

AAIB Bulletin No: 9/95

Ref: EW/G95/07/10

Category: 1.3

Aircraft Type and Registration: Piper PA-28-181 Cherokee Archer II, G-JOYT

No & Type of Engines: 1 Lycoming O-360-A4M piston engine

Year of Manufacture: 1979

Date & Time (UTC): 13 July 1995 at 1310 hrs

Location: Old Warden Airfield, Bedfordshire

Type of Flight: Private

Persons on Board: Crew - 2 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Minor to right wing, right aileron and nose landing gear spat

Commander's Licence: Private Pilot's Licence with IMC Rating

Commander's Age: 69 years

Commander's Flying Experience: 985 hours (of which 793 were on type)
Last 90 days - 84 hours
Last 28 days - 24 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The aircraft was inbound to Old Warden Airfield from Redhill with two qualified pilots on board. The commander, seated on the left, flew the departure and some 20 minutes into the flight handed control to the other pilot for the landing. The commander had earlier telephoned Old Warden for permission to land and was told that the preferred runway in use was 04/22, a grass runway 613 metres in length.

When the aircraft arrived overhead the airfield the flying pilot looked at the windsock and the signals square to determine the landing direction. The windsock was limp and there was no 'T' visible in the square. He therefore decided to land on Runway 04 and positioned the aircraft accordingly.

The weather conditions at the time were fine with no wind, good visibility and overcast cloud at 2,500 feet. The pilot reported that a rain shower had just crossed the airfield and was still in the vicinity.

As the aircraft crossed the threshold, the pilot noticed that the speed was 76 kt, a little faster than normal. The aircraft touched down an estimated 150 metres into the runway and as it reached the halfway point it had still not decelerated appreciably. Application of brake had little effect and it soon became apparent to the pilot that there was insufficient runway remaining within which to stop or attempt a go-around.

As there was no overrun available the pilot tried to turn the aircraft to the left on to a grass area adjacent to the boundary fence. After 70° of the turn however, the right wing contacted the ground, swinging the aircraft to the right. The aircraft came to rest with its nose buried in the boundary hedge. The switches were made safe and the cabin door, positioned on the right, was opened.

When the pilot, seated on the right, tried to vacate the aircraft he found that his left shoe had become jammed between the top of the brake pedal and the pedal suspension bar. In order not to hinder the egress of the commander he had to leave his shoe behind as he left the aircraft.

The commander assessed the cause of the overrun accident as being due to the fact that the runway was 'wet and bumpy' and that the aircraft crossed the threshold at a higher than normal speed. A slight downslope to the runway compounded the stopping performance problem.

Information

The CAA publish a General Aviation Safety Sense leaflet (No 7A) on aeroplane performance. This includes a table of the factors that should be applied to take account of the various weather and surface conditions that can affect the takeoff and landing performance of general aviation aircraft.