EASA PAD No.: 22-126



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 22-126

Issued: 16 September 2022

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: Type/Model designation(s):

PILATUS AIRCRAFT Ltd PC-12 aeroplanes

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

TCDS Number(s): EASA.A.089

Foreign AD: Not applicable

Supersedure: None

ATA 21 – Air Conditioning – Vapour Cycle Cooling System / Compressor Condenser Cables – Inspection / Modification

Manufacturer(s):

Pilatus Aircraft Ltd (Pilatus)

Applicability:

PC-12, PC-12/45, PC-12/47 and PC-12/47E aeroplanes, manufacturer serial number 466, 467, 725, 861, 1032, 1052, 1082, 1115, 1232, 1411, 1428, 1439, 1530, 1541, 1663, 1725 and 1802 inclusive.

Definitions:

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

The SB: Pilatus PC-12 Service Bulletin (SB) 21-016.

Reason:

An occurrence has been reported of burning smell coming from the air conditioning vents during the climb phase of an PC-12/47E aeroplane. Troubleshooting has identified insufficient grounding of the Vapour Cycle Cooling System (VCCS) compressor/condenser at frame 37, resulting in severe heat damage to the baseplate and adjacent metal support structure. It has been determined that



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this condition may occur on aeroplanes equipped in production with large oxygen bottle installation on the right-hand side of the rear fuselage.

This condition, if not detected and corrected, could lead, in case of damage to the oxygen supply line, to an uncontrolled fire and consequent damage to the aeroplane.

To address this potential unsafe condition, Pilatus identified the population of the affected aeroplanes and issued the SB to provide inspection and modification instructions.

For the reason described above, this AD requires a one-time inspection of the power return and chassis grounding cable attachment point at frame 37 and the attachment parts, and the modification of the installation of the VCCS.

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

Required as indicated, unless accomplished previously:

One-Time Inspection:

(1) Within 2 months after the effective date of this AD, inspect the power return and chassis grounding cable attachment points at frame 37, including the attachment parts, in accordance with the instructions of the SB.

Corrective Action(s):

(2) If, during the inspection as required by paragraph (1) of this AD, any discrepancy, as identified in the SB, is detected, before next flight, contact Pilatus for approved corrective actions and accomplish those instructions accordingly.

Modification:

(3) Within 2 months after the effective date of this AD, modify the installation of the VCCS compressor/condenser power return cables and install an additional isolated VCCS chassis ground cable in accordance with the instructions of the SB.

Ref. Publications:

Pilatus PC-12 SB 21-016 original issue dated 15 August 2022.

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 14 October 2022.
- 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 <u>EU aviation</u> <u>safety reporting system</u>. This may include reporting on the same or similar components, other



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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: +41 848 247 365, E-mail: techsupport.ch@pilatus-aircraft.com, Website: www.pilatus-aircraft.com.

