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-145/21 Engine Anti-Ice Valve 9/2008

Applicability: Embraer EMB-l45( ) aircraft, except aircraft of serial numbers 14500921, 14500928, 14500932, 14500949, 14500958, 14500971, 14500973 and up, which have in-factory modification incorporated.

Requirement: Comply with the requirements of AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRAZIL AD 2006-09-03R1.

Compliance: As detailed in AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRAZIL AD 2006-09-03R1 with a revised effective date of 28 August 2008.

This Airworthiness Directive becomes effective on 28 August 2008.

Background: There has been occurrence of an engine anti-ice system valve failure, where the valve spring seat had broken and obstructed the anti-ice system venturi tube. Aircraft dispatch with that failure may be allowed by the operator Minimum Equipment List (MEL), since the engine anti-ice system valve be locked in the OPEN position.

However, there is no readily available means to make sure the anti-ice system tubing is free of debris, allowing unrestricted hot airflow to the piccolo tube on the engine inlet lip. Therefore, should the aircraft encounter icing conditions, ice may accrete in the engine inlet lip and be ingested through the air inlet, resulting in possible engine damage and flame-out.

James Coyne
Delegate of the Civil Aviation Safety Authority

17 July 2008