

**Aviation Safety Investigation Report
199003078**

Snow Commander 600 S2D

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: 199003078 **Occurrence Type:** Accident
Location: Nandowrie, 100 km South-West of Emerald QLD
Date: 21 June 1990 **Time:** 1210
Highest Injury Level: Nil
Injuries:

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

Aircraft Details: Snow Commander 600 S2D
Registration: VH-SCY
Serial Number: 600-1383D
Operation Type: Aerial Work
Damage Level: Substantial
Departure Point: Nandowrie QLD
Departure Time: 1140
Destination: Nandowrie QLD

Approved for Release: 28th August 1990

Circumstances:

The pilot had been spreading Graslan, a herbicide, about five kilometres from an agricultural airstrip. The aircraft was being flown back to the strip at about 300 feet above ground level when suddenly, the engine developed a severe vibration. The pilot diagnosed a propeller blade failure and shut the engine down before it shook itself out of its mounts. The pilot chose the clearest area available for the forced landing, a sloping paddock covered in windrows consisting of recently bulldozed trees. The aircraft encountered one such heap of timber during its 60 metre ground roll. Post flight inspection found a 21 centimetre tip missing off one of the two propeller blades. Specialist metallurgical examination of the fracture surface indicated that the loss of the propeller tip was due to metal fatigue. The fatigue failure was initiated from an improperly blended mark caused by previous foreign object damage.

Significant Factors:

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

1. Fatigue fracture of propeller blade.
2. Improper maintenance by maintenance personnel.
3. Forced landing on unsuitable terrain.