

**Aviation Safety Investigation Report
199402664**

**Cessna Aircraft Company
Skyhawk**

15 September 1994

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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: 199402664 **Occurrence Type:** Accident
Location: Dubbo airport
State: NSW **Inv Category:** 4
Date: Thursday 15 September 1994
Time: 1135 hours **Time Zone** EST
Highest Injury Level: Serious
Injuries:

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

Aircraft Manufacturer: Cessna Aircraft Company
Aircraft Model: 172N
Aircraft Registration: VH-HWO **Serial Number:** 17273485
Type of Operation: Instructional Solo
Damage to Aircraft: Substantial
Departure Point: Dubbo NSW
Departure Time: 1110 EST
Destination: Dubbo NSW

Crew Details:

Role	Class of Licence	Hours on	
		Type	Hours Total
Pilot-In-Command	Student	15.9	62

Approved for Release: Friday, September 13, 1996

FACTUAL INFORMATION

History of the flight

The flight was planned as a dual instructional flight followed by solo circuits to refamiliarise the student with the C172 aircraft and circuit procedures.



The student pilot had completed several circuits with the instructor during which some improvements to the students technique were made. The instructor then alighted and the student proceeded to conduct further solo circuits. The instructor reported that he observed two circuits and detected only minor problems in their conduct. On the planned last circuit of the sequence, the aircraft descended and impacted the ground, some 150 m short of the runway 23 threshold.

The pilot of an aircraft taxiing at Dubbo reported seeing the C172 on what appeared to be a normal final approach followed by a rapid descent to impact the ground, nose first, from a height of approximately 50 ft. He also reported that the aircraft did not appear to stall. There was no fire.

The aircraft came to rest inverted. The fuselage had broken at the baggage door frame and was folded back along the upturned forward fuselage. The engine and propeller had separated from the airframe and were located in the general direction of the runway, approximately 12m from the main wreckage. The nose landing gear had also separated from the airframe and was located approximately 6m from the main wreckage. The wing flaps were fully extended and the aircraft contained sufficient fuel for the intended flight.

Personnel information

The pilot held a valid student pilot licence endorsed for C172 aircraft. He had gained approximately 45 hours in ultralight aircraft prior to his general aviation training. He had completed approximately 16 hours in the aircraft type and had accumulated approximately 1.5 hours solo experience. The last time he had flown, which was in the accident aircraft, was 31 days prior to the accident.

The pilot reported that he was well rested prior to the flight.

Aircraft information

The pilot reported that the aircraft had been performing normally. The investigation found no evidence to indicate a malfunction of the aircraft or its systems. A post accident "strip inspection" of the engine revealed no defects which may have contributed to the occurrence. The aircraft was fitted with a serviceable Emergency Locator Transmitter (ELT), however no emissions were reported by other aircraft in the area. The ELT switch was found in the OFF position at the accident site.

Communications

The aircraft transmissions were recorded by a voice recorder used in revenue collection administration. These recordings were replayed with the following observations:

- The pilot used standard phraseology throughout the circuit sequence and was consistent in his transmissions. The pilot used the term "touch and go" on approach to the runway, including the full stop landing to allow the instructor to disembark. Similarly, although the final approach was intended to be the last for the day, the pilot called "touch and go".



- There was no other recorded traffic during the circuit sequence. During the last circuit, however, there was another aircraft conducting an approach and an aircraft taxiing at Dubbo, both of which were communicating on the Mandatory Traffic Advisory Frequency (MTAF). The pilot was wearing a headset to monitor the radio but was using a hand held microphone for transmitting.

Weather

The weather at the time of the accident was reported as fine and clear with a light wind from the south and a temperature of 19 degrees Celsius. Weather is not considered as being a factor in the accident.

ANALYSIS

This was the pilots first flight after a break of 31 days. His previous flights had been conducted over a two day period, which included his first solo flight on the first day.

The initial circuits were conducted with an instructor and some corrections were suggested to the pilot. Similarly, the two observed solo landings had only minor problems which the instructor noted. The circuit during which the accident occurred was planned to be the last of the session. On this circuit there was other traffic communicating on the Dubbo MTAF. This resulted in the pilot having to operate the hand held microphone as well as handle the aircraft and it is possible that, even though he reported being well rested, the pilot was experiencing fatigue toward the end of a reasonably demanding session. The accumulation of these factors, coupled with the pilots low aeronautical experience, may have contributed to the pilot being distracted during the final approach and losing control of the aircraft at an altitude too low to effect a recovery.

CONCLUSIONS

Significant Factor

The pilot lost control of the aircraft at an altitude too low to effect a recovery.

