.

To address this potential unsafe condition, Pilatus issued SB 27-009 (original issue) and EASA published Emergency AD 2023-0219-E to provide repetitive replacement instructions and a one-time inspection of the threaded titanium bolts, having P/N 527.20.24.489, installed on the rudder trim tab short control rods. That AD was considered an interim action.

Since that AD was issued, also microstructure not conforming to the specification and potentially affecting fatigue characteristics was discovered in some titanium bolt batches. Therefore, it has been determined that the affected parts must be replaced with serviceable parts having threaded steel bolts, which assure an improved fatigue tolerance.. Consequently, Pilatus issued the SB providing the replacement instructions.

For the reason described above, this AD requires the replacement of the affected parts with serviceable parts. This AD also prohibits (re)installation of affected parts.

Required Action(s) and Compliance Time(s):

Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

Replacement:

- (1) For Group 1 aeroplanes: Within 300 flight hours (FH) after first installation on an aeroplane an affected part, or within 300 FH since last replacement as required by EASA AD 2023-0219-E, whichever occurs first, replace each affected part with a serviceable part in accordance with the instructions of the SB (see Note 1 of this AD).

Note 1: If the FH accumulated by an affected part are unknown, the FH accumulated by the aeroplane since first flight may be used instead.

Part(s) Installation:

- (2) For Group 1 and Group 2 aeroplanes: From the effective date of this AD, do not install on any aeroplane an affected part (see Note 2 and Note 3 of this AD).

Note 2: The SB provides instructions to modify and reidentify an affected part into a serviceable part.



Note 3: Removal of an affected part from an aeroplane and subsequent reinstallation of that affected part on the same aeroplane, accomplished during a single maintenance visit, is not considered as 'install' as specified in paragraph (2) of this AD.

Ref. Publications:

Pilatus PC-24 SB 27-010 original issue dated 04 July 2024.

The use of later approved revisions of the above-mentioned document is acceptable for compliance with the requirements of this AD.

Remarks:

1. This Proposed AD will be closed for consultation on 12 September 2024.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, can be reported to the [EU aviation safety reporting system](#). This may include reporting on the same or similar components, other than those covered by the design to which this PAD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
4. For any question concerning the technical content of the requirements in this PAD , please contact: Pilatus Aircraft Ltd, Technical Support, CH-6371 Stans, Switzerland, Telephone: +41 848 24 7 365, E-mail: techsupport.ch@pilatus-aircraft.com Website: www.pilatus-aircraft.com.

