


EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2008-0010R1</p> <p>Date: 07 October 2008</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>	
Type Approval Holder's Name : AIRBUS	Type/Model designation(s) : A330 and A340 aircraft
TCDS Number : EASA A.004, EASA A.015	
Foreign AD : Not applicable	
Revision : This AD revises and replaces EASA AD 2008-0010-E dated 14 January 2008	
ATA 27	Flight Controls – Flight Control Primary Computer (FCPC) – Dispatch Restriction and Operational Test
Manufacturer(s):	AIRBUS (formerly AIRBUS INDUSTRIE)
Applicability:	<p>AIRBUS A330 aircraft, models -201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342 and -343, all serial numbers.</p> <p>AIRBUS A340 aircraft, models, -211, -212, -213, -311, -312, -313, -541, -542, -642 and -643, all serial numbers.</p>
Reason:	<p>On A330/A340 aircraft, the Flight Control Primary Computer 2 (FCPC2) and FCPC3 are supplied with power from the 2PP bus bar. Electrical transients on the 2PP bus bar occur, in particular during engine n.2 failure on A330 aircraft or engine n.3 failure on A340 aircraft. Such electrical transients lead to a FCPC2 reset. FCPC3 reset does not occur thanks to the introduction of second electrical power supply to FCPC3 from 1PP bus bar associated to Electrical Contactor Management Unit (ECMU) standard 5.</p> <p>During the evaluation of specific engine failure cases at take-off on Airbus flight simulators, it has been evidenced that with FCPC1 inoperative, in the worst case, when FCPC2 and FCPC3 resets occur during rotation at take off, a transient loss of elevator control associated with a temporary incorrect flight control law reconfiguration could occur. It leads to a movement of the elevators to the zero position, which induces a pitch down movement instead of a pitch up movement needed to lift off. In addition, it leads to a limitation of the pilot authority in pitch axis and limits the capacity to counter the pitch down movement during this flight phase.</p>

	<p>which constitutes an unsafe condition.</p> <p>To prevent such situation, Emergency Airworthiness Directive (EAD) 2008-0010-E aimed to prohibit aircraft dispatch with FCPC1 inoperative (from GO to NO-GO) for certain aircraft configuration. For the other configurations dispatch is allowed when integrity of the FCPC3 second electrical power supply is ensured.</p> <p>This AD is revised in order to :</p> <ul style="list-style-type: none"> - For A340-500/-600, alleviate the dispatch restriction on aircraft fitted with new FCPC Standard W11 (PN LA2K2B100GA0000) <p>and</p> <ul style="list-style-type: none"> - For A330 and A340-200/-300, to take into account the possibility to embody in service a new FCPC3 second electrical power supply equivalent to the production one.
Effective Date:	16 January 2008.
Required action(s) and Compliance Time(s):	<p>The following operational limitation is required as indicated from the effective date of this AD:</p> <p>(1) <u>For aircraft identified in applicability section of this AD except:</u></p> <ul style="list-style-type: none"> - A330 and A340-200/-300 aircraft on which AIRBUS modification 44385 has been embodied either in production or in service by AIRBUS Service Bulletin (SB) A330-27-3159 or SB A340-27-4158 AND AIRBUS modification 44431 has been embodied either in production or in service by SB A330-24-3011 or SB A340-24-4019, - A340-500/-600 aircraft on which AIRBUS modification 57698 has been embodied either in production or in service by SB A340-27-5046, <p><u>Dispatch restriction :</u></p> <p>Dispatch with the FCPC "PRIM 1" inoperative (item numbered 27-93-01-A) in the associated MMEL) is prohibited.</p> <p><u>Note 1:</u> This dispatch restriction applies notably to A330 and A340-200/-300 aircraft which have embodied AIRBUS SB A330-27-3040 or A340-27-4046 in service corresponding to production modification 44385.</p> <p>(2) <u>For A330 and A340-200/-300 aircraft on which :</u></p> <ul style="list-style-type: none"> - AIRBUS modification 44385 has been embodied either in production or in service by SB A330-27-3159 or SB A340-27-4158, AND - AIRBUS modification 44431 has been embodied either in production or in service by AIRBUS SB A330-24-3011 or SB A340-24-4019, <p>a) Dispatch with the FCPC "PRIM 1" inoperative (item numbered 27-93-01-A) in the associated MMEL) is allowed provided that the operational test of the FCPC3 second electrical power supply is successfully performed in accordance with the</p>

