

No: 7/91 **Ref: EW/G91/06/06** **Category: 1c**

Aircraft Type and Registration: Piper PA-28-181, G-BLAW
No & Type of Engines: 1 Lycoming O-360-A4M piston engine
Year of Manufacture: 1981
Date & Time (UTC): 9 June 1991 at 1825 hrs
Location: Keyston airstrip, Cambridgeshire
Type of Flight: Private
Persons on Board: Crew - 1 Passengers - 3
Injuries: Crew - None Passengers - None
Nature of Damage: Right main gear leg detached plus damage to right wing
Commander's Licence: Private Pilot's Licence with Night rating
Commander's Age: 34 years
Commander's Flying Experience: 178 hours (of which 23 were on type)
Information Source: Aircraft Accident Report Form submitted by the pilot

The pilot and his three passengers departed from Luton airport at almost MTWA to fly to Keyston airstrip where the pilot had landed several times before. The airstrip is approximately 600 metres long and has a significant slope; landings are usually made up-slope in a northerly direction. The weather was suitable although the grass at Keyston was wet and the wind was south to south-westerly at 15 kt which produced a tailwind component of at least 10 kt down the strip.

The pilot joined the Keyston circuit and noted that the windsock indicated a southerly wind. He abandoned his first two approaches to land up-slope but on the third approach, when he was satisfied with the angle and airspeed, touchdown occurred a short distance into the strip. Although the pilot applied the wheelbrakes almost immediately, the aircraft failed to decelerate as rapidly as he expected and he perceived that the aircraft was likely to over-run the end of the strip. He applied full power to go-around and pulled back on the control wheel. The aircraft became airborne in a nose high attitude but did not accelerate or climb and so he closed the throttle and allowed the aircraft to touch down in a field beyond the airstrip. The aircraft came to rest upright and with the engine still running but minus the port main landing gear which had been ripped off in soft ground. The engine was shut down normally and all four occupants vacated the aircraft uninjured.

AIC 90/1990 (*Take-Off, Climb and Landing Performance of Light Aeroplanes*) includes a chart designed to give GA pilots guidance on safety factors which should be applied to the landing and take-off performance data contained in 'owners handbooks'. This chart indicates that under the prevailing conditions, the minimum safe landing distance required would have exceeded twice the distance required on a level tarmac runway in still-air conditions.

The pilot and his three passengers departed from Luton airport at almost MTWA to fly to Keyston where the pilot had landed several times before. The airstrip is approximately 600 metres long and runs north-south. The weather was generally clear with a light easterly wind. The pilot was flying at 15 ft when he touched down on the runway. The runway was wet and the wind was south to south-westerly at 15 kt which produced a tailwind component of at least 10 kt down the strip.

The pilot found the Keyston circuit and noted that the windsock indicated a southerly wind. He decided to fly the circuit and approach to land up-slope but on the third approach, when he was satisfied with the height and airspeed, touchdown occurred a short distance into the strip. Although the pilot applied the brakes immediately, the aircraft failed to decelerate as rapidly as he expected and he realised that the aircraft was likely to overrun the end of the strip. He applied full power to the engine and pulled back on the control wheel. The aircraft became airborne in a nose high attitude but did not accelerate or climb and so he closed the throttle and allowed the aircraft to touch down in a field beyond the airstrip. The aircraft came to rest upright and with the engine still running but minus the port main landing gear which had been ripped off in soft ground. The engine was shut down manually and all four occupants vacated the aircraft unhurt.