

**Aviation Safety Investigation Report
199000010**

PA25-235

21 June 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: 199000010 **Occurrence Type:** Accident
Location: 15 km northwest of Tumby Bay SA
Date: 21 June 1990 **Time:** 1600
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: PA25-235
Registration: VH-BCP
Serial Number: 25-4386
Operation Type: Aerial work
Damage Level: Destroyed
Departure Point: Tumby Bay SA
Departure Time: 1545
Destination: Tumby Bay SA

Approved for Release: 18th June 1991

Circumstances:

Following a similar wire strike accident to another company aircraft earlier in the day, a second pilot and aircraft were brought in to complete the spraying task. The second pilot had flown 30 hours on agricultural tasks during the three weeks leading up to the accident. For approximately nine months prior to resuming agricultural operations, the pilot had been engaged in fish spotting operations. During an aerial survey of the treatment area the pilot observed a 19kV Single Wire Earth Return (SWER) powerline running south to north across the property's northern boundary. The span between support poles was 860 metres. At the property owner's request the Electricity Trust of SA (ETSA) had attached marker flags to that portion of the powerline above the owner's property. Following the survey, the pilot laid a smoke trail to ascertain wind speed and direction. The wind was evaluated to be a light south westerly. The pilot had intended to use the flags on the powerline as visual markers to indicate his passage beneath the powerline. Spraying started along the northern boundary flying east to west with the pilot pulling up into a right turn before the SWER powerline. On completion of the second run to the west, and while the aircraft was above trees in the adjacent property, the pilot was unable to sight the flags on the wire to the south of the aircraft flight path. With the flags unsighted, and no positive ground marker to indicate wire passage, the pilot, estimating that he had underflown the wire, pulled up into it. The aircraft struck the powerline with the left wing and windscreen cable cutter. The aircraft slid along the powerline and rolled over the top to impact the ground in a steep nose and left wing down attitude. The pilot evacuated the aircraft unassisted. Post ground impact fire destroyed the aircraft.

Significant Factors:

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

1. The pilot lacked recent flying experience in agricultural operations and below obstruction height flying.

2. The presence of marker flags on the powerline deceived the pilot into thinking that he could rely on these flags as wire passage markers.

3. The pilots survey of the property was inadequate. Specifically he failed to mentally note the location of the powerline in relation to the ground topography, and, being unable to select a positive ground feature had failed to arrange for a marker on the ground to give visual indication of wire passage.³⁻

Reccomendations:

1. That the Civil Aviation Authority give consideration to reducing the calendar period for the flight test nominated in Civil Aviation Orders section 40.6 para 11 from 12 months to 90 days.

2. That the Civil Aviation Authority specify a syllabus for, and the qualifications of the person conducting, agricultural proficiency checks in accordance with Civil Aviation Order 40.6.