

AIRCRAFT ACCIDENT INVESTIGATION  
SUMMARY REPORTReference No.  
AS/712/1057

## 1. LOCATION OF OCCURRENCE

In the sea near Bondi Beach, New South Wales	Height a.m.s.l. (ft) 0	Date 5.9.71	Time (Local) 1045	Zone EST
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## 2. THE AIRCRAFT

Make and Model Britten Norman BN2A	Registration VH-BNN
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## 3. CONCLUSIONS

At approximately 1045 hours EST, on 5 September, 1971, a parachutist landed in the sea close to Mackenzie's Point, following a free fall type descent from 10,000 feet. Rescue attempts were made but the parachutist was lost beneath the surface, in rough water, for several minutes and was subsequently pulled ashore at Bondi Beach in an unconscious state. Following resuscitation attempts the parachutist was admitted to hospital, where she died several days later on 11 September without regaining consciousness.

(ii) The parachutist, Patricia Ann King, jumped in company with nine other parachutists and all were members of the Australian Parachute Federation.

(iii) The parachutist was equipped with a ParaCommander Mark II main parachute and a reserve parachute. The main parachute was steerable, with toggle controls, and was capable of a forward speed through the air of about 7 knots. The parachutist was also equipped with a sleeveless vest type flotation jacket, worn beneath the parachute harness and inflatable by mouth through a tube to the left shoulder position.

(iv) No evidence was found of any pre-existing defect in the main parachute, the only one used during the descent, which might have contributed to the accident. When subsequently examined all harness release clips functioned normally. The flotation jacket was destroyed after the accident and was not examined.

(v) The dropping zone, which was situated on Bondi Beach, was approximately 110 yards long and 90 yards wide. The dropping zone dimensions did not meet the requirements of ANO 29.1.6(b) in regard to minimum distance to obstructions and spectators.

(vi) The descent on which the accident occurred was from a Britten Norman BN2A aircraft, bearing the registration marks VH-BNN. The aircraft was owned by Islander Aircraft Sales Pty. Ltd. and flown by James David HAZELTON, the holder of a Commercial Pilot Licence.

(vii) The group descent by the ten parachutists was to be part of the entertainment associated with the inaugural "City to Surf", foot race. It was not intended that any of the parachutists would land in the water but, as a precaution, arrangements were made to have two boats available for rescue purposes.

(viii) The aircraft departed from Sydney Airport at about 1010 hours carrying parachutists Edward Clifford HARRISON, John MAHAFFY, David HOBBS, Ian Gordon SWINBOURNE, Geoffrey David BINGHAM, Brian BROWN, Ian HANDLEY, Russell COCKING, Robert HEPBURN and Patricia Ann KING. Mr. Harrison was the jump master. At a height of 2,000 feet above the dropping zone drift markers were dropped to check the wind. An exit point approximately 1400 yards upwind from the landing marker, was selected. As the aircraft climbed to height, the ground indicator was changed to a cross, which then indicated that it was safe to drop.

(ix) The parachutists exited the aircraft at an altitude of 10,000 feet. During free fall it was intended that all would link up to form a 10 point star, but only four of the parachutists were able to join up prior to separation and parachute deployment. Shortly after opening his parachute, parachutist SWINBOURNE briefly collided with the canopy of Patricia KING's parachute. There is no evidence to suggest that this caused any damage to Patricia KING's parachute but as a result parachutist

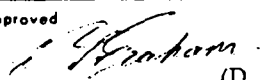
**CONCLUSIONS** (Cont'd)

SWINBOURNE's reserve was accidentally opened. This resulted in a higher than normal rate of descent and he landed in the sea well out from shore. Parachutist HARRISON became concerned that he would not clear the very rough water adjacent to the shore at Bondi Beach and deliberately steered away from the shore to land in the water outside the breaker line. Parachutists SWINBOURNE and HARRISON were quickly picked up by boat. One parachutist landed in the drop zone and six others landed at various points along the shore, short of the drop zone.

(x) Witness evidence indicates that Patricia KING attempted to land on Mackenzie's Point. Facing into wind she was seen to narrowly miss the cliff edge and rocky shore, landing in the water near the northern side of Mackenzie's Point, about 15 yards from shore. Parachutist BINGHAM, who had already landed on Mackenzie's Point, quickly removed his own equipment and went to her aid. Other swimmers arrived and together they tried to keep the parachutist afloat. For reasons which could not be established no equipment was discarded by the parachutist, and the group drifted across an inlet known as "The Boot", in rough conditions. A powered rescue boat tried to manoeuvre to attach a line but was thrown onto the rocks. The rescuers lost their grip on the parachutist who was lost in the foam. Approximately 20 minutes passed before the parachutist was relocated and pulled ashore. Some response to resuscitation was detected and the parachutist was conveyed to hospital where she died approximately one week later without regaining consciousness.

**4. OPINION AS TO CAUSE**

The probable cause of the accident was that an error of judgement was made in the selection of the point for exit from the aircraft. A contributory factor was that the dropping zone did not meet the prescribed standards as to dimensions in relation to the proximity of obstructions and spectators.

Release approved  (D.S. GRAHAM)	Designation Assistant Director-General (Air Safety Investigation)	Date 12.2.1973
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