



AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

Reference No.

AS/751/1031

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

1. LOCATION OF OCCURRENCE

16 kilometres south-west of Kenilworth, Queensland	Height a.m.s.l. 3500 feet	Date 15.10.75	Time (Local) 1530 hours	Zone EST
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2. THE AIRCRAFT

Make and Model Piper PA28R/180 'Cherokee Arrow'	Registration VH-BKG	Certificate of Airworthiness Valid from 26.6.68 to 25.6.77
Certificate of Registration issued to P. B. Ryan, Aeroasis Oasis, Marina Waterfront, Caloundra, Qld.	Operator I. D. McKie, 18 Wentworth Parade, Golden Beach, Caloundra, Qld.	Degree of damage to aircraft Destroyed
Defects discovered		Other property damaged Nil

3. THE FLIGHT

Last or intended departure point Boondooma	Time of departure 1420 hours	Next point of intended landing Caloundra	Purpose of flight Travel	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
Ian Duncan McKIE	Pilot	28	Private	10	245	Serious

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

Name	Status	Degree of injury	Name	Status	Degree of injury
Norman BUTLER	Passenger	Serious			
Patricia BUTLER	Passenger	Serious			

6. RELEVANT EVENTS

Before departing from Boondooma the pilot visually checked the contents of the fuel tanks of the aircraft and estimated that there was about 8 gallons in the port tank and at least 18 gallons in the starboard tank. On the basis of a consumption rate of $8\frac{1}{2}$ gallons per hour he was satisfied that there was adequate fuel available for the planned flight of about 75 minutes duration.

While cruising at an altitude of about 4000 feet, over a densely timbered mountain range, the engine began to run roughly and surge and there was a considerable power loss. The pilot selected rich mixture and switched on the auxiliary fuel pump but there was no improvement in engine performance. He noted that the fuel pressure indicator was flickering in the lower range of the gauge and he changed the fuel selector back and forth, again with no result. He then made a 'Mayday' radio call, advising that he had experienced a complete loss of fuel pressure and was making a forced landing.

The area selected by the pilot for landing was a bush track running along a ridge and, while approaching the ridge, he extended the landing gear and some flap. The aircraft undershot, struck a tree short of the intended landing area and, with the starboard wing torn off by tree impact, it swung through 180 degrees and crashed to the ground in a flat attitude some 12 metres beyond the tree. As the pilot assisted the passengers to vacate the aircraft a fire, which was initially apparent in the area of the starboard wing root, developed rapidly.

Examination of the aircraft wreckage was restricted by the extent of fire destruction but it was found that incorrect installation of a counterbored brass washer in the fuel selector valve mechanism would result in non-positive engagement of the selector. It was not possible to determine if this was a factor in the accident.

7. OPINION AS TO CAUSE

The cause of the accident was a substantial loss of engine power in circumstances which precluded a successful forced landing being carried out. There is insufficient evidence available to determine the reason for the engine power loss.

Approved for publication	(I. M. Leslie) Delegate of the Secretary	Date 8.12.1976
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