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-190 Series Aeroplanes

AD/ERJ-190/1 Air Data Smart Probes 5/2008 DM

Applicability: ERJ-190 model aeroplanes, equipped with Air Data Smart Probes part number (P/N) 2015G2H2H-4( ), 2015G2H2H-5( ), 2015G2H2H-6( ) or 2015G2H2H-7( ).

Requirement:

1. Carry out a detailed inspection of the four "Air Data Smart Probes" drain hole and remove the accumulated moisture in accordance with Embraer Service Bulletin 190-34-0003, original issue, dated 2 December 2005 or further revisions approved by the Brazilian Agência Nacional de Aviação Civil (ANAC).

Note 1: For the purpose of this Directive, a detailed inspection is defined as: "An intensive examination of a specific item, installation or assembly to detect damage, failure or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirrors, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate access procedures may be required."

The optional installation of Air Data Smart Probes P/N 2015G2H2H-8( ) in accordance with the procedures detailed in the Embraer SB 190-34-0008 original issue, dated 19 September 2006 or further revisions approved by ANAC, constitutes terminal action to the repetitive inspections.

2. Air data smart probes part number (P/N) 2015G2H2H-4( ), 2015G2H2H-5( ), 2015G2H2H-6( ) or 2015G2H2H-7( ) may not be reinstalled on any aeroplane as a replacement for probe P/N 2015G2H2H-8( ).

Note 2: ANAC AD 2006-05-08R1 refers.

Compliance: For Requirement 1 - Either within the next 600 hours time in service (TIS) after the first issue of an Australian Certificate of Airworthiness and thereafter, at intervals that do not exceed 600 hours TIS until the Air Data Smart Probe is replaced by a probe P/N 2015G2H2H-8( ).

For Requirement 2 - As of the effective date of this Directive.

This Airworthiness Directive becomes effective on 27 March 2008.

Embraer ERJ-190 Series Aeroplanes

AD/ERJ-190/1 (continued)

Background: The ANAC has received reports of moisture being found in the pneumatic passage between the pitot port and the pressure sensors in the Air Data Smart Probe. That moisture may freeze and block the sensors, causing erroneous information to the Air Data System.

Since this condition may affect the safety of the aeroplane, this Directive requires the repetitive inspection of the Air Data Smart Probe for moisture and, if necessary, the removal of any accumulated moisture until the probes are replaced.

David Punshon
Delegate of the Civil Aviation Safety Authority

12 March 2008