

**Aviation Safety Investigation Report
199805247**

**Britten Norman Ltd
Islander**

23 November 1998

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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.

Occurrence Number: 199805247 **Occurrence Type:** Incident
Location: Near Horn Island, Aerodrome
State: QLD **Inv Category:** 4
Date: Monday 23 November 1998
Time: 1000 hours **Time Zone** EST
Highest Injury Level: None

Aircraft Manufacturer: Britten Norman Ltd
Aircraft Model: BN-2A-8
Aircraft Registration: VH-FCO **Serial Number:** 845
Type of Operation: Charter Passenger
Damage to Aircraft: Nil
Departure Point: Dauan Island Qld
Departure Time: 0928 EST
Destination: Horn Island Qld

Approved for Release: Wednesday, January 27, 1999

The pilot reported that the aircraft appeared to be slow to respond to aileron control inputs during the previous flight. While carrying out a flight control check prior to departure for the next flight, he noticed that the right aileron did not respond to cockpit control column inputs. The pilot cancelled the flight and advised company maintenance personnel of the apparent problem.

Examination revealed that the control rod for the right aileron had fractured, separating the aileron from the aileron control system. Specialist examination of the control rod confirmed that the fracture originated in the internally threaded tube end fitting at the point where the fitting was pinned to the centre tube section of the rod. The features of the fracture were consistent with the application of excessive stress. There was no evidence of pre-existing cracking or other defects. The spherical bearing in the rod end fitting had seized and there was evidence of sliding contact between the outer edge of the inner race of this bearing and the aileron attachment fitting. This suggested that the rod probably failed as a result of aileron control input loads applied after the rod end bearing had seized. It could not be determined when the control rod had been fitted to the aircraft.

A scheduled 100 hourly maintenance inspection of the aircraft had been completed on the day prior to the incident and no abnormality concerning the aileron control system was noted. The maintenance organisation considered that during routine maintenance activities it was difficult to inspect the complete aileron assembly in the area where the failure occurred.

Following advice concerning this incident, the Civil Aviation Safety Authority commenced a review of the maintenance organisation's inspection and certification procedures.
