Aviation Safety Investigation Report 199600051

de Havilland Aircraft Tiger Moth

06 January 1996

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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.

Aviation Safety Investigation Report

199600051

The Bureau did not conduct an on scene investigation of this occurrence. The information presented below was obtained from information supplied to the Bureau.

Occurrence Number: 199600051 **Occurrence Type:** Accident
Location: 2km S Mount Compass
State: SA **Inv Category:** 4
Date: Saturday 06 January 1996
Time: 1300 hours **Time Zone** CSuT
Highest Injury Level: None

Aircraft Manufacturer: de Havilland Aircraft
Aircraft Model: DH-82
Aircraft Registration: VH-BLH **Serial Number:** T303
Type of Operation: Non-commercial Pleasure/Travel
Damage to Aircraft: Destroyed
Departure Point: Kensington Airstrip SA
Departure Time: 1300 CSuT
Destination: Old Noaralunga SA

Crew Details:

Role	Class of Licence	Hours on Type	Hours Total
Pilot-In-Command	Private	600.0	1200

Approved for Release: Friday, November 8, 1996

The pilot, accompanied by a passenger, was departing from an airstrip which had a dry short grass surface, aligned in an east west direction, and located on the top of a lightly timbered hill. The weather was reported as being fine, with a gusty 10 - 15kt wind blowing from the south west.

The pilot stated that he had ascertained the crosswind component was within the limits for the aircraft before commencing a take off towards the west. He reported that the engine power and acceleration were normal, but after becoming airborne he noticed the aircraft appeared to be sluggish, and slow to climb. The automatic wing slats had deployed indicating the aircraft was at, or near its stall speed. He had difficulty maintaining directional control, and the aircraft veered to the right.

He considered rejecting the take off, but as the aircraft was moving with a sideways motion he decided to allow it to accelerate in ground effect rather than chance a landing which may have impose a side load to the landing gear, and the possibility for it to collapse.

The pilot believed the wind gusts increased and changed to a tailwind component, further reducing the aircraft's climb performance. As the aircraft departed from the airstrip area the pilot was unable to arrest the sideways drift before colliding with a tree.

The aircraft was extensively damaged, and the pilot was unable to turn the fuel off as the selector was inaccessible due to airframe distortion. He evacuated himself from the rear cockpit, then assisted the passenger to exit from the front cockpit. During the evacuation smoke was observed around the front cockpit floor area, which originated from fuel contacting the hot engine and exhaust. The aircraft then became engulfed in flames, resulting in an extensive grass/bushfire.

It is possible that the pilot raised the aircrafts tail too soon at the commencement of the take off run before effective rudder control could be established. The propeller slipstream direction allows the wash to contact the right side of the rudder imposing a tendency for the aircraft to swing right. This would have been aggravated by the aircrafts slow forward speed, and the crosswind from the left.

The slow airspeed, crosswind, and/or the reported wind changes, would have caused difficulties for the pilot to maintain and/or recover directional control.