

EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2010-0038 Date: 15 April 2010 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 Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive 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 : AIRBUS	Type/Model designation(s) : A380 aeroplanes
TCDS Number : EASA.A.110	
Foreign AD : Not applicable	
Supersedure : None	
ATA 27	Flight Controls – Outboard Elevator Electro Hydrostatic Actuator (EHA) – Inspection / Replacement
Manufacturer(s):	Airbus (formerly Airbus Industrie)
Applicability:	Airbus A380 aeroplanes, -841, -842, and -861 models, all manufacturer serial numbers (MSN), except aeroplanes on which Airbus modification 69142 or 69149 has been embodied in production on both outboard elevators.
Reason:	Two aileron EHAs and one elevator EHA have been removed from in-service aeroplanes due to detection of untimely damping mode or accumulator very low level. For each case, the investigation revealed a failure of the accumulator pressure sensor: permanent low or high pressure information. Permanent high pressure information, if not detected, combined with accumulator leakage on the same EHA and associated in flight with the loss of adjacent servocontrol active and damping modes (disconnection or high hydraulic leakage) could lead to an uncontrolled surface, the surface being neither actuated nor damped. In this condition, the aileron and the inboard elevator surfaces would be steady, but not the outboard elevator surfaces, therefore reducing the controllability of the aeroplane. For the reason described above, this AD requires to perform repetitive operational checks of the accumulator pressure sensor of each outboard elevator EHAs having part number (P/N) 31131-302, or 31131-305 or 31131-310 and, in case of findings, either their replacement with EHAs having P/N 31131-315 or 31131-330, as applicable or replacement with

	EHA having the same P/N 31131-302, or 31131-305 or 31131-310. In the latter case, the repetitive requirements of this AD remain applicable.
Effective Date:	29 April 2010
Required action(s) and Compliance Time(s):	Required as indicated : (1) Unless accomplished previously, within 1 500 Flight Hours (FH) after the effective date of this AD, perform a detailed visual inspection of the Left-hand (LH) and Right-hand (RH) outboard elevators EHA in order to identify their P/N, in accordance with the instructions defined in Airbus Service Bulletin (SB) A380-27-8020, and (2) If the identified outboard elevator EHA P/N is 31131-302, or 31131-305 or 31131-310 : (2.1) Within 1 500 FH after the effective date of this AD, perform an operational check of the accumulator pressure sensor of the affected outboard elevator EHA in accordance with the instructions defined in Airbus SB A380-27-8020. (2.2) Repeat the operational check defined in the paragraph (2.1) of this AD at intervals not to exceed 1 500 FH since the last inspection. (2.3) In case of an unsuccessful operational check during the initial or the repetitive inspections as required by the paragraph (2.1) and (2.2) of this AD, before next flight, replace the affected outboard elevator EHA in accordance with the instructions defined in Airbus SB A380-27-8020. (3) The replacement of one outboard elevator EHA by a new one having P/N 31131-315 or 31131-330 in accordance with Airbus SB A380-27-8012 cancels the requirements of this AD on that outboard elevator. (4) Aeroplanes that have accomplished, before the effective date of this AD, the instructions of Airbus All Operator Telex (AOT) A380-27A8018 at original issue are compliant with the requirements of paragraph (1), (2.1) or (2.3) of this AD, as applicable. The repetitive operational check defined in paragraph (2.2) and the associated corrective actions of paragraph (2.3) of this AD remain applicable for aeroplanes fitted with outboard elevator EHA P/N 31131-302, or 31131-305 or 31131-310. (5) At each replacement of an elevator EHA as required by paragraph (2.3) of this AD by an elevator EHA having P/N 31131-302, or 31131-305 or 31131-310, before next flight following its installation, perform the operational check defined in paragraph (2.1) of this AD and thereafter comply with the requirements of paragraph (2.2) and the associated corrective actions of paragraph (2.3) of this AD.
Ref. Publications:	Airbus All Operator Telex A380-27A8018 at original issue; Airbus Service Bulletin A380-27-8020 at original issue; Airbus Service Bulletin A380-27-8012 at original issue. 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. 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 - EANA (Airworthiness Office); Phone: +33 562 110253 ; Fax : +33 562 110307; E-mail: account.airworth-A380@airbus.com and nicolas.cordeau@airbus.com .
--	---