Airworthiness Directive

AD No.: 2023-0126

Issued: 23 June 2023

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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:
SONACA AIRCRAFT S.A.

Type/Model designation(s):
S2 aeroplanes

Effective Date: 07 July 2023

TCDS Number(s): EASA.A.626

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2023-0050 dated 09 March 2023.

ATA 24 – Electrical Power – Equipment Power Distribution / Main Power Supply Wiring – Inspection

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Manufacturer(s):
Sonaca Aircraft S.A.

Applicability:
Sonaca S200 and S201 aeroplanes, all manufacturer serial numbers.

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

The SB: Sonaca Aircraft Service Bulletin (SB) SB-SONAIR-S2-033 Revision C.

Reason:
An occurrence was reported where, during an aeroplane troubleshooting inspection, a manufacturing / installation deviation was identified, concerning the equipment power distribution and the main power supply wiring beside the cockpit panel, that had caused damage / chafing to the affected wiring.

This condition, if not detected and corrected, could lead to loss of power supply for certain equipment and/or electrical short circuit(s), possibly resulting in an electrical fire in the cockpit and loss of control of the aeroplane.

To address this potential unsafe condition, Sonaca Aircraft issued SB-SONAIR-S2-033 (original issue, Revision A) to provide inspection and repair instructions for the affected equipment power distribution and the main power supply wiring behind the instrument panel. Consequently, EASA issued AD 2023-0050 to require a one-time inspection of the affected wiring behind the instrument panel in the cockpit and, depending on findings, accomplishment of applicable corrective action(s).

Since that AD was issued, a new occurrence was reported where, during unscheduled maintenance, additional damage / chafing of wiring, including the main fuel pump wiring, was found, behind the circuit board panel in the cockpit. Further investigation determined that this was probably also caused by a manufacturing / installation deviation of the affected wiring, which had not been identified before, and that possibly also other aircraft in service could be affected. Consequently, Sonaca Aircraft issued the SB, as defined in this AD, expanding the areas to be inspected for damage / chafing of wiring and the applicable corrective action(s) to be accomplished.

For the reason described above, this AD retains the requirements of EASA AD 2023-0050, which is superseded, and adds a one-time inspection of certain wiring in the areas behind the instrument and the circuit board panels in the cockpit and, depending on findings, accomplishment of applicable corrective action(s).

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

Required as indicated, unless accomplished previously:

Inspection(s):

(1) Within 25 flight hours (FH) after 16 March 2023 [the effective date of EASA AD 2023-0050], inspect the equipment power distribution wiring and main power supply wiring behind the instrument panel in the cockpit, as specified in the points 1, 2, 6, 7 and 8 of section 4.2 of the SB, in accordance with the instructions of the SB.

(2) Within 25 FH after the effective date of this AD, inspect the wiring behind the instrument panel and the circuit board panel in the cockpit, as specified in the points 3, 4, 5 and 9 of section 4.2 of the SB, in accordance with the instructions of the SB.

Corrective Action(s):

(3) If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, any discrepancy is detected as defined in the SB, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the SB.

Credit:

(4) Inspections and corrective action(s) on an aeroplane, accomplished before the effective date of this AD in accordance with the instructions of Sonaca Aircraft SB SB-SONAIR-S2-033 Revision A (original issue) or Revision B, are acceptable to comply with the corresponding requirements of paragraphs (1), (2) and (3) of this AD for that aeroplane.

Ref. Publications:

Sonaca Aircraft SB SB-SONAIR-S2-033 Revision A (original issue) dated 14 February 2023, Revision B dated 06 April 2023 and Revision C dated 21 June 2023.

The use of later approved revisions of the above-mentioned document 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 Safety Information Section, Certification Directorate. E-mail: 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. This may include reporting on the same or similar components, other than those covered by the design to which this AD 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.

5. For any question concerning the technical content of the requirements in this AD, please contact: Sonaca Aircraft S.A., Telephone: +32 81 90 00 01, or E-mail: occurrences@sonaca.aircraft.com or support@sonaca-aircraft.com.