



## Airworthiness Directive

**AD No.:** 2018-0227

**Issued:** 22 October 2018

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):

A330 aeroplanes

**Effective Date:** 05 November 2018

**TCDS Number(s):** EASA.A.004

**Foreign AD:** Not applicable

**Supersedure:** None

## ATA 78 – Exhaust – Thrust Reverser Latch Beam Gussets – Inspection / Modification

### Manufacturer(s):

Airbus, formerly Airbus Industrie

### Applicability:

Airbus A330-223, A330-223F, A330-321, A330-322 and A330-323 aeroplanes, all manufacturer serial numbers.

### Definitions:

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

**The inspection SB:** Airbus Service Bulletin (SB) A330-78-3024, which includes reference to Pratt & Whitney SB PW4G-100-A78-116.

**The modification SB:** Airbus SB A330-78-3014, which includes reference to Pratt & Whitney SB PW4G-100-78-78.

**Affected TR:** Thrust Reverser (TR) assemblies, having a serial number (s/n) listed in Pratt & Whitney SB PW4G-100-A78-116 original issue dated 20 June 2018, except those that have been modified in accordance with the instructions of the modification SB.

**Groups:** Group 1 aeroplanes are those that have an affected TR installed. Group 2 aeroplanes are those that do not have an affected TR installed. An aeroplane that embodies Airbus modification



(mod) 48539 in production, or has embodied modification SB in service on both engines, as applicable, is a Group 2 aeroplane, provided the aeroplane remains in that configuration.

**Reason:**

A report was received of an in-service occurrence where an operator found a crack in the latch beam gussets of an affected TR, between the forward (L2) and middle (L3) latches, adjacent to the aft cascade frame attachment bracket in the 6 o'clock beam. Subsequent investigation revealed that the crack surface of the latch beam gusset showed indication of high fatigue cycle, leading to development of a design modification, reinforcing the latch beam gussets. This was introduced through Airbus production mod 48539 (improvement of 6 o'clock latch beam) and Airbus issued the modification SB as a recommendation for in-service aeroplanes. Since these measures were introduced, a new case was reported of finding a crack beyond prediction at the latch beam gusset of an affected TR, on which the recommended modification SB had not been accomplished.

This condition, if not detected and corrected, could lead to crack propagation until part failure and potentially departure of TR cascade during TR operation, which could create runway hazards for other aeroplanes.

To address this potential unsafe condition, Airbus issued the inspection SB to provide instructions for special detailed inspection (SDI) of the latch beam gussets.

For the reasons described above, this AD requires a one-time SDI of the latch beam gussets between the forward and middle latches of the affected TR and, depending on findings, replacement with improved (reinforced, modified) TR latch beam gussets.

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

Required as indicated, unless accomplished previously:

**Inspection:**

- (1) For Group 1 aeroplanes: Within the compliance times specified in Table 1 of this AD, as applicable, accomplish an SDI of each affected TR in accordance with the instructions of the inspection SB.

Table 1 – One-time SDI of affected TR (see Note 1 of this AD)

Compliance Time (A or B, whichever occurs later)	
<b>A</b>	Before exceeding 26 000 flight cycles (FC), but not before exceeding 22 000 FC
<b>B</b>	Within 24 months after the effective date of this AD

Note 1: The FC specified in Table 1 of this AD are those accumulated by the affected TR since its first installation on an aeroplane.

**Corrective Action / Modification:**

- (2) If, during the SDI as required by paragraph (1) of this AD, a crack is detected, before next flight, modify the latch beam gussets of the affected TR in accordance with the instructions of the modification SB.



**Part(s) Installation:**

- (3) For Group 1 and Group 2 aeroplanes: From the effective date of this AD, installation of an affected TR on an aeroplane is allowed, provided that, within the compliance times as specified in Table 1 of this AD, the affected TR is inspected in accordance with the instructions of the inspection SB and, depending on findings, corrected as required by this AD.

**Ref. Publications:**

Airbus SB A330-78-3014 original issue dated 09 May 2001.

Airbus SB A330-78-3024 original issue dated 28 June 2018.

Pratt & Whitney SB PW4G-100-A78-116 original issue dated 20 June 2018.

Pratt & Whitney SB PW4G-100-78-78 Revision 1 dated 21 September 2001.

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 07 September 2018 as PAD 18-124 for consultation until 05 October 2018. 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. 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 – Airworthiness Office – EIAL, E-mail: [airworthiness.A330-A340@airbus.com](mailto:airworthiness.A330-A340@airbus.com).

