



AIRWORTHINESS BULLETIN

Embraer 120 Windscreen and Cockpit
Window Support Structure Cracking.

AWB 53-007 **Issue :** 1
Date : 08 December 2010

1. Applicability

All Embraer 120 Aircraft

2. Purpose

This bulletin relates to two locations in the cockpit window and windshield area where cracking has been detected.

Location 1: Cracking in the windscreen support post external doubler and underlying fuselage skin (see figures 1 and 2).

Location 2: Cracking in the left and right hand cockpit DV window lower horizontal support frame beams (see figure 3).

3. Background

Location 1: There have been reports to CASA of cracking in the external doubler P/N 145-30236-001 (Installed IAW SB120-53-0072) and the underlying fuselage skin in the same location. The crack appears to originate from a fastener in the doubler which has a low edge margin, as shown in the photograph below. The cracking then propagates to adjacent fasteners and reduction of load carrying capability of the doubler can lead to the underlying fuselage skin cracking shown in figure 1.

Location 2: There have been multiple reports to CASA of cracking in the left and right hand cockpit window lower horizontal support beams. The crack location and extent is indicated in figure 3.

The manufacturer Embraer and the Brazilian Airworthiness Authority (ANAC) have been notified of both defects and we expect them to advise on a suitable corrective action after they review the defect reports.



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Figure 1 – Underlying fuselage skin cracking. This cracking would be hidden from view by the overlying external doubler which is installed IAW SB120-53-0072. Figure 2 shows the external doubler installed.



Figure 2 – showing external doubler installed. Initial crack has originated from the edge of the doubler to a low edge margin fastener at a location indicated by arrow in the figure. The crack has propagated between the group of three fasteners (circled).



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Figure 3: Cockpit window lower support frame cracked from rivets on LH and RH sides.

4. Recommendation

It is highly recommended that operators visually inspect for this cracking and if any cracking is found, rectify/repair by either contacting the Type Certificate holder, manufacturer or a CAR 35 authorised person.

5. Enquiries

Enquiries with regard to the content of this Airworthiness Bulletins should be made via the direct link e-mail address:

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Or in writing, to:

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