

Airworthiness Directive

Issued: 04 March 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:

PIPISTREL VERTICAL SOLUTIONS d.o.o.

Type/Model designation(s): Virus SW 121 aeroplanes

| Effective Date: | 18 March 2020 |
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| TCDS Number(s): | EASA.A.573 |
| Foreign AD: | Not applicable |
| Supersedure: | This AD supersedes EASA AD 2018-0281 dated 18 December 2018. |
| | |

ATA 28 – Fuel – Fuel Pressure Sensor – Inspection / Replacement

Manufacturer(s):

Pipistrel d.o.o.

Applicability:

Virus SW 121 aeroplanes, serial numbers (s/n) VSW1210001 to VSW1210041 inclusive.

Definitions:

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

The SB: Pipistrel Vertical Solutions d.o.o. (PVS) Service Bulletin (SB) SB-121-00-80-009 issue A01.

Affected part: Fuel distribution block, Rotax Part Number (P/N) 851328.

Serviceable part: Affected parts which are new (never installed).

Groups: Group 1 aeroplanes are s/n VSW1210001 to VSW1210038 inclusive. Group 2 aeroplanes are s/n VSW1210039 to VSW1210041 inclusive.

Reason:

Several occurrences were reported of damage and leakage of the fuel distribution block between the fuel pressure sensor and the rest of the fuel system. The related technical investigation



concluded that the leakage was the consequence of an incorrect design for the installation of the sensor. The results of the subsequent investigations determined that the crack may develop following removal and re-installation, e.g. during maintenance.

This condition, if not detected and corrected, could lead to leakage of fuel, possibly resulting in an in-flight fire.

To address this potential unsafe condition, PVS issued SB SB-121-00-80-009 original issue (A00) to provide instructions to inspect the fuel pressure sensor and distribution block, and to modify the installation by inserting an adapter. Consequently, EASA issued AD 2018-0281 to require repetitive inspections of the affected part, as defined in this AD, and, depending on findings, replacement and modification of the installation. That AD also required a temporary amendment of the applicable Airplane Flight Manual (AFM), which is the PVS Pilot Operating Handbook (POH), to introduce post-flight checks for signs of fuel leakage, pending modification.

Since that AD was issued, PVS issued the SB, as defined in this AD, to cover additional s/n aeroplanes.

For the reason described above, this AD retains the requirements of EASA AD 2018-0281, which is superseded, and expands the Applicability.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- For Group 1 aeroplanes: Within 14 days after 25 December 2018 [the effective date of EASA AD 2018-0281], visually inspect the affected part for signs of damage or leakage in accordance with the instructions of Part 1 of the SB.
- (2) For Group 2 aeroplanes: Within 14 days after the effective date of this AD, visually inspect the affected part for signs of damage or leakage in accordance with the instructions of Part 1 of the SB.
- (3) Concurrent with the inspection as required by paragraph (1) or (2) of this AD, as applicable, amend the applicable AFM/POH by inserting SPOH-121-00-41-002_A00 Supplement 2, inform all pilots, and, thereafter, inspect the aeroplane accordingly.

Corrective Action(s):

(4) If, during the inspection as required by paragraph (1) or (2) of this AD, or during any post-flight check as required by paragraph (3) of this AD, as applicable, any damage or leakage is found, before next flight, replace the affected part with a serviceable part, as defined in this AD, and modify the installation in accordance with the instructions of Part 3 of the SB.

Modification:

(5) For Group 1 aeroplanes: Unless accomplished as required by paragraph (4) of this AD, within the next 25 flights (as defined in the SB) or 2 months, whichever occurs first after 25 December 2018 [the effective date of EASA AD 2018-0281], replace the affected part with a serviceable



part, as defined in this AD, and modify the installation in accordance with the instructions of Part 3 of the SB.

(6) For Group 2 aeroplanes: Unless accomplished as required by paragraph (4) of this AD, within the next 25 flights (as defined in the SB) or 2 months, whichever occurs first after the effective date of this AD, replace the affected part with a serviceable part, as defined in this AD, and modify the installation in accordance with the instructions of Part 3 of the SB.

Terminating Action:

(7) Modification of an aeroplane as required by paragraph (4), (5) or (6) of this AD, as applicable, constitutes terminating action for the post-flight checks as required by paragraph (3) of this AD for that aeroplane. After modification, the temporary amendment of the AFM/POH as required by paragraph (3) of this AD may be removed from that aeroplane.

Credit:

(8) Accomplishment on an aeroplane of an inspection and replacement, before the effective date of this AD in accordance with the instructions of PVS SB SB-121-00-80-009 at original issue, is acceptable to comply with the requirements of paragraphs (1), (4) and (5) of this AD for that aeroplane.

Parts Installation:

- (9) After modification of an aeroplane as required by paragraph (4), (5) or (6) of this AD, as applicable, installation of an affected part is allowed, provided that it is a serviceable part, as defined in this AD, and that installation is accomplished in accordance with the instructions of Part 3 of the SB, as required by paragraph (9.1) or (9.2) of this AD, as applicable.
 - (9.1) For Group 1 aeroplanes: After 25 December 2018 [the effective date of the EASA AD 2018-0281].
 - (9.2) For Group 2 aeroplanes: From the effective date of this AD.

Ref. Publications:

PVS SB-121-00-80-009 original issue (A00) dated 13 December 2018, and issue A01 dated 24 February 2020.

PVS AFM/POH SPOH-121-00-41-002_A00 Supplement 2 dated 13 December 2018.

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.



- 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> <u>reporting system</u>.
- 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: <u>maintenance@pipistrel.si</u>.

