

Piper PA-38-112, G-BPJF

AAIB Bulletin No: 9/98 Ref: EW/G98/06/29 Category: 1.3

Aircraft Type and Registration: Piper PA-38-112, G-BPJF

No & Type of Engines: 1 Lycoming O-235-L2C piston engine

Year of Manufacture: 1978

Date & Time (UTC): 20 June 1998 at 1245 hrs

Location: Derby Airfield

Type of Flight: Private

Persons on Board: Crew - 1 - Passengers - 1

Injuries: Crew - None - Passengers - None

Nature of Damage: Both wings detached, fuel lines disrupted, propeller, left tailplane severely damaged

Commander's Licence: Private Pilot's Licence

Commander's Age: 43 years

Commander's Flying Experience: 120 hours (of which all were on type)
Last 90 days - 11 hours
Last 28 days - 1 hour

Information Source: Aircraft Accident Report Form submitted by the pilot

The aircraft was engaged on a private flight from Derby, returning to Woodford, Cheshire having arrived earlier the same day. The weather conditions for the day were generally good with a light southerly wind and visibility of 8 km in light rain showers.

On his arrival at Derby the pilot had experienced some difficulty in locating the airfield and subsequently had made two go-arounds before landing. On landing he touched down rather long and used all the available runway to bring the aircraft to a halt. On his departure half an hour later the pilot was concerned to make a better impression.

The take off was carried out on Runway 17 (Take Off Run Available 525 metres), a grass runway at the end of which there is another 75 metres of grass before a hedgerow. The pilot had only carried out two previous take offs from grass surfaces, and this was his first when the grass was wet. During the early part of the take off the pilot became absorbed with directional control which he found difficult due to a lack of centreline reference. He was distracted by this and when he later realised that acceleration was poor he felt that there was not enough runway remaining to be able to stop without causing damage to the aircraft. Observers stated that they had expected the aircraft to abort the take off, and the Airport Fire and Rescue Service were in motion before the impact. At a point some 30 metres before the boundary hedge the pilot raised the aircraft nose but the main wheels remained on the ground. The aircraft impacted the hedge, the wings were torn back, and it came to rest in a field the other side having slewed through 180°. The aircraft was on its port side and both occupants were able to vacate through the passenger door. There was a considerable amount of fuel spillage but there was no fire and the Airport Fire Services were rapidly on the scene.

The magnetos had been switched off by the pilot before he vacated the aircraft but the carburettor heat control was found to be partially on by the rescue crew. This control is a sliding lever and may have been moved when the pilot was escaping from the aircraft. Take off performance calculations factored for the ambient conditions at the aircraft weight indicate that 575 metres were required for the aircraft to reach a height of 50 feet. Any degradation of performance therefore would have made a successful take off unlikely. The pilot had qualified for his private licence a year earlier and all his training had been conducted on longer tarmac runways. The pilot considered that his lack of experience and relevant training led to his failure to abort the take off when he should have done. Both occupants were wearing lap belts and diagonal shoulder straps and were not injured.