# Aviation Safety Investigation Report 199400232

## Weatherly Aviation Company Ltd 620B

## 31 January 1994

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# 199400232

**Occurrence Number:** 199400232 **Occurrence Type:** Accident
**Location:** Mount Murray
**State:** VIC **Inv Category:** 3
**Date:** Monday 31 January 1994
**Time:** 1515 hours **Time Zone** ESuT
**Highest Injury Level:** Fatal
**Injuries:**

| | Fatal | Serious | Minor | None | Total |
|---|---|---|---|---|---|
| Crew | 1 | 0 | 0 | 0 | 1 |
| Ground | 0 | 0 | 0 | 0 | 0 |
| Passenger | 0 | 0 | 0 | 0 | 0 |
| **Total** | **1** | **0** | **0** | **0** | **1** |

**Aircraft Manufacturer:** Weatherly Aviation Company Ltd
**Aircraft Model:** 620B
**Aircraft Registration:** VH-WEK **Serial Number:** 1551
**Type of Operation:** Commercial Fire Control
**Damage to Aircraft:** Substantial
**Departure Point:** Snowy Range
**Departure Time:** 1510 ESuT
**Destination:** Snowy Range

**Crew Details:**

| Role | Class of Licence | Hours on Type | Hours Total |
|---|---|---|---|
| Pilot-In-Command | Commercial | 47.0 | 11707 |

**Approved for Release:** Thursday, March 9, 1995

The aircraft arrived at Snowy Range airstrip from Moorabbin at 1245 ESuT to participate in fire-bombing operations. Three fire-bombing flights to Mt Murray were completed. The aircraft was then reloaded and refuelled prior to the next flight which departed Snowy Range at 1455. At 1515, the pilot of a spotter aircraft, participating in the fire fighting operation at Mt Murray, reported that VH-WEK had crashed while completing a fire-bombing run.

There were numerous firefighters who witnessed VH-WEK make its bombing run, some also witnessing the accident. A media helicopter crew recorded on video the aircraft making its bombing run and the accident sequence. From these sources, it was established that the aircraft made its bombing run flying up a steep slope on Mt Murray. The retardant was dropped and, about four to five seconds later, the aircraft appeared to commence a left turn. It was apparent from the video that airspeed was rapidly decreasing at this time. The aircraft appeared to stall, after which it struck trees and crashed.

Immediately after the accident, the helicopter pilot flew his aircraft to about 100 feet above the trees in the vicinity of the accident site but reported that due to downdrafts he was unable to sustain slow speed flight. He then repositioned his aircraft to about 500 to 600 feet above the accident site where he was able to sustain slow speed flight.

Witnesses reported that the engine of VH-WEK was at high power until the time the aircraft hit the trees. The previous bombing run was also made up-slope and the aircraft recovered via a wingover manoeuvre. Witnesses estimated that the aircraft was higher above the trees on the first run than it was on the accident run.

The investigation did not disclose any aircraft defect that could have contributed to the accident. The pilot probably elected to fly up-slope for greater bombing accuracy. However, up-slope runs create a difficult situation for exiting the valley at the completion of the run. An up-slope run also limits the options available in the event of an encounter with a downdraft, an adverse windshift or a mechanical malfunction that prevents the load being dropped. The reason for the apparent loss of airspeed as the aircraft completed the fire bombing run may be attributable to the reported downdrafts. However, this could not be positively determined.

Factors

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

1. The pilot flew the fire-bombing run up a steep slope.

2. After the load was dropped, there was a loss of airspeed to the extent that a recovery after completion of the bombing run was not possible.

3. Downdrafts were evident at the time of the accident.