



COMMONWEALTH OF AUSTRALIA

DEPARTMENT OF TRANSPORT

AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

Reference No.

SI/772/1005

Publication of this report is authorised by the Secretary under the provisions of Air Navigation Regulations 283 (1)

1. LOCATION OF OCCURRENCE

17 kilometres north-west of Port Macquarie, New South Wales	Height a.m.s.l. 60 feet	Date 19.2.77	Time (Local) 0848 hours	Zone ESuT
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2. THE AIRCRAFT

Make and Model Piper PA23/250	Registration VH-AVQ	Certificate of Airworthiness Valid from 17.3.76
Certificate of Registration issued to	Operator	Degree of damage to aircraft Destroyed
		Other property damaged Nil

Defects discovered

Nil

3. THE FLIGHT

Last or intended departure point Port Macquarie	Time of departure 0830 hours	Next point of intended landing Dubbo	Purpose of flight Carriage of freight	Class of operation Private
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4. THE CREW

Name	Status	Age	Class of licence	Hours on type	Total hours	Degree of injury
	Pilot	42	Private	Approx. 130	Approx. 730	Fatal

5. OTHER PERSONS (All passengers and persons injured on ground)

Name	Status	Degree of injury	Name	Status	Degree of injury
	Passenger	Fatal			

6. RELEVANT EVENTS

The aircraft was fuelled to capacity at West Maitland during the afternoon of 18 February. It was then flown by the pilot to Wallsend, a flight of some 10 minutes, where it remained overnight. The pilot did not hold an instrument rating and was therefore restricted to flight in accordance with the Visual Flight Rules (VFR).

On the following morning he flew the aircraft to Port Macquarie, a flight of some 50 minutes, where a landing was made at about 0720 hours. At this time there were frontal weather conditions at Port Macquarie, the cloud base was 1100 feet, with lower patches of cloud to the east and west, the visibility was 10 kilometres and the surface wind was 170°/15 knots.

The aircraft was loaded with perishable freight destined for Broken Hill and, at 0730 hours, the pilot telephoned Coffs Harbour Flight Service Unit (FSU) and requested a meteorological forecast for the route Port Macquarie - Dubbo - Broken Hill. He was advised that a front was passing through the area and that the forecast in respect of cloud behind the front, on the coast to the mountains, was broken cumulus from 2000 feet and scattered stratus base 1000 to 2000 feet. He made the comment that "the cloud at the moment here is about 1200 feet". He was also advised that, over the mountains and to the west, the forecast indicated rain areas and occasional thunderstorms mainly associated with the front and occasional rain showers behind the front. The terminal forecast for Dubbo was wind 180°/15 knots, cloud 3 oktas cumulus base 4000 feet. The forecasts for Broken Hill and the area west of Dubbo were to be available to him at Dubbo.

At 0811 hours, the pilot again telephoned Coffs Harbour FSU. He gave details of the flight plan for this intended flight and these indicated that it was to be a VFR private flight. He stated that the estimated time of departure was about 0830 hours but he was waiting for a break in the cloud at Port Macquarie. The stated fuel endurance was 250 minutes from Port Macquarie and 310 minutes from Dubbo. At about this time the cloud base at Port Macquarie was approximately 1000 feet, there were squalls in the area and visibility was reduced in patches of rain.

6. Relevant Events (cont'd)

The aircraft subsequently took off towards the south-west at about 0830 hours but the pilot did not establish radio communication with any ground station or known other aircraft. The aircraft was later heard apparently above the base of extensive low cloud in the vicinity of Pembroke, some 11 km west-north-west of Port Macquarie aerodrome, and it was then seen to descend out of the cloud in a steep nose-down, wings-level attitude on an easterly heading. As it neared the ground it made a steeply banked turn to the left on to a reciprocal heading and commenced to climb. At about this time it rolled rapidly to an inverted position, a sharp explosive sound was heard and the aircraft dived to the ground.

The wreckage of the aircraft extended over a distance of about 450 metres and indicated that there had been an in-flight structural break-up. Detailed examination of the wreckage revealed that all structural component failures were of an overload nature and there was no evidence of any pre-existing defect, fire or explosion. The component failures and the wreckage distribution were consistent with a roll-right aileron control input together with a simultaneous up-elevator control input resulting in partial torsional collapse of both wings outboard of the engines and an upward bending failure of the left wing at the root.

The investigation also indicated that the gross weight of the aircraft at the last take-off was at least 272 kg in excess of the maximum take-off weight.

Post mortem examination revealed that the pilot had coronary artery disease and the possibility that he became incapacitated in flight cannot be entirely discounted.

7. OPINION AS TO CAUSE

The probable cause of the accident was that the pilot persisted with flight into adverse weather conditions and, in an attempt to recover from a resultant hazardous flight situation, applied abnormal control inputs.

Approved for
publication

G.V. Hughes

(G.V. Hughes)
Delegato of the Secretary

Date

22.1.1980