

<b>EASA</b>	<b>PROPOSED AIRWORTHINESS DIRECTIVE</b>	
	<p style="text-align: center;"><b>PAD No.: 07 - 178</b></p> <p style="text-align: center;"><b>Date: 09 October 2007</b></p>	
<p>No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise agreed with the Authority of the State of Registry.</p>		
<p><b>Type Approval Holder's Name :</b> AIRBUS</p>	<p><b>Type/Model designation(s) :</b> A330 and A340-200/-300 aircraft</p>	
<p>TCDS Number : EASA A.004 and EASA A.015</p>		
<p>Foreign AD : Not applicable</p>		
<p>Supersedure : EASA AD 2006-0322 dated 18 October 2006.</p>		
<b>ATA 28</b>	<b>Fuel - Fuel tanks – Prevention against Fuel Explosion Risks – Modification / Installation</b>	
<p>Manufacturer:</p>	<p>AIRBUS (formerly AIRBUS INDUSTRIE)</p>	
<p>Applicability:</p>	<p>AIRBUS A330, A340-200 and A340-300 aircraft, all certified models, all serial numbers.</p> <p>Note : Detailed Applicability for each of the actions rendered mandatory is defined in the Compliance section of this Airworthiness Directive (AD).</p>	
<p>Reason:</p>	<p>Further to the accident which occurred to a Boeing 747-131 (flight TWA800), the FAA published SFAR 88 (Special Federal Aviation Regulation 88).</p> <p>By mail referenced 04/00/02/07/01-L296 of March 4th, 2002 and 04/00/02/07/03-L024 of February 3rd, 2003 the JAA recommended to the National Aviation Authorities (NAA) the application of a similar regulation.</p> <p>The aim of this regulation is to require all holders of type certificates for passenger transport aircraft certified after January 1st, 1958 with a capacity of 30 passengers or more, or a payload of 3,402 kg or more, to carry out a definition review against explosion hazards.</p> <p>Consequently, the following measures were rendered mandatory by EASA AD 2006-0322:</p> <ul style="list-style-type: none"> <li>- replacement of the white P-clips by blue P-clips which are more fuel resistant remove the risks of fuel quantity indicator (FQI) and fuel level sensor system (FLSS) harnesses chafing against the metallic part of the P-clip,</li> </ul>	

	<ul style="list-style-type: none"> <li>- modification of electrical bonding of equipment installed in fuel tanks in order to re-establish the conformity with the design definition by introducing additional bonding leads, electrical bonding points and electrical bonding of a support bracket for a diffuser assembly installed between Rib 1 and Rib 2 on the stringers of the No.1 bottom skin panel,</li> <li>- modification of bonding points, installation of additional bonding leads and other modifications of the Additional Center Tank (ACT),</li> <li>- modification to increase the distance between metallic parts on the THS Trim Tank,</li> <li>- installation of a bonding lead between the bonding tags on the Jettison valve actuator and drive assembly.</li> </ul> <p>This new AD supersedes EASA AD 2006-0322 taking over its requirements and :</p> <ul style="list-style-type: none"> <li>- mandates SB A330-28-3082 Revision 04 which introduces an additional work for some bonding points which were omitted from the center tank at original issue (action n°2);</li> <li>- mandates SB A340-28-4097 Revision 03 which introduces an additional work by addition of electrical bondings omitted from previous revisions (action n°2);</li> <li>- introduces an extension of the required compliance time to perform action n°4 for those aircraft already compliant with AIRBUS AOT 55-03 dated 22 August 1996 ("solution A"), mandated by DGAC AD F-1996-178-049(B) R1 and DGAC AD F-1996-177-038(B) with a compliance time of November 15<sup>th</sup>, 1996;</li> <li>- refers to the latest revision of certain AIRBUS SBs.</li> </ul>
Effective Date:	TBD: 14 days after final AD issue date
Compliance:	<p>Unless already accomplished, the following measures are rendered mandatory from 02 November 2006 [effective date of EASA AD 2006-0322] :</p> <p><b><u>Action n°1 applicable to:</u></b></p> <p>AIRBUS A330, A340-200 and A340-300 aircraft, all certified models, all serial numbers except for aircraft on which AIRBUS modification No. 47634 has been embodied in production :</p> <p>Not later than December 31<sup>st</sup>, 2009, perform a detailed visual inspection of the P-clips in the wings and center fuel tanks, and if necessary apply the corrective actions, in accordance with the instructions of Service Bulletin (SB) A330-28-3092 Revision 01 or SB A340-28-4107 Revision 01.</p> <p><b><u>Action n°2 applicable to:</u></b></p> <p>AIRBUS A330, A340-200 and A340-300 aircraft, all certified models, all serial numbers except for aircraft on which the four AIRBUS modifications No. 49135 and 49630 and 51825 and 55118 have been embodied in production or modified in-service in accordance with both SB A330-28-3082 Revision 04 and SB A330-28-3101 Revision 01 or both SB A340-28-4097</p>

Revision 03 and SB A340-28-4118 Revision 02 :

Not later than December 31st, 2009, modify the electrical bonding of equipment installed in fuel tanks in accordance with the instructions of SB A330-28-3082 Revision 04 and SB A330-28-3101 Revision 01 or SB A340-28-4097 Revision 03 and SB A340-28-4118 Revision 02.

