

EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2011-0041R1 Date: 07 October 2014 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 EU 748/2012, Part 21.A.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].	
Design Approval Holder's Name: AIRBUS	Type/Model designation(s): A380 aeroplanes
TCDS Number: EASA.A.110	
Foreign AD: Not applicable	
Revision: This AD revises EASA Emergency AD 2011-0041-E dated 10 March 2011.	
ATA 27	Flight Controls – Aileron and Elevator Servo Controls – Electronic Centralized Aircraft Monitoring (ECAM) and Aircraft Flight Manual (AFM) Changes / Installation Prohibition
Manufacturer(s): Airbus	
Applicability: Airbus A380-841, A380-842 and A380-861 aeroplanes, all manufacturer serial numbers (MSN).	
Reason:	During production, an abnormal presence of hydraulic fluid at front ram bearing static seal area was found on several Aileron Servo Controls (S/C). Investigation revealed that these leaks were due to defective seals. The batch of Aileron S/C and Elevator S/C affected by this seal issue has been identified by Part Number (P/N) and serial number (s/n) and is listed in Appendix 1 of this AD. The defective seals could lead to an external leakage or seepage at the level of the rear and front bearings of the S/C. The hydraulic leak and seepage rate resulting from defective seals does not lead to the loss of the aircraft hydraulic circuit. However, if the leak is combined with the loss of the associated hydraulic system, the S/C may lose the damping mode after the accumulator is emptied. Depending on the number of S/C affected and their location, some remote failure combinations occurring during specific flight conditions could lead to non-damped surfaces oscillations. This condition, if not corrected, could reduce the ability of the flight crew to maintain the safe flight of the aeroplane. Prompted by this finding, and to prevent non-damped flight control surface

	oscillations, EASA issued AD 2011-0041-E to require: • Installation of Airbus Temporary Quick Change (ATQC) database and activation of ECAM Temporary Change (ETC), • Introduction of Aircraft Flight Manual Temporary Revision (AFM TR), • Prohibition of further installation of the affected S/C. Since that AD was issued, Airbus issued Service Bulletin (SB) A380-27-8040 to provide instructions to identify the P/N and s/n of the installed aileron S/C units and, depending on findings, replacement of the S/C unit(s). Airbus also developed a modification for aeroplanes in post-SB A380-27-8040 configuration to deactivate the ATQC/ETC No. 0038, available through Airbus SB A380-31-8071. Replacement of all affected aileron S/C units on an aeroplane with serviceable units, and deactivation of the ATQC/ETC No. 0038, make operational procedures required by this AD no longer applicable for that aeroplane. For the reasons describe above, this AD is revised to introduce an optional alternative method of compliance to the AFM operational procedures through modification of an aeroplane in accordance with Airbus SB A380-27-8040 and SB A380-31-8071.
Effective Date:	Revision 1: 07 October 2014 Original issue: 14 March 2011
Required Action(s) and Compliance Time(s):	Required as indicated, unless already accomplished: (1) For aeroplanes with MSN 003, 009, 010, 023, 025, 028, 030, 038, 041, 042, 043, 044, 046, 048, 049, 051, 056 and 057: Within 3 days after 14 March 2011 [the effective date of the original issue of this AD], accomplish the following actions concurrently: (1.1) Install ATQC V11 L50 and activate ETC No. 0038 in accordance with Airbus All Operator Telex (AOT) A380-27A8027, (1.2) Amend the applicable AFM by inserting a copy of AFM TR 83 or 84, as applicable to MSN, and thereafter operate the aeroplane in accordance with the instructions contained in the AFM TR. For all MSN: (2) After 14 March 2011 [the effective date of the original issue of this AD], do not install on any aeroplane an S/C with P/N 31132-080, P/N 31132-100, P/N 31132-110, or P/N 31132-150, identified by s/n in Appendix 1 of this AD, unless it has been repaired in accordance with the instructions of Airbus AOT A380-27A8027. (3) Inspection and, depending on findings, correction of an aeroplane in accordance with the instructions of Airbus SB A380-27-8040 or replacement of each S/C unit with a serviceable part having a P/N not listed in the Appendix 1 of this AD in accordance with approved instructions, allows the operational procedures (AFM TR 83 or 84, as applicable to MSN), as required by paragraph (1.2) of this AD, to be removed from the AFM of that aeroplane. (4) For aeroplanes inspected and corrected as specified in paragraph (3) of this AD, and additionally modified in accordance with the instructions of Airbus MSB A380-31-8071, the operational requirements as required by paragraph (1.1) of this AD are no longer applicable.

