EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2009-0141 **Date: 02 July 2009** 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 this 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	A318, A319, A320 and A321 aeroplanes

TCDS Number :	EASA.A.064
Foreign AD :	Not applicable
Supersedure :	None

ATA 55	**Stabilizer – Rudder – Side Shell Skin – Inspection**
Manufacturer(s):	AIRBUS (formerly AIRBUS INDUSTRIE)
Applicability:	AIRBUS A318-111, A318-112, A318-121, A318-122, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-111, A320-211, A320-212, A320-214, A320-215, A320-216, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplane models, all manufacturer serial numbers, if equipped with Carbon Fiber Reinforced Plastic (CFRP) rudders having part numbers (P/N) and serial numbers (S/N) as listed in Appendix A to this AD.
Reason:	Surface defects were visually detected on the rudder of one A319 and one 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 a result of de-bonding between the skin and honeycomb core. 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. This AD requires inspections of specific areas and, when necessary, the application of corrective actions for those rudders where production reworks have been identified.

Effective Date:	16 July 2009
Required action(s) and Compliance Time(s):	Required as indicated: (1) <u>For rudders with a honeycomb core density of 24 kg/m^3 as identified in Appendix A to this AD, apply the following actions for the locations defined in Airbus All Operators Telex (AOT) A320-55A1038 Revision 01:</u> (1.1) Reinforced area location: Unless already accomplished, within 200 days from the effective date of this AD, perform Vacuum Loss inspection on the rudder reinforced area in accordance with instructions defined in Airbus AOT A320-55A1038 Revision 01. (1.2) Trailing edge area location: (1.2.1) Unless already accomplished, within 20 months from the effective date of this AD, perform Elasticity Laminate Checker inspection on the rudder trailing edge area in accordance with instructions defined in Airbus AOT A320-55A1038 Revision 01. (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. (1.3) Other areas locations (splice/lower rib/upper edge/leading edge/other locations). (1.3.1) Unless already accomplished, within 200 days from the effective date of this AD, perform Elasticity Laminate Checker inspection on the other areas (splice/lower rib/upper edge/leading edge/other locations) in accordance with instructions defined in Airbus AOT A320-55A1038 Revision 01. (1.3.2) Repeat the inspection defined in paragraph (1.3.1) of this AD at intervals not exceeding 1 500 FC or 200 days from the last inspection, whichever occurs first. (1.3.3) Unless already accomplished, within 20 months from the effective date of this AD, perform Vacuum Loss inspection on these areas (lower rib/upper edge/leading edge/other locations) in accordance with instructions defined in Airbus AOT A320-55A1038 Revision 01. (1.3.4) Accomplishment of the inspection required by paragraph (1.3.3) cancels the initial and repetitive inspections required by paragraph (1.3.1) and (1.3.2) of this AD. (1.4) In case of findings during the inspections defined in paragraphs (1.1), (1.2) or (1.3) of this AD, before next flight, contact Airbus to get further instructions and apply the associated instructions and corrective actions in accordance with the approved data provided. (1.5) Within 10 days after accomplishment of each inspection in accordance with paragraphs (1.1), (1.2) or (1.3) of this AD, report

the inspection results, including no findings, to Airbus.

(2) <u>For rudders not having a honeycomb core density of 24 kg/m^3 as identified in Appendix A to this AD, apply the following actions for the locations defined in Airbus AOT A320-55A1038 Revision 01:</u>

For the purpose of this AD a Reference Date is defined as the effective date of this AD or the date when the rudder will accumulate 20 000 FC from its first installation on an aeroplane, whichever occurs later.

(2.1) Reinforced area location:

Unless already accomplished, within 200 days from the Reference Date, perform Vacuum Loss inspection on the rudder reinforced area in accordance with instructions defined in Airbus AOT A320-55A1038 Revision 01.

(2.2) Trailing edge area location:

(2.2.1) Unless already accomplished, within 20 months from the Reference Date, perform Elasticity Laminate Checker inspection on the rudder trailing edge area in accordance with instructions defined in Airbus AOT A320-55A1038 Revision 01.

(2.2.2) Repeat two further times the inspection defined in paragraph (2.2.1) of this AD at intervals not to exceed 4 500 FC but not less than 1 000 FC from the last inspection.

(2.3) Other areas locations (splice/lower rib/upper edge/leading edge/other locations):

(2.3.1) Unless already accomplished, within 200 days from the Reference Date, perform Elasticity Laminate Checker inspection on the other areas (splice/lower rib/upper edge/leading edge/other locations) in accordance with instructions defined in Airbus AOT A320-55A1038 Revision 01.

(2.3.2) Repeat the inspection defined in paragraph (2.3.1) of this AD at intervals not exceeding 1 500 FC or 200 days from the last inspection, whichever occurs first.

