



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 19-181

Issued: 27 September 2019

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:

PIAGGIO AVIATION S.p.A.

Type/Model designation:

P.180 Avanti II aeroplanes

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

TCDS Number(s): EASA.A.059

Foreign AD: Not applicable

Supersedure: None

ATA – Aircraft Flight Manual – Amendment

ATA 34 – Navigation – Flight Environment Data / Altimetry System for RVSM Operations – Modification

Manufacturer:

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

Applicability:

Piaggio P.180 Avanti II aeroplanes, manufacturer serial number (MSN) 1002 and MSN 1105 to 3010 inclusive.

Definitions:

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

The SB: Piaggio P.180 Avanti II Service Bulletin (SB) 80-0467.

The AFM TC: Piaggio P.180 Avanti II Aircraft Flight Manual (AFM) Temporary Change (TC) No 107.

Improved part: Air Data Computers (ADC), having Part Number (P/N) 822-1109-144, and Detachable Configuration Modules, having P/N 501-1870-188.



Reason:

During monitoring of P.180 Avanti II fleet by EUROCONTROL (checks performed by Air Traffic Control stations) a mean altimetry system error and some singular measurement exceedances were reported being outside of limits defined by rules applicable to Reduced Vertical Separation Minimum (RVSM) airworthiness standards. Subsequent investigation determined that the static source error correction curves embedded in the ADC of pilot and co-pilot, as well as in the stand-by instrument system, did not ensure the required RVSM performance of the aeroplane.

This condition, if not corrected, could lead to delivery erroneous air data information and consequent impairment of aeroplane altitude-keeping capability, possibly resulting in a mid-air collision within RVSM airspace.

To address this potential unsafe condition, Piaggio issued the AFM TC introducing additional limitations for operation within RVSM airspace and issued the SB providing instructions to modify the aeroplane.

For the reasons described above, this AD requires amendment of the AFM and modification of the aeroplane by installing improved ADCs and DCM.

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

Required as indicated, unless accomplished previously:

AFM Amendment:

- (1) Within 24 months 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 AFM TC, is an acceptable method to comply with the requirements of paragraph (1) of this AD for that aeroplane.

Modification:

- (3) Within 660 FH or 24 months, whichever occurs first after the effective date of this AD, modify the aeroplane by installing improved parts, as defined in this AD, thereby replacing the currently-installed ADC and DCM, in accordance with the instructions of the SB.
- (4) After modification of an aeroplane as required by paragraph (3) of this AD, the AFM amendment, as required by paragraph (1) of this AD, can be removed from the AFM of that aeroplane.

Part Installation:

- (5) After modification of an aeroplane as required by paragraph (3) of this AD, it is allowed to install on any aeroplane an ADC or DCM, provided that the part is an improved part, as defined in this AD.



Ref. Publications:

Piaggio AFM TC No 107 original issue dated 17 September 2019, to the P.180 Avanti II AFM (Piaggio Report 180-MAN-0010-01100).

Piaggio P.180 Avanti II SB 80-0467 original issue dated 31 May 2019.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. This Proposed AD will be closed for consultation on 25 October 2019.
2. Enquiries regarding this PAD should be referred to the EASA Programming and Continued Airworthiness 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 [EU aviation safety reporting system](#).
4. For any question concerning the technical content of the requirements in this PAD, 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.

