

COMMONWEALTH OF AUSTRALIA-BUREAU OF AIR SAFETY INVESTIGATION
AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

REFERENCE NO
SI/814/1027

1. LOCATION OF OCCURRENCE

Duck Hole Bore, 62 km east of Oodnadatta, S.A.		Height a.m.s.l.: 300 feet
Date: 26.7.81	Time (Local): 1900 hours (approx)	Zone: CST

2. THE AIRCRAFT

Make and Model: Cessna 210-5	Registration: VH-BPT
Certificate of Airworthiness: Valid from 15.4.74	
Certificate of Registration Issued to:	Operator:
Degree of Damage to Aircraft: Destroyed	Other Property Damaged: Nil
Defects discovered: Low output pressure from fuel pump.	

3. THE FLIGHT

Last or intended departure point: Duck Hole Bore	Time of departure: 1900 hours (approx)
Next point of intended landing: Oodnadatta	
Purpose of flight: Rescue of Persons	Class of Operation: Aerial Work

4. THE CREW

Name	Status	Age	Class of Licence	Hours on Type	Total Hours	Degree of Injury
	Pilot	46	Commercial	250	5613	Serious

5. OTHER PERSONS (ALL PASSENGERS AND PERSONS INJURED ON GROUND)

Name	Status	Degree of Injury
	Passenger	Fatal
	Passenger	Serious
	Passenger	Minor

6. RELEVANT EVENTS

The pilot had been engaged to transport a group of entertainers to their various commitments, in a DH 104 Dove aircraft. On 26.7.81, this had involved a flight from Brewarrina NSW to Oodnadatta, with refuelling stops at Bourke and Tibooburra. During the final segment of the flight, at 1510 hours, an engine malfunction necessitated a forced landing on a remote airstrip which was subsequently identified as being near Duck Hole Bore. The pilot notified Alice Springs Airways Operations Unit of the malfunction when it occurred and the Distress Phase of Search and Rescue (SAR) procedures had been declared. This was down-graded to the Uncertainty Phase when the pilot reported that the landing had been safely completed.

The pilot also requested that advice of the forced landing be passed to the pilot of a Piper PA24-400 aircraft who was engaged in the same task and had preceded the Dove to Oodnadatta. He suggested the other aircraft might be of assistance in the recovery of his passengers. The SAR Mission Co-ordinator at Alice Springs, whose responsibilities included the rescue of the stranded persons, accepted the pilot's suggestion in view of the uncertainty as to the Dove's exact location, the approach of nightfall and the doubt expressed by the Oodnadatta police that they could locate and reach the stranded party in the dark.

The owner of VH-BPT, who had learnt of the stranded party, also contacted the SAR Mission Co-ordinator and offered his aircraft to supplement the PA24 in the rescue operation. As a spare pilot was not available at Oodnadatta, it was arranged that [redacted] would be uplifted in the first group by the PA24 and, if the owner of VH-BPT was satisfied as to his qualifications to fly the Cessna 210-5, then he would use that aircraft in further rescue flights.

After satisfying the owner that he was endorsed on the type, [redacted] departed Oodnadatta in VH-BPT. He did not, however, submit flight details of the proposed operation, as was required in the designated remote area, and he also did not make radio contact with any Airways Operations Unit. VH-BPT landed at Duck Hole Bore at about 1810 hours, some eight minutes before last light. By this time, the PA24 had made its second pick-up and only three persons remained to be uplifted. Prior to landing the pilot had observed the police vehicles approaching and he decided to await their arrival, although this would necessitate a night take-off. VH-BPT was equipped and approved for operations at night under Visual Meteorological Conditions and the pilot held a Class One instrument rating. However, he had not flown at night since October 1979 and there were no lights on the airstrip at Duck Hole Bore.

By the time the police arrived and necessary arrangements had been finalised, it was very dark. There was a high overcast and no moon, with the consequence that there was no visible horizon. At the request of the pilot, two vehicles were positioned along the left side of the 900 metre long airstrip, to give guidance during the proposed take-off to the southeast. Using the aircraft's landing light to supplement the lights of the vehicles, the take-off run was completed satisfactorily and VH-BPT became airborne some 200 metres before the end of the airstrip. After establishing a rate of climb of about 500 feet per minute and an airspeed of 85 knots, the pilot turned off the landing light and slowly retracted the flaps from the take-off setting of 15 degrees. His intention was to initially climb straight ahead but the aircraft was observed to enter a right turn and slowly descend.

6. RELEVANT EVENTS

After retracting the flap the pilot noted the rate of climb indication was near zero and applied rearward control pressure. He then noted that the artificial horizon indicated a very right-wing-low attitude and, almost simultaneously, the ground was illuminated by the navigation light on the right wing-tip.


VH-BPT struck the ground in a nose-low, right-wing-down attitude on a heading of approximately 285 degrees, at a position some 1600 metres south-south west of the departure end of the airstrip. During the ground slide of approximately 100 metres the aircraft broke apart and the fuselage came to rest in an inverted position. A fire broke out and consumed much of the wreckage. The pilot was thrown clear during the ground slide and two of the passengers were able to vacate the cabin by their own efforts. Their attempts, and those of the police party that arrived at the scene a few minutes later, to assist the fourth occupant were unsuccessful because of the intense fire.

Subsequent examination of the wreckage found no evidence of significant pre-existing malfunction or defect. The low fuel pump output pressure, due to normal wear of the component, was not likely to have reduced engine power. Witness evidence indicated that the engine had operated normally throughout the flight.

7. OPINION AS TO CAUSE

The probable cause of the accident was that insufficient attention was paid to the flight instruments subsequent to take-off when external reference was inadequate to maintain spatial orientation. Probable contributory factors were the pilot's lack of recent night-flying experience, fatigue and excessive motivation to expedite evacuation of the stranded persons.

Approved for publication under the
provisions of Air Navigation
Regulation 283(1)


(G.V. Hughes) Director

Date:
18.10.82