Airworthiness Directive

AD No.: 2017-0129R1

Issued: 19 July 2019

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: 26 July 2019
Original Issue: 01 August 2017

TCDS Number(s): EASA.A.151

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2017-0129 dated 25 July 2017.

ATA 42 – Integrated Modular Avionics – Internal Timer – Power Cycle (Reset)

Manufacturer(s):
Airbus

Applicability:
Airbus A350-941 aeroplanes, all serial numbers, except aeroplanes that have embodied Airbus modification (mod) 112312 and mod 112313 in production.

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

The AOT: Airbus Alert Operators Transmission (AOT) A42P001-17.


Reason:
Prompted by in-service events where a loss of communication occurred between some avionics systems and avionics network, analysis has shown that this may occur after 149 hours of continuous aeroplane power-up. Depending on the affected aeroplane systems or equipment, different consequences have been observed and reported by operators, from redundancy loss to complete loss on a specific function hosted on common remote data concentrator and core processing input/output modules.
This condition, if not corrected, could lead to partial or total loss of some avionics systems or functions, possibly resulting in an unsafe condition.

To address this potential unsafe condition, Airbus issued the AOT to provide instructions to reset the internal timer. Consequently, EASA issued AD 2017-0129 to require repetitive on ground power cycles (resets).

Since that AD was issued, Airbus developed mod 112312 and mod 112313 for aeroplanes in production and issued the SB for aeroplanes in service, providing instructions for updating the Core Processing Input / Output Module (CPIOM) software (S/W) to standard (STD) S3.0.3 and Common Remote Data Concentrator (CRDC) core S/W to STD S3.1.3.

For the reasons described above, this AD is revised to reduce Applicability, excluding aeroplanes that embody Airbus mod 112312 and mod 112313 in production, and to introduce reference to the SB as optional terminating action for the repetitive on ground power cycles (resets) required by this AD.

**Required Action(s) and Compliance Time(s):**
Required as indicated, unless accomplished previously:

**Repetitive Power Cycle (Reset):**
1. Within 30 days after 01 August 2017 [the effective date of the original issue of this AD], and, thereafter, at intervals not to exceed 149 hours of continuous power-up (as defined in the AOT), accomplish an on ground power cycle in accordance with the instructions of the AOT.

**Terminating Action:**
2. Modification of an aeroplane in accordance with the instructions of the SB constitutes terminating action for the repetitive ground power cycles (resets) as required by paragraph (1) of this AD for that aeroplane.

**Ref. Publications:**
Airbus AOT A42P001-17 original issue dated 30 June 2017.

Airbus SB A350-42-P010 original issue dated 14 August 2018.

The use of later approved revisions of these 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 Programming and Continued Airworthiness 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.

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.