



EASA Safety Information Bulletin

SIB No.: 2012-05
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Subject: Water freezing in Pitot lines

Ref. Publication: Piaggio Aero Industries (PAI) Service Bulletin (SB) 80-0326, Rev. 1, dated 05 December 2011.

Applicability: PAI P.180 aeroplanes, all serial numbers (S/N).

Description: Several cases of water accumulation and subsequent freezing in pitot lines have been reported by operators, resulting in airspeed indication mismatch between the pilot and co-pilot instruments, and in some cases resulting in total loss of air data computer (ADC) airspeed information on primary and standby instruments.

Heavy rain during climb after take-off is a probable cause of water accumulation in pitot lines.

Contributing factors could be:

- pressure washing without covers on pitot probes;
- not using covers on pitot probes while the aeroplane is on ground, allowing dirt and water penetration in the pitot line;
- incorrect cleaning of the lines when required;
- insufficient slope of pitot lines from the probes to the ADCs; this can help water penetration in the lines during climb and slow down the draining from pitot probes drain holes.

Freezing of accumulated water, which causes loss of corresponding airspeed information, happens when reaching high altitude.

After descending to non-freezing altitudes, correct airspeed information is usually displayed again on affected side(s).

PAI determined that pitot lines, especially the one on the pilot side, have insufficient slope, and designed for Avanti II models new lines with a better slope (Modification N. 80-1018), which is addressed in SB 80-0326 Rev. 1.

PAI is currently working on a similar change for the Avanti model.

Recommendations: At the present time, the airworthiness concern described in this SIB is not considered to be an unsafe condition that would warrant Airworthiness Directive (AD) action under EC 1702/2003, Part 21A.3B.

EASA recommends operators of the PAI P.180 Avanti II model to accomplish PAI SB 80-0326 Rev.1 at the earliest opportunity, preferably within 1 500 flight hours (FH) or 2 years from the issue date of the above-referenced SB.

EASA also recommends all operators of both P.180 Avanti and Avanti II models:

- do not pressure wash aeroplanes without installing protective covers on pitot probes;
- always install protective covers on pitot probes when the aeroplane is parked;
- ascertain that proper cleaning of pitot lines is performed whenever required and executed in accordance with instructions of the Maintenance Manual.

Contact:

For further information contact the Safety Information Section, Executive Directorate, EASA. E-mail: ADs@easa.europa.eu.

For a copy of the referenced SB, or for technical assistance, please contact:

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