


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>	
	<p><b>AD No.: 2010-0127</b></p> <p><b>Date: 23 June 2010</b></p> <p>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.</p>	
<p>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].</p>		
<p><b>Type Approval Holder's Name :</b> AIRBUS</p>	<p><b>Type/Model designation(s) :</b> A330 and A340-200/-300 aeroplanes</p>	
<p>TCDS Number : EASA.A.004, EASA.A.015</p>		
<p>Foreign AD : Not applicable</p>		
<p>Supersedure : None</p>		
<p><b>ATA 55</b></p>	<p><b>Stabilizers – Rudder Side Shell Skin – Inspection</b></p>	
<p>Manufacturer(s):</p>	<p>Airbus (formerly Airbus Industrie)</p>	
<p>Applicability:</p>	<p>Airbus A330 aeroplanes, models -201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342 and -343, all manufacturer serial numbers, and</p> <p>Airbus A340 aeroplanes, models -211, -212, -213, -311, -312 and -313, all manufacturer serial numbers,</p> <p>if equipped with rudders having part numbers (P/N) and serial numbers (S/N) as listed in the Appendix A, B or C to this AD.</p>	
<p>Reason:</p>	<p>Surface defects were visually detected on the rudder of one A319 and one A321 in-service aeroplane during scheduled maintenance.</p> <p>Investigation has determined that the defects reported on both rudders corresponded to areas that had been reworked in production. The investigation confirmed that the surface defects were a result of de-bonding between the skin and honeycomb core.</p> <p>Such reworks were also performed on some rudders fitted on A330 and A340-200/-300 aeroplanes.</p> <p>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.</p>	

	<p>To address this unsafe condition, EASA issued AD 2010-0021, superseding EASA AD 2009-0156, to require inspections of specific areas and, depending on findings, the accomplishment of corrective actions for those rudders where production reworks have been identified.</p> <p>In addition, this AD addresses the rudder population that has also been reworked in production but is not part of EASA AD 2010-0021 applicability.</p>
Effective Date:	07 July 2010
Required action(s) and Compliance Time(s):	<p>Required as indicated:</p> <p>(1) <b><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) A330-55-3042, or Airbus SB A340-55-4038, as applicable:</u></b></p> <p>(1.1) Non ventilated area ("Area 1") location :</p> <p>Unless already accomplished,</p> <ul style="list-style-type: none"> <li>- within 1 800 Flight Hours (FH) after the effective date of this AD for rudders listed in Appendix A to this AD, or</li> <li>- within 21 months after the effective date of this AD, for rudders listed in Appendix B to this AD,</li> </ul> <p>perform Vacuum Loss inspection on the rudder non ventilated area in accordance with instructions defined in Airbus SB A330-55-3042, or Airbus SB A340-55-4038, as applicable to the aeroplane model.</p> <p>(1.2) Trailing edge area ("Area 2") location:</p> <p>(1.2.1) Unless already accomplished, within 21 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 A330-55-3042, or Airbus SB A340-55-4038, as applicable to the aeroplane model.</p> <p>(1.2.2) Repeat two further times the inspection required by 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.</p> <p>(2) <b><u>For rudders as identified in Appendix C to this AD:</u></b></p> <p>(2.1) Unless already accomplished, within 4 500 FC but not less than 4 000 FC from the sampling inspection, perform an Elasticity Laminate Checker inspection on the rudder trailing edge area in accordance with instructions defined in Airbus SB A330-55-3042, or Airbus SB A340-55-4038 as applicable to the aeroplane model.</p> <p>(2.2) Repeat once the inspection required by paragraph (2.1) of this AD within 4 500 FC but not less than 4 000 FC from the last inspection.</p> <p>(3) In case of findings during the inspections required by 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.</p> <p>(4) In case of no findings during the inspection required by 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 with resin), in accordance with Airbus SB A330-55-3042, or Airbus SB A340-55-4038, as applicable to the aeroplane model, and apply the associated instructions until performance of permanent restoration.</p>

	<p>(5) Within 10 days after accomplishment of each inspection in compliance with paragraphs (1) or (2) of this AD, report to Airbus the inspection results, including no finding.</p> <p>(6) After the effective date of this AD, do not 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.</p>
Ref. Publications :	<p>Airbus Service Bulletin A330-55-3042 at original issue; Airbus Service Bulletin A340-55-4038 at original issue.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>
Remarks:	<ol style="list-style-type: none"> <li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>2. This AD was posted on 19 May 2010 as PAD 10-044 for consultation until 16 June 2010. The Comment Response Document can be found at <a href="http://ad.easa.europa.eu/">http://ad.easa.europa.eu/</a>.</li> <li>3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management &amp; Research Section, Certification Directorate, EASA. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a> .</li> <li>4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – EAL, E-mail: <a href="mailto:airworthiness.A330-A340@airbus.com">airworthiness.A330-A340@airbus.com</a> .</li> </ol>

<b>EASA AD 2010-0127 – Appendix A</b>	
<b>Rudder P/N</b>	<b>Affected rudder S/N</b>
F554-70000-000-00	TS-2045
F554-70000-000-00	TS-2046
F554-71000-000-00-0000	TS-3013
F554-71000-000-00-0000	TS-3014
F554-71000-000-00-0000	TS-3020
F554-71000-000-00-0000	TS-3022
F554-71000-000-00-0000	TS-3023
F554-71000-000-00-0000	TS-3027
F554-71000-000-00-0000	TS-3031
F554-71000-000-00-0000	TS-3034
F554-71000-000-00-0000	TS-3036
F554-71000-000-00-0000	TS-3038
F554-71000-000-00-0000	TS-3041
F554-71000-000-00-0000	TS-3046
F554-71000-000-00-0000	TS-3054
F554-70005-000-00-0000	TS-3102
F554-71002-000-00-0002	TS-4018
F554-71002-000-00-0002	TS-4022
F554-71002-000-00-0002	TS-4031

