There is a safety issue involving the E170 and E190 Type I aircraft door operation.

The E170/E190 Type I Aircraft Door is designed such that when operated normally and opened from the outside while armed the escape slide will not deploy. However, there have been at least two occurrences of partial inadvertent slide deployments due to opening from the outside. These inadvertent deployments have been traced to improper operational procedures, as well as to unique features of the door design. Specifically, if the door is armed but the door vent flap is open, the escape slide will deploy when opened from the outside.

This issue potentially poses a threat to Airport Rescue and Fire Fighting (ARFF) personnel in the event of an emergency evacuation or similar event involving the E170/E190.

Previous guidance issued by Embraer stated that opening the E170/E190 aircraft door from the outside automatically disarmed the slide. Based on new information provided by Embraer, this design may be defeated through incorrect operational procedures. It has been found if you use the external handle to open the aircraft door while the aircraft slide is armed and the vent flap is open, rapid door emergency operation will occur and the escape slide will deploy. On all 4 aircraft doors the VENT FLAP must be closed and flush with the door before opening. Embraer released the attached Service Newsletter SNL 170-52-0006 to advise operators of the correct procedure when opening the door from the outside. Similar information will be added to the Aircraft Maintenance Manual and the Aircraft Operating Manual.
Embraer also intends to release a service bulletin modification to install an additional placard on the door exterior. Additional design changes are under consideration as a long-term solution.

Attachment

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OSB                    2/9/2006
Benedict D. Castellano, Manager  Date
Airport Safety and Operations Division, AAS-300
SERVICE NEWSLETTER

SUBJECT: CORRECT OPERATION OF THE PASSENGER AND SERVICE DOORS FROM OUTSIDE THE AIRCRAFT

APPLICABILITY: To all EMBRAER 170 aircraft.

VALIDITY: This SNL remains valid until its information is incorporated into the next revision of AMM Part I (SDS) and RMM Part I.

SCOPE: To advise operators about the correct operation of the Passenger and Service Doors from outside the aircraft.

DESCRIPTION:
The precaution below must be followed in order to correctly operate the Passenger and Service Doors.

MAKE SURE THAT THE VENT FLAP IS CLOSED (FLUSH WITH THE DOOR) BEFORE YOU OPEN THE DOOR FROM THE OUTSIDE. IF YOU USE THE EXTERNAL HANDLE TO OPEN THE DOOR WHILE THE SLIDE IS ARMED AND THE VENT FLAP IS OPEN, RAPID DOOR EMERGENCY OPERATION WILL OCCUR AND THE ESCAPE SLIDE WILL DEPLOY. AS A RESULT, INJURY TO PERSONS CAN OCCUR.

DATE: 07/Nov/05

SNL: 170-52-0006

CHANGE No.: __ - __/__/__

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