

ACCIDENT

Aircraft Type and Registration:	Piper PA-28-140 Cherokee, G-DIAT	
No & Type of Engines:	1 Lycoming O-320-E2A piston engine	
Year of Manufacture:	1974 (Serial no: 28-7425322)	
Date & Time (UTC):	30 August 2013 at 1255 hrs	
Location:	Sandtoft Airfield, Lincolnshire	
Type of Flight:	Training	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Damage to the nose landing gear and propeller	
Commander's Licence:	Student pilot	
Commander's Age:	43 years	
Commander's Flying Experience:	71 hours (of which 50 were on type) Last 90 days - 21 hours Last 28 days - 20 hours	
Information Source:	Aircraft Accident Report Forms submitted by the student pilot and his flying instructor	

Synopsis

The aircraft was being landed by a student pilot at the end of a solo navigation exercise. The aircraft "ballooned" in the flare and was seen to oscillate in pitch, bouncing two or three times. The nosewheel detached from the aircraft, which came to a stop on the runway. The student pilot was uninjured.

History of the flight

The student pilot was landing the aircraft at the end of a solo cross-country navigation training exercise. Runway 23 was in use and the weather was fine with a surface wind of 15 kt from 230°.

The student pilot reported that he flew the final approach at 70 kt to the point of flare, at which point he closed the

throttle. He felt that a gust of wind caught the aircraft, causing it to "balloon". The aircraft then touched down in an approximately normal attitude before bouncing and becoming airborne again. The second touchdown was in a flatter attitude, such that the nosewheel was subject to a harder landing force than usual. The student did not think it excessive, and did not think that the second touchdown was on the nosewheel first, but the nosewheel detached at this point.

The student pilot applied aft control column in an attempt to keep weight of the nose leg. The aircraft subsequently came to a stop on the asphalt runway. The Airfield Fire Service attended the scene but the pilot, who was uninjured, was able to vacate the aircraft normally.

The student's flying instructor also submitted a report, in which he commented that the student had completed eight good landings prior to the accident. The accident was witnessed by another club instructor who reported that the aircraft's approach had appeared higher and faster than normal, leading to a "balloon" at the point of

flare. The aircraft then pitched nose-down in an apparent attempt by the student to land the aircraft, before entering a series of pitch oscillations and bounces. On the third bounce the nosewheel detached, and the aircraft came to a stop on the runway.