

Airworthiness Bulletin

AWB 52-001 Issue 2 - 25 November 2021

Beechcraft Super King Air 200 and 300 Series Aircraft -Emergency Exit Cracking

An Airworthiness Bulletin is an advisory document that alerts, educates and makes recommendations about airworthiness matters. Recommendations in this bulletin are not mandatory.

1. Effectivity

This AWB is applicable to Beech Super King Air 200 Series (200C/T/CT - B200/C/T/CT/GT/CGT) and Super King Air 300 Series (300/350/i/iER/iC/iCER/ER/CER 360/360ER, B300C) aircraft and will be of interest to;

- The owners and operators of Beech 200 and 300 series aircraft;
- Maintenance organisations that carry out maintenance on Beech 200 and 300 series aircraft; and
- Licensed Aircraft Maintenance Engineers who carry out maintenance on Beech 200 and 300 series aircraft.

2. Purpose

The purpose of this Bulletin is to bring to the attention of operators and maintainers of Beech 200 and 300 aircraft the possibility of undetected cracking of the Emergency Exit door.

At this time, the airworthiness concern described in this Airworthiness Bulletin is not considered an unsafe condition that would warrant an Airworthiness Directive to be issued under Part 39 of the *Civil Aviation Safety Regulations 1998*.

3. Background

During an investigation into a pressurisation leak, an operator discovered a large crack in the Emergency Exit door structure fitted to a Beech 200 series aircraft.

The Beech 200 and 300 series Maintenance Manual contains an inspection to detect cracking in this area however the procedure is an external inspection only. The operator conducted a fleet-wide inspection of the Emergency Exit door with the addition of removing the door trim to examine the internal structure of the door. This resulted in the discovery of another crack that was obvious from the inside of the door but almost undetectable from the outside even with a magnifying glass.



A similar internal crack finding was reported recently on a Beech B300C aircraft where an operator reported that a crack was found during a scheduled high utilization inspection program check on the inside of the Emergency Exit door curved panel at the lower aft door corner, but that the crack found was not otherwise apparent from the outside direction that the Beech 300 Maintenance Manual visual inspection calls for.



Figure 1. This aircraft contained a crack in the door structure that was detectable from the outside.



Figure 2. This aircraft contained a crack that <u>was not</u> apparent from the outside, but was found by removing the internal door trim.

4. Recommendations

It is recommended that operators and maintainers of Beech 200 and 300 series aircraft carry out an additional inspection of the internal structure of the door in order to detect defects of the Emergency Exit structure that may be undetectable from the routine exterior inspection:

At the next available opportunity and at each future routine inspection of the Emergency exit door in accordance with the Maintenance Manual, carry out the Emergency Exit inspection in accordance with the requirements of the Beech Maintenance Manual with the addition of an internal inspection:



- i) Remove the internal lining/trim of the Emergency Exit door to gain access to the extruded curves of the door structure.
- ii) Inspect with a bright light source and magnifying glass in the area of the extruded curves for cracks and/or corrosion.
- iii) Report any findings of defects to CASA via the CASA Defect Reporting System.

5. Reporting

Text.

6. Enquiries

Enquiries with regard to the content of this Airworthiness Bulletin should be made via the direct link email address:

AirworthinessBulletin@casa.gov.au

or in writing, to:

Airworthiness and Engineering Branch National Operations and Standards Civil Aviation Safety Authority GPO Box 2005, Canberra, ACT, 2601