Piper PA-28-140, G-AYJP

AAIB Bulletin No: 5/98 Ref: EW/G98/02/17Category: 1.3

Aircraft Type and Registration:	Piper PA-28-140, G-AYJP
No & Type of Engines:	1 Lycoming O-320-E2A piston engine
Year of Manufacture:	1970
Date & Time (UTC):	23 February 1998 at 1423 hrs
Location:	RAF Brize Norton, Oxon
Type of Flight:	Private (Training)
Persons on Board:	Crew - 1 - Passengers - None
Injuries:	Crew - None - Passengers - N/A
Nature of Damage:	Damage to right wing tip, nosewheel and propeller tips
Commander's Licence:	Student Pilot
Commander's Age:	26 years
Commander's Flying Experience:	23 hours (all on type)
	Last 90 days - 23 hours
	Last 28 days - 23 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Having already carried out a total of eight dual circuits withan instructor using Runway 26, the student pilot was sent on hissecond solo flight. He had been briefed to carry out a touch-and-golanding followed by a circuit and full stop landing.

The pilot reported that the approach was flown normally usingfull flap and an approach speed of 85 mph, with the aircraft'smainwheels touching down at the normal point on the runway ata speed of about 75 mph with the power at idle. Before nosewheeltouchdown, the right wing lifted and the aircraft turned throughabout 90° to the left on the left mainwheel only. Full oppositeaileron was applied and the right wing tip and nosewheel struckthe ground firmly. The aircraft came to a stop on the grass tothe left side of the runway.

The pilot considered that the application of power to executea go around from the attitude and heading that occurred wouldhave been dangerous, so he elected not to do so.

The surface wind was reported as being from 270°T at 9 kt.

The instructor was observing the approach from the Control TowerVisual Control Room. He reported that the initial touchdown appearedto be normal, but that the right wing lifted shortly afterwardsand the aircraft ground looped, coming to a halt facing almostin the opposite direction. He commented that a wind fluctuationhad been observed shortly after the aircraft's take off.

An aftercast from the Met Office indicated that at the time ofthe accident there was a weak trough of low pressure crossingthe area from the north west. The surface wind veered to 290°Tat 10 kt, with possible gusts to 20 kt, with the passage of thetrough.

The instructor indicated that with the prevailing wind direction,some vortex or rotor may be produced at the runway threshold bythe upwind hangars.