Aviation Safety Investigation Report 199501060

Howard Hughes Engineering Pty Ltd Lightwing

08 April 1995

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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.

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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: 199501060 **Occurrence Type:** Accident
Location: Yelka Station
State: NSW **Inv Category:** 4
Date: Saturday 08 April 1995
Time: 1630 hours **Time Zone** EST
Highest Injury Level: Fatal
Injuries:

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

Aircraft Manufacturer: Howard Hughes Engineering Pty Ltd
Aircraft Model: GA-55 LIGHTWING I
Aircraft Registration: 25-0709 **Serial Number:**
Type of Operation: Non-commercial Practice
Damage to Aircraft: Destroyed
Departure Point: Yelka Station NSW
Departure Time:
Destination: Yelka Station NSW

Crew Details:

Role	Class of Licence	Hours on Type	Hours Total
Pilot-In-Command	Private	14.0	90

Approved for Release: Wednesday, December 13, 1995

The aircraft had only recently been acquired, and the pilot had received instruction on its operating characteristics. He was also briefed on low altitude stalls, engine failures and mustering techniques, although this did not constitute a low flying/mustering endorsement.

On the day of the accident the pilot flew the aircraft from one property to another, where he assisted with some farm duties. At about 1500 EST he departed to return to the original property, maintaining CB radio contact with his father for part of the flight. However, this radio contact was lost as the aircraft descended for a landing.

Later that evening, when there had been no further contact with the pilot, and he could not be found at the property, a search was instigated which went well into the night, but failed to find him or the aircraft. An aerial search of the area next morning found the burnt out wreckage of the aircraft, with the pilot still inside, in low scrub, approximately 90 metres east of the north/south airstrip, and 400 metres south of its northern threshold.

Examination of the wreckage indicated that the aircraft probably had been flying in a westerly direction towards the airstrip when it impacted the ground in a steep nose down attitude, creating a crater, 10 - 15 cm deep in the sandy soil. The wooden propeller had shattered, and sections of its blades were thrown up to 14 metres from the point of impact. The battery had separated from its attachment at impact, probably causing sparks which ignited fuel from the ruptured right fuel tank. The resulting fire engulfed the aircraft, consuming all combustible items, including the airframe fabric covering, cabin trim, seat belt webbing and instrument panel.

The intense heat of the fire melted a large portion of the engine, distorted the wing leading edges, and softened the fuselage metal tubular frame, causing the rear fuselage section frame, being at a steep angle, to collapse.

Other than fire damage, the aircraft suffered only minor distortion to the cabin area and landing gear at impact. The right side of the engine frame distorted and bent up, with the engine being pushed back only as far as the firewall.

The aircraft was last seen with the cabin doors fitted, but these had been removed after its return, and left in the hangar where they were found after the accident. The pilot then flew the aircraft again in this condition, possibly practicing some of the low flying skills he had recently been taught.

The day was fine with a light and variable wind, mainly from the south-west. There were no power lines, or other high obstacles, such as trees, in the area with which the aircraft may have collided. The aircraft was new and there were no indications that it was other than serviceable prior to the accident. The pilot was reported as being healthy and in good spirits.

Even though the pilot had received injuries to his head and limbs, he had not been thrown violently forward in his seat, and the aircraft did not appear to have moved or bounced after its initial contact with the ground, suffering only minimal impact damage. This would indicate that the aircraft impacted the ground at a slow speed, possibly following a stall at a low height from which the pilot was unable to recover.

The throttle was found to be near the full forward (open) position, but bent downward, probably by exertion of the pilots hand at impact. From the propeller damage, and throttle position, it would appear that the engine was delivering a considerable amount of power at the time of the accident, possibly as the pilot attempted a stall recovery.

Because of the condition of the aircraft due to fire damage, the lack of witnesses, and the absence of other evidence, the factors leading to the cause of the accident could not be positively determined.