<b>EASA AD 2010-0127 – Appendix B</b>	
<b>Rudder P/N</b>	<b>Affected rudder S/N</b>
A554-71500-024-00	TS-1014
A554-71500-030-00	TS-1042
F554-70000-000-00	TS-2004
F554-70000-000-00	TS-2005
F554-70000-000-00	TS-2008
F554-70000-000-00	TS-2009
F554-70000-000-00	TS-2010
F554-70000-000-00	TS-2022
F554-70000-000-00	TS-2023
F554-70000-000-00	TS-2028
F554-70000-000-00	TS-2029
F554-70000-000-00	TS-2030
F554-70000-000-00	TS-2032
F554-70000-000-00	TS-2033
F554-70000-000-00	TS-2034
F554-70000-000-00	TS-2041
F554-70000-000-00	TS-2044
F554-70000-000-00	TS-2048
F554-70000-000-00	TS-2049
F554-70000-000-00	TS-2050
F554-70000-000-00	TS-2057
F554-70000-000-00	TS-2067
F554-70000-002-00	TS-2068
F554-70000-002-00	TS-2071
F554-71000-000-00-0000	TS-3001
F554-71000-000-00-0000	TS-3010
F554-71000-000-00-0000	TS-3012
F554-71000-000-00-0000	TS-3017
F554-71000-000-00-0000	TS-3018
F554-71000-000-00-0000	TS-3019
F554-71000-000-00-0000	TS-3021
F554-71000-000-00-0000	TS-3024
F554-71000-000-00-0000	TS-3025
F554-71000-000-00-0000	TS-3026
F554-71000-000-00-0000	TS-3028
F554-71000-000-00-0000	TS-3029
F554-71000-000-00-0000	TS-3030
F554-71000-000-00-0000	TS-3032
F554-71000-000-00-0000	TS-3035
F554-71000-000-00-0000	TS-3037
F554-71000-000-00-0000	TS-3039
F554-71000-000-00-0000	TS-3040
F554-71000-000-00-0000	TS-3042
F554-71000-000-00-0000	TS-3047
F554-71000-000-00-0000	TS-3049
F554-71000-000-00-0000	TS-3055
F554-71000-000-00-0000	TS-3058
F554-71000-000-00-0000	TS-3062
F554-71000-000-00-0000	TS-3063
F554-71000-000-00-0000	TS-3065
F554-71000-000-00-0000	TS-3067
F554-71000-000-00-0000	TS-3069

F554-71000-000-00-0000	TS-3070
F554-71000-000-00-0000	TS-3077
F554-71000-000-00-0000	TS-3078
F554-71000-000-00-0000	TS-3080
F554-71000-000-00-0000	TS-3081
F554-71000-000-00-0000	TS-3086
F554-71000-000-00-0000	TS-3089
F554-71000-000-00-0000	TS-3092
F554-71000-000-00-0000	TS-3093
F554-71000-000-00-0000	TS-3095
F554-71000-000-00-0000	TS-3096
F554-70005-000-00-0000	TS-3098
F554-70005-000-00-0000	TS-3099
F554-70005-000-00-0000	TS-3101
F554-70005-000-00-0000	TS-3103
F554-70005-000-00-0000	TS-3104
F554-70005-000-00-0000	TS-3105
F554-70005-000-00-0000	TS-3108
F554-70005-000-00-0000	TS-3109
F554-70005-000-00-0000	TS-3110
F554-70005-000-00-0000	TS-3111
F554-70005-000-00-0000	TS-3112
F554-70005-000-00-0000	TS-3114
F554-70005-000-00-0000	TS-3116
F554-70005-000-00-0000	TS-3117
F554-70005-000-00-0000	TS-3120
F554-70005-000-00-0000	TS-3131
F554-70005-000-00-0000	TS-3132
F554-70005-000-00-0000	TS-3212
F554-70005-000-00-0002	TS-3323
F554-70005-000-00-0002	TS-3330
F554-71002-000-00-0002	TS-4009
F554-71002-000-00-0002	TS-4010
F554-71002-000-00-0002	TS-4012
F554-71002-000-00-0002	TS-4013
F554-71002-000-00-0002	TS-4014
F554-71002-000-00-0002	TS-4015
F554-71002-000-00-0002	TS-4016
F554-71002-000-00-0002	TS-4017
F554-71002-000-00-0002	TS-4020
F554-71002-000-00-0002	TS-4023
F554-71002-000-00-0002	TS-4025
F554-71002-000-00-0002	TS-4026
F554-71002-000-00-0002	TS-4027
F554-71002-000-00-0002	TS-4029
F554-71002-000-00-0002	TS-4030
F554-71002-000-00-0002	TS-4038
F554-71002-000-00-0002	TS-4047
F554-71002-000-00-0002	TS-4049
F554-71002-000-00-0002	TS-4066
F554-71002-000-00-0003	TS-4083

<b>EASA AD 2010-0127 – Appendix C</b>	
<b>Rudder P/N</b>	<b>Affected rudder S/N</b>
F554-71000-000-00-0000	TS-3060
F554-71000-000-00-0000	TS-3068
F554-70005-000-00-0000	TS-3128
F554-71002-000-00-0002	TS-4011