EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2010-0144 **Date: 16 July 2010** Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, 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 EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 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 [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].

Type Approval Holder's Name :	**Type/Model designation(s) :**
AIRBUS	A310 and A300-600 aeroplanes

TCDS Number :	France N°145
Foreign AD :	Not applicable
Supersedure :	None

ATA 55	**Stabilizers – Rudder Side Shell Skin – Inspection**
Manufacturer(s):	Airbus (formerly Airbus Industrie)
Applicability:	Airbus A310 and A300-600 aeroplanes, all certified models, all manufacturer serial numbers, if equipped with rudders having a Part Number (P/N) and serial number (s/n) as listed in Appendix A, B, C or D to this AD.
Reason:	Surface defects were visually detected on the rudder of an A319 and an A321 in-service aeroplane. Investigation has determined that the defects reported on both rudders corresponded to areas that had been reworked in production. The investigation confirmed that the defects were as a result of de-bonding between the skin and honeycomb core. Such reworks were also performed on some rudders fitted on A310 and A300-600 aeroplanes. An extended de-bonding, if not detected and corrected, may degrade the structural integrity of the rudder. The loss of the rudder leads to degradation of the handling qualities and reduces the controllability of the aeroplane. To address this unsafe condition, EASA issued AD 2010-0002, superseding AD 2009-0166, to require inspections of specific areas and, depending on findings, the application of corrective actions for those rudders where production reworks have been identified. This new AD addresses the rudder population that has also been reworked in production but not included in the applicability of EASA AD 2010-0002.

Effective Date:	30 July 2010
Required action(s) and Compliance Time(s):	Required as indicated: (1) **<u>For rudders as identified in Appendix A and B to this AD, apply the following actions for the locations defined in Airbus Service Bulletin (SB) A310-55-2049, or Airbus SB A300-55-6048, as applicable:</u>** (1.1) "Area 1" location : Unless already accomplished, - within 8 months after the effective date of this AD for rudders listed in Appendix A to this AD, or - within 24 months after the effective date of this AD, for rudders listed in Appendix B to this AD, perform Vacuum Loss inspection on the "area 1" in accordance with instructions defined in Airbus SB A310-55-2049, or Airbus SB A300-55-6048, as applicable to aeroplane model. (1.2) Trailing edge area location: (1.2.1) Unless already accomplished, within 24 months after the effective date of this AD, perform Elasticity Laminate Checker inspection on the rudder trailing edge area in accordance with instructions defined in Airbus SB A310-55-2049, or Airbus SB A300-55-6048, as applicable to aeroplane model. (1.2.2) Repeat two further times the inspection defined in paragraph (1.2.1) of this AD at intervals not to exceed 4 500 flight cycles (FC) but not less than 4 000 FC from the last inspection. (2) **<u>For rudders as identified in Appendix C to this AD</u>** (2.1) Unless already accomplished, within 4500 FC but not less than 4 000 FC from the last sampling inspection, perform an Elasticity Laminate Checker inspection on the rudder trailing edge area in accordance with instructions defined in Airbus SB A310-55-2049, or Airbus SB A300-55-6048 as applicable to aeroplane model. (2.2) Repeat once the inspection defined in paragraph (2.1) of this AD within 4 500 FC but not less than 4 000 FC from the last inspection. (3) **<u>For rudders as identified in Appendix D to this AD</u>** Within 8 months after the effective date of this AD, replace the affected rudder with a serviceable unit. (4) In case of findings during the inspections defined in paragraph (1) or (2) of this AD, before next flight, contact Airbus to get further instructions and apply these associated instructions and corrective actions in accordance with the approved data provided. (5) In case of no findings during the inspection defined in paragraph (1.1) of this AD, before next flight, restore the vacuum loss holes as per the option selected (temporary restoration with self adhesive patches, temporary restoration with resin or permanent restoration), in accordance with Airbus SB A310-55-2049, or Airbus SB A300-55-6048, as applicable to aeroplane model, and apply the associated instructions until performance of permanent restoration. (6) Within 10 days after accomplishment of each inspection in accordance with paragraph (1) or (2) of this AD, report to Airbus the inspection results, including no finding.

	(7) After the effective date of this AD, no person shall install any affected rudder listed in Appendix A or B or C to this AD on an aeroplane, unless in compliance with the requirements of this AD. (8) After the effective date of this AD, no person shall install any affected rudder listed in Appendix D to this AD.
Ref. Publications :	Airbus Service Bulletin A310-55-2049 at original issue. Airbus Service Bulletin A300-55-6048 at original issue. 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 11 June 2010 as PAD 10-042 for consultation until 09 July 2010. No comments were received during the consultation period. 3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail ADs@easa.europa.eu. 4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – EAS Fax +33 5 61 93 44 51, E-mail: account.airworth-eas@airbus.com.

Appendix A	
Rudder P/N	**Affected rudder S/N**
A554-71710-000-00	TS-2010
A554-71710-000-00	TS-2027
A554-71710-000-00	TS-2030
A554-71710-002-00	TS-2043
A554-71710-004-00	TS-2048

Appendix B	
Rudder P/N	**Affected rudder S/N**
MSN-scrapped	TS-1362
A554-71710-000-00	TS-2006
A554-71710-000-00	TS-2008
A554-71710-002-00	TS-2033
A554-71710-004-00	TS-2054
A554-71710-004-00	TS-2061
A554-71710-004-00	TS-2071
A554-71710-004-00	TS-2072
A554-71710-004-00	TS-2073
A554-71730-000-00-0000	TS-2082
A554-71730-000-00-0000	TS-2084
A554-71730-000-00-0000	TS-2085
A554-71730-000-00-0000	TS-2086
A554-71730-000-00-0000	TS-2087

Appendix C	
Rudder P/N	**Affected rudder S/N**
A554-71500-016-30	HF-1254
A554-71710-004-00	TS-2049
A554-71710-004-00	TS-2055
A554-71710-004-00	TS-2059

Appendix D	
Rudder P/N	**Affected rudder S/N**
A554-71500-016-91	HF-1044
A554-71500-014-00	HF-1116
A554-71500-016-00	HF-1183
A554-71500-016-00	HF-1184
A554-71500-026-00	TS-1402