

AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

Reference No.
AS/724/1024

1. LOCATION OF OCCURRENCE

Groote Eylandt Aerodrome, Northern Territory	Height a.m.s.l. (ft) 44 feet	Date 19.8.72	Time (Local) 0740	Zone CST
--	---------------------------------	-----------------	----------------------	-------------

2. THE AIRCRAFT

Type and Model Piper PA30/160 Twin Comanche C	Registration VH-WJC	Certificate of Airworthiness	Valid from 6.5.70	Valid to 5.5.79
Registered Owner Campbell's Tyre Service Pty. Ltd., P.O. Box 2, Lambton, New South Wales.	Operator Campbell's Belting Service Pty.Ltd, P.O. Box 2, Lambton, New South Wales.	Degree of damage to aircraft Destroyed		
Defects discovered Nil.		Other property damaged Nil.		

3. THE FLIGHT

Last or intended departure point Groote Eylandt	Time of departure 0740	Next point of intended landing Gove	Purpose of flight Carriage of pass- engers and goods	Class of operation Private
--	---------------------------	--	--	-------------------------------

4. THE CREW

Name	Status	Age	Class of licence	Hours on type	Total hours	Degree of injury
John Lawrence DALEY	Pilot	29	Senior Commercial	143	1416	Fatal

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

Name	Status	Degree of injury	Name	Status	Degree of injury
Colin WOODBURY	Passenger	Fatal	Peter BUTLER	Passenger	Fatal
Raymond Arthur GILL	Passenger	Fatal			

RELEVANT EVENTS

The aircraft was engaged in the transport of men and materials in connection with the installation and maintenance of conveyor belting. The flight had commenced at Maitland, New South Wales, on the previous day and, prior to departure, the pilot had loaded the aircraft with a quantity of heavy, low volume materials. With one passenger on board, the flight to Groote Eylandt had been uneventful. At Groote Eylandt the main and wing tip fuel tanks were replenished for the final stage of the flight to Gove. Before the aircraft began its departure from Groote Eylandt, two more passengers, their baggage and further materials of trade were loaded on board and distributed by the pilot. The weather was fine and clear and the wind was calm.

After the engines were started, the aircraft taxied to the eastern end of the 6,240 feet long bitumen runway and then commenced a take off into the west. Following a ground run of about 3000 feet the aircraft became airborne and entered a gentle climb. The nose of the aircraft was then seen to rise, the climbing angle increased abruptly and the aircraft climbed steeply to a height of some 300 feet. At this point the port wing went down very quickly until the aircraft was banked almost vertically. The nose then dropped and the aircraft entered a flat, left hand spin from which it did not recover.

The aircraft struck the ground at a position 150 feet to the left of the runway centreline and 4480 feet from the eastern end of the runway. The undercarriage was found to have been down at impact and there was no fire. It has been calculated that, before the flight began, the loaded aircraft weighed 4433 pounds, which is 705 pounds in excess of the maximum permissible gross weight and the centre of gravity, with the undercarriage down, was located 3.9 inches aft of the rear limit specified for the aircraft type. This loading configuration could lead to the aircraft entering an uncontrolled nose pitch up condition with insufficient stabilator control available to correct the situation. There was no defect of the airframe or engines which could have contributed to the loss of the control experienced.

7. OPINION AS TO CAUSE

The cause of the accident was that the pilot loaded the aircraft without adequate regard to the limits of gross weight and the position of the centre of gravity.

Report released <i>D.S. Graham</i> (D.S. GRAHAM)	Designation Assistant Director-General (Air Safety Investigation)	Date 22.5.1973
--	---	-------------------