Aviation Safety Investigation Report 198803462

Cessna 152

14 June 1988

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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 <u>www.atsb.gov.au</u>.

Occurrence Number: Location: Date: Highest Injury Level: Injuries:		85 km NNW Bundaberg QLD 14 June 1988			Occurrence Type: Accident Time: 1715	
J			Fatal	Serious	Minor	None
		Crew	0	0	1	1
		Ground	0	0	0	-
		Passenger	0	0	0	1
		Total	0	0	0	2
Aircraft Details:	Cessna	152				
Registration:	VH-RNE					
Serial Number:	15281093					
Operation Type:	Private					
Damage Level:	Substantial					
Departure Point:	Bowen QLD					
Departure Time:	1331					
Destination:	Bundaberg QLD					

Approved for Release: February 28th 1989

Circumstances:

The pilot had filled the aircraft tanks prior to flying from Rockhampton to Bowen. The stated endurance from Rockhampton was 430 minutes. During the return flight he amended the flight plan by radio and continued the flight towards Bundaberg. The pilot estimated that the aircraft contained about 100 litres of fuel at Bowen and said the gauges indicated that the tanks were about half full overhead Rockhampton. He said that they were indicating about a quarter and a third full over Gladstone. After passing Gladstone both gauge indications moved rapidly towards empty. A descent for a precautionary landing was commenced. The pilot found a suitable area for landing, and commenced an inspection at about 200 feet above ground level when the engine stopped. The aircraft was landed in tall grass and overturned at the end of the landing roll. The accident occurred after about 380 minutes of engine running time, which included 366 minutes of flight time. Investigation of the fuel system failed to disclose any evidence of fuel leaks. The pilot's fuel calculations were based on lower fuel consumption rates than would be expected, given the speed at which the aircraft cruised. This resulted in the planned endurance being greater than the actual endurance possible. In addition to this error, the pilot had planned a flight duration which would have resulted in the aircraft having less than the planned fixed reserve on board on arrival at Bundaberg. This accident was not the subject of an on-site investigation.

Significant Factors:

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

- 1. The pilot's fuel consumption monitoring was inaccurate.
- 2. The pilot attempted flight beyond the safe endurance of the aircraft.