Aviation Safety Investigation Report 198903838

Drifter A503

24 May 1989

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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: 198903838 **Occurrence Type:** Accident
Location: Tinderry Station, 75 km N of Thargomindah QLD
Date: 24 May 1989 **Time:** 640
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: Drifter A503
Registration: AUF 25-0204
Serial Number: A-204
Operation Type: Sport Aviation
Damage Level: Substantial
Departure Point: Tinderry Station QLD
Departure Time: 0635
Destination: Tinderry Station QLD

Approved for Release: 28th November 1989

Circumstances:

The pilot reported that shortly after establishing cruise at 300 feet above ground level the aircraft suddenly began to shake as if something had been thrown into the propeller. The engine stopped shortly afterward and, after establishing a glide and making a radio call, the pilot attempted to restart the engine. The engine would not turn over. A landing amongst scattered scrub and clumps of grass was made. Examination of the propeller disclosed that one blade had failed due to a large fatigue crack adjacent to the mounting holes in the blade root. The blade had then severed a bracing wire running between the wing trailing edge and the fuselage behind the propeller. The wire had become entangled in the other propeller blades. The propeller blades were constructed of fibreglass strands in a resin matrix covered with a layer of carbon fibre cloth. Visual and x-ray examination of the blades indicated that the strands were not uniform in direction in the area of the blade roots, some sections had no strands at all, and there were voids in the matrix. These faults reduced the strength of the blades in that area. All blades showed evidence of fatigue cracking near the mounting holes. The holes had been made by multiple drilling. The blade manufacturer advised that he was aware of the faults and had altered the production method. He had advised all owners of similar blades of the deficiencies. This accident was not the subject of a formal on-scene investigation.

Significant Factors:

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

1. Inadequate manufacturing standard of propeller blade.

2. Fatigue failure of propeller blade.

3. Forced landing on unsuitable terrain.