



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2020-04-01

Effective Date: 17 Apr. 2020

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 da Aviação Civil (RBAC) 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. 2020-04-01 - EMBRAER / 39-1458.

APPLICABILITY:

(a) This Airworthiness Directive (AD) applies to Embraer S.A. airplanes model EMB-545 and EMB-550 airplanes equipped with cockpit side window Left Hand (LH) side with Part Number (P/N) NP-200402-1 or P/N NP-200402-5 or cockpit side window Right Hand (RH) side with P/N NP-200402-2 or P/N NP-200402-6, as identified in Embraer Service Bulletin N. 550-56-0001, original revision, dated July 18, 2019.

CANCELLATION / REVISION:

Not applicable.

REASON:

It has been found the occurrences of cracks, delamination and failure of the cockpit side windows during the certification fatigue tests. The cracks and delamination may cause the cockpit side windows failure leading to an in-flight depressurization event.

Since this condition may occur in other airplanes 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:

Inspection and replacement of the cockpit side window LH and RH of the airplane by modified windows with new P/N.

COMPLIANCE:

Required as indicated below, unless already accomplished.

(b) Initial and repetitive inspection of the cockpit LH and RH side windows.

(1) For airplanes identified in paragraphs (a) of this AD, before they log 750 Flight Hours Since New (FHSN) or within the next 50 Flight Cycles (FC) after the effective date of this AD, whichever occurs later; carry out a detailed inspection (DET) for cracks and delamination according to the Task 56-12-00-200-801-A Detailed Inspection of Cockpit Side Window, revision 30 dated April 15, 2019; as published on Aircraft Maintenance Manual AMM-5613, Part II (Maintenance Practices and Procedures-MPP).

(i) In case of any crack or delamination is detected, before the next flight, replace the damaged window by a modified window with a new P/N NP-200402-7 or P/N NP-200402-8, as applicable.

(ii) In case of no crack or delamination are detected, no action is required at this time.

(2) Repeat the required inspections of paragraph (b)(1) of this AD at each 750 Flight Hours (FH).

NOTE: For the purpose of this AD, a Detailed Inspection (DET) is an intensive examination of a specific item, installation or assembly to detect damage, failure or irregularity. This could include tactile assessment in which a component or assembly can be checked for tightness/security. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirrors and magnifying lenses may be necessary. Surface cleaning and elaborate access procedures may be required.

(c) Replacement of cockpit LH and RH side windows.

(1) For airplanes identified in paragraphs (a) of this AD, before the airplane logs 3,400 Flight Cycles Since New (FCSN), replace the cockpit LH and RH side windows by a modified window bearing a new P/N NP-200402-7 or P/N NP-200402-8, as applicable.

(d) Prohibition of new installations.

After the effective date of this AD it is forbidden to install side windows on the airplane with P/N NP-200402-1, P/N NP-200402-2, P/N NP-200402-5 and P/N NP-200402-6.

(e) Alternative methods of compliance (AMOCs).

A different method or a different compliance time, with the requirements of this AD, may be used if approved by the General Manager of the Aeronautical Product Certification Branch (Gerência Geral de Certificação de Produtos Aeronáuticos – GGCP).

(f) Service information.

You must use Embraer Service Bulletin N. 550-56-0001, original issue, dated July 18, 2019; or further revisions approved by the ANAC and the Task 56-12-00-200-801-A Detailed Inspection of Cockpit Side Window, revision 30 dated April 15, 2019, as published on Aircraft Maintenance Manual AMM-5613, Part II (Maintenance Practices and Procedures-MPP); to do the actions required by this AD.

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

CONTACT:

For additional technical information, contact:

National Civil Aviation Agency (ANAC)
Aeronautical Products Certification Branch (GGCP)
Rua Laurent Martins, nº 209, Jardim Esplanada
CEP 12242-431 – São José dos Campos - SP, BRAZIL.
Tel: 55 (12) 3203-6600; E-mail: pac@anac.gov.br

APPROVAL:

MÁRIO IGAWA
General Manager
GGCP

ROBERTO JOSÉ SILVEIRA HONORATO
Airworthiness Superintendent
ANAC

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).

