

**ACCIDENT**

<b>Aircraft Type and Registration:</b>	Acrosport 1, G-BSHY	
<b>No &amp; Type of Engines:</b>	1 Lycoming O-290-G piston engine	
<b>Category:</b>	1.3	
<b>Year of Manufacture:</b>	1992	
<b>Date &amp; Time (UTC):</b>	2 May 2005 at 1300 hrs	
<b>Location:</b>	Private airstrip near Keal Cotes, Lincolnshire	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 1	Passengers - None
<b>Injuries:</b>	Crew - 1 (Serious)	Passengers - N/A
<b>Nature of Damage:</b>	Aircraft damaged beyond repair	
<b>Commander's Licence:</b>	Private Pilot's Licence	
<b>Commander's Age:</b>	65 years	
<b>Commander's Flying Experience:</b>	1,712 hours (of which 375 were on type) Last 90 days - 2 hours Last 28 days - 1 hour	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

**History of the flight**

The pilot was attempting to land at a private grass airstrip which was about 1,300 ft (396 m) long and had a hedgerow about 12 ft high running perpendicular to it, approximately half way down its length. The landing strip was orientated 130°/310° and had a tree situated beyond the hedgerow, towards the far end of the strip and close to the left hand edge when viewed from the 310° direction. The tree was about 40 ft high.

The aircraft was a single seat biplane which offered little forward view when on the ground due to its tail-wheel type landing gear. The forward view was also limited in the air, especially after takeoff or during a go-around

due to the aircraft's nose-up climbing attitude. During landing, in order to gain a clear view ahead, the pilot would sideslip the aircraft slightly to gain a forward view down the side of the aircraft, rather than attempting to look over the nose. When approaching the strip from the north, his normal practice was to sideslip to the left after flying a left hand circuit. On the day of the accident the weather was good with only light and variable winds but the pilot flew the circuit to the right to avoid helicopter traffic and he sideslipped to the right on finals.

The pilot did not have a good recollection of the accident. He reports landing on the airstrip in the 310° direction.

He remembers landing 'long' having misjudged the approach and as a result initiating a go-around. During the go-around he was suddenly aware of the top of the tree next to the strip directly ahead of him. In an attempt to avoid the tree the pilot pulled the aircraft near vertical, however the bottom of the aircraft collided with the branches, the force of the impact pushing the main landing gear assembly into the cockpit area causing multiple fractures to his ankles and lower legs. The aircraft struck the ground about 20 ft beyond the tree, sideways on, and on its right hand side. The pilot was able to switch off the electrical master switch and he reports the fuel tanks had ruptured, covering him with fuel. He was unable to open the canopy, the mounts of which had become distorted, but he was able to punch a hole through the plastic transparency. By this time a colleague, who had been watching the landing, arrived at the aircraft and was able to enlarge the hole sufficiently to extricate the pilot.

There was no fire and the pilot considers that he would have been able to extricate himself without any help, but with considerably more difficulty in view of his leg

injuries. He sustained no other major injuries, a fact that he attributes to the strength of the fuselage, his four point harness and his wearing of a protective flying helmet. The top of the helmet showed evidence of damage caused by impact with the canopy mounting.

#### **Pilot's assessment of the causal factors**

The pilot's report was quite frank and he attributed the accident to his failure to maintain the runway centreline and being unable to see the tree ahead. He was familiar with the strip and was aware of the presence of the tree. He believes that during the approach, his sideslip to the right meant the tree was masked by the nose of the aircraft. The tree remained masked from view during the subsequent touchdown and go around and it only became apparent when it was too late to avoid.

The accident serves to act as a reminder of the hazards that obstacles at such airstrips present, even when pilots are aware of them. It also serves to show that appropriate safety equipment, such as helmets and four point harnesses, can and do save lives. The tree has now been cut down.