



Airworthiness Directive

AD No.: 2020-0167R1

Issued: 08 July 2021

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):

A350 aeroplanes

Effective Date: Revision 1: 15 July 2021
Original issue: 10 August 2020

TCDS Number(s): EASA.A.151

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2020-0167 issued on 27 July 2020, which superseded EASA AD 2019-0203 dated 20 August 2019.

ATA 42 – Flight Control and Guidance System – Ram Air Turbine Performance – Modification (Software Update)

ATA 21 – Air Conditioning – Electrical Power Supply to Air Generation System Ram Air Actuators – Modification

Manufacturer(s):

Airbus

Applicability:

Airbus A350-941 aeroplanes, all manufacturer serial numbers, except aeroplanes that have embodied Airbus modification (mod) 113749 and mod 112250 in production.

Definitions:

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

The ATA 42 SB: Airbus Service Bulletin (SB) A350-42-P012.

The ATA 21 SB: Airbus SB A350-21-P038.

Airbus date of manufacture: The date of transfer of title (ownership) which is referenced in Airbus documentation at the time of first delivery to an operator.



Groups: Group 1 aeroplanes are those that do not have Airbus mod 113749 embodied in production, except those that have embodied the ATA 42 SB in service.

Group 2 aeroplanes are those that do not have Airbus mod 112250 embodied in production, except those that have embodied the ATA 21 SB in service.

Reason:

It has been determined through testing that ram air turbine (RAT) performance may be below the expected (certified) level, when the landing gear is extended.

This condition, if not corrected, could lead to partial or total loss of RAT electrical power generation, when RAT is deployed in an emergency condition, possibly resulting in reduced control of the aeroplane.

To initially address this potential unsafe condition, Airbus issued the ATA 42 SB, providing instructions to install flight control and guidance system (FCGS) software (SW) X11 Standard (STD) to limit aeroplane side slip and guarantee RAT electrical power generation performance in case of total engine flame out, or during a total loss of normal electrical power generation. Consequently, EASA issued AD 2019-0203 to require installation of FCGS SW X11 STD.

Since that AD was issued, in order to force the Air Generation System (AGS) ram air outlet doors #2 to be flush in case of total engine flame out or loss of main electrical supply, Airbus developed mod 112250 to modify the electrical power supply of AGS ram air outlet actuator, and published the ATA 21 SB to provide in-service modification instructions.

For the reasons described above, EASA issued AD 2020-0167, retaining the requirements of EASA AD 2019-0203, which was superseded, and additionally to require modification of the electrical power supply of the AGS ram air outlet door actuators.

Since that AD was issued, EASA has reassessed the risk, allowing an extension of the compliance time to require modification of the electrical power supply of the AGS ram air outlet door actuators, from 6 years to 78 months. This AD is revised accordingly.

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

Required as indicated, unless accomplished previously:

Modification:

- (1) For Group 1 aeroplanes: Within 10 months after 03 September 2019 [the effective date of EASA AD 2019-0203], modify the aeroplane by installing FCGS SW X11 STD in accordance with the instructions of the ATA 42 SB.
- (2) For Group 2 aeroplanes: Before exceeding 78 months since aeroplane date of manufacture, modify the electrical power supply of AGS ram air outlet door actuators from Electrical Power Distribution Center (EPDC) norm bus 24VDC to Circuit Breaker Panel (CBP) emergency bus 24VDC in accordance with the instructions of the ATA 21 SB.



Ref. Publications:

Airbus SB A350-42-P012 original issue dated 26 June 2019.

Airbus SB A350-21-P038 original issue dated 24 April 2020.

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. 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: AIRBUS XWB, E-mail: continued-airworthiness.a350@airbus.com.

