



## Airworthiness Directive

**AD No.:** 2022-0164

**Issued:** 09 August 2022

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:** 23 August 2022

**TCDS Number(s):** EASA.A.626

**Foreign AD:** Not applicable

**Supersedure:** None

### ATA 71 – Power Plant – Engine Mount Bolts – Inspection

### ATA 53 – Fuselage – Centre Fuselage Main Spar Bolts – Inspection

### Manufacturer(s):

Sonaca Aircraft S.A.

### Applicability:

Sonaca S200 and S201 aeroplanes, manufacturer serial numbers (MSN) 015, MSN 039, MSN 043 to 049 inclusive, and MSN 051.

### Definitions:

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

**The SB:** Sonaca Aircraft Service Bulletin (SB) SB-SONAIR-S2-029.

**Affected part:** Engine mount bolts, having Part Number (P/N) AN5-6A, and centre fuselage main spar bolts, having P/N MS21250H06.

### Reason:

An occurrence was reported where a torque wrench, used on the final assembly line, was found to have been wrongly calibrated during its last shop visit. Further investigation revealed that, on a limited number of aeroplanes manufactured, overhauled or repaired by Sonaca Aircraft, a too low



(incorrect) torque value may have been applied to the (six) main bolts of the engine mount, as well as to the (sixteen) centre fuselage main spar bolts.

This condition, if not detected and corrected, could lead to structural damage of the affected parts and/or the structural areas where the affected parts are installed, with consequent loss of fixation of the engine suspension and reduced structural integrity, possibly resulting in loss of control of the aeroplane.

To address this potential unsafe condition, Sonaca Aircraft published the SB, providing instructions to check the torque values of all affected parts.

For the reasons described above, this AD requires a one-time inspection of the affected parts, as defined in this AD, and, depending on findings, accomplishment of applicable corrective action(s).

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

Required as indicated, unless accomplished previously:

#### **Inspections:**

- (1) Within 70 flight hours (FH) or 60 days, whichever occurs first after the effective date of this AD, inspect (verify) the torque value of the affected engine mount bolts (quantity: 6) in accordance with the instructions of the SB.
- (2) For MSN 051 (only): Within 70 FH or 60 days, whichever occurs first after the effective date of this AD, inspect (verify) the torque value of the affected fuselage main spar bolts (quantity: 16) in accordance with the instructions of the SB.

#### **Corrective Action(s):**

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

#### **Ref. Publications:**

Sonaca Aircraft SB SB-SONAIR-S2-029 Revision A (original issue) dated 20 July 2022.

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](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](#). 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;  
E-mail: [occurrences@sonaca.aircraft.com](mailto:occurrences@sonaca.aircraft.com) or [support@sonaca-aircraft.com](mailto:support@sonaca-aircraft.com).

