EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2009-0111 **Date: 13 May 2009** 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.

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].

Type Approval Holder's Name :	**Type/Model designation(s) :**
AIRBUS	A300 aeroplanes

TCDS Number :	France N° 145
Foreign AD :	Not applicable
Supersedure :	None

ATA 27	**Flight Controls – Trimmable Horizontal Stabilizer Actuator (THSA) – Check / Replacement**
Manufacturer(s):	Airbus (formerly Airbus Industrie)
Applicability:	Airbus A300B2-1C, A300B2-203, A300B2K-3C, A300B4-103, A300B4-120, A300B4-203, A300B4-2C, A300C4-203 and A300F4-203 aeroplanes, all serial numbers.
Reason:	One operator reported loss of both pitch trims following autopilot disengagement after take off. Subsequent shop findings revealed severe damage to the power gears. Mal-phasing between the hydraulic motors was suspected to have induced excessive loads into the gear train, leading to collapse of one bearing on a shaft of the main gear, causing severe tooth damage. The combination of tooth damage and gear tilting caused the disconnection of two of the three hydraulic motors, resulting in jamming of the THSA gearbox and consequent loss of THSA control. This condition, if not detected and corrected, could lead to further cases of mal-phasing of the hydraulic motors of the THSA, causing degradation of the power gears and potentially resulting in reduced control of the aeroplane. For the reasons described above, this AD requires repetitive checks of the THSA and corrective actions, depending on findings.
Effective Date:	27 May 2009

Required Action(s) and Compliance Time(s):	Required as indicated, unless already accomplished: (1) Within 4 000 Flight Hours (FH) after the last THSA overhaul or within the next 250 FH after the effective date of this AD, whichever occurs later, perform an on-aeroplane phasing check and a magnetic plug check for metal particles on the THSA in accordance with the instructions of Airbus Service Bulletin (SB) A300-27-0201. (2) If the THSA passes the phasing check, but the magnetic plug check reveals metal particles that are equal to or less than 1.5 mm (0.059 in.) x 0.5 mm (0.0196 in), and the depth of the particle layer does not exceed 1 mm (0.0393 in.), repeat the checks at intervals not to exceed 2 500 FH in accordance with the instructions of Airbus SB A300-27-0201. (3) If the THSA passes the phasing check, but the magnetic plug check reveals metal particles with dimensions greater than 1.5mm (0.059 in.) x 0.5mm (0.0196 in), or a layer of particles with a depth greater than 1 mm (0.0393 in.) is found, before next flight, replace the THSA with a serviceable unit in accordance with the instructions of Airbus SB A300-27-0201. (4) If the THSA fails the phasing check and the magnetic plug check reveals metal particles that are equal to or less than 1.5 mm (0.059 in.) x 0.5 mm (0.0196 in), and the depth of the particle layer does not exceed 1 mm (0.0393 in.), within 500 FH after the check, replace the THSA with a serviceable unit in accordance with the instructions of Airbus SB A300-27-0201. (5) If the THSA fails the phasing check and the magnetic plug check reveals metal particles with dimensions greater than 1.5 mm (0.059 in.) x 0.5 mm (0.0196 in), or a layer of particles with a depth greater than 1 mm (0.0393 in.) is found, before next flight, replace the THSA with a serviceable unit in accordance with the instructions of Airbus SB A300-27-0201. **Note**: A serviceable THSA is one that has a correct hydraulic motor phasing and no particles or few particles with maximum dimensions of 1.5 mm (0.059 in.) x 0.5 mm (0.0196 in.) and a layer of particles with a maximum depth of 1 mm (0.0393 in.) found on the magnetic plug. (6) Replacement of the THSA as required by paragraph (3), (4) and (5) of this AD, as applicable, does not constitute terminating action for the repetitive checks as required by paragraph (2) of this AD. (7) After the effective date of this AD, do not install a replacement THSA on an aeroplane, unless it has been verified that it meets the criteria as specified in this AD. (8) Within 3 weeks after removal of a THSA unit from an aeroplane, send it to the THSA manufacturer, Goodrich Actuation Systems, Staffford Road Fordhouses, Wolverhampton, West Midlands WV10 7EH, England. (9) Within 3 weeks after each check, fill in the report sheet and send it to Airbus in accordance with the instructions of Airbus SB A300-27-0201.
Ref. Publications:	Airbus ASB A300-27-0201 original issue The use of later approved revisions of this document is acceptable for compliance with requirements of this AD.
Remarks :	1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. This AD was posted on 09 April 2009 as PAD 09-060 for consultation until 07 May 2009. The Comment Response Document can be found at http://ad.easa.europa.eu. 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).