

**Aviation Safety Investigation Report
199001964**

Cessna 182-E

10 February 1990

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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: 199001964

Occurrence Type: Accident

Location: Collector NSW 6km West

Date: 10 February 1990

Time: 1655

Highest Injury Level: Serious

Injuries:

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

Aircraft Details: Cessna 182-E

Registration: VH-WJB

Serial Number: 18254254

Operation Type: Private

Damage Level: Substantial

Departure Point: Collector NSW

Departure Time: 1615

Destination: Collector NSW

Approved for Release: 11th September 1990

Circumstances:

After completing a number of parachute dropping flights under supervision, the pilot refuelled the aircraft from drums using a hand pump which he understood delivered a specific volume of fuel per stroke. He then flew the aircraft on a short solo flight to drop parachutists from 3000 feet. On his return he was asked to conduct another flight ahead of an approaching rain storm. On reaching jump height the jump coordinator decided that the descent would be conducted to the north of the strip, away from the drop zone, due to the rain. As the parachutists descended, the aircraft was observed to fly to the north west of the strip and shortly after was obscured from view by heavy rain. The aircraft failed to return and was subsequently located by search aircraft approximately six kilometres to the west of the strip. It had impacted the ground in a right wing low attitude at slow speed. The investigation revealed that the fuel on board prior to the last take off was less than statutory reserve requirements. The engine had lost power due to fuel exhaustion. The fuel pump being used for the refuelling operation was found to be delivering less fuel per stroke than stated and the pilot had not use the dipstick to check the aircraft fuel quantity prior to the accident flight. The times being used by the pilot to determine fuel quantity required were taken from the aircraft tachometer. These times were substantially less than real time. It is considered that the pilot's decision to rely on a predetermined fuel quantity and allow himself to be rushed into departing ahead of a rain storm of unknown duration contributed to the development of this accident.

Significant Factors:

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

1. The pilot did not adequately carry out pre-flight preparation and planning duties.
2. The pilot did not follow approved procedures.

3. The loss of engine power was due to fuel exhaustion.