ACCIDENT

Aircraft Type and Registration: Piper PA-28-161 Cherokee Warrior II, G-BRBA

No & Type of Engines: 1 Lycoming O-320-D3G piston engine

Year of Manufacture: 1979 (Serial no: 28-7916109)

Date & Time (UTC): 2 February 2013 at 1150 hrs

Location: Full Sutton Airfield, York

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Damage to propeller and nosewheel

Commander's Licence: Private Pilot's Licence

Commander's Age: 57 years

Commander's Flying Experience: 521 hours (of which 426 were on type)

Last 90 days - 1 hour Last 28 days - 0 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

Synopsis

The pilot was performing a full-stop landing at Full Sutton Airfield following three 'touch-and-go' landings. As on the previous approaches, he encountered strong turbulence on short finals and added power as a precaution against sink. The aircraft failed to stop on the damp grass runway and overran, damaging the nose landing gear and propeller.

History of the flight

The pilot had travelled to Full Sutton Airfield to practise circuits. He reported that it was a cold, dry day with very good visibility; the wind was 330° at 15 kt and Runway 22 was in use. This is a grass runway with a landing distance available of 772 metres and on the day was reportedly "very damp".

He experienced strong turbulence on his first final approach and carried out a low go-around, making a mental note to increase his approach speed to 75 kt and limit flap to two stages. He performed two successful touch-and-goes at that speed and in this configuration. On his fourth approach, the pilot elected to perform a full-stop landing. He again encountered strong turbulence on short finals and added power to guard against sink and maintain stability. On touchdown he allowed the aircraft to roll freely to check directional stability before applying gentle braking. He noticed that there was a lack of deceleration and so increased the braking effort to "moderate", but could sense the wheels skidding. He tried to use a cadence braking technique to prevent the wheels locking and also started turns to

© Crown copyright 2013 34

the left and right to try and lose speed. He could feel the aircraft starting to skid, so he made these turns very gentle and eventually allowed the aircraft to run straight toward the end of the runway.

The aircraft overran the runway end to the left. Just prior to stopping, the nose landing gear caught a lip, compressing the oleo and causing the propeller to strike the ground. The nosewheel also sank into the soft ground and twisted sideways, bending the leg. The pilot vacated the aircraft normally, having radioed the situation to the Air/Ground Service.

The pilot feels that, with hindsight, he should have gone around on encountering the turbulence. His preoccupation with adding power and persisting with the landing meant that, together with the runway condition and the possibility of a slight tailwind component, he had eroded his chances of stopping successfully.

© Crown copyright 2013 35