(2.3.3) Unless already accomplished, within 20 months from the Reference Date, perform Vacuum Loss inspection on these areas (lower rib/upper edge/leading edge/other locations) in accordance with instructions defined in Airbus AOT A320-55A1038 Revision 01.

(2.3.4) Accomplishment of the inspection required by paragraph (2.3.3) of this AD cancels the initial and repetitive inspections required by paragraph (2.3.1) and (2.3.2) of this AD.

(2.4) In case of findings during the inspections defined in paragraphs (2.1), (2.2) or (2.3) of this AD, before next flight, contact Airbus to get further instructions and apply the associated instructions and corrective actions in accordance with the approved data provided.

(2.5) Within 10 days after accomplishment of each inspection in accordance with paragraphs (2.1), (2.2) or (2.3) of this AD, report

	the results, including no findings, to Airbus. (3) All rudders that have passed the inspection, before the effective date of this AD, in accordance with the instructions of Airbus AOT A320-55A1038 at original issue or Sampling instruction Technical Disposition (TD) ref. TD/K4/S2/27051/2009 issue B, are compliant with the associated requirements of this AD for the areas inspected. Additional areas requiring inspection are defined in AOT A320-55A1038 at Revision 01. For these additional areas the requirements of paragraphs (1) or (2) of this AD are applicable. For all areas, the repetitive inspections required by paragraphs (1) or (2) of this AD remain applicable. (4) After the effective date of this AD, no person shall install any rudder listed in Appendix A to this AD on an aeroplane unless in compliance with the requirements of this AD.
Ref. Publications:	AIRBUS All Operators Telex A320-55A1038 Revision 01. AIRBUS Technical Disposition ref. TD/K4/S2/27051/2009 issue B. 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. The required actions and the risk allowance have granted the issuance of a Final AD with Request for Comments, postponing the public consultation process after publication. 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 of this AD, please contact: AIRBUS – Airworthiness Office – EAS; Fax +33 (0) 561 93 44 51; E-mail: account.airworth-eas@airbus.com .

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Rudder P/N	Affected rudder S/N	Core density of 24 kg/m^3
D554 71000 010 00	TS-1069	X
D554 71000 010 00	TS-1090	X
D554 71000 012 00	TS-1227	X
D554 71000 014 00	TS-1350	
D554 71000 014 00	TS-1366	
D554 71000 014 00	TS-1371	
D554 71000 014 00	TS-1383	
D554 71000 014 00	TS-1387	
D554 71000 016 00	TS-1412	
D554 71000 018 00	TS-1443	
D554 71000 018 00	TS-1444	
D554 71000 018 00	TS-1468	
D554 71000 020 00	TS-1480	
D554 71000 020 00	TS-1491	
D554 71000 020 00	TS-1495	
D554 71000 020 00	TS-1498	
D554 71000 020 00	TS-149	
D554 71000 020 00	TS-1 00	
D554 71000 020 00	TS-150	
D554 71000 020 00	TS-1506	
D554 71000 020 00	TS-150	
D554 71000 020 00	TS-1509	
D554 71000 020 00	TS-1515	
D554 71000 020 00	TS-1528	
D554 71000 020 00	TS-1530	
D554 71000 020 00	TS-1532	
D554 71000 020 00	TS-1535	
D554 71000 020 00	TS-1536	
D554 71000 020 00	TS-1538	
D554 71001 000 00	TS-1537	
D554 71001 000 00	TS-1540	
D554 71001 000 00	TS-1541	
D554 71001 000 00	TS-1543	
D554 71001 000 00	TS-1548	
D554 71001 000 00	TS-1549	
D554 71001 000 00	TS-1551	
D554 71001 000 00	TS-1554	
D554 71001 000 00	TS-1555	
D554 71001 000 00	TS-1556	
D554 71001 000 00	TS-1557	
D554 71001 000 00	TS-1559	
D554 71001 000 00	TS-1562	
D554 71001 000 00	TS-1563	
D554 71001 000 00	TS-1564	
D554 71001 000 00	TS-1565	
D554 71001 000 00	TS-1566	

