

 適航指令發布單 Airworthiness Directive Issuance Form			
民航局 AD 編號 AD number	CAA-2017-10-002	發布日期 Date issued	2017/10/12
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	Airbus A340-211, A340-212, A340-213, A340-311, A340-312 and A340-313 aeroplanes, all manufacturer serial numbers.		
主旨摘要	Exhaust - Thrust Reverser Outer Fixed Structure - Inspection / Replacement		
民航局 CAA <input type="checkbox"/> 本國產品 Native products <input type="checkbox"/> 其他個案 Other	設計國民航主管機構 Original Authorities <input type="checkbox"/> FAA <input type="checkbox"/> Germany LBA <input checked="" type="checkbox"/> EASA <input type="checkbox"/> CAA-NL <input type="checkbox"/> Brazil <input type="checkbox"/> UK CAA <input type="checkbox"/> Transport Canada Civil Aviation <input type="checkbox"/> Japan CAB <input type="checkbox"/> DGAC <input type="checkbox"/> CAA of Israel <input type="checkbox"/> Other _____		
	設計國 AD 編號 Original AD number	2017-0195	
	1. 直接採用原 AD 之內容?(Is the original AD directly adopted?) <input checked="" type="checkbox"/> 是(Yes) <input type="checkbox"/> 否(No) _ a. 生效日期另訂為(Re-specify the effective date as) : _____ b. 執行時限另訂為(Re-specify the compliance time or period as) : _____ 2. 使用人是否需要將 AD 執行結果向民航局提出報告?(Do Users need to report the status of compliance to the CAA?) <input type="checkbox"/> 是(Yes) <input checked="" type="checkbox"/> 否(No)		
備註 Note	ATA 78. This AD supersedes EASA AD 2011-0174(CAA-2011-09-004) dated 08 September 2011. Ref. Publications: Airbus SB A340-78-4041 original issue dated 22 April 2011. and Airbus SB A340-78-4050 original issue dated 29 August 2017.		
註： 1. AD 內容後附。 2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。 3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： adcaa@mail.caa.gov.tw Note： 1. The AD text is enclosed. 2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval. 3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： adcaa@mail.caa.gov.tw			



Airworthiness Directive

AD No.: 2017-0195

Issued: 04 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):

A340 aeroplanes

Effective Date: 18 October 2017

TCDS Numbers: EASA.A.015

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2011-0174 dated 08 September 2011.

ATA 78 – Exhaust – Thrust Reverser Outer Fixed Structure – Inspection / Replacement

Manufacturer(s):

Airbus (formerly Airbus Industrie)

Applicability:

Airbus A340-211, A340-212, A340-213, A340-311, A340-312 and A340-313 aeroplanes, all manufacturer serial numbers.

Reason:

During inspection of an inner fixed structure (IFS) panel on an engine thrust reverser (T/R), an outer fixed structure (OFS) panel was found disbonded. Further investigations indicated that the panel core was made of Alcore and investigations by Aircelle, the T/R manufacturer, resulted in the identification of a batch of T/R halves (C-ducts), potentially containing Alcore panels and initially assumed to be made of Hexcel core only.

This condition, if not corrected, can lead to the in-flight loss of the common nozzle assembly, possibly resulting in damage to the aeroplane and/or injury to persons on the ground.

To address this potential unsafe condition, Airbus identified the affected T/R batches and issued Service Bulletin (SB) A340-78-4041 to provide the necessary instructions, and EASA issued AD 2011-0174 to require identification and inspection of the affected T/R components and, depending of



findings, accomplishment of applicable correctives actions. That AD identified certain T/R halves, identified by serial number (s/n) in the Appendix of that AD, as not affected.

Since that AD was issued, new cases have been found of disbonding on some OFS panels, where the core was made of Hexcel Chromic Acid Anodized (CAA) Honeycomb . This led to the determination that additional s/n T/R components, identified as batch 1 and batch 4, are also affected.

Furthermore, the T/R which were considered as not affected by EASA AD 2011-0174, are now affected by this AD.

In addition, a new HEXCEL CAA fleet plan dedicated to HEXCEL CAA disbonding indicated that the inspection threshold value could be extended. Prompted by these findings, Airbus published SB A340-78-4050 to provide a new list of affected parts and new compliance times.

