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**AIRWORTHINESS DIRECTIVE**

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For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

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**Airbus Industrie A330 Series Aeroplanes****AD/A330/68****Fight Controls - Back-Up Control Module****13/2006**

**Applicability:** A330 aircraft, all certified models, all serial numbers, on which Airbus Modification 49144 (install rudder fly by wire) has been embodied during production, except those on which Airbus Modification 55185 has been embodied during production or Airbus Service Bulletin (SB) A330-27-3142 dated 17 August 2006 has been embodied whilst in service.

**Requirement:**

1. Perform an operational test of the back-up control module (BCM) and back-up power supply (BPS) by BITE (Built In Test Equipment) in accordance with Airbus SB A330-27-3147 dated 4 August 2006.
2. If, as a result of the Requirement 1 operation test, any discrepancies are detected, apply the corrective actions in accordance with SB A330-27-3147.
3. Install a modified BCM in accordance with instructions SB A330-27-3142.

Later approved revisions of the above service bulletins may be utilised to achieve compliance with the relevant Requirements of this Directive.

*Note: EASA AD 2006-0313 refers.*

**Compliance:** For Requirement 1 - Within 900 hours time in service (TIS) after the effective date of this Directive and, thereafter, at intervals not exceeding 900 hours TIS until the BCM is replaced in accordance with SB A330-27-3142.

For Requirement 2 - Before further flight after the Requirement 1 operational test.

For Requirement 3 - No later than 31 December 2008.

This Airworthiness Directive becomes effective on 21 December 2006.

**Background:** The European Aviation Safety Agency (EASA) has advised that during a BCM retrofit campaign, one resistor manufactured by SRT was found with an abnormal resistance drift. This resistor was subject to humidity absorption and then to oxidation, which lead to increase the resistor value. This oxidation has been determined coming from a production quality issue.

When the aircraft is in control back up configuration (considered to be an extremely remote case), an incorrect value on these resistors may cause degradation of the BCM piloting laws, potentially leading to erratic motion of the rudder and to possible impact on the Dutch Roll.

**Airbus Industrie A330 Series Aeroplanes**

AD/A330/68 (continued)

In order to detect a degradation of the BCM piloting laws due to resistor oxidation, this Directive mandates a repetitive ground operational test of the BCM fitted with resistor manufactured by SRT until accomplishment of terminating action (installation of BCM fitted with resistors manufactured by VISHAY).



James Coyne  
Delegate of the Civil Aviation Safety Authority

9 November 2006