


EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2013-0022</p> <p>Date: 01 February 2013</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:</p> <p>AIRBUS</p>	<p>Type/Model designation(s):</p> <p>A318, A319, A320, and A321 aeroplanes</p>
TCDS Number:	EASA.A.064
Foreign AD:	Not Applicable
Supersedure:	This AD supersedes EASA AD 2012-0264-E dated 17 December 2012.
ATA 34	Navigation – Angle of Attack Sensor Conic Plates – Replacement
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>Recently, an Airbus A330 aeroplane equipped with Angle of Attack (AoA) sensors with conic plates installed, experienced blockage of all sensors during climb, leading to autopilot disconnection and activation of the alpha protection (Alpha Prot) when Mach number was increased.</p> <p>Based on the results of the subsequent analysis, it is suspected that these conic plates may have contributed to the event. Investigations are on-going to determine what caused the blockage of these AoA sensors.</p> <p>Blockage of two or three AoA sensors at the same angle may cause the Alpha Prot of the normal law to activate. 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 be unable to counteract with a side stick deflection, even in the full backward position.</p> <p>This condition, if not corrected, could result in reduced control of the aeroplane.</p> <p>AoA conic plates of similar design are also installed on A320 family aeroplanes, and installation of these AoA sensor conic plates was required by EASA AD 2012-0236, making reference to Airbus Service Bulletin (SB) A320-34-1521 for in-service modification.</p>

	<p>That requirement was deleted by EASA AD 2012-0236R1.</p> <p>To address this potential unsafe condition on A320 family aeroplanes, Airbus developed an "AOA Blocked" emergency procedure, published as a temporary revision (TR) of the Airplane Flight Manual (AFM), to ensure that flight crews, in case of AoA sensors blockage, apply the applicable emergency procedure.</p> <p>Consequently, EASA issued Emergency AD 2012-0264-E to require amendment of the AFM by incorporating the Airbus TR.</p> <p>Since that AD was issued, Airbus published approved instructions to re-install AoA sensor flat plates on A320 family aeroplanes.</p> <p>For the reasons described above, this AD retains the requirements of EASA AD 2012-0264-E which is superseded, and requires installation of AoA sensor flat plates, after which the AFM operational procedure can be removed.</p>
Effective Date:	15 February 2013
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>Re-statement of EASA AD 2012-0264-E requirement:</p> <p>For aeroplanes on which Airbus modification (mod.) 153213 or 153214 has been embodied in production, or Airbus SB A320-34-1521 has been embodied in service:</p> <ol style="list-style-type: none"> (1) Before next flight after 22 December 2012 [the effective date of EASA AD 2012-0264-E], amend the applicable AFM to incorporate Airbus AFM A320 TR286 "AOA Blocked", issue 1.0, inform all flight crews and thereafter operate the aeroplane accordingly. <p>New requirements of this AD:</p> <p>For all aeroplanes as identified in the Applicability section of this AD:</p> <ol style="list-style-type: none"> (2) Within 5 months after the effective date of this AD, remove all AoA sensor conic plates having Part Number (P/N) F3411060200000 or P/N F3411060900000 and install AoA sensor flat plates: <ol style="list-style-type: none"> (2.1) P/N D3411013520200 in accordance with the instructions of Airbus SB A320-34-1564, or (2.2) P/N D3411007620000, or P/N D3411013520000 in accordance with approved instructions. (3) An aeroplane on which Airbus mod. 154863 (installation of AOA sensor flat plate) and mod. 154864 (Coating protection) have 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 sensor conic plate P/N F3411060200000 or P/N F3411060900000 has been installed on that aeroplane. (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. (5) Do not install on an aeroplane any AoA sensor conic plate P/N F3411060200000 or P/N F3411060900000, and do not use AoA protection cover P/N 98D34203003000 on an aeroplane, as follows: <ol style="list-style-type: none"> (5.1) For aeroplanes that, on the effective date of this AD, have AoA sensor flat plates installed: From effective date of this AD. (5.2) For aeroplanes that, on the effective date of this AD, have AoA sensor conic plates installed: After modification of the aeroplane as required by paragraph (2) of this AD.

Ref. Publications:	<p>Airbus SB A320-34-1564 Original Issue dated 25 January 2013.</p> <p>Airbus AFM TR 286 Issue 1.0 dated 17 December 2012.</p> <p>Note: A copy of the AFM TR is attached to the record of this AD in the EASA AD publishing tool.</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. 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, 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 – EIAS E-mail: account.airworth-eas@airbus.com.