EASA AD No.: 2016-0080



# **Airworthiness Directive**

AD No.: 2016-0080

**Issued: 21 April 2016** 

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: Type/Model designation(s):

AIRBUS A300, A300-600, A300-600ST and A310 aeroplanes

Effective Date: 05 May 2016

TCDS Numbers: EASA.A.172 and EASA.A.014

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2013-0163 dated 24 July 2013.

# ATA 28 – Fuel – Fuel Pumps / Power Supply Circuit Breaker – Functional Test / Replacement / Fuel Pumps Replacement

# Manufacturer(s):

Airbus (formerly Airbus Industrie)

#### Applicability:

Airbus A300, A300-600, A300-600ST and A310 aeroplanes, all certified models, all manufacturer serial numbers.

#### Reason:

Two successive failures have been reported of a Right Hand # 1 inner tank fuel pump, Part Number (P/N) 2052Cxx series (where "xx" represents any numerical combination). These occurrences were solved by replacement of the pump, associated circuit breaker (CB) and the alternating current (AC) bus load relay.

Investigations determined that, in case of loss of one phase on the pump supply and the associated CB failing to trip, the fuel pump thermal fuses may not operate as quickly as expected.

This condition, if not detected and corrected, could lead to an overheat condition of the fuel pump in excess of 200°C, possibly resulting in a fuel tank explosion and loss of the aeroplane.



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To address this potential unsafe condition, Airbus issued Alert Operator Transmission (AOT) A28W002-13 providing instructions for functional tests of CBs.

As a temporary measure, EASA issued AD 2013-0163 to require repetitive functional tests of the affected fuel pump power supply CBs, and, depending on findings, replacement.

Since that AD was issued, a new standard of fuel pump was developed, which improves the thermal protection, thereby preventing the potential unsafe condition and cancelling the need for repetitive functional tests of the affected CBs, as required by EASA AD 2013-0163. Airbus issued Service Bulletin (SB) A300-28-0093, SB A300-28-6111, SB A300-28-9025 and SB A310-28-2176 to provide instructions for this upgrade of the fuel pump for all positions on the aeroplane.

For the reasons described above, this AD retains the requirements EASA AD 2013-0163, which is superseded, and requires installation of the new standard fuel pump, which constitutes terminating action for the repetitive functional tests.

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

Required as indicated, unless accomplished previously:

# Restatement of the requirements of EASA AD 2013-0163:

(1) Within 6 months or 500 flight hours (FH) after 07 August 2013 [the effective date of EASA AD 2013-0163], whichever occurs first, and, thereafter, at intervals not to exceed 6 months or 500 FH, whichever occurs first, accomplish a functional test of the fuel pump power supply CBs as listed in Table 1 of this AD, as applicable to aeroplane model, in accordance with the instructions of Airbus AOT A28W002-13.

Aeroplane models

Circuit Breakers to be Tested

- Inner and outer pump, No. 1 and No. 2, Left Hand (LH) and Right Hand (RH) side

- A300B4/C4/F4 and A300-600 (all models, except -600R), A300F4-608ST and A310-200 (all models)

- Inner and outer pump, No. 1 and No. 2, LH and RH side
- Centre pump LH and RH side

Trim tank pump No. 1 and No. 2

Table 1: Affected Circuit Breakers

- (2) If, during any functional test as required by paragraph (1) of this AD, any discrepancy is found, before next flight, replace the affected CB with a serviceable part in accordance with the instructions of Airbus AOT A28W002-13.
- (3) The replacement on an aeroplane of one or more CBs as required by paragraph (2) of this AD does not constitute terminating action for the repetitive functional tests as required by paragraph (1) of this AD for that aeroplane.



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# New requirements of this AD:

- (4) Within 72 months after the effective date of this AD, install the new standard fuel pumps at all positions on the aeroplane in accordance with the instructions of Airbus SB A300-28-0093, or SB A300-28-6111, or SB A300-28-9025, or SB A310-28-2176, as applicable to aeroplane model.
- (5) Modification of an aeroplane as required by paragraph (4) of this AD constitutes terminating action for the repetitive functional tests as required by paragraph (1) of this AD for that aeroplane.
- (6) After modification of an aeroplane as required by paragraph (4) of this AD, do not install a fuel pump having P/N 2052Cxx (where "xx" represents any numerical combination) on that aeroplane.

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

Airbus AOT A28W002-13 original issue dated 23 July 2013.

Airbus SB A300-28-0093 original issue dated 15 December 2015.

Airbus SB A300-28-6111 original issue dated 15 December 2015.

Airbus SB A300-28-9025 original issue dated 15 December 2015.

Airbus SB A310-28-2176 original issue dated 15 December 2015.

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. This AD was posted on 16 March 2016 as PAD 16-041 for consultation until 13 April 2016. No comments were received during the consultation period.
- 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. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS EIAW (Airworthiness Office)

E-mail: continued.airworthiness-wb.external@airbus.com.

