

# **Airworthiness Directive**

AD No.: 2022-0031

Issued: 25 February 2022

Note: 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: Type/Model designation(s):

AIRBUS A350 aeroplanes

Effective Date: 11 March 2022

TCDS Number(s): EASA.A.151

Foreign AD: Not applicable

Supersedure: None

ATA 36 - Pneumatic - Overheat Detection System Sensing Elements - Inspection

- Master Minimum Equipment List - Temporary Operational Restrictions

# Manufacturer(s):

Airbus

### **Applicability:**

Airbus A350-941 and A350-1041 aeroplanes, all manufacturer serial numbers (MSN).

### **Definitions:**

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

The SB: Airbus Service Bulletin (SB) A350-36-P032.

**The VSB**: Kidde Aerospace & Defense (vendor) SB (VSB) CFD-26-3.

**Affected part**: Overheat detection system (OHDS) sensing elements, also identified as 'Continuous Fire Detector', having a Part Number (P/N) and corresponding date code as listed in Section 1.A of the VSB, except those that passed an inspection (no discrepancies found; one face of the connector hex nut is marked) in accordance with the instructions of Section 3 of the VSB.

**Serviceable part**: Any OHDS sensing element, eligible for installation, that is not an affected part.



**Affected positions**: Positions identified as Functional Item Number (FIN) 223HF, FIN 323HF, FIN 273HE and FIN 373HE.

**The MMEL update**: Airbus A350 Master Minimum Equipment List (MMEL) item 36-22-01, Air Leak Detection Redundancy, as provided in Airbus A350 MMEL Revision dated 06 January 2022, or in Airbus A350 MMEL Major Event Revision (MER) dated 06 January 2022.

**Airbus date of manufacture**: The date of transfer of title (ownership) of the aeroplane upon delivery by Airbus to the first operator, which is referenced in Airbus documentation.

**Groups**: Group 1 aeroplanes are those that have an affected part installed at an affected position. Group 2 aeroplanes are those that do not have an affected part installed at any affected position. An aeroplane having an MSN not listed in the Section 1.A of the SB is Group 2, provided it is determined that no affected part has been installed on any affected position of that aeroplane since Airbus date of manufacture.

#### Reason:

The affected part manufacturer, Kidde Aerospace & Defense, has reported that certain OHDS sensing elements, produced before 31 January 2021, may not properly detect thermal bleed leak events due to a quality escape during the manufacturing process.

This condition, if not detected and corrected, could lead to an air leak remaining undetected by the OHDS at an affected position and not being isolated during flight, possibly resulting in localized areas of the wing structure being exposed to high temperatures, with consequent reduced structural integrity of the aeroplane.

To address this potential unsafe condition, Airbus issued the MMEL update that incorporates temporary restrictions of the MMEL items related to the affected positions of the OHDS. Airbus also issued the SB to provide inspection and replacement instructions of the affected parts at the affected positions.

For the reasons described above, this AD requires implementation of the MMEL update in the operator's Minimum Equipment List (MEL). This AD also requires a one-time detailed inspection (DET) of each affected part installed at an affected position, as defined in this AD, and, depending on findings, replacement of an affected part with a serviceable part. Appendix 1 of this AD provides information to identify affected parts (P/N and date code).

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

Required as indicated, unless accomplished previously:

# **MEL changes / Dispatch Restrictions:**

(1) For Group 1 aeroplanes: Within 30 days after the effective date of this AD, amend the operator's MEL on the basis of the MMEL update, as defined in this AD, inform all flight crews, and, thereafter, operate the aeroplane accordingly (see Note 1 of this AD).

Note 1: Airbus issued Operators Information Transmission 999.0061/21 and Flight Operations Transmission 999.0023/21 providing additional guidance to amend the operator's MEL.



# Inspection:

(2) For Group 1 aeroplanes: Within 36 months after the effective date of this AD, accomplish a DET of each affected part installed at an affected position, in accordance with the instructions of the SB.

#### Corrective Action:

(3) If, during the inspection as required by paragraph (2) of this AD, any discrepancy as defined in the SB is detected on an affected part installed at an affected position, before next flight, replace that affected part with a serviceable part in accordance with the instructions of the SB.

#### Parts Installation:

(4) For Group 1 and Group 2 aeroplanes: From the effective date of this AD, do not install on any aeroplane an affected part at an affected position.

## **MEL Change Removal:**

(5) For Group 1 aeroplanes: After inspection of an aeroplane and, depending on findings, accomplishment of corrective action(s) on that aeroplane, as required by paragraphs (2) and (3) of this AD, the MEL changes implemented on that aeroplane as required by paragraph (1) of this AD are no longer necessary and can be removed from that aeroplane.

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

Airbus A350 MMEL Revision dated 06 January 2022.

Airbus A350 MMEL MER dated 06 January 2022.

Airbus SB A350-36-P032 original issue dated 03 December 2021.

Kidde Aerospace & Defense VSB CFD-26-3 dated 13 January 2022.

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. This AD was posted on 21 January 2022 as PAD 22-004 for consultation until 04 February 2022. The Comment Response Document can be found in the <u>EASA Safety Publications Tool</u>, in the compressed (zipped) file attached to the record for this AD.
- 3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.
- 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 <a href="EU aviation safety reporting system">EU aviation safety reporting system</a>. 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 A350 XWB, E-mail: <a href="mailto:continued-airworthiness.a350@airbus.com">contact: AIRBUS A350 XWB, E-mail: continued-airworthiness.a350@airbus.com</a>.



# Appendix 1 – Affected Part – Locations of P/N and date code

Figure 4-50. Identification Markings on Coaxial SE Male (Pin) Connector



Figure 4-51. Identification Markings on Coaxial SE Female (Socket) Connector



