



## Notification of a Proposal to issue an Airworthiness Directive

**PAD No.:** 21-044

**Issued:** 18 March 2021

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-6 aeroplanes

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

**TCDS Number(s):** Switzerland No. F 56-10

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes EASA AD 2011-0230 dated 09 December 2011.

### ATA 27, 55 – Flight Controls / Stabilizers – Aileron, Elevator and Rudder Hinge Bolt Installations – Inspection / Modification

**Manufacturer(s):**

Pilatus Aircraft Ltd. and Fairchild Republic Company, formerly Fairchild Industries, Fairchild Heli Porter and Fairchild-Hiller Corporation

**Applicability:**

PC-6 aeroplanes, all models, all manufacturer serial numbers.

**Definitions:**

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

**The SB:** Pilatus Aircraft PC-6 Service Bulletin (SB) 55-005.

**Affected part:** Aileron, elevator and rudder assemblies with a hinge bolt installation in CONFIG 1 standard, as defined in the SB.

**Serviceable part:** Aileron, elevator and rudder assemblies with a hinge bolt installation in CONFIG 2 standard, as defined in the SB.



**Groups:** Group 1 aeroplanes are those in CONFIG 1 (SB 55-003 and SB 55-005 not embodied). Group 2 aeroplanes are those in CONFIG 2 (SB 55-003 or SB 55-005 embodied).

Note 1: Section 3 (Part 1) of the SB provides instructions to determine, if the aircraft is in CONFIG 1 or CONFIG 2.

**Reason:**

Occurrences were reported where, on certain PC-6 aeroplanes, elevators or rudders were lost or partially detached during flight. All the occurrences happened on PC-6 aeroplanes in CONFIG 1.

This condition, if not corrected, could lead to in-flight failure of the elevator or rudder attachment, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, Pilatus issued SB 55-001 (original issue and Revision 1) to provide rework instructions for the elevator and rudder hinge bolt locking. Consequently, EASA published AD 2011-0230 to require this rework. Subsequently, Pilatus issued recommended SB 55-003 (later revised) to provide instructions to modify the hinge bolt installation of the elevator and rudder. This SB, being recommended only, had no impact on the existing EASA AD.

Since that AD and the recommended Pilatus SB 55-003 were published, the latest risk assessment determined that the modification of the hinge bolt installation of the right-hand (RH) aileron, elevator and rudder installation must be required to reach an acceptable level of safety for the affected aeroplanes. Consequently, Pilatus issued the SB, as defined in this AD, to provide instructions to modify the affected aeroplanes into CONFIG 2 standard.

For the reasons described above, this AD supersedes EASA AD 2011-0230 and requires, for certain aeroplanes, a one-time inspection of the elevator and rudder installation, followed by repetitive inspections of the elevator and rudder, and, depending on findings, accomplishment of applicable corrective action(s). This AD also requires modification of the RH aileron, elevator and rudder hinge bolt installations into CONFIG 2, which is the terminating action for the repetitive inspections required by this AD. Finally, this AD prohibits (re)installation of affected parts.

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

Required as indicated, unless accomplished previously:

**Inspection(s):**

- (1) For Group 1 aeroplanes: Within 14 days after the effective date of this AD, inspect the RH aileron, elevator and rudder hinge bolt installations in accordance with the instructions of section 3 (Part 1) of the SB.
- (2) For Group 1 aeroplanes: Within 100 flight hours (FH) after the inspection as required by paragraph (1) of this AD, and thereafter, at intervals not to exceed 100 FH, inspect the elevator and rudder hinge bolt installations in accordance with the instructions of section 4 (Part 2) of the SB.



**Corrective Action(s):**

- (3) If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, any discrepancy is detected as identified in the SB, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of section 3 (Part 1) or section 4 (Part 2) of the SB, as applicable.

**Modification:**

- (4) For Group 1 aeroplanes: Within 11 months after the effective date of this AD, modify the hinge bolt installations on the elevators, rudder and RH aileron in accordance with the instructions of section 5 (Part 3) of the SB.

**Terminating Action:**

- (5) Accomplishment of corrective action(s) on an aeroplane as required by paragraph (3) of this AD does not constitute terminating action for the repetitive inspections as required by paragraph (2) of this AD for that aeroplane.
- (6) Modification of an aeroplane as required by paragraph (4) of this AD constitutes terminating action for the repetitive inspections as required by paragraph (2) of this AD for that aeroplane.

**Part(s) Installation:**

- (7) Do not install an affected part on an aeroplane as required by paragraph (7.1) or (7.2) of this AD, as applicable.

(7.1) For Group 1 aeroplanes: After modification of the aeroplane as required by paragraph (4) of this AD.

(7.2) For Group 2 aeroplanes: From the effective date of this AD.

**Ref. Publications:**

Pilatus Aircraft PC-6 SB 55-005 original issue dated 25 February 2021.

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 01 April 2021.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto: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, Customer Support General Aviation, CH-6371 Stans, Switzerland, Telephone: +41 848 24 7 365, E-mail: [techsupport.ch@pilatus-aircraft.com](mailto:techsupport.ch@pilatus-aircraft.com), Website: [www.pilatus-aircraft.com](http://www.pilatus-aircraft.com).

