


EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2014-0103</p> <p>Date: 06 May 2014</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 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].</p>	
<p>Design Approval Holder's Name: AIRBUS</p>	<p>Type/Model designation(s): A330 and A340 aeroplanes</p>
TCDS Numbers:	EASA.A.004, EASA.A.015
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA AD 2013-0023 dated 01 February 2013.
ATA 34	Navigation – Angle Of Attack Probe Conic Plates – Operational Procedure / Replacement
Manufacturer(s):	Airbus (formerly Airbus Industrie)
Applicability:	<p>Airbus A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343 aeroplanes, all manufacturer serial numbers (MSN).</p> <p>Airbus A340-211, A340-212, A340-213, A340-311, A340-312, A340-313, A340-541, A340-542, A340-642 and A340-643 aeroplanes, all MSN.</p>
Reason:	<p>An A330 aeroplane experienced a blockage of all Angle Of Attack (AOA) probes during climb leading to Autopilot (AP) disconnection and activation of the alpha protection (Alpha Prot) when Mach number increased.</p> <p>Analysis showed that this aeroplane was equipped with AOA probes having conic plates, and it is suspected that these plates might have contributed to the event. Investigations are on-going to determine the root cause of this AOA probes blockage. The AOA conic plates can also be installed on A340 aeroplanes.</p> <p>These AOA conic plates could have been installed in production through Airbus modification (mod.) 201609, associated to Thales Avionics AOA probes Part Number (P/N) C16291AA and P/N C16291AB, or mod. 201610, associated to Goodrich AOA probes P/N 0861ED, or in service through Airbus Service Bulletin (SB) A330-34-3255 or SB A340-34-4250 or SB A340-34-5081.</p> <p>The blockage of two or three AOA probes at the same angle may cause the Alpha Prot of the normal law to activate.</p>

	<p>Under normal flight conditions (in normal law), if the Alpha Prot activates and Mach number increases, the flight control laws order a pitch down of the aeroplane that the flight crew may not be able to counteract with a sidestick deflection, even in the full backward position.</p> <p>This condition, if not corrected, could result in reduced control of the aeroplane.</p> <p>To address this condition, Airbus developed a "Blocked AOA probes" emergency procedure included in Airbus Airplane Flight Manual (AFM) A330 Temporary Revision (TR) TR293 issue 1 and Airbus AFM A340 TR294 issue 1.</p> <p>Consequently, EASA issued Emergency AD 2012-0258-E to require amendment of the AFM to ensure that flight crews, in case of AOA probe blockage, apply the applicable emergency procedure.</p> <p>Subsequently, Airbus published approved instructions to re-install AOA probe flat plates on A330/A340 family aeroplanes and EASA issued AD 2013-0023, retaining the requirement of EASA AD 2012-0258-E, which was superseded, to require installation of AOA probe flat plates, with subsequent removal of the AFM operational procedure.</p> <p>Since that AD was issued, several incorrect installations of AOA flat plates were identified, due to a mistake in the accomplishment instructions of the applicable Airbus SB at original issue, inducing a slight discrepancy on the angle of attack. To address this discrepancy, Airbus published all applicable SB at Revision 1, providing instructions for additional work.</p> <p>For the reasons described above, this AD retains the requirements of EASA AD 2013-0023, which is superseded, and requires accomplishment of the additional work.</p>
Effective Date:	20 May 2014
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>Re-statement of EASA AD 2012-0258-E requirement:</p> <p>For A330 and A340 aeroplanes on which Airbus mod. 201609 or mod. 201610 has been embodied in production, or on which Airbus SB A330-34-3255 or SB A340-34-4250 or SB A340-34-5081, as applicable to aeroplane model, has been embodied in service:</p> <p>(1) Before next flight after 06 December 2012 [the effective date of EASA AD 2012-0258-E], amend the applicable AFM to incorporate Airbus AFM A330 TR293 issue 1 or Airbus AFM A340 TR294 issue 1 "Blocked AOA probes", as applicable, depending on aeroplane type, and, thereafter, operate the aeroplane accordingly.</p> <p>Re-statement of EASA AD 2013-0023 requirements:</p> <p>For all aeroplanes as identified in the Applicability section of this AD:</p> <p>(2) Within 5 months after 15 February 2013 [the effective date of EASA AD 2013-0023], remove all AOA probe conic plates having P/N F3411060200000 or P/N F3411060900000 and install AOA probe flat plates:</p> <p>(2.1) P/N F3411007920200 or F3411007920300 in accordance with the instructions of Airbus SB A330-34-3293 or SB A340-34-4273 or SB A340-34-5093, as applicable to aeroplane type and model, or</p> <p>(2.2) P/N F3411007920000 or F3411007920100 in accordance with approved instructions.</p> <p>(3) An aeroplane on which Airbus mod. 203285 (improved AOA flat plate protection treatment) has been embodied in production is not affected by the requirements of paragraphs (1) and (2) of this AD, provided that, since first flight, no AOA probe conic plate P/N F3411060200000 or P/N</p>

	<p>F3411060900000 has been installed on that aeroplane.</p> <p>(4) After modification of an aeroplane as required by paragraph (2) of this AD, the operational procedure introduced by paragraph (1) of this AD is no longer required and must be removed from the AFM of that aeroplane.</p> <p>(5) Do not install on an aeroplane any AOA probe conic plate P/N F3411060200000 or P/N F3411060900000, and do not use AOA protection cover P/N 98D34203003000 on an aeroplane, as follows:</p> <p>(5.1) For aeroplanes that, on 15 February 2013 [the effective date of EASA AD 2013-0023], had AOA probe flat plates installed: From 15 February 2013 [the effective date of EASA AD 2013-0023].</p> <p>(5.2) For aeroplanes that, on 15 February 2013 [the effective date of EASA AD 2013-0023], had AOA probe conic plates installed: After modification of the aeroplane as required by paragraph (2) of this AD.</p> <p>New requirements of this AD:</p> <p>(6) For aeroplanes modified as required by paragraph (2) of this AD, within 12 months after the effective date of this AD, accomplish the additional work as identified in Airbus SB A330-34-3293 Revision 01, or SB A340-34-4273 Revision 01, or SB A340-34-5093 Revision 01, as applicable to aeroplane type and model.</p>
Ref. Publications:	<p>Airbus AFM A330 TR293 issue 1 and Airbus AFM A340 TR294 issue 1, "Blocked AOA probes", both approved on 04 December 2012.</p> <p>Airbus SB A330-34-3293 original issue dated 31 January 2013, or Revision 1 dated 12 June 2013.</p> <p>Airbus SB A340-34-4273 original issue dated 30 January 2013, or Revision 1 dated 12 June 2013.</p> <p>Airbus SB A340-34-5093 original issue dated 30 January 2013, or Revision 1 dated 12 June 2013.</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. This AD was posted on 19 March 2014 as PAD 14-052 for consultation until 16 April 2014. The Comment Response Document can be found at http://ad.easa.europa.eu. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive 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 – Airworthiness Office – EIAL; E-mail: airworthiness.A330-A340@airbus.com.