LOCATION OF OCCURRENCE

DEPARTMENT OF TRANSPORT

Reference N

17110/000/100

AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

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

V116/793/1032

		Height e.m.s.l.	Dete	Time (Lecel)	Zene		
5 Km east of Shepparton, Victoria		370 feet	30.8.79	1513 hours	EST		
THE AIRCRAFT							
the and Model	Registration	Cortificate of Airworthiness					
Cessna P206C	VH-DSN	VH-DSN		Valid from 18.8.75			
Certificate of Registration issued to	Operator	Operator		Degree of damage to circusts Destroyed			
		Other property demaged					
	. 1			Nil			
Defects discovered							
	Ni	1					
THE FLICHT		······································					

Tocumwal	1457 hours	Essendon		Travel		Private	
THE CREW	Status	Age	Class of licence	Hours on type	Total hours	Degree of injury	
	Pilot	39	Private	71	470	Fatal	

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

Name

Status

Degree of injury

Passenger

Passenger

Passenger

Passenger

Passenger

Fatal

Passenger

Fatal

Passenger

Fatal

Passenger

Fatal

RELEVANT EVENTS

At 1304 hours the pilot telephoned the Briefing Office at Essendon Airport from his home at Cobram and obtained the current meteorological forecasts for the Tocumwal/Essendon route. The area forecast indicated that a weak front was moving eastwards and was expected to have passed through Melbourne between 1000 and 1200 hours. North of the Great Dividing Range, scattered strato-cumulus cloud was expected with visibility decreasing to 10 km in patchy rain. Isolated heavy showers with scattered low stratus cloud and visibility decreasing to 4 000 metres were forecast south of the Divide. Broken strato-cumulus cloud, base 500 feet a.m.s.l., was forecast for the Kilmore Gap area and the Essendon terminal forecast provided for wind of $270^{\circ}/15$ knots, visibility 10 km, showers, two oktas stratus cloud base 1 500 feet and five oktas cumulus cloud base 3 000 feet.

The pilot telephoned the Briefing Office again at 1341 hours and submitted flight plan details for the flight from Tocumwal to Essendon and return. The details indicated that the estimated time of departure was 1430 hours, the time interval to Essendon was 58 minutes, the cruising altitude was below 5 000 feet, the route was via Mangalore and Kilmore and the fuel endurance was 280 minutes. The pilot held a Class Four Instrument Rating but he was not qualified to fly in other than visual meteorological conditions. The flight plan details indicated the flight was in the VFR category.

At 1458 hours, the pilot established radio communication with Melbourne Flight Service Unit and advised that he had departed Tocumwal at 1457 hours, was climbing to 4 000 feet on a track of 1880, and estimated being over Mangalore at 1529 hours. He was given the area QNH (altimeter setting) and his acknowledgement was the last communication received from the aircraft.

The aircraft was observed to take off to the west at Tocumwal, turn left and fly towards Cobram. An aircraft which may have been VH-DSN, was subsequently seen flying on a south-south-westerly heading at a low height to the east of Wunghnu, some 20 km north of Shepparton. There were rain squalls and extensive low cloud in that area at the time.

6. RELEVANT EVENTS (Cont'd)

In the Shepparton area, there were intermittent squalls from the west with wind gusts, heavy rain and low cloud. Shortly after a squall had passed, several persons located to the east of Shepparton heard intermittent and abnormal aircraft engine noise. One person observed an aircraft on a southerly heading emerge from a cloud formation, then perform a loop type manoeuvre from which it dived steeply to the ground whilst rotating in a clockwise direction. Several other persons observed the aircraft apparently emerge from the base of cloud at high speed, in a steep nose down attitude, and rolling to the right until it struck the ground.

Examination of the wreckage of the aircraft confirmed that it had struck the ground at high speed in a near vertical attitude and virtually disintegrated on impact. There was no evidence of any defect or malfunction which might have contributed to the accident.

A meteorological post analysis indicated that a disjointed cold front or trough lying NW/SE had moved eastwards across Victoria at a speed of 20 knots. The passage of the trough was associated with isolated showers north of the ranges and scattered showers on and south of the ranges. As the trough moved eastwards, it encountered pockets of higher dew points which were not evident at the time of preparation of the forecasts issued prior to the accident, and more frequent showers, isolated and heavy, occurred. As the trough approached Shepparton, it encountered a pocket of higher dew points and scattered showers and a cloud base of 3 000 feet developed. In the vicinity of the trough, isolated heavy showers occurred and the cloud base lowered to about 1 500 feet with scattered stratus cloud about 800 feet. Local wind squalls of 20 to 30 knots ere associated with the showers. There is evidence to suggest that the flight could probably have been simpleted in visual meteorological conditions if diversions around the shower areas had been made.

7. OPINION AS TO CAUSE

The probable cause of the accident was that the pilot continued the flight into weather conditions in which he was not able to maintain the visual reference required for him to retain control of the aircraft.

Approved for blication (G.V. Hughes)
Delegate of the Secretary

Dote

19.8.1981

DEFINITIONS

- ACCIDENT An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all those persons have disembarked and in which
 - (a) any person suffers death or serious injury as a result of being in or upon the aircraft or by direct contact with the aircraft or anything attached to the aircraft; or

Note. - Specifically excluded are: death from natural causes and fatal or serious injury to any person on board whether self-in-flicted or inflicted by another person, or to ground support personnel before or after flight, or fatal or serious injury which is not a direct result of the operation of the aircraft, or which concerns stowaways.

- (b) the aircraft suffers substantial damage or is destroyed; or
- (c) the aircraft is missing or is completely inaccessible.

FATAL INJURY - Any injury which results in death within 30 days.

SERIOUS INJURY - Any injury other than a fatal injury which

- (a) requires hospitalisation for more than 48 hours, commencing within seven days from the date the injury was received; or
- (b) results in a fracture of any bone (except simple fractures of fingers, toes or nose); or
- (c) involves lacerations which cause severe haemorrhages, nerve, muscle or tendon damage; or
- (d) involves injury to any internal organ; or
- (e) involves second or third degree burns, or any burns affecting more than five percent of the body surface.

MINOR INJURY - Any injury other than as defined under "Fatal Injury" or "Serious Injury".

DESTROYED - Consumed by fire, demolished or damaged beyond repair.

SUBSTANTIAL DAMAGE - Damage or structural failure which adversely affects the structural strength, performance or flight characteristics of the aircraft and which would normally require major repair or replacement of the affected component. The following types of damage are specifically excluded: engine failure; damage limited to an engine or its accessories, or to propeller blades; bent fairings or cowlings: small dents or puncture holes in the skin; damage to wing tips, antennas, tires, or brakes.

MINOR D \MAGE - Damage other than as defined under "Destroyed" or "Substantial Damage",