

AIRCRAFT ACCIDENT INVESTIGATION
SUMMARY REPORT

Reference No
AS/732/1011

1. LOCATION OF OCCURRENCE

Probably in the Merimbula-Moruya area, New South Wales	Height a.m.s.l. (ft) -	Date 23.1.73	Time (Local) 2151	Zone ESuT
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2. THE AIRCRAFT

Make and Model Cessna 150G	Registration VH-KPH
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3. CONCLUSIONS

(i) On 23 January, 1973, a Cessna 150G aircraft registered VH-KPH disappeared whilst on a travel flight from Latrobe Valley, Victoria, to Merimbula, New South Wales and no trace has been found of the aircraft or its occupants.

(ii) The holder of the certificate of registration for VH-KPH was Barola Pty. Ltd. of 174 Phillip Street, Sydney, New South Wales. The aircraft was normally based at Merimbula and was operated by the Merimbula Flying School.

(iii) The aircraft was flown by Stig Halvard Hellstrom, aged 40 years, who held a valid commercial pilot licence endorsed for the aircraft type. His total flying experience was 327 hours, of which 125 hours had been gained on Cessna 150 type aircraft. Peter Hugh Johnson was the only passenger on board the aircraft.

(iv) The aircraft was operating under a certificate of airworthiness which was valid until 17 February, 1976, and there was no evidence that the aircraft was in other than airworthy condition. The aircraft was fitted with VHF radio only.

(v) There was no evidence to suggest that the gross weight of the aircraft or the position of the centre of gravity were not within prescribed limits.

(vi) At approximately 1050 hours the pilot telephoned the Cooma Flight Service Unit and requested a meteorological forecast for the intended flight from Merimbula to Latrobe Valley and return to Merimbula. He was informed that for the coastal area from Merimbula to Gabo Island an area forecast valid until 1600 hours predicted winds of 040 degrees 10 knots up to 5000 feet; 3/8th cumulus cloud based at 3000 feet, and visibility 15 miles reducing to three miles in drizzle. An area forecast, valid until 2200 hours, covering the coastal sector from Gabo Island to Latrobe Valley predicted winds of 050 degrees 15 knots at 2000 feet; 340 degrees 15 knots at 5000 feet; 5/8th stratus cloud at 1000 to 2000 feet and visibility three to six miles. The pilot immediately notified flight plan details indicating that the flight time interval from Merimbula to Latrobe Valley would be 105 minutes and that the aircraft would fly a track via the coast and over Bairnsdale, East Sale and Heyfield. He also indicated that the return flight would be via the reciprocal route and that the estimated time interval would again be 105 minutes. A SARTIME (time for initiation of search and rescue action) of 1800 hours was nominated and the fuel endurance was stated to be 250 minutes. The flight was to be conducted under visual flight rules. The aircraft was not equipped for, and the pilot was not rated for, flight under instrument meteorological conditions.

(vii) The time intervals notified by the pilot were subsequently established to be not consistent with the distances involved and the forecast wind conditions. On the basis of a cruising speed of 85 knots, the computed time intervals for the flight Merimbula to Latrobe Valley and return were 131 and 158 minutes respectively.

(viii) VH-KPH landed at Latrobe Valley shortly before 1400 hours. During the afternoon a locally based flying instructor refuelled the aircraft to maximum capacity and ground running checks at this time revealed no abnormalities in the aircraft engine. At approximately 1600 hours the pilot telephoned Moorabbin Airways Operations Unit and amended his SARTIME to 2000 hours. He did not notify any other changes to his previously filed flight plan, nor request the latest available weather information. He discussed the time of last light at Merimbula with the local instructor and this was correctly calculated as 2047 hours.

CONCLUSIONS (Cont'd)

(ix) Weather forecasts which would have been available to the pilot upon request for the period commencing 1600 hours, indicated that in the area between Latrobe Valley and Gabo Island the wind at 2000 feet would be from 060 degrees at 12 knots; there would be 7/8th stratus cloud based at 1000 feet, and visibility three to six miles with occasional drizzle. Along the coast north of Gabo Island the wind would become more northerly; the cloud cover 6/8th, decreasing to 4/8th in the Moruya area, and the visibility 15 to 20 miles.

