## Cessna 172P Skyhawk, G-BYET

AAIB Bulletin No: 11/2003	Ref: EW/G2003/07/31	Category: 1.3
Aircraft Type and Registration:	Cessna 172P Skyhawk, G- BYET	
No & Type of Engines:	1 Lycoming O-320-D2J piston engine	
Year of Manufacture:	1982	
Date & Time (UTC):	30 July 2003 at 1410 hrs	
Location:	Redhill Aerodrome, Surrey	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Undercarriage damage, propeller strike and fuel spill	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	50 years	
Commander's Flying Experience:	80 hours (all on type)	
	Last 90 days - 1 hour	
	Last 28 days - 1 hour	
Information Source:	Aircraft Accident Report Form submitted by the pilot and subsequent AAIB enquiries	

## History of the flight

The pilot had completed a short solo flight and on returning to the airfield was initially cleared for an overhead rejoin. However, subsequently ATC offered the pilot a straight-in approach to Runway 26R which the pilot accepted. He lined up with the runway and set landing flap, but then realised he had descended below the normal circuit height. He commenced the approach but remained below the correct profile, setting a higher than normal power setting in order to try and regain the correct glidepath.

On approaching the runway threshold, the pilot became concerned that he was going to undershoot and so added still more power. The aircraft landed on the runway just beyond the identification numbers and bounced. The first bounce was followed by several more, each increasing in severity and accompanied by a large pitching moment. It was on the penultimate bounce that the Tower controller reported seeing the nose wheel bend backwards before collapsing when the wheels next contacted the runway.

The aircraft came to a halt with the propeller hitting the ground and stopping the engine. The pilot radioed the Tower to inform them he was uninjured before turning off the electrics and vacating the aircraft. The airfield fire service was quickly in attendance and although there was no fire, they put down a protective blanket of foam over a fuel leak which had developed due to the accident.

## **Analysis**

The pilot considered that as a result of applying more power than normal during the approach he had exceeded the correct speed at touchdown. He also stated that in the latter stages of the approach he had become fixated on his touchdown point.

The pilot had experienced two abandoned landings, one whilst solo and the other when with an instructor, both due to bounces on touchdown. On this occasion, however, he did not recognise the severity of the initial bounce and so he did not apply power or attempt to go around. Instead he tried to control the aircraft back onto the ground with the power remaining at idle.

It is likely, therefore, that by becoming so absorbed on his landing point the pilot had lost his peripheral reference making it more difficult to judge the true extent of the bounce on landing. The accident also demonstrated the importance of making adequate corrections early in the approach to regain the correct profile and air speed in good time before touchdown.