

ACCIDENT

Aircraft Type and Registration:	Piper PA-18-150 (Modified) Super Cub, G-BEOI	
No & Type of Engines:	1 Lycoming O-360-A4A piston engine	
Year of Manufacture:	1976	
Date & Time (UTC):	7 April 2010 at 1415 hrs	
Location:	Parham Airfield, West Sussex	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Propeller tips bent, engine shock-loaded and minor structural damage to the nose	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	73 years	
Commander's Flying Experience:	5,323 hours (of which 45 were on type) Last 90 days - 7 hours Last 28 days - 3 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Summary

On landing, the aircraft veered to the left and departed the runway into an adjacent field. The pilot attempted to taxi back onto the runway but the main wheels dropped into a rut on the runway edge and the aircraft pitched forward onto its nose.

The pilot was wearing a new pair of ex-service flying boots which made it difficult to locate and operate the brake levers. This may have contributed to him not being able to maintain directional control.

History of the flight

The pilot departed from Runway 04 at Parham Airfield towing a glider. It was his fifth aero-tow of the day from

the runway, which was a mown grass strip approximately 660 metres in length and some 25 metres wide. He had not flown the aircraft for about three weeks, since a dual check lasting one hour, and it had been some six months since he had flown the aircraft prior to that. He was also wearing a new pair of recently purchased ex-service flying boots, which had thicker soles and heels compared to his normal footwear. The foot brakes on the aircraft were two upright metal levers in front of the rudder pedals angled forward towards the engine at an angle of about 45°. The brakes are operated using the heel of the foot.

The weather was good, with a wind of 310°/5-10 kt,

visibility in excess of 20 km and scattered cloud at about 3,000 ft. The glider released from the tow at 1,500 ft above the airfield and the tug was descended back towards the runway.

A side-slipping approach was made to Runway 04, with a normal touchdown at the intended point. Shortly after, the aircraft veered to the left and, despite application of right brake and rudder, the pilot could not prevent the aircraft departing the left side of the runway into the adjacent field. After entering the field, the right brake seemed to take effect and the aircraft turned sharply to the right. As the brakes appeared to be working correctly and crossing the ground between the landing strip and the adjacent field had been uneventful, the pilot elected to taxi back onto the runway.

As the aircraft crossed the edge of the runway, the main wheels entered a deep rut and the aircraft pitched forward onto its nose. The engine stopped immediately and the pilot isolated the fuel and electrical system before vacating the aircraft.

Analysis

Although the braking system was unusual to the pilot, he had not experienced any previous difficulty using it to maintain directional control, even in crosswinds of 10-15 kt. He could not rule out a short-term fault with the brakes, such as air in the system, but a post-incident functional check found them to be operating correctly. The pilot considered that his flying boots made it more difficult for him to locate and operate the foot brakes, and it may have been this that had prevented him from achieving effective braking and maintaining directional control of the aircraft on the runway.

Had the aircraft been stopped in the field at this point, no damage would have occurred. On reflection, the pilot thought it would have been wiser not to taxi over the unfamiliar surface of the adjacent field and try to taxi back onto the runway. It would have been safer to shut down the aircraft and ground handle it back onto the runway.