

COMMONWEALTH OF AUSTRALIA-BUREAU OF AIR SAFETY INVESTIGATION  
AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

REFERENCE NO.  
SI/811/1066

1. LOCATION OF OCCURRENCE

Roma, Qld		Elevation: 1032 feet
Date: 22.9.81	Time: 1845 hours (approx.)	Zone: EST

2. THE AIRCRAFT

Make and Model: Beech C24R	Registration: VH-MYG
Certificate of Airworthiness: Date of Issue 13.12.79	
Certificate of Registration Issued to:	Operator:
Degree of Damage to Aircraft: Destroyed	Other Property Damaged: Nil
Defects discovered: Turn coordinator not operating	

3. THE FLIGHT

Departure Point: Augathella	Time of departure: 1745 hours
Destination: Roma	
Purpose of flight: Carriage of passengers	Class of Operation: Charter

4. THE CREW

Name	Status	Age	Class of Licence	Hours on Type	Total Hours	Degree of Injury
	Pilot	27	Private	4	271	Fatal

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

Name	Status	Degree of Injury
	Passenger	Fatal
	Passenger	Fatal

## 6. RELEVANT EVENTS

At about 2100 hours on 21.9.81, [redacted] contacted the operator to charter an aircraft for a flight on the following day to Augathella and return. The operator subsequently contacted the pilot, who flew for him on a part-time basis, and then refuelled VH-MYG to capacity in preparation for the flight.

Although the pilot had recently passed the examinations and flight test for the initial issue of a commercial pilot licence, he had not completed all of the required medical examinations. He held a current private pilot licence and a Class Four instrument rating, allowing him to fly at night under Visual Meteorological Conditions (Night-VMC). He had not previously flown a Beech C24R aircraft and the Pilot's Operating Handbook, containing information about the systems and operating procedures for the aircraft type, was not available in VH-MYG.

The pilot was at his normal place of employment when contacted, engaged in a 1800 hours to 0200 hours shift. He completed his shift, proceeded to his home and went to bed, and arose at about 0415 hours. On arrival at Archerfield, he completed a flight plan for the proposed return flight, which he submitted to the Briefing Office at 0544 hours. The nominated class of operation was charter.

When the flight plan was checked by Air Traffic Control (ATC) it was noted that the aircraft was not equipped with high frequency radio. The pilot would therefore be unable to meet the requirement for charter operations to maintain continuous radio communications. When he was reminded of this requirement, the pilot contacted the operator and subsequently advised ATC that the class of operation was amended to private. He also nominated a Search and Rescue watch (SARTIME) on his flight based on telephone reporting of arrival.

VH-MYG departed Archerfield at 0635 hours. At 1030 hours the pilot reported his arrival at Augathella by telephone. While his passengers were otherwise engaged, he spent the time relaxing and reading a magazine. At about 1340 hours, the pilot and passengers proceeded to the aircraft for the return flight. This was intended to be via Roma, as a refuelling stop. Difficulty was experienced in starting the engine and, after a number of attempts, the aircraft's battery became depleted. It was not until 1730 hours that a suitable truck battery was obtained and the engine was started using external power leads.

At 1748 hours, the pilot established radio contact with Charleville Flight Service Unit and reported he had departed Augathella three minutes earlier. He also advised he would operate under Night-VMC conditions and obtained the radio frequency to operate the remotely controlled runway lights at Roma. A SARTIME of 1930 hours was nominated for his arrival. There were no further radio transmissions received from the aircraft after these exchanges.

Weather conditions at Roma were suitable for Night-VMC; there were only two oktas of cumulus at 4000 feet and the wind was northerly at two knots. The night was dark. At about 1845 hours, persons on the ground to the south of Roma Aerodrome heard the sound of an aircraft engine. Although the sound was considered normal, their attention was drawn because the aircraft lights were not on. The aircraft was assessed to be on an approach to Runway 36. The runway lights were on. As the aircraft neared the aerodrome, one witness reported that the engine noise ceased. Others reported that there was a sudden roar of engine power. Several persons then heard a thump, but they either did not associate it with the aircraft or considered the aircraft had made a hard landing on the runway.

## 6. RELEVANT EVENTS

When no report had been received from the pilot by the nominated SARTIME, Search and Rescue procedures were implemented. Searching aircraft received a signal from an Emergency Locator Beacon in the vicinity of Roma and the wreckage of VH-MYG was located at 0624 hours on the following morning. The aircraft had struck the ground at a moderate speed, in an approximately 70 degree nose-down attitude and while heading approximately 050 degrees magnetic. The accident site was some 800 metres south of the threshold of Runway 36 and 146 metres left of the extended centreline of the runway. After the initial impact, the aircraft rebounded approximately 5 metres and came to rest in an upright attitude. There was no post-impact fire.

There was no evidence of pilot incapacitation. Examination of the wreckage found no evidence of pre-existing defect other than the inoperative turn coordinator instrument. The reason why this was not working could not be determined. The gyros of the primary flight instruments, artificial horizon and directional gyro, had been rotating at impact, consistent with normal operation. The landing gear was down but the flaps were in the retracted position. Examination of the aircraft light systems indicated that the taxi lights and the gear-down indicator light had been illuminated at impact. In view of the witness evidence, it is probable that the external taxi lights had only been turned on immediately prior to the accident. There was no evidence that any other lights, including the aircraft navigation lights, instrument lights and cabin lights, had been illuminated at the time of the accident.

The relatively minor damage sustained by the propeller and engine indicated that the engine was not delivering high power at impact. However, the exhaust pipes had been hot, which indicated that if the engine had failed it only occurred shortly before impact.

Both of the aircraft fuel tanks had ruptured and only 500 ml of fuel was recovered from the left tank. There was no evidence of fuel spillage at the accident site. Calculations written on a magazine that was found in the wreckage, apparently made by the pilot at Augathella, indicated that he had been operating the aircraft at a high cruise power setting that consumed approximately 40 litres per hour. The calculations indicated that the flight time to Augathella had been three hours. The flight time to Roma was approximately one hour and, if the noted fuel consumption was correct, the aircraft should have had some 59 litres of fuel remaining on arrival. The fuel selector was found at the right tank position but the pre-impact distribution of fuel between the left and right tanks could not be determined. The electric fuel boost pump had been operating at impact. The operating procedures for the aircraft type indicated that this pump was only intended for use during engine start and in a fuel system emergency. It was not required to be on for take-off and landing, as is the case with such pumps on many other types of aircraft. However, as the pilot was not familiar with the operating procedures for this aircraft, it was not known whether he had turned the pump on as a matter of habit during pre-landing checks learnt on other aircraft or in response to an emergency during the approach to land.

## 7. OPINION AS TO CAUSE

The cause of the accident has not been determined but it is likely that fatigue and the pilot's lack of experience with the aircraft type were contributory factors.

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

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Date:  
14.12.82