COMMONWEALTH OF AUSTRALIA DEPARTMENT OF CIVIL AVIATION	AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT	Reference No. AS/734/1012

1. LOCATION OF OCCURRENCE

	Height a.m.s.l. (ft)	Date	Time (Local)	Zone
Three miles west-north-west of Myponga, South Australia	680 feet	12.5.73	1001 hours	CST

2. THE AIRCRAFT

Make and Model	Registration
Beech 35/C33 Debonair	VH-DHI

3. CONCLUSIONS

(i) At 1001 hours CST on 12 May 1973, a Beech 35/C33 Debonair aircraft, registered VH-DHI, struck the ground near the top of a ridge three miles west-north-west of Myponga, South Australia.

(ii) The aircraft was registered in the name of S.S. McDougall of 4 Waterloo Road, Camberwell, Victoria, and it was engaged on a private flight from Moorabbin, Victoria, to Adelaide, South Australia.

(iii) On board the aircraft were the pilot, David ROBINSON, and three passengers, Arthur Leonard DELALAND, Neville Ephraim KAY and Peter Graham BECKETT. All four persons were killed in the accident.

(iv) The pilot, aged 30 years, held a current private pilot licence endorsed for the aircraft type. His total flying experience amounted to 197 hours, including 49 hours on this type of aircraft. His licence was also endorsed with a Class 4 instrument rating which authorised him to act as pilot-in-command by night in visual meteorological conditions (VMC) using Automatic Direction Finding (ADF) and VHF Omni Range (VOR) radio navigation aids. He held no licence or rating which authorised him to operate an aircraft in other than VMC.

(v) The aircraft was virtually destroyed by impact forces but there was no fire.

(vi) The aircraft was operating under a valid certificate of airworthiness and was approved for flight under the visual flight rules (VFR) and at night in VMC. It was not approved for flight in instrument meteorological conditions (IMC).

(vii) The centre of gravity position and gross weight of the aircraft were within safe limits.

(viii) On the morning of the day on which the accident occurred the pilot attended the Briefing Office at Moorabbin Airport and obtained a meteorological forecast for the route and destination. This forecast predicted, en-route, 5/8th stratus cloud, base 1,500 feet with tops 2,000 feet, and 6/8th strato-cumulus cloud, base 2,500 feet with tops 5,500 feet. The significant weather was forecast to be scattered drizzle and fog in the coast and mountain areas until 0830 hours. The terminal aerodrome forecast for Adelaide indicated that the weather would be CAVOK which is a term used where visibility is five miles or more, where there is no precipitation, no thunderstorm, and where there is no cloud below a height of 5,000 feet above the aerodrome reference point.

(ix) The pilot then lodged a flight plan nominating a SARTIME (time for initiation of search and rescue action) of 1000 hours and indicating that he would report at all positions nominated on the plan. The category of the flight was specified as VFR which, amongst other things, requires that the aircraft shall not be flown in cloud. The flight plan indicated that ADF and VOR radio navigation aids would be used and the nominated cruising altitudes were below 5,000 feet to Yarrowee, at 8,500 feet to Bordertown, 8,000 feet to Tailem Bend and 4,000 feet to Adelaide. The estimated duration of the flight was 187 minutes and the plan indicated that there was fuel on board to provide for 360 minutes of flight time.

(x) The aircraft departed from Moorabbin at 0634 hours CST and routine radio position reports were made to Melbourne as the flight progressed. The pilot established communication with the Adelaide Flight Service Centre when he reported his position over Bordertown at 0847 hours at an altitude of 8,500 feet. At 0852 hours an amended area forecast, applicable to the area between Bordertown and

DEFINITIONS

ACCIDENT - An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all those persons have disembarked and in which

(a) any person suffers death or serious injury as a result of being in or upon the aircraft or by direct contact with the aircraft or anything attached to the aircraft; or

(b) the aircraft suffers substantial damage.

FATAL INJURY - Any injury which results in death within 30 days.