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Rudder P/N	Affected rudder S/N	Core density of 24 kg/m^3
D554 71001 000 00	TS-1567	
D554 71001 000 00	TS-1568	
D554 71001 000 00	TS-1569	
D554 71001 000 00	TS-1570	
D554 71001 000 00	TS-1573	
D554 71001 000 00	TS-1575	
D554 71001 000 00	TS-1578	
D554 71001 000 00	TS-1579	
D554 71001 000 00	TS-1580	
D554 71001 000 00	TS-1581	
D554 71001 000 00	TS-1582	
D554 71001 000 00	TS-1584	
D554 71001 000 00	TS-1593	
D554 71001 000 00	TS-1594	
D554 71001 000 00	TS-1596	
D554 71001 000 00	TS-1599	
D554 71001 000 00	TS-1603	
D554 71001 000 00	TS-160[illegible]	
D554 71001 000 00	TS-1[illegible]21	
D554 71001 000 00	TS-162[illegible]	
D554 71001 000 00	TS-1627	
D554 71001 000 00	TS-163[illegible]	
D554 71001 000 00	TS-16[illegible]7	
D554 71002 000 00	TS-2306	
D554 71002 000 00 0002	TS-2003	
D554 71002 000 00 0001	TS-2005	
D554 71002 000 00 0001	TS-2013	
D554 71002 000 00 0001	TS-2016	
D554 71002 000 00 0001	TS-2019	
D554 71002 000 00 0001	TS-2020	
D554 71002 000 00 0001	TS-2022	
D554 71002 000 00 0001	TS-2024	
D554 71002 000 00 0001	TS-2026	
D554 71002 000 00 0001	TS-2031	
D554 71002 000 00 0001	TS-2033	
D554 71002 000 00 0001	TS-2043	
D554 71002 000 00 0001	TS-2047	
D554 71002 000 00 0001	TS-2048	
D554 71002 000 00 0001	TS-2054	
D554 71002 000 00 0001	TS-2058	
D554 71002 000 00 0001	TS-2059	
D554 71002 000 00 0001	TS-2064	
D554 71002 000 00 0001	TS-2072	
D554 71002 000 00 0001	TS-2075	
D554 71002 000 00 0001	TS-2076	
D554 71002 000 00 0001	TS-2079	
D554 71002 000 00 0001	TS-2083	

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Rudder P/N	Affected rudder S/N	Core density of 24 kg/m^3
D554 71002 000 00 0001	TS-2089	
D554 71002 000 00 0002	TS-2090	
D554 71002 000 00 0002	TS-2095	
D554 71002 000 00 0002	TS-2103	
D554 71002 000 00 0002	TS-2116	
D554 71002 000 00 0002	TS-2122	
D554 71002 000 00 0002	TS-2133	
D554 71002 000 00 0002	TS-2142	
D554 71002 000 00 0002	TS-2147	
D554 71002 000 00 0002	TS-2157	
D554 71002 000 00 0002	TS-2158	
D554 71002 000 00 0002	TS-2162	
D554 71002 000 00 0002	TS-2167	
D554 71002 000 00 0002	TS-2174	
D554 71002 000 00 0002	TS-2176	
D554 71002 000 00 0002	TS-2181	
D554 71002 000 00 0002	TS-2189	
D554 71002 000 00 0002	TS-219[illegible]	
D554 71002 000 00 0002	TS-2[illegible]03	
D554 71002 000 00 0002	TS-220[illegible]	
D554 71002 000 00 0002	TS-2207	
D554 71002 000 00 0002	TS-222[illegible]	
D554 71002 000 00 0002	TS-22[illegible]9	
D554 71002 000 00 0002	TS-2233	
D554 71002 000 00 0002	TS-2241	
D554 71002 000 00 0002	TS-2246	
D554 71002 000 00 0002	TS-2249	
D554 71002 000 00 0002	TS-2270	
D554 71002 000 00 0002	TS-2275	
D554 71002 000 00 0002	TS-2289	
D554 71002 000 00 0002	TS-2290	
D554 71002 000 00 0002	TS-2294	
D554 71002 000 00 0002	TS-2309	
D554 71002 000 00 0002	TS-2347	
D554 71002 000 00 0002	TS-2348	
D554 71002 000 00 0002	TS-2349	
D554 71002 000 00 0002	TS-2357	
D554 71002 000 00 0002	TS-2361	
D554 71002 000 00 0002	TS-2380	
D554 71002 000 00 0002	TS-2383	
D554 71002 000 00 0002	TS-2390	
D554 71002 000 00 0002	TS-2394	
D554 71002 000 00 0002	TS-2396	
D554 71002 000 00 0002	TS-2401	
D554 71002 000 00 0002	TS-2406	
D554 71002 000 00 0002	TS-2461	
D554 71002 000 00 0002	TS-2468	

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Rudder P/N	Affected rudder S/N	Core density of 24 kg/m^3
D554 71002 000 00 0002	TS-2516	
D554 71002 000 00 0002	TS-2537	
D554 71002 000 00 0002	TS-2543	
D554 71002 000 00 0002	TS-2546	
D554 71002 000 00 0002	TS-2619	
D554 71002 000 00 0002	TS-2684	
D554 71002 000 00 0003	TS-2752	
D554 71002 000 00 0003	TS-2869	
D554 71002 000 00 0003	TS-2876	
D554 71002 000 00 0003	TS-2970	
D554 71002 000 00 0003	TS-2971	
D554 71002 000 00 0003	TS-2987	
D554 71004 000 00 0000	TS-3083	
D554 71004 000 00 0000	TS-3197	