| EASA | AIRWORTHINESS DIRECTIVE |
|---|---|
| | **AD No.: 2010-0016R1**<br><br>**Date: 09 February 2010**<br><br>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 :** | **Type/Model designation(s) :** |
|---|---|
| AIRBUS | A330 and A340 aeroplanes |

| | |
|---|---|
| TCDS Number : | EASA.A.004, EASA.A.015 |
| Foreign AD : | Not applicable |
| Revision : | This AD revises EASA AD 2010-0016 dated 27 January 2010 |

| **ATA 34** | **Navigation – Thales Avionics Angle of Attack (AoA) Probe – Inspection / Replacement** |
|---|---|
| Manufacturer(s): | Airbus (formerly Airbus Industrie) |
| Applicability: | Airbus A330-201, A330-202, A330-203, A330-223, A330-243, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343 aeroplanes models, all manufacturer serial numbers, if equipped with Thales Avionics AoA probe having part number (P/N) C16291AA.<br><br>Airbus A340-211, A340-212, A340-213, A340-311, A340-312, A340-313, A340-541, A340-542, A340-642 and A340-643 aeroplanes models, all manufacturer serial numbers, if equipped with Thales Avionics AoA probe having P/N C16291AA. |
| Reason: | During Airbus Final Assembly Line reception flight tests, AoA data from two different aeroplanes were found inaccurate. Inaccuracy was confirmed by flight data analysis.<br><br>Investigation conducted by Thales on the removed probes revealed oil residue between the stator and the rotor parts of the AoA vane position resolvers. This oil residue was due to incorrect cleaning of the machining oil during the manufacturing process of the AoA resolvers. At low temperatures, this oil residue becomes viscous (typically in cruise) causing lag of AoA vane movement.<br><br>Such condition could lead to discrepant AoA measurement. If not corrected, and if two or three AoA probes were simultaneously affected and provided wrong indications of the AoA to a similar extent, it could lead |

| | |
|---|---|
| | to a late activation of the angle of attack protection, which in combination with flight at high angle of attack would constitute an unsafe condition.<br><br>Therefore, this AD requires a one time inspection of the Thales Avionics AoA probe P/N C16291AA in order to identify the suspect parts and to remove them from service.<br><br>This AD revision is issued to specify that the identification of the affected AoA probes is also possible in accordance with aeroplane maintenance records data analysis. |
| Effective Date: | 10 February 2010 |
| Required action(s) and Compliance Time(s): | Required as indicated, unless accomplished previously:<br><br>(1) No later than 30 April 2010, perform a detailed visual inspection of Thales Avionics AoA probe P/N C16291AA for Serial Number (S/N) identification, in accordance with the instructions of Airbus Service Bulletin (SB) A330-34-3232 or SB A340-34-4239 or SB A340-34-5072, as applicable, depending on the aeroplane type.<br><br>(2) For aeroplanes on which Airbus modification 53368 (Back Up Speed Scale) has been embodied in production or Airbus SB A330-34-3213 or SB A340-34-4213 or SB A340-34-5060, as applicable, depending on the aeroplane type, has been embodied in service:<br><br>If the identified S/N corresponds to a suspect AoA probe in accordance with the list provided in Thales SB C16291A-34-007 Revision 01, no later than **30 April 2010**, replace the affected AoA probe with a serviceable one in accordance with one of the four options and associated instructions defined in SB A330-34-3232 or SB A340-34-4239 or SB A340-34-5072, as applicable, depending on the aeroplane type.<br><br>(3) For aeroplanes on which Airbus modification 53368 ((Back Up Speed Scale) has NOT been embodied in production or Airbus SB A330-34-3213 or SB A340-34-4213 or SB A340-34-5060, as applicable, depending on the aeroplane type, has NOT been embodied in service:<br><br>If the identified S/N corresponds to a suspect AoA probe in accordance with the list provided in Thales SB C16291A-34-007 Revision 01, no later than **30 April 2011**, replace the affected AoA probe with a serviceable one in accordance with one of the four options and associated instructions defined in SB A330-34-3232 or SB A340-34-4239 or SB A340-34-5072, as applicable, depending on the aeroplane type.<br><br>(4) From the effective date of this AD, do not install a Thales Avionics AoA probe having P/N C16291AA on an aeroplane that is identified as a suspect AoA probe in accordance with the list provided in Thales SB C16291A-34-007 Revision 01 unless it is fitted with an inspection label stating that Thales SB C16291A-34-007 Revision 01 has been accomplished.<br><br>(5) A review of aeroplane maintenance records is acceptable in lieu of the inspection required by paragraph (1) of this AD if the S/N of the installed AoA probe can be conclusively identified from that review. |
| Ref. Publications: | Airbus Service Bulletin A330-34-3232 at original issue;<br><br>Airbus Service Bulletin A340-34-4239 at original issue;<br><br>Airbus Service Bulletin A340-34-5072 at original issue.<br><br>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD. |

| | |
|---|---|
| | Thales Service Bulletin C16291A-34-007 Revision 01 dated 03 December 2009. |
| Remarks: | 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.<br>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.<br>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 .<br>4. For any questions concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – EAL; E-mail: airworthiness.A330-A340@airbus.com . |