AIRWORTHINESS DIRECTIVE

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.

Embraer EMB-135 and EMB-145 Series Aeroplanes

AD/EMB-145/4 Engine Thrust Reverser Stow/Transit Switches 8/2008 DM

Applicability: All EMB-145( ) model aircraft.

Requirement:

1. Unless previously accomplished, inspect the thrust reversers stow/transit switches on both engine for internal corrosion in accordance with detailed instructions and procedures described in either Embraer Service Bulletin (SB) 145-78-0029, original issue, or SB 145LEG-78-005, original issue, or later revisions approved by the Brazilian Departamento de Aviação Civil (DAC) - Centro Técnico Aeroespacial (CTA) or Agência Nacional de Aviação Civil (ANAC).

2. Continue the Requirement 1 inspections.

The installation, on both engines of an aircraft, of transit switches part number (P/N) 83-990-168, according to either Embraer SB 145-78-0035, original issue, or SB 145LEG-78-0006, original issue, or further revisions approved by the CTA or ANAC, constitutes a terminal action to the repetitive inspections for the transit switches for that aircraft. Additionally, switches P/N 83-990-168, when installed at the stow positions; do not require the repetitive inspections required by this AD.

Note 1: The "145LEG" series of Embraer Service Bulletins only applies to Legacy executive jets.

Note 2: DAC AD 2001-05-03R3 refers.

Compliance: For Requirement 1 -

a. For aircraft which have logged more than 1,600 hours total time in service (TIS) on 8 June 2001 (the effective date of the original issue DAC AD 2001-05-03) - Within the next 400 hours TIS after that date.

b. For aircraft which have logged 1,600 hours total TIS or below on 8 June 2001 - Before reaching 2,000 hours total TIS after that date.

For Requirement 2 - Within 1,200 hours TIS after the last inspection and thereafter within every 1,200 hours TIS, until all transit switches on both engines are replaced with a P/N 83-990-168 switch.

This Airworthiness Directive becomes effective on 23 June 2008.

Embraer EMB-135 and EMB-145 Series Aeroplanes

AD/EMB-145/4 (continued)

Background: The DAC have been found cases of internal corrosion of the stow/transit switches installed in the engine thrust reversers of the EMB-145( ) aircraft models. One case of severely contaminated transit switch resulted in uncommanded engine rollback to idle in flight. Spurious messages "ENG ( ) REV DISAGREE" have also been displayed in the engine indicating and crew alerting system (EICAS), due to the above internal corrosion, which have induced aborted takeoffs.

James Coyne
Delegate of the Civil Aviation Safety Authority

16 June 2008