



## Airworthiness Directive

**AD No.:** 2019-0144

**Issued:** 19 June 2019

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:

PIAGGIO AVIATION S.p.A.

### Type/Model designation(s):

P.180 Avanti and Avanti II aeroplanes

**Effective Date:** 03 July 2019

**TCDS Number(s):** EASA.A.059

**Foreign AD:** Not applicable

**Supersedure:** None

### ATA – Aircraft Flight Manual – Amendment

### ATA 30 – Ice and Rain Protection – Total Air Temperature Probe Heater / Electrical Circuit – Modification

#### Manufacturer(s):

Piaggio Aero Industries S.p.A. (PAI)

#### Applicability:

Piaggio P.180 Avanti and Avanti II aeroplanes, all manufacturer serial numbers (MSN).

#### Definitions:

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

#### Groups:

Group 1 aeroplanes are P.180 Avanti aeroplanes, MSN from 1004 through 1104 inclusive.

Group 2 aeroplanes are P.180 Avanti II aeroplanes with SAFRAN Landing Systems landing gear installed, except those on which PAI modification (mod) 80-1312 (Total Air Temperature (TAT) heater inhibition on ground) has been embodied in production. These aeroplanes are known to include MSN 1105 through 3002 inclusive, except MSN on which PAI Service Bulletin (SB) 80-0425 or SB 80-0454 has been embodied in service.

Group 3 aeroplanes are P.180 Avanti II aeroplanes equipped with Magnaghi landing gear, except those on which PAI mod 80-1283 (TAT heater inhibition on ground) has been embodied in



production. These aeroplanes are known to include MSN 1002, 3001, 3003, 3004, 3006 and 3007, and each MSN on which Piaggio SB 80-0425 or SB 80-0454 has been embodied.

Group 4 aeroplanes are P.180 Avanti II aeroplanes on which PAI mod 80-1283 or mod 80-1312 (TAT heater inhibition on ground) has been embodied. These aeroplanes are known to include MSN 3005, 3008 and later.

**The applicable SB:** Piaggio P.180 Avanti II SB 80-0430 Revision 1 (for Group 3 aeroplanes) and P.180 Avanti II SB 80-0457 original issue (for Group 2 aeroplanes), as applicable.

**The applicable AFM TC:** Piaggio P.180 Avanti Aircraft Flight Manual (AFM) Temporary Change (TC) No. 36 and P.180 Avanti II AFM TC No. 79.

#### Reason:

Occurrences of pitot-tube blockage were reported, leading to in-flight air data loss. Investigation results indicated that accumulation of water and subsequent freezing was the failure cause.

This condition, if not corrected, could lead to unreliable indication or loss of in-flight air data provided by systems deriving their data from measuring air pressure, possibly resulting in loss of control of the aeroplane.

To address this potentially unsafe condition, Piaggio issued the applicable AFM TC, providing instructions to switch on pitot-tube heater before taxi if operation in heavy rain, snow or icing condition is expected. To prevent concurrent activation of TAT probe heater on ground, which could lead to temporary air data indications failure, Piaggio issued the applicable SBs, providing modification instructions to inhibit on-ground power supply to TAT probe heater, when the pitot-tube heater is activated.

For the reasons described above, this AD requires amendment of the applicable AFM and, for certain aeroplanes, modification of the TAT probe heater electrical circuit.

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

Required as indicated, unless accomplished previously:

#### AFM Amendment:

- (1) For all aeroplanes: Within 30 days after the effective date of this AD, amend the applicable AFM by inserting a copy of the applicable AFM TC, inform all flight crews, and, thereafter, operate the aeroplane accordingly.
- (2) Amending the applicable AFM by incorporating a later AFM revision which includes the instructions of the applicable AFM TC is an acceptable method to comply with the requirements of paragraph (1) of this AD for that aeroplane.

#### Modification:

- (3) For Group 2 and Group 3 aeroplanes: Within 660 flight hours or 24 months, whichever occurs first after the effective date of this AD, modify the TAT probe heater electrical circuit in accordance with the instructions of the applicable SB.



**Credit:**

- (4) Modification of a Group 3 aeroplane, accomplished before the effective date of this AD in accordance with the instructions of the original issue of Piaggio P.180 SB 80-0430 is an acceptable method to comply with the requirements of paragraph (3) of this AD for that aeroplane.

**Ref. Publications:**

Piaggio P.180 AFM TC No. 36 dated 11 April 2019 to the P.180 Avanti Pilot's Operating Handbook and AFM (Report 6591).

Piaggio P.180 AFM TC No. 79 dated 17 September 2018 to P.180 Avanti II AFM (Report 180-MAN-0010-01100).

Piaggio P.180 Avanti II SB 80-0430 original issue dated 10 August 2017, or Revision 1 dated 30 April 2019.

Piaggio P.180 Avanti II SB 80-0457 original issue dated 30 April 2019.

Piaggio P.180 Avanti II SB 80-0425 original issue dated 30 May 2017, or Revision 1 dated 15 December 2017, or Revision 2 dated 04 June 2018.

Piaggio P.180 Avanti II SB 80-0454 original issue dated 06 March 2017.

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. This AD was posted on 06 May 2019 as PAD 19-077 for consultation until 06 June 2019. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto: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](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: Piaggio Aero Industries, P180 Customer Support, Via Pionieri e Aviatori d'Italia 2, 16154 Genoa, Italy, Fax: + 39 010 099 8400, E-mail: [technicalsupport@piaggioaerospace.it](mailto:technicalsupport@piaggioaerospace.it).

