COMMONWEALTH OF AUSTRALIA
DEPARTMENT OF CIVIL AVIATION

AIRCRAFT ACCIDENT INVESTIGATION
SUMMARY REPORT

Reference No.: AS/721/1005

1. LOCATION OF OCCURRENCE

	Height a.m.s.l. (ft)	Date	Time (Local)	Zone
½ mile south-east of Heron Island, Queensland.	Sea Level	22.1.72	0045	ESuT

2. THE AIRCRAFT

Make and Model	Registration
Bell 206A	VH-FOY

3. CONCLUSIONS

At approximately 0045 hours on 22 January, 1972 a Bell 206A helicopter registered VH-FOY crashed into the sea approximately 2700 feet south-east of Heron Island.

(ii) The aircraft was owned by Airfast Services Pty. Ltd., Mascot, N.S.W. and was normally operated by Helicopter Utilities Pty. Ltd., Mascot, N.S.W., on regular charter operations between Heron Island and Gladstone. At the time of the accident it was engaged on a private flight, the purpose of which was to search for the origin of reported distress signals.

(iii) The pilot, Donald Walter Morser, and two passengers, James McKirdy and David Powdrill, received fatal injuries.

(iv) The aircraft was destroyed by impact forces. No other property was damaged.

(v) The pilot, Donald Walter Morser, was 42 years of age and held a valid Commercial Helicopter pilot licence endorsed for the aircraft type. His total flying experience amounted to 6,000 hours, of which 4,473 hours had been flown on helicopters and 1,524 hours on the Bell 206 type. At the time he retired from the United States Air Force in January 1967 his experience included some 18 months flying helicopters on air-sea rescue missions; 280 hours total night flying on fixed and rotary wing aircraft, and 186 hours actual instrument flying. His last recorded instrument rating check was on 10 January, 1967. His total night flying in the five years preceding the accident was some 35 minutes on a helicopter mercy flight on 25 April, 1971 in clear visual conditions and this flight had commenced in daylight.

(vi) There was a current certificate of airworthiness for the aircraft and examination of the maintenance records indicated that it had been properly maintained. The aircraft was equipped with instruments appropriate to instrument flight but was not approved for night or instrument flight operations. Examination of the aircraft wreckage did not reveal any defect or malfunction which could have directly caused or contributed to the accident.

(vii) The wreckage examination revealed that the sub-scale of the altimeter was set at 1011.3 mbs. Since post analysis of the synoptic meteorological situation indicates that the QNH at Heron Island at the time the aircraft took off was 1006 mbs, it is probable that the altimeter would have been indicating a height of approximately 143 feet above the actual height flown by the aircraft.

(viii) The aircraft was loaded within permissible limits.

(ix) The weather at Heron Island was fine with some electrical storm activity to the north and over the mainland. The flight was attempted in total darkness with no moon, few stars visible, no discernable horizon and no visual references other than the island mass and a few domestic lights at the western end of the island.

(x) Heron Island is a timbered cay approximately 2,500 feet east-west by 800 feet north-south, enclosed within an extensive coral reef some 45 nautical miles north east of Gladstone. Holiday resort buildings and a helicopter pad are situated at the western end. Two sea-going pleasure launches were tied up in an entrance area nearby the helicopter pad on the night of 21 January, 1972.

(xi) The pilot flew VH-FOY from Gladstone to Heron Island at midday on 21 January, 1972 in readiness for a planned departure at 0730 hours on 22 January. He spent the afternoon and evening, in company with his wife, dining and relaxing at the holiday resort and during that time consumed alcoholic drinks. At lunch he joined with the Resort Manager, James McKirdy, and others in discussion concerning a boating fatality in the area some six weeks earlier and, during this discussion, reference was made to the part that might be played by searching aircraft.

CONCLUSIONS (Cont'd)

(xii) Shortly after 2300 hours on 21 January, guests at the resort saw, and some heard, two red distress signal flares to seaward nearby the western end of the island. The Resort Manager was informed by guests that the flares had been sighted.

(xiii) James McKirdy, accompanied by David Powdrill, took a boat out to where the two pleasure launches were tied up but was unable to obtain any satisfactory response to enquiries regarding the flares and returned to the island. Donald Morser joined James McKirdy and David Powdrill at the helicopter pad and at this time they sighted what was thought to be a winking light out to sea west-north-west from Heron Island. They took a small launch out to sea in this direction but were unable to proceed beyond a nearby reef. Shortly after returning Donald Morser decided to use the helicopter to search for the origin of the distress flares and winking light. Messrs. Powdrill and McKirdy accompanied the pilot as observers.

(xiv) No details or advice of the flight were provided to any Airways Operations Unit. VH-FOY took off at about 0043 hours on 22 January and, after proceeding south-east over the sea, turned left until about over the centre of the island and then turned right and flew eastward along the length of the island at a height estimated to have been between 200 and 300 feet. Shortly after passing over the eastern end of the island the aircraft commenced a right hand turn. During this turn the aircraft struck the water, approximately 2,700 feet from the eastern end of the island and 5,700 feet flight distance from the helicopter pad.

(xv) The spent distress signal flares were found in the sea about 100 feet west of the island, in a position consistent with having been fired from one of the pleasure launches tied up in the entrance area. The origin of what was believed to be a winking light was not determined.

(xvi) Post-mortem examination of the pilot revealed a blood alcohol level which would have impaired his judgement in assessing the necessity for and safety of the flight and would have impaired his capacity to act as a pilot.

(xvii) The circumstances indicate that the pilot flew eastward along the island with the intention of turning 180 degrees and using the island mass and the lights in the helicopter pad area for directional guidance. Deprived of all visual references after he passed beyond the eastern end of the island, it is probable that division of attention between maintaining attitude by instruments and seeking visual references during the turn resulted in him being unaware that the aircraft was descending.

(xviii) It is probable the pilot's past experience in air-sea rescue operations; the recent boating fatality in local waters and concern for the safety of other persons were significant factors which motivated the pilot in his decision to undertake the flight. He was placed in an unenviable situation but it was a most hazardous operation and should not have been attempted. In circumstances of virtually no night or instrument flying practice for five years, total darkness depriving him of visual reference and his ability impaired by alcohol, the pilot, irrespective of any altimeter setting error, would not have been able to maintain safe flight on instruments alone whilst conducting a low level search over the sea.

4. OPINION AS TO CAUSE

The probable cause of the accident was that the pilot, whose decision making judgement and piloting ability were affected by the consumption of alcohol, attempted a flight which was beyond his capabilities in the circumstances under which it was undertaken.

Release approved	Designation	Date
(D.S. GRAHAM)	Assistant Director-General (Air Safety Investigation)	27.2.73