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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/A330/78****Refuel Isolation Valve****11/2007**

**Applicability:** AIRBUS A330 aircraft, except those on which AIRBUS modification 55664 has been embodied in production or AIRBUS Service Bulletin (SB) A330-28-3103 has been embodied in service; and

AIRBUS aircraft A330-300 series aircraft, on which AIRBUS modification 40176 (optional LH coupling) has been embodied in production or SB A330-28-3018 (optional LH coupling) has been embodied in service, except those on which AIRBUS modification 56148 has been embodied in production or SB A330-28-3103 has been embodied in service.

**Requirement:**

1. Replace the refuel isolation valve(s); and re-identify the refuel/defuel coupling, installed on aircraft in accordance with SB A330-28-3103 or later approved revision.
2. Do not install neither affected refuel isolation valve unit nor affected refuel/defuel coupling unit, as a replacement part on an aircraft, unless it has been modified in accordance with SB A330-28-3103 or later approved revision.

*Note: EASA AD 2007-0239 dated 3 September 2007 refers.*

**Compliance:**

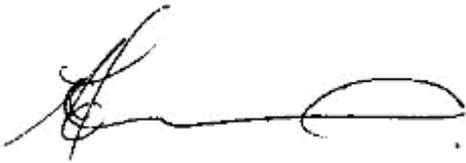
1. Within 18,000 Flight Hours from the effective date of this AD.
2. From the effective date of this AD.

This Airworthiness Directive becomes effective on 25 October 2007.

**Airbus Industrie A330 Series Aeroplanes**

AD/A330/78 (continued)

Background: Two A330 operators have reported that the guide shaft of the Refuel Isolation Valve has been broken away from the main casting and entered the fuel tank. The Supplier investigation revealed that water builds-up in the cavity of the Refuel Isolation Valve and freezes during flight. When refuel pressure is applied to the piston, the ice restricts the piston travel on one side leading to an asymmetric movement of the piston resulting in breakage of the guide shaft. A non-bonded metallic object within the fuel tank can result to a potential ignition source, which in combination with a lightning strike constitutes an unsafe condition. This AD requires replacement of the affected Refuel Isolation Valve with a more robust valve similar to that designed for the A380.



Charles Lenarcic  
Delegate of the Civil Aviation Safety Authority

6 September 2007