## **Aviation Safety Investigation Report 198802415**

Lancair 235

**23 December 1988** 

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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: 198802415 Occurrence Type: Accident

**Location:** Ballina Airport NSW

**Date:** 23 December 1988 **Time:** N/A

**Highest Injury Level:** Nil

**Injuries:** 

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	1
Total	0	0	0	2

Aircraft Details: Lancair 235
Registration: VH-HTD
Serial Number: N149
Operation Type: Aerial work
Damage Level: Substantial
Departure Point: Ballina NSW

**Departure Time:** 1105 **Destination:** N/K

**Approved for Release:** 23rd March 1990

## **Circumstances:**

The pilot was preparing to depart with a crosswind of about 15 knots from the right. At the time, the aircraft left wing fuel tank was about two thirds full, while the right tank was empty. The pilot performed a flapless take-off, rotating the aircraft at 50 knots, then climbed using a higher than normal nose attitude. Shortly afterwards the aircraft commenced to roll to the left, probably because of the low airspeed, and the lateral weight imbalance. The pilot attempted to raise the left wing by use of the aileron, but the aircraft stalled and struck the ground in a left wing low, 20 degree nose down attitude. The aircraft was still undergoing flight testing for type certification and its Certificate of Airworthiness. Data obtained from the test flight schedule indicated that the normal lift-off speed for this aircraft is 63 - 65 knots, with a 48 knot stalling speed in the zero flap configuration. The pilot indicated that he had lifted the aircraft into the air at 50 knots on previous occasions, but this would have been done under more ideal conditions. The reason he attempted to take off below the recommended airspeed was on this occasion not determined. This accident was not the subject of an on-site investigation.

## **Significant Factors:**

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

- 1. The pilot rotated the aircraft at a speed below the optimum take-off speed.
- 2. The pilot failed to maintain flying speed.
- 3. Loss of control with insufficient height available to effect a recovery.