

ACCIDENT

Aircraft Type and Registration:	Piper PA-28-140 Cherokee, G-NHRH	
No & Type of Engines:	1 Lycoming O-320-E2A piston engine	
Year of Manufacture:	1967 (Serial no: 28-22807)	
Date & Time (UTC):	30 May 2016 at 1650 hrs	
Location:	Compton Abbas Airfield, Dorset	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Nose landing gear collapsed, propeller blades bent and engine frame damaged	
Commander's Licence:	National Private Pilot's Licence	
Commander's Age:	70 years	
Commander's Flying Experience:	190 hours (of which 132 were on type) Last 90 days - 3 hours Last 28 days - 1 hour	
Information Source:	Aircraft Accident Report Form submitted by the pilot and additional enquiries by the AAIB	

Synopsis

The aircraft landed heavily, more than halfway along a dry grass runway, and the nose landing gear assembly collapsed, causing the propeller to strike the ground. The pilot had logged three hours flying in the previous 18 months and had not flown with an instructor during this period.

History of the flight

Earlier in the day the pilot flew his aircraft from Compton Abbas to Dunkeswell Airfield, Devon with one passenger on board. A go-around was flown from the first approach, because of observed parachuting activity, but the pilot stated that his subsequent landing was uneventful. Following that flight, he left the aircraft parked for several hours and then flew it back to Compton Abbas, accompanied by the same passenger. After checking-in with 'Compton Radio' for air/ground communication, the pilot chose to make a straight-in approach for grass Runway 08, which was dry. This runway has an available landing distance of 803 m and the surface slopes down from the threshold towards the mid-point before sloping up towards the Runway 26 threshold.

Visibility was good but the wind was northeasterly at 20 kt, so the pilot approached at 75 kt¹ which he said was faster than normal, because of the wind strength. He did not

Footnote

¹ The PA-28-140 pilot's operating handbook provides landing performance based on an indicated approach speed of 61 kt.

believe his approach was unusual in any other way, although he said he touched down more than halfway along the runway. He realised the landing was heavier than intended because, shortly after touchdown, he and his passenger felt a jolt and were “jerked” against their seatbelts. It was apparent that the nose landing gear had collapsed and as a result both propeller blades then struck the ground. Once the aircraft had come to a halt, in a nose-down attitude, the pilot and his passenger both vacated, uninjured and without assistance.

The nosewheel had detached and one leg of the fork assembly had broken off, with the other fork bent through approximately 60°. Both propeller blades were also bent and the engine had been pushed back and upwards, causing distortion of the engine mounting. The pilot could not understand what went wrong during the landing and stated he would seek assistance from a flying instructor when he next flew.

Witness information

A witness at Dunkeswell watched the aircraft’s arrival and observed all three wheels make contact with the runway at the same time, in what was described as a “hard landing”, but apparently without any obvious damage occurring.

An official at Compton Abbas reported that the airfield remained open later than usual to facilitate the aircraft’s return. Details of the wind velocity and the landing runway were passed over the air/ground radio and the aircraft’s approach was watched by an experienced PA-28 pilot. He judged the aircraft to be higher than expected when it overflew the threshold; by his estimation it was then at 100 ft agl.

According to this witness, the pilot did not appear to flare the aircraft before it made ground contact in a nose-down attitude, 500 m from the start of the runway. The nose landing gear seemed to collapse immediately but the aircraft continued along the grass runway for 64 m and then came to rest, in a nose-down attitude, pointing 45° left of the runway centreline.

Pilot’s experience

The pilot’s log book indicated that he commenced flying training in 1990 and was subsequently issued with an NPPL(A) in November 2012. Since that date he had recorded 16 hours flying time, all of which was flown in his own PA-28 aircraft, and this included one flight with an instructor, on 9 November 2014 for renewal of his SSEA (land) rating. He did not record any flying time in the periods from March 2013 to August 2014 or from November 2014 to April 2016. From 8 April 2016 until the accident flight on 30 May 2016 he flew four times and recorded three hours flying.

AAIB comment

The CAA publishes Safety Sense Leaflets and Leaflet 1e ‘*Good Airmanship*’ provides advice to general aviation pilots, recommending they revise their ‘*basic knowledge and skills by having a regular flight, at least every year, with an instructor*’.

The '*Good Airmanship*' leaflet also offers guidance for landings and advises pilots to plan to touch down at the right speed, close to the runway threshold, unless the field length allows otherwise, and to '*go-around if not solidly on in the first third of the runway, or the first quarter if the runway is wet grass*'.