

Aviation Safety Investigation Report
199003059

Beech B95

23 April 1990

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at www.atsb.gov.au.

Occurrence Number: 199003059 **Occurrence Type:** Accident
Location: 1 km West of Archerfield QLD
Date: 23 April 1990 **Time:** 1534
Highest Injury Level: Minor
Injuries:

	Fatal	Serious	Minor	None
Crew	0	0	0	0
Ground	0	0	0	-
Passenger	0	0	0	0
Total	0	0	2	0

Aircraft Details: Beech B95
Registration: VH-UAU
Serial Number: TD-380
Operation Type: Aerial Work
Damage Level: Substantial
Departure Point: Archerfield QLD
Departure Time: N/A
Destination: Archerfield QLD

Approved for Release: 11th September 1990

Circumstances:

The flight was sheduled as the last in a series for the pilot under instruction to gain an endorsement on twin engined aircraft. The instructor occupied the right hand cockpit seat and handled the radio communications. He used a hand held microphone which produced transmissions which were scratchy and somewhat garbled. Also, his speech delivery rate was rapid. The Runway 28 Right circuit pattern was relatively busy at the time with both circuit and departing traffic. Examination of the Air Traffic Services communications tape in the period leading to the accident showed that the Tower Controller asked the pilot how many more circuits he intended to fly. The instructor responded that the next circuit would be his last and that it would be a "fully feathered fullstop" (This phrase was indistinct and could not be understood from the tape until it had been replayed a number of times). During the final circuit, the instructor reported mid-downwind, adding "just confirming (.....) feathered landing" The Tower Controller asked the pilot to repeat the message, to which the response was "we just have one feathered" Again the phrase was difficult to understand and the reply by the Tower Controller referred to the previously crowded circuit. This out of context response was not queried by the instructor. On final approach with the pilot-under-instruction flying the aircraft, the right propeller feathered, and approaching the briefed committal height of 400 feet, a preceding aircraft was observed to be still on the runway. The approach was continued and full flap selected as both pilots thought that the other aircraft would clear the runway for their landing. At a height of about 300 feet, however, the Tower Controller instructed VH-UAU to go-around. The instructor took control of the aircraft and continued the approach but the Tower Controller repeated the go-around instruction. The instructor then applied full power on the left engine and told the pilot under instruction to start the right engine. By this stage, the aircraft had descended to about 100 feet above ground level. It overflowed the aircraft on the runway and continued a slow descent until it struck trees and spun into the ground about one kilometre beyond the end of the runway. No attempt was made to retract the landing gear and flaps. The instructor said that after hearing the first go-around instruction, he

had intended to land beyond the aircraft on the runway but decided there was insufficient runway remaining for such a course of action. He then attempted to reach a clear area beyond the airfield boundary but the aircraft struck the trees prior to this. The investigation established that the Tower Controller was not aware that VH-UAU had one propeller feathered until the stationary propeller was sighted after the second go-around instruction was given. Because the advice from the instructor concerning the feathered propeller was transmitted as an "add-on" to standard radio phraseology, there was no direct means of him knowing whether or not his intentions had been understood by the Tower Controller.

Significant Factors:

The following factors were considered relevant to the development of the accident

1. Radio transmissions from the aircraft were of poor quality.
2. The Tower Controller was not aware that the aircraft was operating with one propeller feathered.
3. The approach was continued below the briefed committal height without a landing clearance having been issued and with the runway occupied by another aircraft.
4. An attempt was made to restart the right engine, however, no attempt was made to retract the landing gear and flaps.

Reccomendations:

There is no operational difference between flying with one engine shut down for training purposes and a genuine engine failure. In the latter case, the aircraft is given priority in the landing sequence by air traffic control. There is justification, therefore, for some formal procedure whereby the practice of shutting down an engine in the circuit for training purposes is conditional upon a separate clearance from the tower controller. The recommendation is made that the Civil Aviation Authority give consideration to amending procedures to the effect that aircraft require a formal clearance for practice engine shutdown exercises in circuit traffic patterns.