**Aviation Safety Investigation Report** 199501327

**Beech Aircraft Corp Baron** 

05 May 1995

## Aviation Safety Investigation Report 199501327

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Investigations commenced on or before 30 June 2003, including the publication of reports as a result of those investigations, are authorised by the Executive Director of the Bureau in accordance with Part 2A of the Air Navigation Act 1920.

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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.

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The Bureau did not conduct an on scene investigation of this occurrence. The information presented below was obtained from information supplied to the Bureau.

Occurrence Number: 199501327 Occurrence Type: Accident

**Location:** 34km WSW Camden

State: NSW Inv Category: 4

**Date:** Friday 05 May 1995

**Time:** 1955 hours **Time Zone** EST

**Highest Injury Level:** Minor

**Injuries:** 

	Fatal	Serious	Minor	None	Total
Crew	0	0	1	0	1
Ground	0	0	0	0	0
Passenger	0	0	0	0	0
Total	0	0	1	0	1

Aircraft Manufacturer: Beech Aircraft Corp

**Aircraft Model:** E55

Aircraft Registration: VH-USP Serial Number: TE820

**Type of Operation:** Charter Cargo

**Damage to Aircraft:** Destroyed

**Departure Point:** Cootamundra NSW

**Departure Time:** 1915 EST

**Destination:** Bankstown NSW

**Crew Details:** 

	Hours on				
Role	Class of Licence	Type Ho	urs Total		
Pilot-In-Command	ATPL	140.0	2400		

**Approved for Release:** Wednesday, May 17, 1995

The pilot said that he had been working for the operator for one week prior to the accident. He was employed on a casual basis, based in Cootamundra.

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After conducting his normal freight flight to Hay he arrived back at Cootamundra at about 1845, whereupon he unloaded the freight he had been carrying, and went to his car to collect personal belongings for a ferry flight to Bankstown. At the same time, the aircraft was being refuelled. A total of 313 litres of fuel was added to the aircraft, filling all tanks with the exception of the right auxiliary, which was filled to 20 litres less than capacity. By the time the pilot had returned to the aircraft the refueller had left. He said he carried out a fuel drain but then became distracted by the imminent arrival of another aircraft. He subsequently believes he did not check the status of the fuel caps.

The aircraft departed Cootamundra at about 1912 for an IFR flight to Bankstown. The planned cruising level was 5000 feet in order to minimise delays with entry to controlled airspace. Main tanks were selected for takeoff and initial climb. Shortly after takeoff the left and right auxiliary tanks were selected to feed their respective engines. During the cruise the pilot said that he noticed, after some time, that the fuel contents indicators appeared to be giving erratic readings. He was not concerned at this because he was confident the aircraft was carrying a very large margin over the fuel required for the flight.

As the aircraft passed Bindook VOR the pilot said he changed back to both main tanks. Shortly after this the left engine stopped. He commenced to go through the appropriate checklist items when the right engine also stopped. He immediately changed back to the auxiliary tanks without effect, then tried a number of tank/crossfeed selections, combined with various fuel pump and mixture settings. A momentary surge of power from one engine was all that could be achieved. The pilot gave a Mayday call, extended half flap and reduced speed to 75-80 knots. Nothing could be seen outside the aircraft due to darkness, low cloud and rain.

The aircraft collided with trees in rugged terrain and came to rest, relatively intact. The pilot said he struck his head on the instrument panel, sustaining a small cut on the forehead. At the time of impact he did not have his shoulder harness secured, being only restrained by his lap belt. He had unbuckled the shoulder straps during cruise because they were chafing his neck. After the loss of engine power he did not have sufficient time to refasten the harness.

Immediately after the aircraft came to rest he kicked open the main door and rapidly evacuated the aircraft, as he was concerned that the aircraft may have caught fire. There was no fire and so he was able to re-enter the aircraft after a short time and use the aircraft radio to notify his position, and to communicate with rescuers. Although located that evening by rescue helicopter, due to poor weather conditions, and hazardous terrain, he was not extracted from the crash site until the following morning.

Inspection of the wreckage revealed that all four fuel tank caps were unlatched, allowing fuel to be vented overboard during flight. It was subsequently reported that the refueller had been specifically instructed by a previous company pilot not to latch the fuel caps after refuelling. This procedure required the fuel contents to be checked, then the fuel caps to be fastened, by the pilot-in-command. The new pilot of VH-USP was aware of this procedure, however, when he failed to check the fuel caps there was no fail-safe capability to prevent a consequent loss of fuel during flight.