SERIOUS INJURY - Any injury other than a fatal injury which

(a) requires hospitalisation for more than 48 hours, commencing within seven days from the date the injury was received; or

(b) results in a fracture of any bone (except simple fractures of fingers, toes or nose); or

(c) involves lacerations which cause severe haemorrhages, nerve, muscle or tendon damage; or

(d) involves injury to any internal organ; or

(e) involves second or third degree burns, or any burns affecting more than five percent of the body surface.

MINOR INJURY - Any injury other than as defined under "Fatal Injury" or "Serious Injury".

DESTROYED - Consumed by fire, demolished or damaged beyond repair.

SUBSTANTIAL DAMAGE - Damage or structural failure which adversely affects the structural strength, performance or flight characteristics of the aircraft and which would normally require major repair or replacement of the affected component. The following types of damage are specifically excluded: engine failure, damage limited to an engine, bent fairings or cowling, dented skin, small punctured holes in the skin or fabric, taxi-ing damage to propeller blades, damage to tyres, engine accessories, brakes, or wingtips.

MINOR DAMAGE - Damage other than as defined under "Destroyed" or "Substantial Damage".

CONCLUSIONS (Cont'd)

Adelaide, was communicated to him. This forecast indicated that there would be 5/8th stratus cloud with a base between 1,500 and 3,000 feet in drizzle about the ranges, 5/8th of strato-cumulus cloud with a base between 3,000 and 6,000 feet and isolated fog areas about the mountains. The current terminal forecast for Adelaide was then given to the pilot, at his request, and this indicated that 3/8th stratus cloud at 1,500 feet and 8/8th strato-cumulus at 2,500 feet could be expected.

(xi) At 0906 hours the pilot advised that he would be diverting from his planned route at Tailem Bend proceeding outside the control area to Adelaide via Port Noarlunga. Shortly afterwards, he amended his SARTIME to 1030 hours. At 0929 hours he reported approaching Tailem Bend at 1,500 feet altitude and then advised that his estimated time of arrival at Port Noarlunga was 1000 hours. The next position report received from the aircraft was at 0948 hours when the pilot reported over Strathalbyn at 2,000 feet and at 0950 hours the aircraft was given a clearance to enter the Adelaide control zone at Port Noarlunga at 500 feet altitude, coastal offshore. This clearance was acknowledged and the altitude read back.

(xii) Following a request to call Adelaide Approach Control the pilot advised, at 1000 hours, that he was listening on 124.2 MHz. He was then requested to report his present position and he replied "Just crossing the radial 180 - over the sea". Immediately he was further requested to report approaching Moana but this request was not acknowledged and no further calls were received from the aircraft.

(xiii) Search and rescue procedures were initiated following unsuccessful communication checks and other efforts to establish the whereabouts of the aircraft. The subsequent air and ground search was hampered initially by low cloud and fog on the hills to the south of Adelaide and the aircraft wreckage was not located until at about 1400 hours, after the fog had lifted.

(xiv) It was found that the aircraft had struck rising ground, some 750 yards from the coast near the top of a north-south ridge, while travelling in a westerly direction and in a substantially level altitude. The altimeter subscale was set to 1019 millibars, which was the current area QNH. An examination of the wreckage failed to reveal any evidence of a defect or malfunction in the aircraft which might have contributed to the accident.

(xv) Local eyewitnesses have said that, at the time of the accident, the terrain in the vicinity of the accident site was enshrouded in fog, with extensive cloud cover above. No communication was received from the aircraft at any time to suggest that the pilot was experiencing difficulty in maintaining visual flight.

4 OPINION AS TO CAUSE

The cause of the accident was that the pilot continued the flight into weather conditions in which he was not able to maintain the visual references necessary to ensure adequate terrain clearance on his selected flight path.

Release approved	Designation	Date
(Frank E. YEEND)	Assistant Director-General (Air Safety Investigation)	20.1.1974