


EASA	AIRWORTHINESS DIRECTIVE	
	<p>AD No.: 2011-0199R1</p> <p>Date: 17 February 2012</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>	
TCDS Numbers:	EASA.A.004 and EASA.A.015	
Foreign AD:	Not applicable	
Revision:	This AD revises EASA AD 2011-0199 dated 27 October 2011.	
ATA 22, 27	Auto Flight / Flight Controls – Flight Control Primary Computer (FCPC) – Modification / Replacement	
Manufacturer(s):	Airbus (formerly Airbus Industrie)	
Applicability:	<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, except those on which Airbus modification 201654 has been embodied in production, or Airbus Service Bulletin (SB) A330-27-3156 has been incorporated in service, and</p> <p>Airbus A340-211, A340-212, A340-213, A340-311, A340-312 and A340-313 aeroplanes, all manufacturer serial numbers.</p>	
Reason:	<p>It has been determined that, when there are significant differences between all airspeed sources, the flight controls of an Airbus A330 or A340 aeroplane will revert to alternate law, the autopilot (AP) and the auto-thrust (A/THR) automatically disconnect, and the Flight Directors (FD) bars are automatically removed.</p> <p>Further analyses have shown that, after such an event, if two airspeed sources become similar while still erroneous, the flight guidance computers will display the FD bars again, and enable the re-engagement of AP and A/THR. However, in some cases, the AP orders may be inappropriate, such as possible abrupt pitch command.</p> <p>In order to prevent such events which may, under specific circumstances, constitute an unsafe condition, EASA issued AD 2010-0271 to require an amendment of the Flight Manual to ensure that flight crews apply the appropriate operational procedure.</p> <p>Since that AD was issued, new FCPC software standards have been</p>	

	<p>developed that will inhibit autopilot engagement under unreliable airspeed conditions.</p> <p>Consequently, EASA issued AD 2011-0199 to require software standard upgrade of the three FCPCs by either modification or replacement, as follows:</p> <ul style="list-style-type: none"> - software standard P11A/M20A on FCPC 2K2 hardware for A330-200/-300 aeroplanes, through Airbus Service Bulletin (SB) A330-27-3176, - software standard P12A/M21A on FCPC 2K1 hardware and M21A on FCPC 2K0 hardware for A330-200/-300 aeroplanes, through Airbus SB A330-27-3177, - software standard L22A on FCPC 2K1 hardware and L22A on FCPC 2K0 hardware for A340-200/-300 aeroplanes, through Airbus SB A340-27-4174, and - software standard L21A on FCPC 2K2 hardware for A340-300 aeroplanes, through Airbus SB A340-27-4162. <p>This AD is revised to :</p> <ul style="list-style-type: none"> • correct and simplify Table 1 – Software Standard updates. The affected aeroplane column of Table 1 has been deleted because the aeroplane configuration applicable to FCPC standards is defined in Airbus SBs, • provide Service Bulletins issuance date and, • specify the consequences that compliance with this AD has for the actions required by EASA AD 2010-0271, EASA AD 2009-0012, and EASA AD 2010-0081. 										
<p>Effective Date:</p>	<p>Revision 1 : 02 March 2012</p> <p>Original issue : 10 November 2011</p>										
<p>Required Action(s) and Compliance Time(s):</p>	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Within 10 months after 10 November 2011 [the effective date of this AD at original issue], modify or replace the three FCPCs, as specified in Table 1 of this AD, in accordance with the instructions of Airbus SB A330-27-3176, or SB A330-27-3177, or SB A340-27-4162, or SB A340-27-4174, as applicable to aeroplane type and model.</p> <p style="text-align: center;">Table 1 – Software Standard updates</p> <table border="1" data-bbox="600 1335 1297 1827"> <thead> <tr> <th>Software Standard update(s)</th> <th>Airbus SB</th> </tr> </thead> <tbody> <tr> <td>software standard P11A/M20A on FCPC 2K2 hardware</td> <td>SB A330-27-3176</td> </tr> <tr> <td>software standard P12A/M21A on FCPC 2K1 hardware, and software standard M21A on FCPC 2K0 hardware</td> <td>SB A330-27-3177</td> </tr> <tr> <td>software standard L22A on FCPC 2K1 hardware, and software standard L22A on FCPC 2K0 hardware</td> <td>SB A340-27-4174</td> </tr> <tr> <td>software standard L21A on FCPC 2K2 hardware</td> <td>SB A340-27-4162</td> </tr> </tbody> </table> <p>(2) After modification of an aeroplane as required by paragraph (1) of this AD, the operational procedures as imposed by EASA AD 2009-0012-E and EASA AD 2010-0271 are no longer required for that aeroplane.</p> <p>(3) Modification of an aeroplane as required by paragraph (1) of this AD constitutes compliance with the modification of the three FCPCs as required by paragraph (8) of EASA AD 2010-0081 for that aeroplane.</p>	Software Standard update(s)	Airbus SB	software standard P11A/M20A on FCPC 2K2 hardware	SB A330-27-3176	software standard P12A/M21A on FCPC 2K1 hardware, and software standard M21A on FCPC 2K0 hardware	SB A330-27-3177	software standard L22A on FCPC 2K1 hardware, and software standard L22A on FCPC 2K0 hardware	SB A340-27-4174	software standard L21A on FCPC 2K2 hardware	SB A340-27-4162
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Ref. Publications:	Airbus SB A330-27-3176 original issue dated 26 July 2011. Airbus SB A330-27-3177 original issue dated 21 December 2011. Airbus SB A340-27-4162 original issue dated 10 January 2012. Airbus SB A340-27-4174 original issue dated 21 November 2011. 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. The original issue of this AD was posted on 02 August 2011 as PAD 11-081 for consultation until 30 August 2011. The Comment Response Document can be found at http://ad.easa.europa.eu/.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