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 ERJ-170 Series Aeroplanes

AD/ERJ-170/23 Airframe Structural Components 7/2009

Applicability: Model ERJ 170-100 LR, ERJ 170-100 SE, ERJ 170-100 STD and ERJ 170-100 SU aircraft.

Model ERJ 170-200 LR, ERJ 170-200 STD, and ERJ 170-200 SU aircraft.

Requirement: Action in accordance with the requirements of ANAC AD 2009-04-01 Amdt 39-1264.

Compliance: As specified in the Requirement document, with a revised effective date of 2 July 2009.

This Airworthiness Directive becomes effective on 2 July 2009.

Background: Cracks were detected in some structural components during ERJ 170 aircraft full scale fatigue testing. Analysis of the cracking has resulted in modifications to the aircraft Airworthiness Limitation Items to include new inspections tasks or modification of existing ones, and respective thresholds and intervals. Undetected fatigue cracking in the affected areas could adversely affect the structural integrity of the aircraft.

David Villiers
Delegate of the Civil Aviation Safety Authority

19 May 2009