

<b>EASA</b>	<b>NOTIFICATION OF A PROPOSAL TO ISSUE AN AIRWORTHINESS DIRECTIVE</b>
	<p><b>PAD No.: 12-057</b></p> <p><b>Date: 04 June 2012</b></p> <p>Note: This Proposed Airworthiness Directive (PAD) 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>In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.</p> <p>All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation closing date indicated.</p>	
<b>Design Approval Holder's Name :</b>	<b>Type/Model designation(s) :</b>
AIRBUS	A318, A319, A320 and A321 aeroplanes
TCDS Number:	EASA.A.064
Foreign AD:	Not applicable
Supersedure:	None
<b>ATA 27</b>	<b>Flight Controls – Trimmable Horizontal Stabilizer Actuator Ballscrew Lower Splines – Inspection / Replacement</b>
Manufacturer(s):	Airbus (formerly Airbus Industrie)
Applicability:	Airbus A318-111, A318-112, A318-121, A318-122, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-111, A320-211, A320-212, A320-214, A320-215, A320-216, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, all manufacturer serial numbers.
Reason:	<p>Some Trimmable Horizontal Stabilizer Actuators (THSA), Part Number (P/N) 47147-500 fitted on A330/A340 aeroplanes have been found with corrosion, affecting the ballscrew lower splines between the tie bar and the screw-jack. The affected ballscrew is made of steel and anti-corrosion protection is ensured, except on both extremities (upper and lower splines) where Molykote is applied.</p> <p>The results of the technical investigations have identified that the corrosion was caused by a combination of:</p> <ul style="list-style-type: none"> <li>- Contact/friction between the tie bar and the inner surface of the ballscrew leading to the removal of Molykote (corrosion protection) at the level of the tie bar splines,</li> <li>- Humidity ingress initiating surface oxidation starting from areas where Molykote is removed, and</li> <li>- Water retention in THSA lower part leading to corrosion spread out and to the creation of a brown deposit (iron oxide).</li> </ul> <p>The results of the technical investigations have also concluded that A320 family THSA P/N 47145-XXX (where XXX stands for any numerical value)</p>

	<p>ballscrews might be affected by this corrosion issue.</p> <p>This condition, if not detected and corrected, may lead, in case of ballscrew rupture, to loss of transmission of THSA torque loads from the ballscrew to the tie-bar, prompting THSA blowback, possibly resulting in loss of control of the aeroplane.</p> <p>For the reasons described above, this AD requires repetitive detailed inspections of the ballscrew lower splines of THSA having P/N 47145-XXX to detect corrosion and, depending on findings, the accomplishment of applicable corrective actions.</p>						
Effective Date:	[TBD: 14 days after final AD issue date]						
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Initially, within the compliance time indicated in Table 1 of this AD, and thereafter at intervals not to exceed 24 months, perform a detailed inspection of the THSA ballscrew having a P/N 47145-XXX in accordance with the instructions of Airbus Service Bulletin (SB) A320-27-1214.</p> <p style="text-align: center;">Table 1 – Initial THSA inspection</p> <table border="1"> <tr> <td></td><td><b>Compliance time</b>, whichever occurs later, A or and B</td></tr> <tr> <td><b>A</b></td><td>Before accumulating 22 years, but not before 20 years since THSA first flight</td></tr> <tr> <td><b>B</b></td><td>Within 3 months after the effective date of this AD</td></tr> </table> <p>Note: For the purpose of this AD, the definition of THSA first flight is the THSA “entry into service date” as listed in Goodrich SB 47145-27-16. If the THSA P/N is not listed in Goodrich SB 47145-27-16, the THSA first flight is the manufacturing date engraved on the THSA identification plate.</p> <p>(2) If, during any inspection as required by paragraph (1) of this AD, corrosion is found, within the applicable compliance time as defined in Paragraph 1.E.(2) of Airbus SB A320-27-1214, accomplish the applicable corrective actions (additional inspections of the affected THSA ballscrew, followed by replacement of the affected THSA) in accordance with the instructions of Airbus SB A320-27-1214.</p> <p>(3) Replacement of a THSA as required by paragraph (2) of this AD does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD.</p> <p>(4) Within 90 days after accomplishment of each inspection as required by paragraph (1) of this AD, as applicable, report the results, including no findings, to Airbus.</p> <p>(5) From the effective date of this AD, do not install a THSA having P/N 47145-XXX, unless in compliance with the requirements of this AD.</p>		<b>Compliance time</b> , whichever occurs later, A or and B	<b>A</b>	Before accumulating 22 years, but not before 20 years since THSA first flight	<b>B</b>	Within 3 months after the effective date of this AD
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Ref. Publications:	<p>Airbus SB A320-27-1214 original issue dated 23 February 2012</p> <p>Goodrich SB 47145-27-16 original issue dated 07 November 2011</p> <p>The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.</p>						
Remarks :	<ol style="list-style-type: none"> <li>1. This Proposed AD will be closed for consultation on 18 June 2012.</li> <li>2. Enquiries regarding this PAD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a></li> <li>3. For any question concerning the technical content of the requirements in this PAD, please contact: AIRBUS – Airworthiness Office – EIAS, Fax +33 5 61 93 44 51, E-mail: <a href="mailto:account.airworth-eas@airbus.com">account.airworth-eas@airbus.com</a></li> </ol>						