


EASA	AIRWORTHINESS DIRECTIVE	
	<p>AD No.: 2013-0270</p> <p>Date: 14 November 2013</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 EU 748/2012, Part 21.A.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>Design Approval Holder's Name: AIRBUS</p>		<p>Type/Model designation(s): A330 and A340 aeroplanes</p>
TCDS Number:	EASA.A.004, EASA.A.005	
Foreign AD:	Not applicable	
Supersedure:	None	
ATA 55		
Stabilizers – Rudder Side Panel Along the Z-Profile – Inspection		
Manufacturer(s):	Airbus (formerly Airbus Industries)	
Applicability:	<p>Airbus A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343 aeroplanes, all manufacturer serial numbers (MSN), except aeroplanes on which Airbus Mod 41800 has been embodied in production.</p> <p>Airbus A340-211, A340-212, A340-213, A340-311, A340-312, A340-313, aeroplanes, all MSN, except aeroplanes on which Airbus Mod 41800 has been embodied in production.</p>	
Reason:	<p>One A310 operator found substantial inner skin disbonding damage on a rudder. The results of the subsequent investigation revealed that the most probable cause of this damage was a blunt impact with no visible damage from outside during the rudder handling. Such type of damage might grow with pressure variation during ground-air-ground cycles, and tests performed with other rudders showed a rapid propagation of damage during artificial pressure cycling.</p> <p>This condition, if not detected and corrected, could affect the structural integrity of the rudder.</p> <p>For the affected A310 and A300-600 aeroplanes, EASA issued AD 2013-0039 to address and correct this potential unsafe condition.</p> <p>As potentially affected rudders can also be installed on A330 and A340 aeroplanes, Airbus issued Alert Operators Transmission (AOT) A55L001-12, pending Aircraft Maintenance Manual (AMM) 27-21-41 PB401 revision, to</p>	

	<p>provide operators with updated rudder handling procedures.</p> <p>For the reasons described above, this AD requires identification of the affected rudders P/N A55471500XXX (where XXX stands for any numerical value), a one-time ultrasonic test (UT) inspection of each affected rudder to detect signs of disbonding and, depending on findings, accomplishment of applicable corrective action(s).</p>
Effective Date:	28 November 2013
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> (1) Within 3 months after the effective date of this AD, in accordance with the instructions of Airbus Alert Operator Transmission (AOT) A55L001-12, accomplish the following actions: <ol style="list-style-type: none"> (1.1) Identify the Part Number (P/N) and serial number (s/n) of the installed rudder assembly. If the P/N and/or s/n cannot be identified, contact Airbus for identification advice. (1.2) Determine if the installed rudder has, before the effective date of this AD, ever been removed and re-installed or inspected off-wing in accordance with the instructions of Airbus SB A330-55-3038 or SB A340-55-4034, as applicable to aeroplane model. (1.3) If it is determined the rudder assembly has P/N A55471500XXX <u>and</u> that rudder was removed and re-installed or inspected off-wing in accordance with the instructions of Airbus SB A330-55-3038 or SB A340-55-4034, as applicable to aeroplane model, accomplish an UT inspection of the rudder side panel along the Z-profile and in the booster area. (2) If, during the inspection as required by paragraph (1.2) of this AD, any finding is detected, before next flight, differentiate the disbonding from other possible damage by accomplishing an Elasticity of Laminate Checker Inspection to detect external and internal disbonding, <u>and</u> accomplish a Woodpecker or Tap test inspection to detect external disbonding, in accordance with the instructions of Airbus AOT A55L001-12. (3) If the finding, differentiated as required by paragraph (2) of this AD, is confirmed as disbonding, accomplish corrective actions as required by paragraph (3.1) or (3.2) of this AD, as applicable, depending on the size of the disbonding. <ol style="list-style-type: none"> (3.1) For disbonding, equal to or less than 50 mm width, and equal to or less than 150 mm length, before next flight, vent the rudder core in accordance with an approved procedure (which must be obtained from Airbus) and, within 10 days after venting the rudder core, send a detailed damage report to Airbus, request permanent repair instructions and, within 100 flight cycles after venting the rudder core, accomplish those instructions accordingly for that disbonding. (3.2) For disbonding, exceeding 50 mm width, or exceeding 150 mm length, before next flight, send a detailed damage report to Airbus, request approved instructions for corrective action and accomplish those instructions accordingly for that disbonding, or replace the rudder with a serviceable rudder. (4) If the finding, differentiated as required by paragraph (2) of this AD, is confirmed as other type(s) of damage (e.g. liquid ingress), before next flight, accomplish a repair in accordance with the instructions as provided in the applicable Airbus Structural Repair Manual for those discrepancies. In case no active SRM procedures are available, contact Airbus for approved repair instructions and accomplish those instructions accordingly. (5) From the effective date of this AD, for each installation of a P/N

	A55471500XXX rudder on an aeroplane, before next flight after installation, accomplish an UT inspection of the rudder in accordance with the instructions of Airbus AOT A55L001-12 and, depending on findings, accomplish corrective actions as required by paragraph (3) or (4) of this AD, depending on the size of the disbonding.
Ref. Publications:	Alert Operator Transmission A55L001-12 dated 20 December 2012. Airbus SB A330-55-3038 original issue dated 07November 2007. Airbus SB A340-55-4034 original issue dated 07November 2007. The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.
Remarks:	<ol style="list-style-type: none"> 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 Safety Information Section, Executive 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 – EIAL, E-mail: airworthiness.A330-A340@airbus.com.