

Piper PA-38-112 Tomahawk, G-BSVV

AAIB Bulletin No: 1/2004	Ref: EW/G2003/03/28	Category: 1.3
Aircraft Type and Registration:	Piper PA-38-112 Tomahawk, G-BSVV	
No & Type of Engines:	1 Lycoming O-235-L2C piston engine	
Year of Manufacture:	1979	
Date & Time (UTC):	15 March 2003 at 1615 hrs	
Location:	Panshanger Aerodrome, Hertford	
Type of Flight:	Training	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Aircraft damaged beyond economic repair	
Commander's Licence:	Student Pilot	
Commander's Age:	40 years	
Commander's Flying Experience:	43 hours (all of which were on type)	
	Last 90 days - 25 hours	
	Last 28 days - 5 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and additional inquiries by the AAIB.	

The student pilot was on her third solo flight and engaged in a supervised solo consolidation exercise. On the fourth touch-and-go, the landing was heavy and, on the climb out, she felt that the rudder was ineffective and engine power was fluctuating. She selected a field for a forced landing but power was restored and she was able to position for a normal approach to land on Runway 11. She was too high on the first approach so a go-around was initiated. During the second approach, her instructor radioed that the nose landing gear might have suffered damage and that she should be prepared for it to collapse. After a successful touchdown, the nose leg collapsed backwards and the aircraft came to a halt on its engine cowling, just off the right side of the runway. The pilot evacuated the aircraft normally and without injury.

The instructor, who had observed the touchdown which caused the damage to the nose landing gear, reported that it had been heavy and that the nose wheel had touched down first; this had caused the aircraft to bounce.

Information from the maintenance company which examined the aircraft after the accident reported that the nose leg upper mount had failed with the first impact, exerting a pull on the steering cables

which, in turn, forced the rudder pedals forwards against the engine firewall. The pilot was thus unable to move the rudder pedals. The steering crank on the leg had also contacted the mixture controls to the carburettor, thus accounting for the uneven running of the engine.