

ACCIDENT

Aircraft Type and Registration:	Piper PA-28-140 Cherokee, G-BEEU	
No & Type of Engines:	1 Lycoming O-320-E2A piston engine	
Year of Manufacture:	1973	
Date & Time (UTC):	27 October 2009 at 1245 hrs	
Location:	Panshanger Airfield, Hertfordshire	
Type of Flight:	Training	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - None	Passengers - N/A Others - 1 (Serious)
Nature of Damage:	Nose gear damaged and wings pierced by a fence post	
Commander's Licence:	Commercial Pilot's Licence	
Commander's Age:	26 years	
Commander's Flying Experience:	460 hours (of which 180 were on type) Last 90 days - 150 hours Last 28 days - 40 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

The aircraft impacted the aerodrome boundary after the takeoff was aborted following an apparent loss of engine power.

History of the flight

The student and instructor were conducting touch-and-go landings on Runway 29 at Panshanger. On the fifth landing the aircraft touched down at approximately the mid-point of the runway, whose grass surface was wet. The instructor stated that when he applied power to take off again the aircraft became airborne but the engine "hesitated". He aborted the takeoff and applied brakes but was unable to stop the aircraft before it crossed a ditch and impacted a fence at the aerodrome boundary.

A man walking a dog along a footpath outside the airfield perimeter fence, stated that he was struck by the aircraft, which ran over and trapped the dog and caused him serious injury. The uninjured pilot and instructor vacated the aircraft without assistance.

Damage to the aircraft

The aircraft, though not substantially damaged, sustained several punctures from the fence posts and a bent propeller. Impact with the ditch and fence and collapse of the nose landing gear disrupted the engine air intake assembly to the extent that the maintenance organisation that inspected it after the accident was unable to determine what might have caused the engine to hesitate.

Discussion*Loss of engine power*

AAIB reports of accidents involving loss of engine power in similar circumstances have identified carburettor icing as a possibility. The report¹ of an accident involving an aircraft with a similar engine model noted that it is susceptible to rich cut in certain circumstances, particularly if the throttle is opened abruptly with carburettor heat selected.

Notices warning the public

Panshanger aerodrome is licensed by the CAA in accordance with Article 128 of the Air Navigation Order. A condition of this licence is that any public right of way crossing or bordering the landing area shall be:

'adequately sign-posted with notices warning the public of danger from aircraft.'

Signs indicating the presence of Panshanger aerodrome are placed at intervals along the fence that borders the end of Runway 29. The licence document does not define 'adequately' in this context but Civil Aviation Publication (CAP) 168 – *Licensing of Aerodromes* describes the process by which CAA inspectors will visit an aerodrome and determine the extent to which the aerodrome, its facilities, equipment and operational organisation meet the licensing requirements.

Footnote

¹ Report of the accident to G-BAKV, reference EW/G2006/09/04, published in AAIB Bulletin 2/2007.