

1. LOCATION OF OCCURRENCE

3 mile south-east of Archerfield, Queensland.	Height a.m.s.l. (ft) 60 feet	Date 5.1.72	Time (Local) 1355	Zone EST
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2. THE AIRCRAFT

Make and Model Piper PA28/180 Cherokee	Registration VH-WDH	Certificate of Airworthiness	Valid from 1.6.67	Valid to 12.4.75
Registered Owner E. J. S. Windley, "Forest Home", Georgetown, Queensland.	Operator E. J. S. Windley, "Forest Home", Georgetown, Queensland.	Degree of damage to aircraft Destroyed		
Defects discovered Nil.		Other property damaged Power lines and a timber house		

3. THE FLIGHT

Last or intended departure point Bankstown	Time of departure 0954	Next point of intended landing Archerfield	Purpose of flight Travel	Class of operation Private
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THE CREW

Name	Status	Age	Class of licence	Hours on type	Total hours	Degree of injury
Edward John Sergison WINDLEY	Pilot	27	Private	134	394	Serious

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

Name	Status	Degree of injury	Name	Status	Degree of injury
Edward Henry WINDLEY	Passenger	Fatal	Patience Ann WINDLEY	Passenger	Serious
Clayre Frances WINDLEY	Passenger	Fatal			

RELEVANT EVENTS

At Bankstown, the pilot submitted a flight plan which indicated that the aircraft would cruise at 5,500 feet to Port Macquarie and then at 6,500 feet to Archerfield. Fuel consumption was shown as 8 gallons per hour and fuel on board the aircraft as 40 gallons. The time required for the flight was 237 minutes but, through a miscalculation, this was shown as 227 minutes. The pilot's normal operating procedure was to lean the fuel mixture only while cruising above 5,000 feet. After departure the pilot elected to cruise at altitudes between 2,300 and 3,000 feet and the mixture control remained selected to Rich. At Grafton, because of the weather ahead, the pilot diverted to a coastal route and this was expected to add seven minutes to the flight time. Whilst on descent to Archerfield, after some 242 minutes of flight, the fuel pressure indication dropped to zero and the engine lost power. The pilot was unable to restore engine power so he advised Archerfield Tower of his predicament and decided to attempt a forced landing on the airport. About one mile from Archerfield, it became obvious to the pilot that he would not reach the landing area. He attempted to turn the aircraft sharply to the right for a landing on a suburban street, but whilst in the turn the port wing of the aircraft struck and severed power lines adjacent to the street. The aircraft then plunged to the ground, right wing first, and came to rest, severely damaged against a timber house. Examination of the aircraft revealed no evidence of pre-impact malfunction. Records of past flights with this aircraft and fuel consumption tests conducted subsequently indicated that by operating at the relevant power setting with the mixture correctly leaned a fuel consumption consistent with that appearing on the flight plan could be realised. When the engine was operated with the mixture in full RICH the fuel consumption was significantly higher and the engine failure had occurred after a flight time compatible with fuel usage at this higher rate. At the accident site, despite both fuel tanks having been punctured, there was no evidence of any significant quantity of fuel having been spilt. There was attached to the instrument panel an ambiguous placard of undetermined origin for converting the fuel contents indication to imperial gallons.

6. OPINION AS TO CAUSE

The probable cause of the accident was that the pilot did not apply fuel management and fuel mixture control procedures essential to the safe conduct of the flight in the existing operating conditions.

Report released

A. S. Graham (D. S. GRAHAM)Designation
Assistant Director-General
(Air Safety Investigation)Date
1.2.73