Aviation Safety Investigation Report 198900811

Cessna 210N

29 May 1989

Readers are advised that the Australian Transport Safety Bureau investigates for the sole purpose of enhancing transport safety. Consequently, Bureau reports are confined to matters of safety significance and may be misleading if used for any other purposes.

Investigations commenced on or before 30 June 2003, including the publication of reports as a result of those investigations, are authorised by the CEO of the Bureau in accordance with Part 2A of the Air Navigation Act 1920.

Investigations commenced after 1 July 2003, including the publication of reports as a result of those investigations, are authorised by the CEO of the Bureau in accordance with the Transport Safety Investigation Act 2003 (TSI Act). Reports released under the TSI Act are not admissible as evidence in any civil or criminal proceedings.

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: 198900811 **Occurrence Type:** Accident
Location: 2 km E Alice Springs Airport, NT
Date: 29 May 1989 **Time:** 2035
Highest Injury Level: Fatal
Injuries:

	Fatal	Serious	Minor	None
Crew	2	0	0	0
Ground	0	0	0	-
Passenger	0	0	0	0
Total	**2**	**0**	**0**	**0**

Aircraft Details: Cessna 210N
Registration: VH-FMW
Serial Number: 21063585
Operation Type: Aerial Work
Damage Level: Destroyed
Departure Point: Alice Springs NT
Departure Time: 2034
Destination: Alice Springs NT

Approved for Release: 3rd January 1990

Circumstances:

The purpose of the flight was to revalidate the Night VFR rating of the pilot undercheck. The pilots intended to conduct several circuits and then carry out a short navigation flight. The flight apparently proceeded without incident during the startup, taxi and takeoff from runway 12. The tower controller reported that he then saw the aircraft initiate a turn as if to fly a right circuit, contrary to previously acknowledged directions for left circuits. When this was queried by the tower, the crew confirmed that they intended to carry out a left circuit and the aircraft was then seen to turn left. This was the last sighting of the aircraft by the controller as he then transferred his attention to other aircraft. When the aircraft later failed to reply to calls from the tower, a SAR phase was declared and this later developed into a full scale search for the aircraft. The wreckage was discovered some hours later. The direction of takeoff had been to the south-east, away from any ground lights, and on a moonless night. This resulted in no natural horizon being available to the pilots. A partial electrical power failure in the city and surrounds of Alice Springs occurred prior to the aircraft taking off and a total blackout occurred after the time established for the crash. While the reduced area of the ground lights pattern was judged not to have contributed to pilot disorientation by a reduction in visual cues, this unusual phenomenon may have caused the diversion of attention of one or both pilots. However, no positive conclusions could be drawn. The subsequent investigation revealed that the aircraft had crashed with the pilot-under-check at the controls. It had passed through the top of a tree before striking the ground at high speed, in a left wing low configuration. The landing gear and flaps were retracted. Ground impact had almost totally destroyed the forward fuselage and cockpit and the aircraft came to rest inverted some 100 metres after ground contact. The engine had been dislodged and was found about 200 metres beyond the fuselage. Detailed airworthiness inspection failed to detect any fault or anomaly in the aircraft which could be considered to have contributed to the accident. The total night flying experience of the check pilot was some 37 hours, of which six hours had been flown in the last 90 days. However, he had successfully completed a Night VFR revalidation flight

for another pilot twelve days prior to the accident and flown some two hours at night three days before the accident. The pilot-under-check had only 14 hours total night flying experience and had not flown at night for 25 months. The conclusion was drawn that loss of control of the aircraft occurred for undetermined reasons at an altitude that was insufficient to effect a recovery.

Significant Factors:

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

1. Both pilots had low levels of night flying experience.

2. There was no natural horizon available to the pilots.

3. For reasons undetermined, there was a loss of control of the aircraft at an altitude insufficient for recovery.