	<p>instructions of AOT A330-27A3158 or AOT A340-27A4157, as applicable, before the first flight of the MMEL interval.</p> <p>b) If the test is not successful, repair in accordance with instructions of AOT A330-27A3158 or AOT A340-27A4157, as applicable, before dispatch with FCPC "PRIM 1" inoperative (item numbered 27-93-01-A) in the associated MMEL).</p> <p><u>Note2:</u> These operational limitations are covered by the following Temporary Revision (TR) of the Master Minimum Equipment List (MMEL):</p> <p>A330 TR 01-27/01Z Issue 01 for A330-200/-300 aircraft pre-mod 44385 or post-SB A330-27-3040 (NO-GO),</p> <p>A330 TR 01-27/02Z Issue 01 for A330-200/-300 aircraft with mechanical rudder and post-mod 44385 (GO-IF),</p> <p>A330 TR 01-27/03Z Issue 01 for A330-200/-300 aircraft with electrical rudder and post-mod 44385 (GO-IF),</p> <p>A340 TR 01-27/01Z Issue 01 for A340-200/-600 aircraft (NO-GO),</p> <p>A340 TR 01-27/02Z Issue 01 for A340-200/-600 aircraft pre-mod 44385 or post-SB A340-27-4046 (NO-GO),</p> <p>A340 TR 01-27/03Z Issue 01 for A340-200/-300 aircraft with mechanical rudder and post-mod 44385 (GO-IF),</p> <p>A340 TR 01-27/04Z Issue 01 for A340-300 aircraft with electrical rudder and post-mod 44385 (GO-IF).</p> <p>Incorporation of the appropriate MMEL TR or inserting the above dispatch restriction or a copy of this AD into the Aircraft Operations Manual (AOM) and strict adherence to above dispatch restriction by the flight crew is acceptable to comply with requirements of this AD.</p>
Ref. Publications:	<p>AIRBUS A330 MMEL TR 01-27/01Z Issue 01;</p> <p>AIRBUS A330 MMEL TR 01-27/02Z Issue 01;</p> <p>AIRBUS A330 MMEL TR 01-27/03Z Issue 01;</p> <p>AIRBUS A340 MMEL TR 01-27/01Z Issue 01;</p> <p>AIRBUS A340 MMEL TR 01-27/02Z Issue 01;</p> <p>AIRBUS A340 MMEL TR 01-27/03Z Issue 01;</p> <p>AIRBUS A340 MMEL TR 01-27/04Z Issue 01;</p> <p>or any later JAA accepted revision of this MMEL TRs or any general MMEL revision including this procedure.</p> <p>All Operators Telex (AOT) A330-27A3158 Original issue;</p> <p>All Operators Telex (AOT) A340-27A4157 Original issue;</p> <p>AIRBUS Service Bulletin A330-27-3159;</p> <p>AIRBUS Service Bulletin A340-27-4158;</p> <p>AIRBUS Service Bulletin A340-27-5046;</p> <p>AIRBUS Service Bulletin A330-24-3011;</p> <p>AIRBUS Service Bulletin A340-24-4019.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with requirements of this AD.</p>

Remarks :	<ol style="list-style-type: none">1. If requested and appropriately substantiated, EASA can accept Alternative Method of Compliance for this AD.2. The safety assessment has requested not to implement the full consultation process and an immediate publication and notification.3. Enquiries regarding this Airworthiness Directive should be referred to the Airworthiness Directive Focal Point - Certification 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 SAS – Airworthiness Office - EAL. Fax: +33 5 61 93 45 80; E-mail: airworthiness.A330-A340@airbus.com.
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