

**Aviation Safety Investigation Report  
199303141**

**Freedom Aerolites  
Sapphire**

**12 September 1993**

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Witnesses reported that they had observed the aircraft flying in a south westerly direction at an altitude of approximately 150 ft. The aircraft was observed to be flying at a constant speed with the engine noise remaining constant. A father and son said that they waved as the aircraft flew over where they were standing and the pilot acknowledged by waving back to them. The aircraft then banked steeply to the right, with the bank angle estimated to be 90 degrees. At approximately 180 degrees into the turn, the aircraft was observed to stall. At this point the nose dropped and the aircraft proceeded to rotate. The aircraft was in a steep nose down wings level attitude, when the aircraft crashed through the safety rails of a bridge and impacted the ground, fatally injuring the pilot. The point of impact was approximately 75m from where the witnesses were standing.

Examination of the wreckage did not find any pre-existing defects that would preclude normal operation of the aircraft. There was no evidence that the pilot had any pre-existing medical conditions that would affect his ability to fly the aircraft. The pilot had accumulated some 188 hours flying time in ultra light aircraft, the majority of which was in this aircraft. He was currently undergoing additional flying training to gain his Private Pilots Licence.

### Analysis

The final flight path observed by the witnesses during the turn was consistent with the aircraft stalling and entering an autorotation. In attempting the manoeuvre, the pilot allowed the aircraft performance to degrade by not maintaining sufficient airspeed, resulting in the aircraft departing controlled flight at an altitude insufficient to recover.

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