

COMMONWEALTH OF AUSTRALIA-BUREAU OF AIR SAFETY INVESTIGATION AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT			REFERENCE NO. SI/812/1014	
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1. LOCATION OF OCCURRENCE

'Wyoming', 4 km southeast of Tuena, N.S.W.		Elevation: 1800 feet
Date: 2.4.81	Time: 1643 hours	Zone: EST

2. THE AIRCRAFT

Make and Model: Cessna 185A	Registration: VH-RCM
Certificate of Airworthiness: Issued on 26.3.62	
Certificate of Registration Issued to:	Operator:
Degree of Damage to Aircraft: Destroyed	Other Property Damaged: Nil
Defects discovered: Nil	

3. THE FLIGHT

Departure Point: Bankstown	Time of departure: 1558 hours
Destination: 'Wyoming'	
Purpose of flight: Travel	Class of Operation: Private

4. THE CREW

Name	Status	Age	Class of Licence	Hours on Type	Total Hours	Degree of Injury
	Pilot	57	Private	28	1572	Fatal

5. OTHER PERSONS (ALL PASSENGERS AND PERSONS INJURED ON GROUND)

Name	Status	Degree of Injury
	Passenger	Fatal

6. RELEVANT EVENTS

The pilot had a property near Tuena but, as he had not yet constructed a strip, operated his aircraft into the adjacent property of 'Wyoming'. There were two strips at 'Wyoming' which were intended for use by agricultural aircraft. The longer strip was orientated southeast/northwest and was 370 metres in length. It was constructed on undulating terrain and both longitudinal and transverse gradients exceeded the limits specified for private operations. In addition, rising terrain, trees and a power line at the southeast end restricted operations to one-way; take-off to the northwest and landing to the southeast. The pilot had operated into 'Wyoming' on 47 occasions over a period of 8 years and preferred to use the longer strip.

Prior to 1962, the pilot had gained 712 hours flying experience on tailwheel aircraft. He had then flown aircraft equipped with tricycle landing gear until February 1981, when he purchased VH-RCM. Arrangements to transfer registration of the aircraft had not been completed at the time of the accident. After acquiring VH-RCM, the pilot had undertaken 6.5 hours endorsement training in the aircraft with a flying instructor. During the training period, the landing technique he used was to touchdown on all three wheels simultaneously. He would normally lower full flap during the approach, except in cross-wind conditions when only partial flap would be used, and apply nose-up stabilator trim to overcome the pitch change caused by the flap. During practice go-arounds in this configuration, introduction of high power would cause the nose of the aircraft to pitch up and considerable forward control pressure was required to overcome the effect. The pilot had no difficulty controlling the trim changes during the practice go-arounds. On 5.3.81, he flew VH-RCM to 'Wyoming' and landed into the southeast. The aircraft bounced several times during the landing, sufficient to cause observers to feel concern, but the bouncing was controlled and the aircraft brought to a halt.

On 2.4.81, the pilot telephoned 'Wyoming' on two occasions, to check on the weather and to arrange for a windsock to be installed at the strip. After refuelling the aircraft and submitting a flight plan, he departed Bankstown and completed an apparently uneventful flight to 'Wyoming'. At 1635 hours, he advised Sydney Flight Service Centre that he was in the circuit area at his destination and cancelled the search and rescue watch on VH-RCM. He also made radio contact with 'Wyoming' to check on the surface wind.

The wind was across the longer strip; from the east at 10 to 15 knots. With the undulating terrain, some turbulence and windshear could be expected during the approach. The aircraft overflowed the pilot's property to the north of the strip and was then observed on final approach for a landing into the southeast. Witnesses on the ground then briefly lost sight of the aircraft behind a hill, and when it came back into view it was over the strip, at a height of about 50 feet and in an extreme nose-high attitude. The engine sound indicated high power was being produced. The aircraft suddenly rolled rapidly to the right and the nose dropped. It struck the ground in a steep descent, cart-wheeled and slid backwards to a halt some 60 metres right of the strip and 100 metres beyond the marked threshold. An intense fire broke out and consumed most of the wreckage. The pilot was thrown clear during the impact and was conscious when rescuers arrived at the scene. However, he did not say anything about the cause of the accident.

6. RELEVANT EVENTS

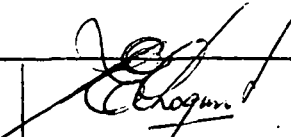
Examination of the wreckage was hampered by fire damage but no evidence was found of pre-existing mechanical defect or malfunction. The flaps had been at the 32 degree position (three-quarters extended) at impact. It was not possible to determine the setting of the stabilator trim. Ground marks indicated that the aircraft had bounced heavily on the sloping terrain short of the strip threshold. It had touched down on the mainwheels first but the tailwheel had made contact shortly afterwards. At the time of the bounce, the aircraft had been aligned approximately 10 degrees left of the strip direction and drifting about 5 degrees to the right. At about the time of the bounce, the pilot had apparently applied power to assist in maintaining or regaining control of the aircraft, but the aircraft had subsequently stalled.

There was evidence that, in February 1981, a fault had occurred in the pilot's seat locking mechanism. However, it was reported that this had been promptly rectified. Consideration was given to the possibility that the extreme nose-high attitude of the aircraft which precipitated the stall was because of accidental rearward movement of the pilot's seat, but fire destruction of the seat rails prevented resolution of this possibility.

7. OPINION AS TO CAUSE

There is insufficient evidence available to determine the cause of the accident.

Approved for publication under the
provisions of Air Navigation
Regulation 283(1)


P.E. Choquenot Director

Date:

21.4.83