


EASA	AIRWORTHINESS DIRECTIVE	
	<p>AD No.: 2011-0139</p> <p>Date: 25 July 2011</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>Type Approval Holder's Name :</p> <p>AIRBUS</p>	<p>Type/Model designation(s) :</p> <p>A330 and A340-200/-300 aeroplanes</p>	
<p>TCDS Number:</p>	<p>EASA.A.004, EASA.A.015</p>	
<p>Foreign AD:</p>	<p>Not applicable</p>	
<p>Supersedure:</p>	<p>This AD supersedes EASA AD 2010-0145 dated 14 July 2010.</p>	
<p>ATA 29</p>	<p>Hydraulic Power – High Pressure Manifold Check Valves – Inspection</p>	
<p>Manufacturer(s):</p>	<p>Airbus (formerly Airbus Industrie)</p>	
<p>Applicability:</p>	<p>Airbus A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343 aeroplanes, all manufacturer serial numbers, and</p> <p>Airbus A340-211, A340-212, A340-213, A340-311, A340-312 and A340-313 aeroplanes, all manufacturer serial numbers.</p>	
<p>Reason:</p>	<p>An A330 operator experienced a yellow hydraulic circuit low level due to a loose check valve, Part Number (P/N) CAR401. During the inspection on the other two hydraulic systems, the other three check valves P/N CAR401 were also found to be loose with their lock wire broken in two instances. Airbus A340 aeroplanes are also equipped with P/N CAR401 high pressure manifold check valves.</p> <p>Additional cases of P/N CAR401 check valve loosening have been reported on aeroplanes having accumulated more than 1 000 flight cycles (FC). The check valve fitted on the Yellow hydraulic system is more affected, due to additional system cycles induced by cargo door operation.</p> <p>This condition, if not detected and corrected, could result in hydraulic leaks, possibly leading to the loss of all three hydraulic systems and consequent loss of control of the aeroplane.</p> <p>To address this unsafe condition, EASA issued Emergency AD 2009-0223-E to require an inspection programme to detect any check valve loosening and,</p>	

	<p>if necessary, to apply the associated corrective actions.</p> <p>EASA AD 2010-0145, which superseded EASA EAD 2009-0223-E retaining its requirements, was issued to expand the applicability to the newly certified models A330-223F and A330-243F.</p> <p>Prompted by further reported in-service events of check valve P/N CAR401 loosening before reaching the threshold of 700 FC, this new AD supersedes AD 2010-0145, retaining its requirements, and is issued to:</p> <ul style="list-style-type: none"> - extend the requirement to identify the P/N CAR401 check valves to all aeroplanes, and to - reduce the inspection threshold for aeroplanes fitted with check valve P/N CAR401, either installed in production through Airbus modification 54491, or installed in service through Airbus Service Bulletin (SB) A330-29-3101 or Airbus SB A340-29-4078.
Effective Date:	08 August 2011
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Within 900 FH after the effective date of this AD, accomplish a visual inspection of the check valves on Blue, Green and Yellow hydraulic systems to identify their P/N, in accordance with the accomplishment instructions of Airbus SB A330-29-3111 Revision 02, or Airbus SB A340-29-4086 Revision 02, as applicable to aeroplane type.</p> <p>(1.1) If check valves P/N CAR401 are installed on all three hydraulic systems, accomplish the actions as specified in paragraphs (1.1.1), (1.1.2) and (1.1.3) of this AD.</p> <p>(1.1.1) Before further flight after the identification as required by paragraph (1) of this AD, perform the inspection programme on yellow and blue system check valves and, depending on findings, apply the associated corrective actions in accordance with the accomplishment instructions of Airbus SB A330-29-3111 Revision 02, or Airbus SB A340-29-4086 Revision 02, as applicable to aeroplane type.</p> <p>(1.1.2) Within 900 FH after compliance with the requirements paragraph (1.1.1) of this AD, perform the inspection programme on green, yellow and blue system check valves and, depending on findings, apply the associated corrective actions in accordance with the accomplishment instructions of SB A330-29-3111 Revision 02, or SB A340-29-4086 Revision 02, as applicable to aeroplane type.</p> <p>(1.1.3) Thereafter, at intervals not to exceed 900 FH, repeat the inspection programme required by paragraph (1.1.2) of this AD and, depending on findings, apply the associated corrective actions in accordance with the accomplishment instructions of SB A330-29-3111 Revision 02, or SB A340-29-4086 Revision 02, as applicable to aeroplane type.</p> <p>(1.2) If check valves P/N CAR401 are not installed on all three hydraulic systems, no immediate further action is required by paragraph (1) of this AD. However, before next flight after any check valve P/N CAR400 is replaced with a check valve P/N CAR401, the aeroplane configuration must be inspected to determine if all three hydraulic systems are equipped with check valve P/N CAR401, in which case the requirements of paragraph (1.1) of this AD must be accomplished.</p>

	<p>(2) Within 90 days after each accomplishment of an inspection programme as required by paragraph (1) of this AD, report all inspection results to Airbus.</p> <p>(3) Aeroplanes which have been inspected and corrected, before the effective date of this AD, in accordance with the instructions of Airbus All Operators Telex (AOT) A330-29A3111 at Original issue or Revision 01, or AOT A340-29A4086 at Original issue or Revision 01, as applicable to aeroplane type, are compliant with the initial inspection programme as required by paragraph (1.1.1) of this AD. After the effective date of this AD, all inspection programmes, as required by paragraphs (1.1.2) and (1.1.3) of this AD, must be accomplished in accordance with the accomplishment instructions of Airbus SB A330-29-3111 Revision 02, or SB A340-29-4086 Revision 02, as applicable to aeroplane type.</p> <p>(4) Aeroplanes that have had Airbus modification 201384 embodied during production are compliant with the requirements of this AD.</p> <p>To ensure that the aeroplane remains compliant, when a check valve P/N CAR401 is replaced after aeroplane first flight, it must be verified that the replacement check valve P/N CAR401 is torqued to 400 Nm during installation.</p>
Ref. Publications:	<p>Airbus AOT A330-29A3111 original issue dated 02 September 2009, or Revision 01 dated 08 October 2009. Airbus SB A330-29-3111 Revision 02 dated 23 June 2011.</p> <p>Airbus AOT A340-29A4086 original issue dated 02 September 2009, or Revision 01 dated 08 October 2009. Airbus SB A340-29-4086 Revision 02 dated 23 June 2011.</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"> 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 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 – EAL; E-mail: airworthiness.A330-A340@airbus.com.