Aviation Safety Investigation Report 199803536

Amateur Built Aircraft Q-200

30 August 1998

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Aviation Safety Investigation Report

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Occurrence Number: 199803536 Occurrence Type: Accident

Location: Shepparton, Aerodrome

State: VIC **Inv Category:**

Sunday 30 August 1998 Date:

1730 hours Time Zone **EST** Time:

Highest Injury Level: None

Aircraft Manufacturer: Amateur Built Aircraft

Aircraft Model: **O**2

Aircraft Registration: VH-OMW Serial Number: Q046

Type of Operation: Non-commercial Pleasure/Travel

Damage to Aircraft: Substantial **Departure Point:** Shepparton Vic.

1645 EST **Departure Time:**

Destination: Shepparton Vic

Crew Details:

Hours on Role **Class of Licence Type Hours Total** Pilot-In-Command Private 312

Approved for Release: Wednesday, October 14, 1998

The pilot advised the Bureau that while flying his Quickie Q2 aircraft in the circuit at Shepparton Vic. he felt that the aircraft was not responding as usual to control inputs. The pilot said that during the roll out after a smooth landing the right canard failed. The propeller was damaged when it contacted the runway after the canard failed.

Arrangements were made for examination of the failed components by the Civil Aviation Safety Authority's structures specialists. It was determined that the upper surface of the canard had failed under a single application of a compression load parallel with the plane of the skin. The inner structure of the section showed damage that was consistent with the upper surface being under compression. Examination of the composite materials indicated that there was no apparent degradation of the matrix. Given these features it was considered that the wing had failed as a result of a large sudden upward force on the wing.

There were many witnesses to the events on the day. It was determined that when the pilot arrived at the airfield and declared his intention to fly the Q2, a highly experienced local pilot advised the Q2 pilot to take some instructional flying in a Pitts Special aircraft that was available. The Q2 pilot declined the offer even though he had only very limited recent flying experience, non of which was in an aircraft comparable to the Q2.

Witnesses advised that during the takeoff the aircraft had been lifted off too early at a very low airspeed. Immediately after lift off the pilot encountered control difficulties, however these were overcome and the aircraft was flown out of the circuit towards the training area. Ten minutes later the aircraft was observed overhead the airfield and was manoeuvred to join crosswind for runway 18. The aircraft was observed to be flying very slowly on the final approach and after touch-down commenced porpoising. The aircraft veered to the left, continued to porpoise, and then veered right, back across the runway. The pilot applied considerable power and lifted the aircraft off the runway at very low speed with a high nose attitude. At approximately 3 metres above the runway the aircraft stalled, dropped to the right and impacted on the right canard which fractured. The aircraft slewed and came to rest. The pilot evacuated without assistance.

The investigation determined that this was most probably the pilot's first flight in the aircraft. He had purchased it 28 months before the accident, and, while he informed the Bureau that he had flown the aircraft for 5 hours, changes and deletions in his pilot's log book precluded verification. The investigation was told that the pilot had been observed taxiing the aircraft but this was the first time the pilot had been observed to fly the aircraft.

Witnesses stated that on one occasion while taxiing fast the pilot lost control and the aircraft was damaged. This accident was not reported and the repairs were not reflected in the aircraft's log books.

It is probable that the accident occurred because the pilot had no experience on the type, had very limited recent flying experience, and lost control of the aircraft on landing.