Ref. Publications:	Airbus AOT A380-27A8027 at original issue dated 07 March 2011. AFM TR 83 issue 1 and TR 84 issue 1. Airbus SB A380-27-8040 at original issue dated 08 September 2014. Airbus SB A380-31-8071 at original issue dated 08 September 2014. The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.
Remarks:	1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication. 3. Enquiries regarding this AD should be referred to the Safety Information 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 - EIANA (Airworthiness Office), Telephone : +33 562 110 253 ; Fax: +33 562 110 307 E-mail: account.airworth-A380@airbus.com.

Appendix 1: Affected S/C units

P/N	s/n
31132-080	3113200307 and 3113200309.
31132-100	3113200317, 3113200319, 3113200324, 3113200328, 3113200329, 3113200330, 3113200331, 3113200332, 3113200333, 3113200334 and 3113200339.
31132-110	3113200030, 3113200031, 3113200032, 3113200033, 3113200035, 3113200036, 3113200038, 3113200060, 3113200063, 3113200065, 3113200067, 3113200074, 3113200075, 3113200083, 3113200089, 3113200116, 3113200139, 3113200220, 3113200250, 3113200287, 3113200305, 3113200306, 3113200308, 3113200310, 3113200311, 3113200312, 3113200313, 3113200314, 3113200315 and 3113200316.
31132-150	3113200318, 3113200320, 3113200321, 3113200322, 3113200323, 3113200325, 3113200326, 3113200327, 3113200335, 3113200336, 3113200337, 3113200338, 3113200340, 3113200341, 3113200342, 3113200343, 3113200344, 3113200345, 3113200346, 3113200347, 3113200348, 3113200349, 3113200350, 3113200351, 3113200352, 3113200353, 3113200354, 3113200355, 3113200356, 3113200357, 3113200358, 3113200359, 3113200360, 3113200361, 3113200362, 3113200363, 3113200364, 3113200365, 3113200366, 3113200367, 3113200368, 3113200369, 3113200370, 3113200371, 3113200372, 3113200373, 3113200374, 3113200375, 3113200376, 3113200377, 3113200378, 3113200379, 3113200380, 3113200381, 3113200382, 3113200383, 3113200384, 3113200385, 3113200386, 3113200387, 3113200388, 3113200389, 3113200390, 3113200391, 3113200392, 3113200393, 3113200394, 3113200395, 3113200396, 3113200397, 3113200398, 3113200399, 3113200400, 3113200401, 3113200402, 3113200403, 3113200404, 3113200409, 3113200410, 3113200411, 3113200414, 3113200418, 3113200419, 3113200420, 3113200421, 3113200422, 3113200423, 3113200424, 3113200425, 3113200426, 3113200427, 3113200428, 3113200429, 3113200432, 3113200437, 3113200438, 3113200439, 3113200441, 3113200442, 3113200443, 3113200444, 3113200445, 3113200446, 3113200447, 3113200448, 3113200449, 3113200450, 3113200451, 3113200452, 3113200453, 3113200454, 3113200455, 3113200456, 3113200457, 3113200458, 3113200459, 3113200460, 3113200461, 3113200462, 3113200463, 3113200465, 3113200466, 3113200467, 3113200468, 3113200469, 3113200470, 3113200471, 3113200473, 3113200474, 3113200475, 3113200476, 3113200477, 3113200478, 3113200479, 3113200480, 3113200481, 3113200482, 3113200483 and 3113200484.