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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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**Pilatus PC-12 Series Aeroplanes****AD/PC-12/45****Windshield Deice System  
Wiring - Inspection/Replacement****4/2005  
TX**

**Applicability:** Model PC-12 and PC-12/45 aeroplanes, Manufacturer Serial Numbers (MSN) 322 through MSN 400 inclusive.

**Requirement:**

1. Perform an inspection for signs of heat damage of the wires, splices and related link wires in the area of terminal block (TB152) in accordance of paragraph 3 of Pilatus PC-12 Service Bulletin (SB) 30-009.
2. Perform a check of the wires and related link wires to verify that wires of correct size (American Wire Gauge [AWG]) are installed as specified in paragraph 3.B. of SB 30-0009 and Wiring Manual (WM) 30-40-00 and 30-40-10.
3. If any signs of heat damage or incorrect wiring are found during the Requirements 1 and 2 inspections, replace them in accordance with SB 30-009.

*Note: FOCA Switzerland AD HB-2005-079 refers.*

**Compliance:** For Requirements 1 and 2 - Within the next 10 hours time-in-service but not later than three calendar months after the effective date of this Directive.

For Requirement 3 - Before further flight.

This Airworthiness Directive becomes effective on 18 February 2005.

**Background:** The Swiss Federal Office for Civil Aviation (FOCA) has advised of a report of a Co-Pilot's windshield de-ice system failure. The cause of the defect was found in an overheating of the return wire from the windshield heating system. Investigation revealed that the installation of the wiring in question was not in accordance with the specifications given in the applicable wiring diagrams (incorrect AWG). This could result in heat damage of the wiring and as a consequence, electrical arcing or possible fire in the overhead panel in the flight-compartment.

**Pilatus PC-12 Series Aeroplanes**

AD/PC-12/45 (continued)

This Directive requires inspection for signs of heat damage of electrical parts together with inspection of wires for incorrect AWG and, if necessary, the replacement of heat damaged parts and incorrect wiring.

A handwritten signature in black ink, appearing to read 'James Coyne', with a stylized flourish at the end.

James Coyne  
Delegate of the Civil Aviation Safety Authority

14 February 2005