

**Aviation Safety Investigation Report
198903806**

Cessna 441

6 September 1989

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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: 198903806
Location: Mackay QLD
Date: 6 September 1989
Highest Injury Level: Nil
Injuries:

Occurrence Type: Accident

Time: 550

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	0
Total	0	0	0	1

Aircraft Details: Cessna 441
Registration: VH-NIF
Serial Number: 441-0232
Operation Type: Charter
Damage Level: Substantial
Departure Point: Mackay QLD
Departure Time: 0550
Destination: Proserpine QLD

Approved for Release: 28th February 1990

Circumstances:

The pilot reported that some freight was removed through the nose compartment left door during the stopover at Mackay. He was sure that the right door had not been touched during this time. After takeoff, the aircraft was climbing through 1000 feet at 160 knots, when the right luggage door opened. The door was torn from its hinges, hit the windscreen, and passed along the right side of the aircraft. Almost immediately, the elevator controls jammed. The pilot applied force to the control column and the elevators became free. The aircraft was then landed uneventfully at Mackay. Post flight inspection of the aircraft showed damage to the windscreen and the inboard leading edge of the right wing. The elevator restriction was caused by the high frequency radio aerial becoming entangled in the tail plane. The aerial had been severed by the door as it departed the aircraft. Inspection of the damaged door frame and hinge, showed that both door locks were capable of functioning correctly and were undamaged, indicating that the locks might not have been fully engaged prior to takeoff. Cessna issued Service Bulletin CQB87-1 on 22 May 1987 which made available a kit for the fitment of a secondary latch for the nose baggage compartment doors, to assist in preventing opening in the event the primary latch failed or was not properly secured. A secondary latch had not been fitted to this particular aircraft.

Significant Factors:

The following factors were considered relevant to the development of the accident

1. The precise sequence of events, resulting in the right nose luggage compartment door opened during flight could not be established.
2. Airloads on the open nose luggage door, resulted in the door separating from the aircraft.

