

**AAIB Bulletin No: 10/94**

**Ref: EW/G94/07/28**

**Category: 1.3**

**Aircraft Type and Registration:** Piper PA-28-140 Cherokee, G-AVBP

**No & Type of Engines:** 1 Lycoming O-320-E2A piston engine

**Year of Manufacture:** 1967

**Date & Time (UTC):** 23 July 1994 at 1050 hrs

**Location:** Bristol (Lulsgate) Airport, Avon

**Type of Flight:** Private (Training)

**Persons on Board:** Crew - 1                      Passengers - None

**Injuries:** Crew - None                      Passengers - N/A

**Nature of Damage:** Damage to nosewheel, propeller and underside of right wing

**Commander's Licence:** Student Pilot

**Commander's Age:** N/K

**Commander's Flying Experience:** 36 hours (all on type)  
Last 90 days - 36 hours  
Last 28 days - 15 hours

**Information Source:** Aircraft Accident Report Form submitted by the pilot and additional AAIB enquiries

The pilot, who had been given clearance for a 'touch-and-go' on Runway 09, made an approach which was normal apart from being a little high. The third stage of flap was lowered and the touchdown was normal. However, the pilot reports that approximately 25 yards after the nosewheel was lowered to the runway surface, the aircraft veered violently to the left onto the grass. During this manoeuvre, the propeller and underside of the right wingtip contacted the ground, sustaining slight damage. Subsequently, fragments of the right-hand side of the nosewheel rim, amounting to approximately 25% of the circumference, were recovered from the runway close to the estimated touchdown point.

The edges of the rim pieces were heavily abraded from contact with the runway, the scuff lines orientated approximately 45° to the aircraft longitudinal axis (the nosewheel can be steered up to approximately 30° either side of neutral). Despite the fact that the tyre must have been considerably deflected to allow the rim to contact the runway, it had remained fully inflated. The nosewheel steering arm on this aircraft is connected to the rudder pedals via rigid links, although bungee links are substituted on models built in 1974 onwards. Subsequent examination of the aircraft revealed that these links had remained intact. In fact nothing was found in the nose gear assembly or its associated steering controls that could have accounted for the aircraft's departure from the runway.