



## Airworthiness Directive

**AD No.:** 2019-0170R1

**Issued:** 15 May 2020

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:

AIRBUS

### Type/Model designation(s):

A380 aeroplanes

**Effective Date:** Revision 1: 22 May 2020  
Original issue: 31 July 2019

**TCDS Number(s):** EASA.A.110

**Foreign AD:** Not applicable

**Revision:** This AD revises EASA AD 2019-0170 dated 17 July 2019.

## ATA 53 – Fuselage – Belly Fairing Panel Support Structure – Inspection

### Manufacturer(s):

Airbus

### Applicability:

Airbus A380-841, A380-842 and A380-861 aeroplanes, all manufacturer serial numbers, except those on which Airbus modification (mod) 75498 or mod 77715 has been embodied in production.

### Definitions:

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

**The SB:** Airbus Service Bulletin (SB) A380-53-8163.

**The applicable modification SB:** Airbus SB A380-53-8166 and SB A380-53-8170, as applicable.

**Affected part:** Forward (FWD) belly fairing (BF) structure profiles, on frame (FR) 40 and Stringer (STGR) 1, as applicable.

**Affected SRM repair tasks:** A380 Structural Repair Manual (SRM), task 53-35-20-283-801-A01, task 53-35-20-283-801-C01, task 53-35-20-308-801-B01, task 53-35-20-308-802-B01, task 53-35-20-308-803-A01 and task 53-35-20-308-803-B01, which are no longer valid.



**Approved SRM repair:** Repairs provided in the A380 SRM, Chapter 53-35-20 at Revision 56, dated June 2018 (or later).

**Reason:**

During scheduled routine in-service maintenance on an A380 aeroplane, corrosion was detected on the FWD BF structure profiles, on FR 40 and STGR 1. Further investigation identified that the corrosion was due to condensation of water vapour and, probably, due to water ingress through the panel gaps in the affected area. Even after adding drainage holes in the BF panels located near FR 40, the corrosion phenomenon can still develop. In addition, deficiencies were detected in the affected SRM repair tasks which cover the whole BF in case of corrosion, in the feet area of the structure.

This condition, if not detected and corrected, could affect the structural integrity of the aeroplane.

To address this potential unsafe condition, Airbus issued the SB to provide instructions to inspect the affected parts. Airbus also developed production mod 75498 and mod 77715, installing titanium parts to solve the corrosion issue. In addition, the SRM was revised to replace the affected SRM repair tasks and provide new approved SRM repairs to ensure proper repairs in future.

For the reasons described above, EASA issued AD 2019-0170 to require repetitive detailed inspections (DET) of each affected part and, depending on findings, accomplishment of applicable corrective action(s). That AD also prohibited the use of an affected SRM repair tasks.

Since that AD was issued, Airbus published the applicable modification SB, providing the necessary instructions for in-service modification.

This AD is revised accordingly, introducing the applicable modification SB as optional terminating action for the repetitive DET as required by this AD.

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

Required as indicated, unless accomplished previously:

**Inspection(s):**

- (1) Within the compliance time defined in Table 1 of this AD, as applicable, and, thereafter, at intervals not to exceed 24 months, accomplish a DET of each affected part in accordance with the instructions of the SB.

Note 1: Airbus A380 Aircraft Maintenance Manual (AMM) task 05-21-90-210-801-A is the subject of Maintenance Planning Document (MPD) reference 052190-210-801, MPD task ZL-191-00001-01.

Table 1 – Inspection Threshold (see Note 1 of this AD)

<b>Compliance Time</b> (whichever occurs later, <b>A</b> or <b>B</b> )	
<b>A</b>	Within 24 months after aeroplane first flight, or after last accomplishment of AMM task 05-21-90-210-801-A, as applicable
<b>B</b>	Within 6 months after 31 July 2019 [the effective date of the original issue of this AD]



**Corrective Action(s):**

- (2) If, during any DET as required by paragraph (1) of this AD, corrosion is found that is within the repair criteria as specified in the applicable approved SRM repair, as defined in this AD, before next flight, repair the affected part(s) in accordance with the instructions of the applicable approved SRM repair, or replace each corroded FR40 or STGR1, as applicable, in accordance with the instructions of the SB.
- (3) If, during any DET as required by paragraph (1) of this AD, corrosion is found that is outside the repair criteria as specified in the applicable approved SRM repair, as defined in this AD, before next flight, contact Airbus for approved corrective action instructions and accomplish those instructions accordingly, or replace each corroded FR40 or STGR1, as applicable, in accordance with the instructions of the SB.

**Terminating action:**

- (4) Replacement or repair of affected parts on an aeroplane as required by paragraph (2) or (3) of this AD, as applicable, does not constitute terminating action for the repetitive DET as required by paragraph (1) of this AD for that aeroplane.

Modification of an aeroplane in accordance with the applicable modification SB constitutes terminating action for the repetitive DET as required by paragraph (1) of this AD for that aeroplane.

**SRM Limitation:**

- (5) From 31 July 2019 [the effective date of the original issue of this AD], do not accomplish an affected SRM repair task, as defined in this AD.

**Ref. Publications:**

Airbus SB A380-53-8163 original issue dated 28 January 2019.

Airbus SB A380-53-8166 original issue dated 01 July 2019.

Airbus SB A380-53-8170 original issue dated 30 April 2020.

Airbus A380 SRM, Chapter 53-35-20 at Revision 56, dated June 2018.

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. The original issue of this AD was posted on 27 May 2019 as PAD 19-095 for consultation until 24 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: AIRBUS SAS – IIANA (Airworthiness Office), Telephone: +33 562 110 253, Fax: +33 562 110 307, E-mail: [account.airworth-A380@airbus.com](mailto:account.airworth-A380@airbus.com).

