Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 18-056

Issued: 20 April 2018

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.
All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name:	Type/Model designation(s):
AIRBUS	A330 aeroplanes

Effective Date:	[TBD - standard: 14 days after AD issue date]
TCDS Numbers:	EASA.A.004
Foreign AD:	Not applicable
Supersedure:	None

ATA 78 – Exhaust – Thrust Reverser Lower Beam – Inspection / Repair

---

Manufacturer(s):
Airbus (formerly Airbus Industrie)

Applicability:
Airbus A330-243, A330-243F, A330-341, A330-342 and A330-343 aeroplanes, all manufacturer serial numbers.

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

The SB: Airbus Service Bulletin (SB) SB A330-78-3023.

The NMSB: Rolls Royce Non Modification Service Bulletin (NMSB) RB211-78-AH677, which includes a reference to Safran Nacelles NMSB 78-AH677.

TRU Beam: Thrust Reverser (TR) Unit (TRU) C-duct lower structural 6 o'clock beam.

Reason:

Occurrences have been reported on A330 aeroplanes fitted with Trent 700 engines where a TRU beam was found with evidence of thermally caused material degradation in the rearmost section of the TRU beam at latches 5, 6 and 7 areas. Subsequent fatigue analysis determined that the static strength margins of the material of the TRU beam could be reduced, with detrimental effect on the operational fatigue life of the beam.

This condition, if not detected and corrected, could lead to disconnection of the TRU from the engine, with possible damage to the engine adjacent structure and controls, and/or damage to the aeroplane, and injury to persons on the ground.

To address this potential unsafe condition, Airbus issued the SB, which includes reference to the instructions of the NMSB, providing instructions to inspect each TRU beam.

For the reasons described above, this AD requires repetitive special detailed inspections (SDI) of the TRU beams and, depending on findings, accomplishment of applicable corrective action(s).

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

Required as indicated, unless accomplished previously:

Repetitive Inspections:

(1) Within 3 300 flight cycles (FC) or 24 months, whichever occurs first after the effective date of this AD, and, thereafter, at intervals not to exceed 3 300 FC or 24 months, whichever occurs first, accomplish an SDI (conductivity test) of each left hand (LH) and right hand (RH) TRU beam in accordance with the instructions of the SB.

Corrective Action(s):

(2) If, during any SDI as required by paragraph (1) of this AD, damage to TRU beam exceeds the limits specified in the NMSB (see Note 1 of this AD), before next flight, replace that TRU beam with a serviceable beam in accordance with the instructions of the SB.

Note 1: The NMSB contains, by reference to Safran Nacelles SB 78-AH677, a matrix to define “GO – NO GO” and includes permitted fly-on damage limits.

(3) If, during any SDI as required by paragraph (1) of this AD, the inspection result of one or more TRU beams is “GO” (see Note 1 of this AD), before next flight, accomplish the inspections as specified in Table 2 of this AD, as applicable, and, depending on findings, accomplish the applicable corrective action(s) in accordance with the instructions of the SB.

Table 2 – DET/Ultrasonic

TRU Position(s)	Inspection Areas and Purpose	Inspection Method
LH Side	TR door beam latches (5, 6 and 7) for bush migration and crack/deformation	DET
RH Side	TR door beam clevises (5, 6 and 7) for crack/deformation	DET
LH and RH side	TR door Outer Fixed Structure rear area for delamination	Ultrasonic

Terminating Action:

(4) None.

Part Installation:

(5) From the effective date of this AD, installation of a TRU beam on an aeroplane is allowed, provided that it has passed an inspection in accordance with the instructions of the SB, or that, following its installation, it is inspected before the TRU beam exceeds 3 300 FC or 24 months, whichever occurs first since its first installation on an aeroplane and, thereafter, as required by paragraph (1) of this AD.

Ref. Publications:

Airbus SB A330-78-3023 original issue dated 12 December 2017.

Rolls Royce NMSB RB211-78-AH677 original issue dated 18 December 2017.

Safran Nacelles SB 78-AH677 dated 18 December 2017.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. This Proposed AD will be closed for consultation on 18 May 2018.

2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.

3. For any question concerning the technical content of the requirements in this PAD, please contact: AIRBUS – EIAL (Airworthiness Office), E-mail: airworthiness.A330-A340@airbus.com.