


|  |  |
|--|--|
| <b>EASA</b>  | <b>AIRWORTHINESS DIRECTIVE</b>   |
|   | <p><b>AD No.: 2010-0132R1</b></p> <p><b>Date: 10 June 2013</b></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> |  |
| <b>Type Approval Holder's Name :</b><br>AIRBUS   | <b>Type/Model designation(s) :</b><br>A330 aeroplanes  |
| TCDS Number:   | EASA.A.004   |
| Foreign AD:  | Not applicable   |
| Revision:  | This AD revises EASA AD 2010-0132 dated 28 March 2010, which superseded EASA AD 2010-0042-E dated 12 March 2010.   |
| <b>ATA 28</b>  | <b>Fuel – Main Fuel Pump System Water Scavenge System – Deactivation</b>   |
| Manufacturer(s):   | Airbus (formerly Airbus Industrie)   |
| Applicability:   | Airbus A330-243, A330-243F, A330-341, A330-342 and A330-343 aeroplanes, all manufacturer serial numbers on which Airbus modification 56966H16199 has been embodied in production, or Airbus Service Bulletin (SB) A330-28-3105 has been embodied in service, except those on which Airbus modification (mod) 200801 has been embodied in production.   |
| Reason:  | <p>During an in-service event, the flight crew of a Trent 700 powered A330 aeroplane reported a temporary Engine Pressure Ratio (EPR) shortfall on engine 2 during the take-off phase of the flight. The ENG STALL warning was set. The flight crew followed the standard procedures which included reducing throttle to idle. The engine recovered and provided the demanded thrust level for the remainder of the flight.</p> <p>Data analysis confirmed a temporary fuel flow restriction and subsequent recovery, and indicated that also engine 1 experienced a temporary fuel flow restriction shortly after the initial event on engine 2, again followed by a full recovery. The engine 1 EPR shortfall was insufficient to trigger any associated warning and was only noted through analysis of the flight data. No flight crew action was necessary to recover normal performance on this engine. The remainder of the flight was uneventful.</p> <p>Based on industry-wide experience, the investigation of the event has focused on the possibility for ice to temporarily restrict the fuel flow. While no direct fuel system fault has been identified, the operation of the water scavenge</p> |

|  |   |
|--|---|
|  | <p>system at Rib 3 is considered to have been a contributory factor.</p> <p>The scenario of ice being shed and causing a temporary blockage in the engine fuel system may lead to a temporary restriction of fuel flow to the engine. This may result in a possible engine surge or stall condition, and in the engine not being able to provide the commanded thrust.</p> <p>As a precautionary measure to reduce the possibility of ingesting ice into the engine fuel feed system, EASA issued Emergency AD 2010-0042-E to require deactivation of the automatic Standby Fuel Pump Scavenge System, which operates during Taxi and Take-off by removing relays Functional Item Numbers (FIN) 80QA1 and 80QA2 (this will not affect normal standby pump operation) and prohibition of dispatch with one MAIN Fuel Pump inoperative.</p> <p>The deactivation was introduced in production through Airbus mod 200801.</p> <p>Subsequently, EASA issued AD 2010-0132 which superseded EASA AD 2010-0042-E, retaining its requirements, to expand the applicability to the newly certified model A330-243F.</p> <p>Since AD 2010-0132 was issued, testing and analysis have continued to identify the root cause of the event and recent rig tests on the aeroplane fuel system have been conducted to evaluate the worst icing scenario.</p> <p>These test results concluded that the water scavenge system at Rib 3 cannot be considered as a significant contributor on ice build-up and subsequent release of ice into the fuel system. Consequently, the temporary MMEL restriction for ATA28-21 (Main Fuel Pump System) is no longer applicable and the dispatch restriction required by the original issue of this AD can be removed.</p> <p>For the reason described above, this AD is revised to remove the dispatch restriction related to A330 MMEL TR 01-28/01Z Issue 01. In addition, some editorial changes have been made to improve the AD readability.</p> |
| Effective Date:                            | <p>Revision 1: 10 June 2013</p> <p>Original issue: 12 July 2010</p>   |
| Required action(s) and Compliance Time(s): | <p>Required as indicated, unless accomplished previously:</p> <p>(1) No later than 26 March 2010, deactivate the water scavenge automatic operation by removing relays FIN 80QA1 (LH) and 80QA2 (RH) in accordance with the instructions of Airbus All Operators Telex (AOT) A330-28A3114.</p> <p>(2) Deleted.</p> <p>(3) Deleted.</p>  |
| Ref. Publications:                         | <p>Airbus All Operators Telex A330-28A3114 dated 10 March 2010, or Rev.1 dated 24 March 2010.</p> <p>The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.</p>  |
| Remarks:                                   | <ol style="list-style-type: none"> <li>If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>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.</li> <li>Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</li> <li>For any question concerning the technical content of the requirements in this AD, please contact:<br/>AIRBUS SAS – Airworthiness Office – EIAL, Fax: + 33 5 61 93 45 80, or + 33 5 61 93 44 51. E-mail: <a href="mailto:airworthiness.A330-A340@airbus.com">airworthiness.A330-A340@airbus.com</a>.</li> </ol>   |