

ACCIDENT

Aircraft Type and Registration:	Piper PA-38-112 Tomahawk, G-RVRG	
No & Type of Engines:	1 Lycoming O-235-L2C piston engine	
Year of Manufacture:	1979	
Date & Time (UTC):	18 April 2007 at 1305 hrs	
Location:	Manchester (Barton) Airport	
Type of Flight:	Training	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Left main landing gear collapsed	
Commander's Licence:	Commercial Pilot's Licence	
Commander's Age:	28 years	
Commander's Flying Experience:	400 hours (of which 163 were on type) Last 90 days - 84 hours Last 28 days - 21 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

Shortly after the aircraft touched down, it hit a bump in the runway causing it to become airborne again. On the second touchdown the left main landing gear collapsed. The cause of the accident was the failure of the left main landing gear securing bolt.

History of the flight

The pilot, who was a flying instructor, reported that that he was conducting an introductory circuit lesson during which he operated the flying controls. On the third touch-and-go to Runway 27R the speed over the threshold was 65 kt and the pilot made a power-off landing. He described the initial touch down as being soft, however shortly afterwards the instructor and student described the aircraft hitting a divot with some

force, causing the aircraft to become airborne again in a nose-high attitude. The pilot moved the control column forward and applied power to arrest the rate of descent. When the aircraft touched down for the second time he opened the throttle to commence the touch-and-go, but despite his control inputs the aircraft began to drift to the left across the runway. The pilot immediately abandoned the takeoff and attempted to keep the aircraft on the runway. Just before the aircraft came to a halt it ground looped and came to rest facing in the opposite direction

Damage to aircraft

The maintenance organisation who repaired the aircraft reported that the left main landing gear

securing bolt (part number 401 511) had failed causing the left landing gear to collapse. Heavy landing checks were carried out and no further damage was found to the aircraft. Although the maintenance organisation had no previous experience of the failure of this bolt, they introduced a programme to replace the bolt on all of the flying school's PA-38 fleet at every annual inspection.

Condition of runway

An airfield guide describes the surface at Manchester Barton as '*undulating in places*'. The Operations Manager reported that they conduct a full daily inspection of the runway and that he was unaware of any divots or holes in the area where the aircraft touched down.