

**Aviation Safety Investigation Report  
198801404**

**Piper PA25-235 (Pawnee)**

**9 November 1988**

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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](http://www.atsb.gov.au).**

**Occurrence Number:** 198801404                      **Occurrence Type:** Accident  
**Location:** "Deddick River" (24 km NE of Gelantipy) VIC  
**Date:** 9 November 1988                      **Time:** 900  
**Highest Injury Level:** Fatal  
**Injuries:**

	Fatal	Serious	Minor	None
Crew	1	0	0	0
Ground	0	0	0	-
Passenger	0	0	0	0
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Aircraft Details:** Piper PA25-235 (Pawnee)  
**Registration:** VH-SEH  
**Serial Number:** 25-7405565  
**Operation Type:** Aerial Work  
**Damage Level:** Destroyed  
**Departure Point:** "Deddick Park" (20 km NE of Gelantipy) VIC  
**Departure Time:** 0830  
**Destination:** "Deddick Park" VIC

**Approved for Release:** June 27th 1989

#### **Circumstances:**

In sunny conditions with clear visibility and a slight easterly wind drift, the pilot was spraying a paddock of thistles with a herbicide. He had inspected the job site on the ground two days earlier. Because of the mountainous terrain, the pilot flew a left hand racetrack pattern. The spray runs were flown at about ten feet above ground level. The fourth spray run was to the south and encountered clumps of trees. Near the end of the run, the outboard section of the right wing collided with a seven metre high tree removing about one metre of the top of the tree. Almost immediately the aircraft carried out a very steep climbing turn to the right and the engine noise diminished as if the pilot had closed the throttle. The aircraft then descended in a steep, nose down attitude. There was no witness to the aircraft's impact with the ground. Wreckage layout confirmed that it impacted the ground in a nose low attitude with wings almost level. There was no ground slide. For reasons unknown, the pilot did not dump the load of herbicide after hitting the tree. At ground impact the hopper burst out of the airframe and the fuel tank, containing an inner rubber liner, ruptured. The fuel ignited and the aircraft was destroyed by fire. Whether the aircraft became uncontrollable after the tree strike remains unknown. The aircraft was serviceable prior to impacting the tree despite confirmation of minor right wing damage after a previous tree strike on 27 October 1989 by the same pilot at a previous job site. A simulated spray run has since been flown over the same ground by an agricultural pilot flying instructor. The impacted tree was difficult to see because of a larger clump of trees in the immediate foreground. Also, it partially blended into a treed hill of similar hue about 500 metres beyond. There was no practical need to fly the run as low as ten feet and doing so would have been unnecessarily dangerous. It is possible that the pilot closed the throttle while mistaking it for the spray lever after the tree collision. The pilot had successfully flown sixteen hours of spraying operations in the same mountainous terrain during the week prior to the fatal accident.

#### **Significant Factors:**

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

1. The tree with which the aircraft collided was difficult to see.
2. The spray run was in difficult, mountainous terrain.
3. The pilot was flying unnecessarily low.
4. The aircraft may have been uncontrollable after the tree strike.
5. The pilot did not dump the load of herbicide.
6. The pilot probably mistakenly closed the throttle after the tree strike.