ACCIDENT

Aircraft Type and Registration: Piper PA-28-140 Cherokee, G-ASPK

No & Type of Engines: 1 Lycoming O-320-E2A piston engine

Year of Manufacture: 1964

Date & Time (UTC): 19 December 2005 at 1408 hrs

Location: Land's End Airfield, Cornwall

Type of Flight: Training

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Damage to nose landing gear, engine cowling, wings

and windscreen

Commander's Licence: Student pilot

Commander's Age: 62 years

Commander's Flying Experience: 85 hours (of which 84 were on type)

Last 90 days - 13 hours Last 28 days - 5 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The student pilot was returning from an uneventful solo navigation exercise. There was a light south-westerly wind of about five knots, the visibility was greater than 10 km and the cloud base was at 2,200 ft amsl. Runway 25 was in use, which is a grass runway 695 m in length; however, a displaced threshold reduces the landing distance to 630 m.

Following a stable approach at 80 to 85 mph, with full flap selected, the aircraft was reported to have made a smooth landing, touching down further along the damp, grass runway than normal. With idle power selected, the pilot allowed the aircraft to slow to about 40 mph before applying the brakes, which are hand operated. The aircraft veered rapidly to the left, through approximately 30°; the pilot released the brakes and tried to regain

directional control. He stated that no amount of pressure on the right rudder pedal would turn the aircraft back to the right and, because the aircraft was heading towards a boundary hedge, he reapplied the brakes, with the result that the aircraft veered further to the left as it slowed down. The pilot estimated that the aircraft struck the hedge at about 25 mph and then stopped. Uninjured, he vacated G-ASPK without delay through the cockpit door and, although there was a smell of fuel, reported that there was no fire. The aircraft sustained damage to the spinner, nose landing gear, engine cowling, wings, and windscreen.

The pilot was unable to explain why the aircraft had veered to the left after he had applied the brakes and why he could not correct the turn. He considered that it

was possible that either there had been uneven braking due to the damp surface conditions or that he had been pushing against a part of the aircraft structure other than the right rudder pedal.

Two witnesses considered that the aircraft had landed longer than usual and one thought that the combination of that and the aircraft's speed was going to result in the aircraft going around. The other witness, the authorising instructor, commented that once the aircraft had veered through 30° or more it would have been very difficult to regain the original heading, especially on a damp, grass surface. He had estimated the braking action as being medium/good. An initial examination of the brakes confirmed that, when progressively applied, they operated correctly and acted evenly on both main wheels. A photograph taken after the accident, of the aircraft's tracks across the grass surface, reveals a steady, continuous turn to the left.