



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 23-136

Issued: 30 November 2023

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(s):

P.180 aeroplanes

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

TCDS Number(s): EASA.A.059

Foreign AD: Not applicable

Supersedure: None

ATA 57 – Main Wing – Lower Skin External Reinforcement Doublers – Inspection

Manufacturer(s):

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

Applicability:

P.180 Avanti and Avanti II aeroplanes, manufacturer serial numbers 1032, 1036, 1037, 1039, 1040, 1043, 1063, 1065, 1074, 1079, 1089, 1106, 1108 and 1112.

Definitions:

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

Affected parts: Main wing lower skin external reinforcement doublers, having Part Number (P/N) 80-212457-001 (left-hand) or P/N 80-212457-002 (right-hand).

The SB: PAI Service Bulletin (SB) 80-0494.

Groups: Group 1 aeroplanes are those on which, on the effective date of this AD, PAI SB 80-0482 is not embodied, but on which, before the effective date of this AD, PAI SB 80-0482 has been embodied and later removed.



Group 2 aeroplanes are those on which, on the effective date of this AD, PAI SB 80-0482 is embodied.

Group 3 aeroplanes are those on which, on the effective date of this AD, PAI SB 80-0482 has never been embodied.

The HFEC inspection: High Frequency Eddy Current (HFEC) of the affected parts of an aeroplane in accordance with the instructions of section 2 of the SB.

Repairable corrosion: Corrosion, identified as “repairable” in PAI Structural Repair Manual (SRM) 180-MAN-0250-1106, chapter 51-10-40, except corrosion around the heads of the attaching fasteners of affected parts.

Reason:

An occurrence was reported where, during scheduled maintenance of an aeroplane, corrosion and cracks were found around the head of attaching fasteners on affected parts. Relevant investigations determined that stress-corrosion may develop on affected parts of aeroplanes on which PAI SB 80-0482 has been embodied to allow operations with increased maximum zero fuel weight.

This condition, if not detected and corrected, could reduce the structural integrity of the main wing.

To address this potential unsafe condition, PAI issued the SB, as defined in this AD, providing instructions for inspections of the affected parts.

For the reason described above, this AD requires repetitive HFEC inspections and, depending on findings, accomplishment of corrective action.

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

Required as indicated, unless accomplished previously:

Inspections:

- (1) For Group 1 and Group 2 aeroplanes: Before exceeding the compliance time and, thereafter, at intervals not to exceed the values as defined in Table 1 of this AD, as applicable, accomplish an HFEC inspection, as defined in this AD.

Table 1 – Repetitive HFEC Inspections

Group	Compliance Time	Interval
1	Within 1 900 flight hours (FH) or 46 months after the effective date of this AD.	1 900 FH or 50 months, whichever occurs first.
2	A or B, whichever occurs later A) Within 220 FH or 9 months after the effective date of this AD, whichever occurs first. B) Within 660 FH or 25 months since first embodiment of PAI SB 80-0482, whichever occurs first.	660 FH or 25 months, whichever occurs first.



Corrective Action(s):

- (2) If, during any inspection as required by paragraph (1) of this AD, repairable corrosion, as defined in this AD, is detected on an aeroplane, before next flight, accomplish a repair in accordance with the instructions of the SB.
- (3) If, during any inspection as required by paragraph (1) of this AD, any discrepancy, other than repairable corrosion, is detected on an aeroplane, before next flight, contact PAI for approved repair instructions and, within the compliance time defined therein, accomplish that repair accordingly, including any post-repair follow-on action(s), as applicable.

Terminating Action:

- (4) Accomplishment of corrective actions on an aeroplane, as required by paragraph (2) or (3) of this AD, as applicable, does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD for that aeroplane, unless otherwise specified in the approved repair instructions.

Additional Instructions:

- (5) For Group 1 aeroplanes: From the effective date of this AD, it is allowed to embody PAI SB 80-0482 on an aeroplane, provided that, before next flight after that modification, an HFEC inspection, as defined in this AD, and, depending on findings, corrective action(s) as required by paragraph (2) or (3) of this AD, as applicable, are accomplished on that aeroplane. After that modification, the aeroplane is effectively considered to be a Group 2, and HFEC inspections must be accomplished on that aeroplane as required by this AD for Group 2 aeroplanes.
- (6) For Group 2 aeroplanes: From the effective date of this AD, following removal of PAI SB 80-0482 from an aeroplane, that aeroplane is effectively considered to be a Group 1 aeroplane and HFEC inspections must be accomplished on that aeroplane as required by this AD for Group 1 aeroplanes.
- (7) For Group 3 aeroplanes: From the effective date of this AD, it is allowed to embody PAI SB 80-0482 on an aeroplane, provided that, within 660 FH or 25 months after that modification, an HFEC inspection, as defined in this AD, and, depending on findings, corrective action(s) as required by paragraph (2) or (3) of this AD, as applicable, are accomplished on that aeroplane. After that modification, the aeroplane is effectively considered to be a Group 2, and HFEC inspections must be accomplished on that aeroplane as required by this AD for Group 2 aeroplanes.

Ref. Publications:

PAI SB 80-0494 original issue dated 05 July 2023, or revision 1 dated 30 November 2023.

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

Remarks:

- 1. This Proposed AD will be closed for consultation on 02 January 2024.



2. Enquiries regarding this PAD should be referred to the EASA Safety 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](#). This may include reporting on the same or similar components, other than those covered by the design to which this PAD 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.
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; E-mail: technicalsupport@piaggioaerospace.it, or Telephone: + 39 331 679 7493.

