



Airworthiness Directive

AD No.: 2024-0246

Issued: 17 December 2024

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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

PIPISTREL VERTICAL SOLUTIONS d.o.o.

Type/Model designation(s):

Virus SW 121 aeroplanes

Effective Date: 31 December 2024

TCDS Number(s): EASA.A.573

Foreign AD: Not applicable

Supersedure: None

ATA 24 – Electrical Power – Software and Data Recording System – Upgrade

Manufacturer(s):

Pipistrel d.o.o.

Applicability:

Virus SW 128 aeroplanes, serial numbers VSW1280002 to VSW1280117 inclusive.

Definitions:

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

The SB -014: Pipistrel Vertical Solutions d.o.o. (PVS) Service Bulletin (SB) SB-128-00-80-014 Revision A03.

The SB -015: PVS SB SB-128-00-80-015 Revision A00.

The SB -023: PVS SB SB-128-00-80-023 Revision A02.

The SB -999: PVS SB SB-128-00-80-999 Revision A13.

Groups: Group 1 aeroplanes are those that have batteries Part Number (P/N) PB345V124E-L installed. Group 2 aeroplanes are those that have batteries P/N PB345V119E-L installed.



Affected SD card: System controller SD card having P/N 5066471.

Serviceable SD card: System controller SD card having P/N 5611096, or a system controller SD card, which is not an affected SD card, eligible for installation in accordance with approved PVS instructions.

Reason:

An occurrence was reported, where the state of charge (SOC) of the high voltage (HV) battery was indicated incorrectly.

This condition, if not corrected, could lead to the wrong interpretation of the HV battery SOC, possibly resulting in a forced landing with consequent damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, PVS issued the SB -999 providing instructions to update the software configuration, and the SB -023 providing instructions to inspect system controller connectors, to replace the SD card, and to accomplish the HV batteries SOC ground run test.

For the reason described above, this AD requires a software package update, inspection of the system controller connectors, replacement of the affected SD card with the serviceable SD card, and accomplishment of the HV batteries SOC test. This AD also provides conditions for the software and SD card installation.

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:

Software Update:

- (1) For Group 1 aeroplanes: Within 2 months after the effective date of this AD, install software package 13.1 in accordance with the instructions of the SB -999.
- (2) For Group 2 aeroplanes, having SW 14 or 14.1 installed: Within 2 months after the effective date of this AD, modify the aeroplane in accordance with the instructions of the SB -014 and, thereafter, before next flight after that modification, install software package 15.0 in accordance with the instructions of the SB -999.
- (3) For Group 2 aeroplanes having SW 14.2 installed: Within 2 months after the effective date of this AD, install software package 15.0 in accordance with the instructions of the SB -999.

Inspection/SD Card Replacement:

- (4) Before next flight after the software update, as required by paragraph (1), (2) or (3) of this AD, as applicable, inspect the system controller connectors pins in accordance with the instructions of the SB -023.
- (5) If, during the inspection as required by paragraph (4) of this AD, any discrepancy, as defined in the SB -023, is detected, before next flight, contact PVS for approved repair instructions and, within the compliance time specified therein, accomplish those instructions accordingly.



- (6) If, during the inspection as required in paragraph (4) of this AD, no discrepancy, as defined in the SB -023, is detected, before next flight, replace the affected SD card with a serviceable SD card in accordance with the instructions of the SB -023.

HV Batteries SOC Ground Run Test Procedure:

- (7) Before next flight after the SD card replacement, as required by paragraph (6) of this AD, perform the “HV batteries SOC ground run test” procedure in accordance with the instructions of the SB -023. Where the SB provides instructions to contact Pipistrel in case batteries are disbalanced, this AD requires to contact Pipistrel for approved instructions and accomplishment of those instructions before next flight.

Software Installation:

- (8) From the effective date of this AD, do not install software package 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 14.1 or 14.2 on any aeroplane.

SD Card Installation:

- (9) Following the modification as required by paragraph (6) of this AD, it is allowed to install a system controller SD card on any aeroplane, provided it is a serviceable SD card, as defined in this AD.

Additional Requirements:

- (10) For Group 1 aeroplanes: From the effective date of this AD, it is allowed to modify an aeroplane into a Group 2 aeroplane in accordance with the approved PVS instructions, provided that, before next flight after that modification, that aeroplane is modified in accordance with the instruction of SB -015 and SB -014 and, thereafter, before next flight, the actions as required by paragraphs (2) to (6) of this AD, as applicable, are accomplished on that aeroplane.

Ref. Publications:

PVS SB SB-128-00-80-014 Revision A03 dated 25 May 2022.

PVS SB SB-128-00-80-015 Revision A00 dated 05 May 2022.

PVS SB SB-128-00-80-023 Revision A02 dated 29 November 2024.

PVS SB SB-128-00-80-999 Revision A13 dated 27 November 2024.

The use of later approved revisions of the above-mentioned documents 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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication. All interested persons may send their comments, referencing the AD Number, to the E-mail address specified in below Remark 3, prior to 14 January 2025. Only if any comment is received



during the consultation period, a Comment Response Document will be published in the [EASA Safety Publications Tool](#), in a compressed ('zipped') file, attached to the record for this AD.

3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
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 [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 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.
5. For any question concerning the technical content of the requirements in this AD, please contact: Pipistrel Vertical Solutions d.o.o. Vipavska cesta 2, 5270 Ajdovščina, Slovenia; E-mail: maintenance@pipistrel.si.

