

## ACCIDENT

<b>Aircraft Type and Registration:</b>	Piper PA-28-181 Cherokee Archer II, G-TSGJ	
<b>No &amp; Type of Engines:</b>	1 Lycoming O-360-A4M piston engine	
<b>Year of Manufacture:</b>	1980	
<b>Date &amp; Time (UTC):</b>	21 March 2009 at 1420 hrs	
<b>Location:</b>	Bourne Park, near Andover, Hampshire	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 1	Passengers - 3
<b>Injuries:</b>	Crew - None	Passengers - None
<b>Nature of Damage:</b>	Propeller strike, engine shock-loaded and nosewheel damaged	
<b>Commander's Licence:</b>	Private Pilot's Licence	
<b>Commander's Age:</b>	68 years	
<b>Commander's Flying Experience:</b>	360 hours (of which 260 were on type) Last 90 days - 4 hours Last 28 days - 4 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot and further enquiries by the AAIB	

### Synopsis

While landing on Runway 29 at Bourne Park, near Andover, the aircraft appears to have clipped a fence and landed in the undershoot, which was deeply rutted. The aircraft bounced and was substantially damaged on the subsequent landing.

### Additional information

Bourne Park Airfield has a 750 metre grass strip orientated 11/29 which slopes down to the west. There are white marker boards attached to a one metre high wire fence that crosses the undershoot of both runways, approximately 85 metre from the threshold. There is no radio facility.

Pooley's flight guide states that '*PPR [prior permission required] by telephone is essential.*' This is issued by the fixed wing maintenance facility.

### History of the flight

The pilot stated that he was flying to Bourne Park, near Andover, Hampshire, so that one of his three passengers could collect a helicopter from a maintenance facility based there. Before departure the pilot telephoned the helicopter maintenance facility, as required by the Pooley's flight guide, but did not receive a briefing on the runway. He believes, in hindsight, this was because they thought he was visiting in a helicopter. The flight to Bourne Park was uneventful.

The pilot stated that when overhead Bourne Park, the windsock indicated a wind of approximately 330°/4-6 kt. A long approach to Runway 29 was established with a track slightly to the right of the centreline to compensate for the crosswind. His plan was to touch down as slowly and as early as possible, given that the aircraft was relatively heavy, with four occupants, and the grass strip had a negative gradient. Although his normal approach speed was 75 kt, he flew this final approach at 65 kt, 15 kt above the stall speed. He noted that there were no runway identifying numbers which would have provided a touchdown aiming point. Having crossed the fence, the pilot flared the aircraft, during which the stall warner sounded. After the aircraft touched down the nosewheel “slammed down.” The aircraft veered 30 degrees to the left and continued for approximately 100 m, before the propeller struck the ground as the aircraft came to a halt, partially off the grass strip. All the occupants vacated the aircraft uninjured. The aircraft sustained damage to its nosewheel, engine frame, engine firewall, propeller and the engine was shock-loaded.

#### **Accident site**

Photographs of the accident site showed a recent witness mark on the fence in the undershoot that corresponded with a witness mark on the underside of the aircraft fuselage. The right main wheel and the nosewheel

touched down in the deeply rutted undershoot of Runway 29, approximately 75 metres from the threshold and 9 metres inside the fence. The aircraft then appears to have bounced about 100 metres. On the subsequent landing the nosewheel bent back wards, probably as a result of the initial landing and the rough ground, causing the propeller to strike the ground.

#### **Discussion**

The pilot considered that the accident was caused by his misjudgement of the runway touchdown point. He believed this occurred because the undershoot was indistinguishable from the grass strip as the grass had not been mown over the winter months.

#### **Safety action**

As a result of this accident the maintenance organisations have nominated a limited number of personnel who can give landing permission over the telephone. They also have a written brief that will be read to all pilots requesting permission to land there.