



GOVERNMENT OF AUSTRALIA

DEPARTMENT OF TRANSPORT

AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

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

Reference No

AS/754/1007

1. LOCATION OF OCCURRENCE

	Height a.m.s.l.	Date	Time (Local)	Zone
Parafield Airport, South Australia	45 feet	3.3.75	1125 hours	CST

2. THE AIRCRAFT

Make and Model	Registration
Beech D55 'Baron'	VH-TYM

3. CONCLUSIONS

3.1 At 1125 hours Central Standard Time on 3 March, 1975 a Beech D55 'Baron' aircraft, registered VH-TYM, struck the ground during an attempted 'go-around' from a landing approach at Parafield Airport, South Australia. The aircraft was virtually destroyed by impact forces and subsequent fire and the five occupants were killed.

3.2 The holder of the certificate of registration for the aircraft was Dr. T. Pirotta of 18 Beryl Street, Essendon, Victoria. At the time of the accident the aircraft was engaged on a private travel flight from Essendon to Parafield.

3.3 On board the aircraft were the pilot, Dr. Thomas Pirotta, and four passengers, Gillian Anne Johnston, Judith M. Johnston, Daniel F. Johnston and Denise Anne Drew.

The pilot, aged 41 years, was the holder of a commercial pilot licence endorsed for the aircraft type. He also held a Class Three instrument rating. His total flying experience amounted to 538 hours, of which 38 hours had been gained on Beech Baron aircraft and 51 hours had been gained on other twin engined aircraft. Prior to the commencement of this flight, his last flight, which was in VH-TYM and of about one hour duration, had been on 23 January, 1975.

3.5 The aircraft was operating under a certificate of airworthiness which was valid from 20 June, 1968 to 19 June, 1977 and there was no evidence that, at the commencement of the flight, it was in other than an airworthy condition. It was established that the gross weight of the aircraft and the centre of gravity position were within the limits.

3.6 Before the flight commenced the pilot prepared and submitted a flight plan which indicated that the flight would be in accordance with the Instrument Flight Rules, the estimated flight time was 130 minutes, the intended cruising altitude was 6500 feet and the fuel endurance was 260 minutes. The aircraft departed from Essendon Airport at 0904 hours, CST.

3.7 There is no evidence to suggest that, en route, the flight was other than normal and, at 1116 hours when the aircraft was approximately 5.5 kilometres south of Parafield Airport, the pilot established radio communication with Parafield Tower and reported approaching for a landing on Runway 21. The weather conditions at this time were visibility 40 kilometres, surface wind from 190 degrees at 10 knots and cloud consisted of 5/8 cumulus with a base of 3000 feet. The Runway 21 complex at Parafield consists of three parallel runways designated Runway 21 left, Runway 21 centre and Runway 21 right. The pilot was advised by the Tower to land on Runway 21 right.

3.8 The aircraft was subsequently observed on the downwind leg of the circuit at a height of 1500-1800 feet and, at 1120 hours when about abeam of the downwind end of the runway, the pilot reported 'I'm having a bit of trouble - my left throttle is jammed - I can't reduce the RPM'. A turn to the left was then commenced and continued until the aircraft was on a south-westerly heading. Following requests by the Tower for further information, the pilot replied 'I think I'll be alright - I'll just try and reduce my speed' and he was then issued with a clearance to orbit. He subsequently advised 'I'm doing a left orbit to lose a bit of height' and, at this time, the aircraft was observed commencing to circle some two kilometres south-west of the upwind end of Runway 21 at a height of about 700 feet.

3.9 At 1123 hours the Tower asked the pilot to confirm that the problem was the boost setting and not the RPM. The pilot replied 'It's the RPM - it's stuck - I'm getting 20 inches - I can't - I have 20 RPM - or, two thousand - I can't reduce it.' At about this stage, VH-TYM discontinued orbiting and flew in a north-easterly direction at a height of 300-500 feet slightly to the east of Runway 21 right and, as this flight path would have conflicted with other traffic, the Tower instructed the pilot to turn to the right. The pilot acknowledged this instruction and, from a position about mid-way along the runway, the aircraft commenced a climbing turn to the right.

3. CONCLUSIONS (Cont'd)

3.10 Upon reaching a height of 700-900 feet, and when in a position for a close base leg, the aircraft rolled into a left turn and the pilot reported 'I'm coming in for final'. During the left turn the aircraft passed through the approach path for Runway 21 right and the left turn was continued in a steep bank followed by a steep bank to the right until it was lined up with the runway. The aircraft then descended towards the runway at a higher than normal speed, with the landing gear extended and the flap lowered.

3.11 Shortly after passing over the runway threshold at a height of about 100 feet, the aircraft was still at an apparently high speed. The engine sound was heard to rapidly decrease and the starboard propeller was then observed to be rotating very slowly. The aircraft continued to descend but was undulating as it flew above the runway. It had flown over about three quarters of the length of the runway and was at a height of about 15 feet when engine power was heard to be re-applied and a shallow climb commenced. At a height of about 150 feet the aircraft commenced a gentle turn to the left and ceased climbing. The nose then rose steeply and a right turn commenced. The angle of bank rapidly increased, the nose dropped and the aircraft continued in a spiral dive until it struck the ground at a point some 950 metres beyond the end of the runway and some 250 metres to the right of the extended runway centre line. An intense fire broke out at impact but this was extinguished by the airport rescue and fire fighting service which arrived on the scene shortly afterwards.

3.12 The investigation established that, at the time of the accident, the landing gear of the aircraft was extended, the flaps were fully down, the starboard propeller was in the feathered position and the port propeller was rotating with the blades resting on the fine pitch stop. The detailed examination of the wreckage did not reveal any evidence of a pre-accident defect which could explain the malfunction reported by the pilot nor was there evidence of any other defect or malfunction which might have contributed to the accident.

4. OPINION AS TO CAUSE

The probable cause of the accident was that, following a reported engine malfunction and a subsequent misjudged landing approach, the pilot did not take timely action to commence a 'go-around'.

Approved for
publication



(I. M. Leslie)
Delegate of the Secretary

Date

30.1.1976

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 cowling, 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".