(x) The pilot and passenger were seen to board the aircraft and take off from Latrobe Valley shortly after 1800 hours. At 1829 hours the pilot contacted Melbourne F.S.U. by radio and reported position as Heyfield, cruising below 2000 feet. At 1845 hours he advised Melbourne that he had departed Latrobe Valley at 1815 hours and was estimating arrival at Merimbula at 2035 hours. He requested that the previously amended SARTIME of 2000 hours be further amended to 2045 hours. There were no further communications between VH-KPH and Melbourne F.S.U.

(xi) At the expiration of SARTIME Sydney F.S.U. endeavoured unsuccessfully to contact VH-KPH and then telephoned Merimbula. Upon receipt of advice that the aircraft had not landed, further communications checks continued. At 2058 hours communication with VH-KPH was established by relay through a R.A.A.F. C130 Hercules aircraft, call sign VM-JLB, which was operating at high level about 100 miles east of Merimbula. Since the initial advice relayed by VM-JLB indicated that VH-KPH was above cloud at 4,600 feet, and was overflying the Merimbula area, the Alert Phase of Search and Rescue Procedures was immediately declared.

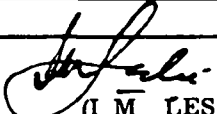
(xii) It was ascertained that there was low cloud and drizzle in the Merimbula area, whereas the cloud base at Moruya was about 1100 feet. At Bateman's Bay, ten miles north of Moruya, there was no cloud. VH-KPH was advised that the aerodrome lights were on at Moruya and at 2102 hours the pilot reported remaining fuel endurance as 90 minutes. In the course of an exchange of communications between VH-KPH, VM-JLB and Sydney F.S.U. it was learned that the pilot of VH-KPH was unsure of position but believed he was about 20 miles out to sea, tracking toward Moruya. It was suggested to the pilot that he continue on a northerly heading for the purpose of proceeding into the clear weather to the north of Moruya. At 2123 hours VH-KPH reported altitude as 4,500 feet, proceeding on a heading of 350 degrees magnetic. The pilot was advised that lights were being arranged at Nowra aerodrome, where there was only 1/8th cloud, in case Moruya was unsuitable for landing.

(xiii) VM-JLB set course toward Moruya for the purpose of making a radar search for VH-KPH and, at about the same time, a radar watch was opened at the Nowra naval air station. VH-KPH achieved direct radio communication with Sydney at 2129 hours and reported heading 350 degrees in cloud and, shortly afterwards, Sydney Operational Control Centre declared the Distress Phase. VH-KPH was requested to climb to an altitude of 7000 feet in case the aircraft was over high terrain and to facilitate radar searches which were in progress. At 2143 hours, VH-KPH reported at an altitude of 6,300 feet, heading 010 degrees; that the right fuel tank was empty and the left tank was nearly empty. Some two minutes later the pilot reported that the engine had stopped and that the aircraft was descending on an easterly heading. At 2151 hours VM-JLB relayed that VH-KPH had reported descending through 700 feet and was still not in visual contact. No further communication was received from VH-KPH.

(xiv) The R.A.A.F. aircraft VM-JLB and two R.A.N. radar equipped aircraft continued radar searching the area until after 2300 hours. An intense air, sea and land search commenced at first light on the next day and continued until 13 February 1973. Civil and military aircraft involved in the search flew 166 hours and covered an area in excess of 8000 square miles, within which the high probability areas were searched many times. Twenty-five sighting and hearing reports were investigated but no trace was found of the aircraft or its occupants.

OPINION AS TO CAUSE

The cause of the disappearance of the aircraft has not been positively determined but the most likely explanation is that the pilot did not plan and conduct the flight with proper regard to weather conditions and the remaining period of daylight.

Release approved  (I.M. LESLIE)	Designation Acting Assistant Director-General (Air Safety Investigation)	Date 13.9.73
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