

Piper PA-25-235 Pawnee, G-ASLK, 10 September 2000

AAIB Bulletin No: 4/2000 Ref: EW/G2000/09/29 Category: 1.3

Aircraft Type and Registration: Piper PA-25-235 Pawnee, G-ASLK
No & Type of Engines: 1 Lycoming O-540-B2C5 piston engine
Year of Manufacture: 1963
Date & Time (UTC): 10 September 2000 at 1100 hrs
Location: Nympsfield Airfield
Type of Flight: Private
Persons on Board: Crew - 1 - Passengers - None
Injuries: Crew - None - Passengers - N/A
Nature of Damage: Minor damage to lower part of rudder
Commander's Licence: Private Pilot's Licence
Commander's Age: 35 years
Commander's Flying Experience: 587 hours (of which 112 were on type)
Last 90 days - 30 hours
Last 28 days - 5 hours
Information Source: Aircraft Accident Report Form submitted by the pilot

Upon returning to land at Nympsfield on his 5th glider towing sortie of the day, the pilot elected to land deeper than usual into the westerly grass runway to maintain adequate clearance between his tow rope and some cattle which had been grazing in a field immediately adjacent to the threshold end of the runway. The touchdown occurred just beyond a slight plateau in the undulating runway profile, on a slight downslope at a position roughly in line with the end of a row of trailers which were parked off to the right of the runway, some 50 to 65 metres distant. As the tail settled down onto the runway at an estimated speed of approximately 30 mph, the pilot started to brake normally. However, without any prior sign of 'fading' the left brake failed completely and the aircraft yawed through some 30° to 40° to the right before the pilot had time to release pressure on the right brake pedal, leaving the aircraft heading towards a car park despite the application of full left rudder. The pilot instinctively re-applied both brakes but, because only the right brake was working, the aircraft slewed further around to the right and began to slide as it continued towards the car park. The aircraft broke through a low wooden fence and finally came to rest just inside the corner of the car park, having damaged the lower part of its rudder. The pilot, who was not injured, shut down the engine and vacated the cockpit.

It was subsequently found that the left brake pedal was 'floppy' in operation due to lack of hydraulic pressure. However it was reported that 'with time the pressure returned', presumably with repeated applications of the brake pedal. The pilot also stated that this aircraft had had an on-going history of brake fluid seepage from the left brake system, resulting in the left brake becoming ineffective, and that this had been reported in the 'Daily Inspection book' on several occasions. The brake system hydraulic reservoir had then been topped up with fluid after such reports, pending the aircraft undergoing the next 150 hr check. When the aircraft was later undergoing the 150 hr check at a maintenance organisation where this pilot was also employed, he queried the brake defect and was informed that its rectification was being deferred until the Annual Inspection, which was due in December 2000. The pilot was unable to say whose decision this had been.

The pilot also commented that had the rudder-to-tailwheel interconnecting springs been installed, it might have been possible for him to have turned the aircraft during the few seconds between the initial swing and his final application of brakes.