GOVERNMENT OF AUSTRALIA

DEPARTMENT OF TRANSPORT

AS/732/1054

Reference No

AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT in this report is durhansed by the Director-General of Civil Aviation under the provisions of Air Navigation Regulation 283(I)

1 LOCATION OF OCCURRENCE				
Mount Neville, 5 miles North-North-East of Nimbin,	Height o.m.s.l.	Date	Time (Local)	inte
New South Wales.	1670 feet	16.8.73	0915 Approx.	EST

THE AIRCRAFT

Piper PA30/160 "Twin Comanche B" VH-MEM

3. CONCLUSIONS

- On 16 August, 1973 a Piper PA30/160 aircraft, registered VH-MEM, crashed into the (i) southern slopes of Mount Neville whilst on a private travel flight from Branxton, New South Wales, to Archerfield, Queensland. The four occupants were killed and the aircraft was destroyed.
- The holder of the certificate of registration for VH-MEM was Moores Earthmoving Pty. Ltd. of Branxton, New South Wales. The aircraft was normally based at Branxton and operated on company business.
- (iii) The aircraft was flown by Bruce Boston Moore, aged 44 years, who held a valid private pilot licence endorsed for the aircraft type and a Class 4 instrument rating which authorised him to fly at ight in visual meteorological conditions. The pilot was not rated for flight in instrument meteorological inditions. His total flying experience was approximately 2660 hours, of which some 2000 hours had been gained on PA30 type aircraft. Allan Boston Moore, Kevin Daril Brown and Ida Cann were passengers in the aircraft.
- The aircraft was operating under a certificate of airworthiness which was valid from 14 October, 1966 until 13 October, 1975 and there is no evidence that the aircraft was in other than an airworthy condition. HF and VHF radio communication equipment and ADF/VOR radio navigation equipment were installed in the aircraft.
- There is no evidence to suggest that the gross weight of the aircraft or the position of its centre of gravity were other than within safe limits.
- (vi) At approximately 0630 hours on 16 August the pilot telephoned the Bankstown Briefing Office and was given a meteorological forecast for the intended flight from Branxton to Archerfield, and return to Branxton. He was informed that, north of Coffs Harbour, at the coast and over the mountains, the area forecast valid from 0600 hours to 1500 hours predicted 4/8 cumulus cloud based at 3000 feet, and visibility 10 to 15 miles reducing to 500 yards in fog and 3000 yards in smoke until 1100 hours. The terminal forecast then current for Archerfield indicated the visibility as 5 miles in smoke, 4/8 cloud based at 3500 feet and a robability of fog from 0600 to 0900 hours. The pilot then notified details of his flight plan which indicated that the flight time interval from Branxton to Archerfield would be 126 minutes, that the aircraft would fly a track over Taree, Point Lookout, Casino and Bromelton and that there was sufficient fuel on board to provide for 400 minutes of flight time. The flight was to be conducted under the visual flight rules with full radio reporting procedures.
- At 0717 hours the pilot established radio communication with Sydney Flight Service Unit and reported that the aircraft departed Branxton at 0712 hours and was climbing to 7000 feet, estimating over Taree at 0739 hours. The next report from the pilot was at 0740 hours and this indicated that the aircraft was then abeam Taree at 7000 feet and the pilot estimated Point Lookout at 0809 hours. At 0811 hours the pilot reported abeam Point Lookout, that he had diverted from his planned track due to cloud and was now operating below 5000 feet with the intention of tracking via Grafton. His estimated time of arrival over Grafton was 0831 hours but this was subsequently amended to 0835 hours. The pilot reported over Grafton at 0837 hours at an altitude of 2000 feet, estimating Casino at 0858 hours. During the time period 0824 hours to 0844 hours, four other aircraft on the same communications frequency as VH-MEM, and operating in the same general area, reported that they were unable to continue their respective flights due to weather and diverted, either back to their departure points or to the nearest suitable aerodrome. VH-MEM reported over Casino at 0900 hours at an altitude of 1500 feet and the pilot requested permission to track through the Coolangatta control zone at 1500 feet. Brisbane Flight Service Unit then advised the aircraft that Archerfield was closed to VFR traffic because of cloud at 900 feet. At 0902 hours VH-MEM was requested to call Coolangatta Tower for an onwards clearance when five miles south of Murwillumbah. Communications from the aircraft had become very broken and it is not certain that the pilot received this instruction. There was no further communication from the aircraft.

- (viii) At 0932 hours, following the failure of the aircraft to communicate with Coolangatta Tower and when it could not be contacted by any air or ground unit in the area, the Uncertainty Phase of Search and Rescue Procedures was declared by Coolangatta Tower. Having regard to the known adverse weather conditions in the area, the Senior Operations Controller at Brisbane declared the Alert Phase at 0937 hours and, following a report that a low flying aircraft and a crashing noise had been heard near Nimbin, the Distress Phase was declared at 1028 hours and arrangements for a ground and air search were commenced.
- (ix) Weather conditions at 0900 hours in the Casino area were wind calm, general overcast, visibility 12 miles in continuous light rain; in the Lismore area wind calm, 8/8ths of stratus cloud at 1000 to 2000 feet, visibility 6 miles in continuous moderate rain. Between Casino and Nimbin conditions were reported as overcast, base 450 to 900 feet, with occasional showers which significantly reduced visibility.
- (x) The aircraft was sighted by witnesses passing slightly east of Kyogle at about 1000 feet above ground level on a northerly heading and later passing over Nimbin, at low altitude on a south easterly heading, where it turned left and followed Mulgum Creek toward the mountains. About two miles along the valley the aircraft was seen to orbit left and thence resume its original heading up the valley. The aircraft was last seen to enter a climb and disappear into cloud which was reported to be based at 50 to 150 feet above ground level. The aircraft was heard to pass a point about a mile further up the valley and shortly afterwards there is the sound of an explosion.
- (xi) Despite adverse weather conditions, an aerial search of the area between Casino and Coolangatta was carried out by military fixed wing aircraft and helicopters and a ground party carried out a search in the Mount Neville area during the remaining daylight hours of 16 August. On the following morning further searches were commenced and the wreckage of the aircraft was located at 0859 hours by a ground party working in conjunction with military helicopters. The aircraft had impacted the southern slopes of Mount Neville at a height of 1670 feet above mean sea level and had been destroyed by severe impact forces and subsequent fire.
- (xii) Examination of the wreckage failed to reveal any evidence of pre-impact structural failure, malfunction of systems, or any mechanical evidence which might have contributed to the accident. At the moment of impact the aircraft was in a climb and the engines were heard at high power immediately prior to impact. The height of the last sighting, the distance travelled and the impact height are in general agreement with the aircraft's normal climb capability. It is apparent, therefore, that the pilot did not appreciate the very dangerous relationship between the aircraft's climb capability and the rising terrain ahead.

OPINION AS TO CAUSE

The cause of the accident was the pilot's decision to continue towards his destination, climbing through cloud, in circumstances where there was no assurance that a safe clearance above terrain could be maintained.

Approprie to Jeanh Spens

(Frank E. Yeend)

7, 10, 1974

Delegate of the Director-General of Civil Aviation