For the reasons described above, this AD retains the requirements of EASA AD 2011-0174, which is superseded, requires tap testing of OFS of all affected T/R and, depending on findings, accomplishment of applicable corrective action(s). This AD also provides conditional credit for certain actions accomplished using the instructions of Airbus SB A340-78-4041.

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

Required as indicated, unless accomplished previously:

Note 1: Airbus SB A340-78-4050 is hereafter referred as “the SB” in this AD.

Note 2: The T/R halves with HEXCEL CAA OFS panels, identified as batches 1, 2, 3 and 4 in Table 1 of this AD, are hereafter referred to as ‘affected T/R’ in this AD.

Table 1 – Affected T/R Halves

Batch	Rohr Industries Inc. s/n	Corresponding Aircelle s/n
1	7 to 118 inclusive	3001 to 3059 inclusive
2	0383001 to 0410001 inclusive	3191 to 3204 inclusive
3	0679001 to 1036001 inclusive	3341 to 3524 inclusive
4	1401001 to 3419001 inclusive	3714 to 4010 inclusive

Inspection:

- (1) After accumulating 11 000 flight cycles (FC) and before exceeding the compliance time specified in Table 2 of this AD, as applicable, accomplish a tap test of the OFS of the affected T/R in accordance with the instructions of the SB.

Table 2 – T/R OFS Tap Test (see Note 3 of this AD)

T/R Batch	Compliance Time
1	14 700 FC
2	12 800 FC
3	12 800 FC
4	14 700 FC



Note 3: The number of FC specified in this AD are those accumulated by a T/R half since first installation (new) on an aeroplane.

Special Inspection for T/R Batches 2 and 3:

- (2) For T/R that were tap tested before the effective date of this AD in accordance with the instructions of Airbus SB A340-78-4041 when the T/R had accumulated less than 11 000 FC, after accumulating 11 000 FC and before the T/R exceeds 19 000 FC (see Note 3 of this AD), accomplish a tap test of the OFS of the T/R in accordance with the instructions of the SB.

Corrective Action(s):

- (3) If, during the tap test as required by paragraph (1) or (2) of this AD, as applicable, any discrepancy as defined in the SB is identified, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the SB.

Conditional Credit for T/R Batches 2 and 3:

- (4) Tap test of an affected T/R and, depending on finding(s), corrective action(s), accomplished before the effective date of this AD in accordance with the instructions of Goodrich Aerostructures Group All Operators Letter (AOL) PUB0001714 Revision 01, or the instructions of CFM International SB No. CFM56-5C 78-0093 (Rohr Industries Inc. SB RA34078-93), or Airbus SB A340-78-4041, as applicable, are acceptable to comply with the requirements of paragraph (1) of this AD for that T/R, provided the tap test was accomplished before exceeding 12 800 FC, but not earlier than 11 000 FC.

Part(s) Installation:

- (5) From the effective date of this AD, installation of an affected T/R (see Note 2 of this AD) on aeroplane is allowed, provided that, prior to installation, it has passed (no discrepancies found) a tap test in accordance with the instructions of the SB (see Note 1 of this AD), or CFM International SB No. CFM56-5C 78-0102 (Rhor Industries Inc. SB No. RA34078-102); or, following installation, the T/R is tap tested and corrected as required by this AD.

Ref. Publications:

Airbus SB A340-78-4041 original issue dated 22 April 2011.

Airbus SB A340-78-4050 original issue dated 29 August 2017.

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

Goodrich AOL PUB0001714 Revision 01 dated 13 September 2010.

CFM International SB No. CFM56-5C 78-0093 Revision 2 dated 02 June 2017.

CFM International SB No. CFM56-5C 78-0102 original issue dated 06 June 2017.

Rhor Industries Inc. SB No. RA34078-93 Revision 2 dated 02 June 2017.

Rhor Industries Inc. SB No. RA34078-102 original issue dated 06 June 2017.



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.
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.



Appendix 1 – Parts from batch 2 and 3 T/R Halves, previously not affected by EASA AD 2011-0174
and affected by this AD
(for information only)

Rhor Industries Inc. s/n	Aircelle s/n	T/R Half, right hand (RH) or left hand (LH)
0390001	3194	RH
0694001	3348	RH
0708001	3355	RH
0781001	3394	LH
0782001	3394	RH
0786001	3396	RH
0819001	3414	LH
0820001	3414	RH
0821001	3415	LH
0826001	3417	RH
0855001	3442	LH
0939001	3475	LH
0943001	3477	LH
0980001	3496	RH

