Piper PA-28-161, G-BXTY

AAIB Bulletin No: 12/2001	**Ref: EW/G2001/09/22**	**Category: 1.3**
Aircraft Type and Registration:	Piper PA-28-161, G-BXTY	
No & Type of Engines:	1 Lycoming O-320-D3G piston engine	
Year of Manufacture:	1989	
Date & Time (UTC):	23 September 2001 at 1300 hrs	
Location:	Bournemouth International Airport, Dorset	
Type of Flight:	Training	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Damage to propeller, nose gear and engine components	
Commander's Licence:	Training	
Commander's Age:	41 years	
Commander's Flying Experience:	23 hours (of which 12 were on type)	
	Last 90 days - 11 hours	
	Last 28 days - 5 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The student pilot had been briefed to complete a series of solo, visual circuits at Bournemouth airport. The meteorological conditions were reported as: surface wind 130°/20 kt, visibility greater than 10 km, no significant weather, scattered cloud at 2,000 feet, temperature +16°C and QNH 1013 hPa. Runway 08 was in use and its concrete surface was dry.

The pilot had completed two successful circuits and landings. He reported that the third approach was uneventful, the aircraft touched down at the required position, at the correct speed and on the runway centre line. The pilot checked that the carburettor heat was set to the 'COLD' position, reset the flaps and applied full power. The speed was now approximately 35 kt. The aircraft accelerated normally and at approximately 65 kt the pilot moved the control column aft in order to rotate the aircraft. As the nose wheel lifted clear of the ground the aircraft swung sharply to the left. The pilot applied full right rudder, but this had little effect so he reduced power and aborted the take off. As the aircraft crossed the runway edge, at an angle of about 45° to the runway centre line, the nose

wheel was broken off. The aircraft came to rest in a nose down attitude having suffered damage to the propeller and also to a number of engine components. The pilot was uninjured and vacated the aircraft via the main door.

The aircraft maintenance organisation conducted an assessment of the damage. They confirmed that the damage to the nose wheel, propeller and engine area was consistent with the events described by the pilot. They examined the brakes and main wheels and these were found to be serviceable. No obvious explanation could be found for the pronounced swing on take-off.