



## Airworthiness Directive

**AD No.:** 2017-0200

**Issued:** 10 October 2017

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

### Design Approval Holder's Name:

AIRBUS

### Type/Model designation(s):

A350 aeroplanes

**Effective Date:** 17 October 2017

**TCDS Number(s):** EASA.A.151

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes EASA AD 2017-0180 dated 18 September 2017.

## ATA 29, 47 – Hydraulic System / Fuel Tank Inerting System – Engine Driven Pump Rapid Overheat – Master Minimum Equipment List Restriction / Software Update

### Manufacturer(s):

Airbus

### Applicability:

Airbus A350-941 aeroplanes, all serial numbers.

### Reason:

In the Airbus A350 design, the hydraulic fluid cooling system is located in the fuel tanks. Recently, an **overheat failure mode** of the hydraulic engine-driven pump (EDP) was found. Such EDP failure may cause a fast temperature rise of the hydraulic fluid.

This condition, if not detected and corrected, combined with an inoperative fuel tank inerting system, could lead to an uncontrolled overheat of the hydraulic fluid, possibly resulting in ignition of the fuel-air mixture in the affected fuel tank.

To address this potential unsafe condition, Airbus issued a Major Event Revision (MER) of the A350 Master Minimum Equipment List (MMEL) that incorporates restrictions to avoid an uncontrolled overheat of the hydraulic system. Consequently, EASA issued Emergency AD 2017-0154-E to require implementation of these dispatch restrictions.



Since EASA Emergency AD 2017-0154-E was issued, following further investigation, Airbus issued another MER of the A350 MMEL that expands the number of restricted MMEL items. At the same time, Airbus revised Flight Operation Transmission (FOT) 999.0068/17, to inform all operators about the latest MMEL restrictions. Consequently, EASA issued AD 2017-0180, retaining the requirements of EASA Emergency AD 2017-0154-E, which was superseded, and requiring implementation of the new Airbus A350 MMEL MER and, consequently, restrictions for aeroplane dispatch.

Since EASA AD 2017-0180 was issued, Airbus developed a software (SW) update of the Hydraulic Monitoring and Control Application (HMCA), SW S4.2, introduction of which avoids uncontrolled overheat of the hydraulic system. HMCA SW S4.2 is embodied in production through Airbus modification (mod) 112090, and introduced in service through Airbus Service Bulletin (SB) A350-29-P012.

For the reasons described above, this AD retains the requirements of EASA AD 2017-0180, which is superseded, and requires modification of the aeroplane by installing HMCA SW S4.2.

This AD is still considered to be an interim action and further AD action may follow.

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

Required as indicated, unless accomplished previously:

Note 1: Group 1 aeroplanes are those that, on the effective date of this AD, do not have HMCA SW S4.2 installed. Group 2 aeroplanes are post-mod 112090 and have HMCA SW S4.2 installed.

#### MMEL Changes - Dispatch Restrictions:

- (1) Before next flight after 24 August 2017 [the effective date of EASA AD 2017-0154-E], implement the MMEL changes in accordance with Airbus A350 MMEL MER dated 21 August 2017.
- (2) Within 30 days after 22 September 2017 [the effective date of EASA AD 2017-0180], implement the MMEL changes in accordance with Airbus A350 MMEL MER dated 06 September 2017, inform all flight crews, and, thereafter, operate the aeroplane accordingly.

#### Modification:

- (3) For Group 1 aeroplanes: Within 30 days after the effective date of this AD, modify the aeroplane by installing HMCA SW S4.2 in accordance with the instructions of Airbus SB A350-29-P012.

#### Part Installation:

- (4) Do not install on any aeroplane an HMCA software pre-mod HMCA SW 4.2, as required by paragraph (4.1) or (4.2) of this AD, as applicable.
  - (4.1) For Group 1 aeroplanes: After modification of the aeroplane as required by paragraph (3) of this AD.
  - (4.2) For Group 2 aeroplanes: From the effective date of this AD.



(5) Installation of an HMCA SW standard approved after the effective date of this AD is equal to compliance with the requirements of paragraph (3) of this AD, provided the conditions as specified in paragraphs (5.1) and (5.2) of this AD are met.

(5.1) The HMCA SW standard must be approved by EASA, or approved under Airbus Design Organisation Approval (DOA); and

(5.2) The installation must be accomplished in accordance with aeroplane modification instructions approved by EASA, or approved under Airbus DOA.

#### Ref. Publications:

Airbus A350 MMEL MER dated 21 August 2017, EASA approval reference D17028232.

Airbus A350 MMEL MER dated 06 September 2017, EASA approval reference D17029962, which is available at [AirbusWorld](#).

Airbus Flight Operation Transmission 999.0068/17 Rev. 01, dated 06 September 2017.

Airbus A350 SB A350-29-P012 original issue, dated 06 October 2017.

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 Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS XWB, E-mail: [continued-airworthiness.a350@airbus.com](mailto:continued-airworthiness.a350@airbus.com).

