

Airworthiness Directive

Issued: 21 September 2020

Note: This Airworthiness Directive (AD) 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.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name: PILATUS AIRCRAFT Ltd

Type/Model designation(s): PC-24 aeroplanes

Effective Date: 01 October 2020

TCDS Number(s): EASA.A.594

Foreign AD: Not applicable

Supersedure: None

ATA 42 – Integrated Modular Avionics – Utility Management System – Software Update

Manufacturer(s):

Pilatus Aircraft Ltd

Applicability:

PC-24 aeroplanes, all manufacturer serial numbers (MSN).

Definitions:

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

The SB: Pilatus Aircraft PC-24 Service Bulletin (SB) 42-010.

Affected part: Utility Management System (UMS) having a software (SW) version Build 7 standard or earlier SW version installed.

Groups: Group 1 aeroplanes are those that have an affected part installed. Group 2 aeroplanes are those that do not have an affected part installed. An aeroplane having MSN 170 or higher is Group 2, provided no affected part has been installed on that aeroplane since first flight.



Reason:

An occurrence was reported where, during climb phase, a PC-24 aeroplane suffered a dual Ethernet communication channel failure on a dual-channel data concentration and processing unit. This triggered opening of electronic circuit breakers, which resulted in the degradation of environmental control system functionalities, the deployment of all passenger oxygen masks and the autopilot entering in emergency descent mode. Various crew alerting system messages were shown. The functionality of other systems, e.g. flaps, fuel indication and the ice protection system were significantly degraded.

This condition, if not corrected, could reduce the safety margins of the aeroplane and lead to increased pilot workload, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, Pilatus developed UMS SW to Build 7.3 standard and issued the SB to provide installation instructions.

For the reason described above, this AD requires an update of the UMS SW, and prohibits (re-)installation of affected parts.

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

Required as indicated, unless accomplished previously:

SW Update:

(1) For Group 1 aeroplanes: Within 30 days after the effective date of this AD, install the UMS SW Build 7.3 standard in accordance with the instructions of the SB.

Parts Installation:

- (2) Do not install an affected part on any aeroplane, as required by paragraph (2.1) or (2.2) of this AD, as applicable.
 - (2.1) For Group 1 aeroplanes: After UMS SW update as required by paragraph (1) of this AD.
 - (2.2) For Group 2 aeroplanes: From the effective date of this AD.

Ref. Publications:

Pilatus Aircraft PC-24 SB 42-010 original issue dated 21 January 2020.

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

Remarks:

- 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
- 2. This AD was posted on 28 August 2020 as PAD 20-126 for consultation until 11 September 2020. No comments were received during the consultation period.



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- 3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.
- 4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the <u>EU aviation safety</u> reporting system. This may include reporting on the same or similar components, other than those covered by the design to which this AD 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.
- For any question concerning the technical content of the requirements in this AD, please contact: Pilatus Aircraft Ltd, Customer Support General Aviation, CH-6371 Stans, Switzerland Telephone: +41 848 24 7 365, E-mail: <u>techsupport.ch@pilatus-aircraft.com</u>, Website: <u>www.pilatus-aircraft.com</u>.

