


EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2010-0092</p> <p>Date: 21 May 2010</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>A310 and A300-600 aeroplanes</p>
TCDS Number :	France N° 145
Foreign AD :	Not applicable
Supersedure :	None
ATA 27	Flight Controls – Trimmable Horizontal Stabilizer Actuator (THSA) Upper Attachment Gimbal – Inspection
Manufacturer(s):	Airbus (formerly AIRBUS INDUSTRIE)
Applicability:	Airbus A310 and A300-600 aeroplanes, all certified models, all manufacturer serial numbers.
Reason:	<p>The ball screw nut assemblies of the first 70 Trimmable Horizontal Stabilizer Actuators (THSA) manufactured by Goodrich were fitted with an upper attachment gimbal having a thickness of 58 mm (2.28 in), which is different from the design of the final production standard. The gimbal installed on the subsequent THSAs (final production standard) is more robust, having a thickness of 70 mm (2.76 in).</p> <p>During the fatigue life demonstration of the THSA upper attachment primary load path elements, only a gimbal having a thickness of 70 mm (2.76 in) was used. Thereafter, no additional justification work to demonstrate the robustness of the upper attachment fitted with a gimbal of 58 mm was accomplished.</p> <p>In case of failure of this gimbal, the THSA upper attachment primary load path would be lost and the THSA upper attachment secondary load path would engage.</p> <p>Because the upper attachment secondary load path will only withstand the loads for a limited period of time, the condition where it would be engaged and not detected could lead to failure of the secondary load path, which would likely result in loss of control of the aeroplane.</p> <p>As the affected ball screw nut assemblies (including the gimbal) could have been moved from one THSA to another during maintenance operation and because the change from the old design to the final production standard design</p>

	<p>is not identified through a dedicated THSA Part Number, a gimbal with thickness of 58 mm (2.28 in) can be fitted on any A310 or A300-600 aeroplane.</p> <p>For the reasons described above, this AD requires the identification of the THSA which have a 58 mm (2.28 in) gimbal installed, repetitive inspections to check whether there is engagement of the secondary load path and, depending on findings, associated corrective action(s).</p>
Effective Date:	04 June 2010
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> (1) Within the next 130 flight cycles (FC) or 650 flight hours (FH), whichever occurs first after the effective date of this AD, perform a measurement of gimbal thickness in accordance with the instructions of Airbus Alert Service Bulletin (SB) A310-27A2104 Revision 01, or Alert SB A300-27A6067 Revision 01, as applicable to aeroplane Model. (2) If the gimbal thickness measurement as required by paragraph (1) of this AD is equal to 58 mm (2.28 in) +/- 5 mm (0.20 in), before next flight after the inspection as required by paragraph (1) of this AD and thereafter at intervals not exceeding 130 FC or 650 FH, whichever occurs first, perform an inspection in accordance with the instructions of Airbus Alert SB A310-27A2104 Revision 01, or Alert SB A300-27A6067 Revision 01, as applicable to aeroplane Model. (3) Inspections and corrective actions accomplished prior to the effective date of this AD, in accordance with Airbus Alert SB A310-27A2104 or Alert SB A300-27A6067, as applicable to aeroplane Model, at original issue, are acceptable to comply with the initial requirements of paragraphs (1) and (2) of this AD. After the effective date of this AD, repetitive inspections and corrective actions must be accomplished in accordance with Airbus Alert SB A310-27A2104, or Alert SB A300-27A6067, as applicable to aeroplane Model, at Revision 01. (4) If, during any inspection as required by paragraph (2) of this AD, it is found that the THSA upper attachment secondary load path is engaged, before next flight, contact Airbus for approved corrective action instructions and accomplish those instructions accordingly. (5) After the effective date of this AD, do not install any THSA on an aeroplane, unless it is in compliance with the requirements of this AD.
Ref. Publications:	<p>Airbus Alert SB A310-27A2104 original issue or Revision 01.</p> <p>Airbus Alert SB A300-27A6067 original issue or Revision 01.</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 Airworthiness Directives, Safety Management & Research Section, 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 – EAW (Airworthiness Office, Telephone: + 33 5 61 93 36 96, Fax: + 33 5 61 93 44 51).