AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/EMB-120/45 and issues the following 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-120 (Brasilia) Series Aeroplanes

AD/EMB-120/45 Stall Warning Computer 11/2008 Amdt 1

Applicability: All EMB-120( ) model aeroplanes.

Requirement:

1. Replace the current stall warning computers with new improved versions in accordance with detailed instructions and procedures described in Embraer Service Bulletin (SB) 120-27-0092 Revision 01 dated 29 December 2006, or later revision approved by Brazilian Agência Nacional de Avição Civil (ANAC).

Note 1: Before installing the improved stall warning computers, the detailed instructions and procedures described in the Embraer SB No. 120-27-0091 Revision 02 dated 29 September 2003, or later revisions approved by ANAC must be accomplished.

2. EMB-120( ) aircraft may not be operated with stall warning computers bearing part number (P/N) C-81806-1 Mod. A, C-81806-2 Mod. A or C-81806-3 installed.

Note 2: ANAC AD 2007-03-03 refers.

Compliance: For Requirement 1 - Remains unchanged as “Within the next 36 calendar months after the effective date of the original issue of this Directive (7 June 2007)”.

For Requirement 2 - After 7 June 2010.

This Amendment becomes effective on 23 October 2008.

Background: Icing tunnel tests on an EMB-120 wing section, conducted under a joint Embraer-NASA-FAA-CTA research program well after the EMB-120( ) was type-certificated, have shown that stick shaker to stick pusher speed margins may drop below the minimum required by the applicable regulations in certain icing conditions. Although flight tests have shown that the aircraft handling qualities are not adversely affected, these reduced speed margins may significantly increase crew workload in certain flight phases.

Since this condition affects flight safety, the original issue of this Directive required the replacement of the stall warning computers.

Embraer EMB-120 (Brasilia) Series Aeroplanes

AD/EMB-120/45 Amdt 1 (continued)

This Amendment continues the requirements of the original issue but extends the compliance for Requirement 2 by 28 days to align with the Requirement 1 compliance date.

The original issue of this Directive became effective on 7 June 2007.

Charles Lenarcic
Delegate of the Civil Aviation Safety Authority

11 September 2008