

**Aviation Safety Investigation Report
199600381**

**Cessna Aircraft Company
182P**

07 February 1996

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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: 199600381 **Occurrence Type:** Accident
Location: Bathurst Harbour, (ALA)
State: TAS **Inv Category:** 4
Date: Wednesday 07 February 1996
Time: 1535 hours **Time Zone** ESuT
Highest Injury Level: Serious
Injuries:

	Fatal	Serious	Minor	None	Total
Crew	0	0	1	0	1
Ground	0	0	0	0	0
Passenger	0	1	2	0	3
Total	0	1	3	0	4

Aircraft Manufacturer: Cessna Aircraft Company
Aircraft Model: 182P
Aircraft Registration: VH-API **Serial Number:** 18261873
Type of Operation: Non-commercial Pleasure/Travel
Damage to Aircraft: Substantial
Departure Point: Cambridge Tas
Departure Time: 1425 ESuT
Destination: Bathurst Harbour Tas

Crew Details:

Role	Class of Licence	Hours on	
		Type	Hours Total
Pilot-In-Command	Private	14.0	389

Approved for Release: Friday, March 22, 1996

The pilot planned a scenic flight from Cambridge Airport, Hobart to Bathurst Harbour and return, with an intermediate stop at Melaleuca airstrip adjacent to Bathurst Harbour. The airstrip is situated in low scrub country surrounded by mountains, is 450 metres long and has a white gravel surface.

The pilot commenced flying in 1977, had flown a total of approximately 390 hours, 20 hours of which were in the past year. Most of his recent flying had been on Cessna 182 aircraft.



On arrival at Cambridge the pilot found that the Cessna 182 aircraft had been refuelled to full tanks. He was concerned about operating into Melaleuca with four persons and full fuel. While the operator's chief flying instructor was under no obligation to provide the pilot with any advice or assistance, he advised the pilot to fly around for a while to burn off fuel prior to landing. Neither the pilot nor the chief flying instructor used the landing and takeoff charts supplied by the operator to calculate the take-off and landing performance, or the weight and balance of the aircraft for the flight. Calculations have shown that the aircraft departed Cambridge approximately 14 kg above its maximum permitted take-off weight.

The flight proceeded along the coast towards Bathurst Harbour. The weather was fine with a light and variable breeze. On arrival in the Bathurst Harbour area the pilot overflowed Melaleuca airstrip and continued on to Port Davey, a further 17 km to the north west. He then turned the aircraft to the south east and commenced a long, straight-in approach to the airstrip. Straight-in approaches are not approved for operations into airstrips such as Melaleuca. The statutory requirement is that all aircraft must join the circuit on the upwind, crosswind or downwind leg.

Two persons, one a commercial pilot, observed the approach from a boat moored 100 metres from the threshold of the strip. The aircraft was seen to be very low and continued to descend until it impacted an embankment one metre below the strip surface. The aircraft overturned coming to rest 14 metres into the strip. The persons from the boat ran to the inverted aircraft, initiated rescue action and extinguished a fire in the engine bay.

The passenger sitting in the seat to the right of the pilot recorded much of the flight on a video camera. The video showed that the pilot conducted the final part of the straight in approach at extremely low height and at very slow speed. Full flap was extended and the stall warning horn was sounding continuously for the last six seconds of the recording. The recording showed that just prior to impact the right wing dropped sharply, this being confirmed by ground impact marks. In the last second of the recording an increase in engine power could be heard.

The wreckage was examined and no defects were found that could have contributed to the accident.

Analysis.

By carrying out a straight-in approach the pilot did not comply with the statutory requirements for circuit entry. In doing so, he also denied himself the basic visual cues, associated with flying at least three legs of a circuit, which assist in establishing a safe approach to land. Melaleuca is a short strip and as such needs an accurate and disciplined approach to land in this type of aircraft.

The advice given by the chief flying instructor was inadequate. Had he required that the pilot utilise the operator's performance data, they would have found that the aircraft was above its maximum permitted take-off weight for departure from Cambridge, and that the landing distance available at Melaleuca was inadequate for the aircraft given the loading and weather conditions existing at the time.

Conclusions

Findings.

1. The aircraft was serviceable and carried sufficient fuel for the intended flight.
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2. The pilot had low total and recent experience
3. The pilot made inadequate preparations for the flight.
4. The chief flying instructor gave inadequate advice to the pilot.
5. The aircraft departed Cambridge in excess of its maximum permitted take-off weight.
6. The landing distance available at Melaleuca was inadequate for the aircraft in terms of its landing weight and the weather conditions existing at the time.
7. The pilot did not conform to the statutory requirements for circuit entry.

Factors.

The following significant factor is considered relevant to the development of the accident:

1. The pilot did not recognise and correct an approach to land that was too low and too slow.

