

AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

Reference No.
AS/705/1018

1. LOCATION OF OCCURRENCE

10 miles north of Yanrey Station, Western Australia.	Height a.m.s.l. (ft) 150 feet	Date 16.4.70	Time (Local) 1130	Zone WST
--	----------------------------------	-----------------	----------------------	-------------

2. THE AIRCRAFT

Make and Model Cessna 177	Registration VH-DZK	Certificate of Airworthiness	Valid from 25.1.68	Valid to 24.1.77
Registered Owner Samav Pty. Ltd., Jandakot Airport, Jandakot, Western Australia.	Operator T.D.D. Alston, Yanrey Station, Western Australia.	Degree of damage to aircraft Substantial		
		Other property damaged Nil		

Defects discovered

Right hand and left hand fuel tank contents transmitter arms bent, causing gauges to over read.

3. THE FLIGHT

Last or intended departure point 10 miles north east of Yanrey Homestead.	Time of departure 1115	Next point of intended landing Yanrey Homestead	Purpose of flight Sheep Spotting	Class of operation Private
---	---------------------------	--	-------------------------------------	-------------------------------

4. THE CREW

Name	Status	Age	Class of licence	Hours on type	Total hours	Degree of injury
Thomas David De Pledge ALSTON	Pilot	27	Private	24	97	Nil

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

Name	Status	Degree of injury	Name	Status	Degree of injury
David KIFFEN- PETERSON	Passenger	Nil			

6. CONTRAVENTIONS OF REGULATIONS AND ORDERS

Regulation or Order No.	Nature of contravention
A.N.R. 226	The aircraft commenced a flight when the quantity of fuel on board was less than the quantity necessary for the flight, calculated in accordance with the provisions of the Aeronautical Information Publication.

7. RELEVANT EVENTS

The aircraft was refuelled before the flight in circumstances such that some fuel transfer between tanks may have taken place. This would have resulted in a slight reduction in the total fuel carried, but allowance for normal fuel reserves would have adequately provided for this contingency. The pilot considered, from past experience of the type of operation and the power settings to be used, that the total endurance of the aircraft would be 5 hours based on the full capacity of the tanks. After some 4 hours 40 minutes flying time the aircraft was returning to Yanrey Station and was at a height of about 800 feet above terrain, when the engine failed. The pilot noted that the fuel pressure was zero and he changed the fuel tank selection from "Left" to "Both", turned on the fuel booster pump and checked that the fuel shut off valve was in the "On" position. The engine did not regain power and the pilot carried out a forced landing in the only cleared area within gliding distance. Towards the end of the landing roll the port mainplane struck a small tree, causing the aircraft to veer to the left as it came to rest. Damage was confined to the outer leading edge of the port mainplane. Subsequent to the landing, both fuel gauges were found to be reading 2 gallons, but there was no available fuel in the tanks.

OPINION AS TO CAUSE

The cause of the accident was that the pilot conducted a flight without consideration for the requirement for adequate fuel reserves. A contributory factor was that the fuel tank contents gauges were over-reading.

Report approved

 (D.S. GRAHAM)Designation
Assistant Director-General
(Air Safety Investigation)Date
23.8.71

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
- (b) the aircraft suffers substantial damage.

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, bent fairings or cowlings, dented skin, small punctured holes in the skin or fabric, taxi-ing damage to propeller blades, damage to tyres, engine accessories, brakes, or wingtips.

MINOR DAMAGE - Damage other than as defined under "Destroyed" or "Substantial Damage".