



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2010-01-01

Effective Date: 31 Jan. 2010

The following Brazilian Airworthiness Directive (AD), issued by the Agência Nacional de Aviação Civil (ANAC) in accordance with provisions of Chapter IV, Title III of Código Brasileiro de Aeronáutica - Law No. 7,565 dated 19 December 1986 - and Regulamento Brasileiro de Homologação Aeronáutica (RBHA) 39, applies to all aircraft registered in the Registro Aeronáutico Brasileiro. No person may operate an aircraft to which this AD applies, unless it has previously complied with the requirements established herein.

AD No. 2010-01-01 - EMBRAER - Amendment 39-1291.

APPLICABILITY:

This Airworthiness Directive is applicable to Embraer Models ERJ 170-100 LR, ERJ 170-100 SE, ERJ 170-100 STD, ERJ 170-100 SU, ERJ 170-200 LR, ERJ 170-200 STD and ERJ 170-200 SU airplanes equipped with Air Management System (AMS) controller cards part number (P/N) 1001050-1-YYY or P/N 1001050-2-YYY containing software version Black Label 08 or lower installed.

CANCELLATION / REVISION:

Not applicable.

REASON:

It has been determined that due to an intermittent communication between AMS controller cards and both Secondary Power Distribution Assemblies (SPDAs) the message “RECIRC SMK DET FAIL” is displayed in the Engine Indication and Crew Alerting System (EICAS). This communication failure could result in loss of automatic activation of engine inlet ice protection system when in ice condition. In this situation the caution messages “A-I Eng 1 Fail” and “A-I Eng 2 Fail” will be displayed and if the flight crews do not follow the associated procedures ice may accrete in the engines inlet and cause a dual engine shut down.

Since this condition may occur in other aircraft of the same type and affects flight safety, a corrective action is required. Thus, sufficient reason exists to request compliance with this AD in the indicated time limit.

REQUIRED ACTION:

To prohibit dispatch if the message “RECIRC SMK DET FAIL” is displayed and is confirmed to be associated to AMS controller processor board.

COMPLIANCE:

Required as indicated below, unless already accomplished.

After 10 days of the effective date of this AD, dispatch with message “RECIRC SMK DET FAIL” displayed on ground, as allowed in section 21 (Air Conditioning), item 24-04 (Recirculation System Smoke Detector), of the Embraer ERJ 170 Master Minimum Equipment List (MMEL), is prohibited unless after troubleshooting action confirms the message has been triggered due to a failure on the recirculation bay smoke detection system (Ref. FIM Task 26-16-00-810-801-A).

NOTE 1: The MMEL currently allow dispatch with the message “RECIRC SMK DET FAIL” displayed on ground under certain conditions. This AD supersedes the MMEL or the approved Minimum Equipment Lists (MEL) for any operator.

NOTE 2: The above limitation and procedures are considered an interim solution until a final action is identified, at which time the ANAC may consider further AD action.

Record compliance with this AD in the applicable maintenance log book.

CONTACT:

For additional technical information, contact:

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NOTE: Original in Portuguese language signed and available in the files of the Aeronautical Products Certification Branch (GGCP) of the National Civil Aviation Agency (ANAC).