

**Aviation Safety Investigation Report
199301250**

**Embraer-Empresa Brasileira de
Aeronautica
Bandeirante**

05 May 1993

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Investigations commenced on or before 30 June 2003, including the publication of reports as a result of those investigations, are authorised by the Executive Director of the Bureau in accordance with Part 2A of the Air Navigation Act 1920.

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at www.atsb.gov.au.

The Bureau did not conduct an on scene investigation of this occurrence. The information presented below was obtained from information supplied to the Bureau.

Occurrence Number: 199301250 **Occurrence Type:** Incident
Location: 33km NW Cairns
State: QLD **Inv Category:** 4
Date: Wednesday 05 May 1993
Time: 1140 hours **Time Zone** EST
Highest Injury Level: None

Aircraft Manufacturer: Embraer-Empresa Brasileira de Aeronautica
Aircraft Model: EMB-110P1
Aircraft Registration: VH-XFK **Serial Number:** 110-253
Type of Operation: Air Transport Domestic Low Capacity Passenger Scheduled
Damage to Aircraft: Nil
Departure Point: Aurukun QLD
Departure Time:
Destination: Cairns QLD

Approved for Release:

When the aircraft left the control area on its previous flight, it was noted by ATC staff that the transponder was not operational. The operator was informed that the equipment was unserviceable but that the aircraft would be allowed into the control area on its return flight.

However, when the aircraft reported outside the control area (OCTA) for a clearance it was denied on the basis that the transponder was unserviceable. This left the aircraft crew with the option of proceeding OCTA or landing somewhere else. The crew continued OCTA but inadvertently infringed the 3,000 step north of Cairns due to unfamiliarity with VFR procedures in the area and difficulty with the radio navigation chart presentation.

As a result of this investigation, ATS has modified their approach to this type of situation. Aircraft crews will no longer be forced OCTA under similar circumstances.

One of the problems inherent in the present radar system in Cairns is that only transponder returns can be seen beyond 50nm to the north-west due to terrain shielding of the primary radar. ATC's first option should have been to reroute the aircraft to track in from the north to give primary radar coverage earlier. A second option was to bring the aircraft in on a procedural clearance.