



## Airworthiness Directive

**AD No.:** 2017-0105R2

**Issued:** 16 March 2018

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):

A330 aeroplanes

**Effective Date:** Revision 2: 23 March 2018  
Revision 1: 17 July 2017  
Original issue: 28 June 2017

**TCDS Numbers:** EASA.A.004

**Foreign AD:** Not applicable

**Revision:** This AD revises EASA AD 2017-0105R1 dated 17 July 2017. The original issue of this AD superseded EASA AD 2014-0281, dated 22 December 2014.

## ATA 24 – Electrical Power – Alternating Current Emergency Generation – Flight Warning Computer Software Update

### Manufacturer(s):

Airbus (formerly Airbus Industrie)

### Applicability:

Airbus A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343 aeroplanes, all manufacturer serial numbers.

### Definition(s):

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

**Affected FWC:** Flight Warning Computer (FWC) standard lower than T7-0, or a FWC standard lower than M6-0, as applicable to aeroplane configuration.

**Serviceable FWC:** FWC standard T7-0, Part Number (P/N) LA2E20202T70000, or higher standard, or FWC standard M6-0, Part Number (P/N) LA2E20202M60000, or higher standard, as applicable, depending on aeroplane configuration.



**Groups:** Group 1 aeroplanes are those that have an affected FWC installed. Group 2 aeroplanes are those that do not have an affected FWC installed.

**Reason:**

The Constant Speed Motor/Generator (CSM/G), as installed on Airbus A330 aeroplanes, is qualified for an overload condition of 9.5 kVA for 30 minutes. This duration is sufficient to perform safe landing and go-around. However, electrical load analysis revealed that the hydraulic power might not be sufficient to supply the CSM/G during slat/flap extension, when only one engine is running.

This condition, if not corrected, and in conjunction with the loss of main system, could lead to a scenario where the crew is not clearly warned that the electrical system has switched on the battery and thus has a limited duration to support a safe landing.

To initially address this potential unsafe condition, Airbus issued an Aircraft Flight Manual (AFM) Temporary Revision (TR) to amend the electrical emergency configuration “ELEC EMER CONFIG” procedure to require the pilot to deploy the ram air turbine manually before setting the Landing Recovery to “ON” position, which provides sufficient hydraulic power and avoids CSM/G shedding under worst-case operational conditions. Consequently, EASA issued AD 2014-0273 to require amendment of the AFM by incorporating the applicable Airbus TR.

After finding that AD 2014-0273 contained some incorrect and incomplete information, EASA issued AD 2014-0281, retaining the requirements of EASA AD 2014-0273, which was superseded, but correcting the information related to pre-mod / pre Service Bulletin (SB) or post-mod / post SB aeroplane configurations.

Since EASA AD 2014-0281 was issued, in order to improve the “ELEC EMER CONFIG” procedure, Airbus developed modifications to install improved Flight Warning Computer (FWC), which is embodied in production through Airbus modification (mod) 205228, and to be embodied in service with Airbus SB A330-31-3232, or SB A330-31-3237, or SB A330-31-3229, as applicable.

For the reasons described above, EASA issued AD 2017-0105 (later revised), retaining the requirements of EASA AD 2014-0281, which was superseded, and requires installation of a software standard upgrade of the two FWCs.

Since EASA AD 2017-0105R1 was issued, Airbus have issued SB A330-31-3229 and this AD is revised accordingly.

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

Required as indicated, unless accomplished previously:

**Restatement of the requirements of EASA AD 2014-0281:**

**AFM Amendment:**

- (1) For Group 1 aeroplanes: Within 15 days after 05 January 2015 [the effective date of EASA AD 2014-0281], amend the applicable A330 AFM to incorporate the Airbus AFM TR as defined in Table 1 of this AD, as applicable, depending on aeroplane configuration, inform all flight crews, and thereafter, operate the aeroplane accordingly.



Table 1 – AFM Amendment

Aeroplane configuration	AFM TR
Pre-mod 47930; pre-SB A330-28-3067	TR 427 issue 1
Post-mod 47930; post-SB A330-28-3067	TR 428 issue 1

Amending the applicable AFM to incorporate a later AFM revision which includes A330 AFM TR 427 issue 1 or A330 AFM TR 428 issue 1, as applicable, is acceptable to comply with the requirements of paragraph (1) of this AD.

Note: Airbus published EMERGENCY PROCEDURES /24-ELECTRICAL POWER/ ELEC – EMER CONFIG Documentary Unit (DU) 00005218.0001001 and DU 00005218.0002001, as applicable, which are acceptable to be used for compliance with the requirements of paragraph (1) of this AD.

#### **New requirements of this AD:**

##### **Modification:**

- (2) For Group 1 aeroplanes: Within 24 months after 28 June 2017 [the effective date of the original issue of this AD], replace both FWCs with not affected FWCs in accordance with the instructions of Airbus SB A330-31-3232, or SB A330-31-3237, or SB A330-31-3229, as applicable, depending on aeroplane configuration.

##### **AFM Amendment:**

- (3) [Deleted].

##### **Parts installation:**

- (4) Do not install on any aeroplane an affected FWC, 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 (2) of this AD.

(4.2) For Group 2 aeroplanes: From 28 June 2017 [the effective date of the original issue of this AD].

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

Airbus A330 AFM TR 427 issue 1 EASA approved on 14 October 2014.

AFM DU EMER-24-00005218.0001001, EASA approved on 20 December 2016.

Airbus A330 AFM TR 428 issue 1 EASA approved on 14 October 2014.

AFM DU EMER-24-00005218.0002001, EASA approved on 20 December 2016.

Airbus SB A330-31-3232 original issue dated 04 May 2016, or Revision 01 dated 14 February 2017.

Airbus SB A330-31-3237 original issue dated 30 January 2017.

Airbus SB A330-31-3229 original issue dated 14 November 2017.



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. The original issue of this AD was posted on 12 May 2017 as PAD 17-060 for consultation until 09 June 2017. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), 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: [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 – EIAL (Airworthiness Office), E-mail: [airworthiness.A330-A340@airbus.com](mailto:airworthiness.A330-A340@airbus.com).

