

**Aviation Safety Investigation Report
198803444**

Piper PA25-260

19 March 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.

Occurrence Number: 198803444 **Occurrence Type:** Accident
Location: Mt Sylvia (30 km South of Gatton) QLD
Date: 19 March 1988 **Time:** 800
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	1	0

Aircraft Details: Piper PA25-260
Registration: VH-PXO
Serial Number: 25-4497
Operation Type: Aerial Work (Agricultural Spraying)
Damage Level: Destroyed
Departure Point: Gatton QLD
Departure Time: 0745
Destination: Gatton QLD

Approved for Release: 12 January 1989

Circumstances:

The pilot was spraying a bean crop in a valley. During a procedure turn the aircraft began to sink towards trees on the side of the valley. The pilot immediately applied full power and dumped the load, but the sink could not be arrested and the aircraft struck the trees. When the sink was encountered the pilot was committed to continue the turn to avoid terrain. The surface wind in the valley was a light southerly breeze, but there was a strong south-easterly at 2000 feet. The pilot had sprayed the field on previous occasions, and was familiar with the local area. The sink experienced on this occasion was considered to be the result of the strong wind at height combined with the local topography. This type of situation is documented in the Agricultural Pilots Manual. No faults were found with the aircraft that may have contributed to the occurrence. It was evident that when the sink occurred the performance available from the aircraft was insufficient to enable the pilot to avoid collision with the trees.

Significant Factors:

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

1. The surface wind was a factor in the pilot's decision to carry out the spray runs in a direction which placed the procedure turn in proximity to the hill.
2. The pilot encountered a downdraft near the hill when committed to continue the procedure turn.
3. Aircraft performance was insufficient to enable the pilot to avoid trees on the flight path.
4. The effect of terrain and wind at altitude combined to create a dangerous situation near the ground.

Reccomendations:

A recommendation has been made to the Civil Aviation Authority that an article be published in the Aviation Safety Digest to highlight the dangers associated with flying in close proximity to mountain ranges in strong wind conditions.