For aircraft that have already been modified in accordance with SB A330-28-3082 at original issue or SB A340-28-4097 at any previous issue preceding Revision 03:

Not later than December 31<sup>st</sup>, 2011, perform the additional work in accordance with the instructions of SB A330-28-3082 Revision 04 or SB A340-28-4097 Revision 03.

Accomplishment of AIRBUS SB A330-28-3101 instructions at original issue or SB A330-28-4118 instructions at original issue or revision 01 or SB A330-28-3082 at revision 01 or revision 02 or revision 03, is acceptable to comply with this AD requirements.

**Action n°3 applicable to:**

AIRBUS A340-200 and A340-300 aircraft, all certified models, all serial numbers, which have the AIRBUS modification 42612/SB A340-28-4047 or 44002/SB A340-28-4066 or 44005/SB A340-28-4067 embodied in production/in-service (installation of ACT) except aircraft modified by SB A340-28-4078 Revision 01 in service :

Not later than December 31st, 2009, modify the electrical bonding in the ACT in accordance with the instructions of SB A340-28-4078 Revision 01.

Accomplishment of AIRBUS SB A330-28-4078 instructions at original issue is acceptable to comply with this AD requirements.

**Reminder:** It's the responsibility of the operator to ensure that any spare (ACT) that could be installed on the aircraft does not jeopardize the compliance of the aircraft with the requirements of this AD.

**Action n°4 applicable to:**

- AIRBUS A330-300 aircraft, -301, -321, -322, -341, -342 models, all serial numbers except for aircraft on which AIRBUS modification No. 44252 has been embodied in production or modified in-service in accordance with AIRBUS SB A330-55-3016:
  
- AIRBUS A340-200 and A340-300 aircraft, all certified models, all serial numbers, except for aircraft on which AIRBUS modification No. 44252 has been embodied in production or modified in-service in accordance with AIRBUS SB A340-55-4017:

Not later than December 31st, 2009 increase the distance between metallic parts on the THS Trim Tank in accordance with the instructions of SB A330-55-3016 or SB A340-55-4017.

For all aircraft where the improvement of the THS lighting strike protection has already been performed in accordance with AOT 55-03 dated 22 August 1996 ("solution A"), mandated by DGAC AD F-1996-178-049(B) R1 and DGAC AD F-1996-177-038(B) with a compliance time of November 15<sup>th</sup>,

	<p>1996, it is allowed to increase the distance between metallic parts on the THS Trim Tank in accordance with the instructions of SB A330-55-3016 or SB A340-55-4017 after 31st December 2009, whenever the THS removal from aircraft and put on ground on Support Tool (Lifting and Resting points Fittings must be installed) for any reason (fuselage stress jacking, repair...) is performed for the first time after such date, or at the first aircraft maintenance task requiring the use of THS Lifting and Resting points Fittings performed after such date.</p> <p><b><u>Action n°5 applicable to:</u></b></p> <p>AIRBUS A340-200 and A340-300 aircraft, all certified models, all serial numbers, except for aircraft which have the modification 46142 embodied in production or modified in-service in accordance with AIRBUS SB A340-28-4073 Revision 02 :</p> <p>Not later than December 31st, 2009, install a bonding lead between the bonding tags on the Jettison valve actuator and drive assembly in accordance with the instructions of SB A340-28-4073 Revision 02.</p> <p>Accomplishment of AIRBUS SB A330-28-4073 instructions at original issue or revision 01 is acceptable to comply with this AD requirements.</p>
<p>Ref. Publications:</p>	<p>AIRBUS Service Bulletin A330-28-3092 Revision 01;  AIRBUS Service Bulletin A340-28-4107 Revision 01;  AIRBUS Service Bulletin A330-28-3082 Revision 04;  AIRBUS Service Bulletin A330-28-3101 Revision 01;  AIRBUS Service Bulletin A340-28-4097 Revision 03;  AIRBUS Service Bulletin A340-28-4118 Revision 02;  AIRBUS Service Bulletin A340-28-4078 Revision 01;  AIRBUS Service Bulletin A330-55-3016 ;  AIRBUS Service Bulletin A340-55-4017 ;  AIRBUS Service Bulletin A340-28-4073 Revision 02;  or later approved revisions of these documents.</p>
<p>Remarks :</p>	<ol style="list-style-type: none"> <li>1. If requested and appropriately substantiated, EASA can accept Alternative Methods of Compliance for this AD.</li> <li>2. The closing date for comments is 23 October 2007.</li> <li>3. Enquiries regarding this Airworthiness Directive should be referred to the Airworthiness Directive Focal Point - 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 SAS – Airworthiness Office - EAL E- mail: <a href="mailto:airworthiness.A330-A340@airbus.com">airworthiness.A330-A340@airbus.com</a>.</li> </ol>