

Piper PA-28-181 Cherokee Archer II, G-OODW, 18 June 1996

AAIB Bulletin No: 9/96 Ref: EW/G96/06/26 Category: 1.3

Aircraft Type and Registration: Piper PA-28-181 Cherokee Archer II, G-OODW

No & Type of Engines: 1 Lycoming O-360-A4M piston engine

Year of Manufacture: 1984

Date & Time (UTC): 18 June 1996 at 1415 hrs

Location: St Just, Lands End

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 3

Injuries: Crew - None Passengers - None

Nature of Damage: Substantial to propeller, engine cowl and nose landing gear. Shock loading to engine

Commander's Licence: Private Pilot's Licence

Commander's Age: 60 years

Commander's Flying Experience: 174 hours (of which 72 were on type)

Last 90 days - 11 hours

Last 28 days - 4 hours

Information Source:

Aircraft Accident Report Form submitted by the pilot

The aircraft departed St Mary's airfield, Isles of Scilly, on the first leg of its return journey to Exeter via Lands End (StJust). The front seat occupants were both qualified pilots and the stop over at Lands End was for refuelling and to enable the pilots to change seats. The weather was fine with light and variable winds and visibility in excess of 10 km with no cloud.

With ten miles to go the pilot made contact with Lands End and was asked to report 'field in sight' and was given the landing runway as 25 (grass surface; 677 x 36 metres, LDA 630 metres; down sloping from 392 feet amsl to 353 feet amsl) and a surface wind of 260°/5 kt. With the help of ATC the pilot sighted the field and turned final for Runway 25. The pilot reported that he was not happy with his first approach as he was high and fast, and therefore decided to go-around for a further attempt. The pilot climbed the aircraft to approximately 500 feet, retracted landing flap and turned left downwind for an extended circuit to allow other traffic to land on Runway 35. Established for a second time on final for 25, the pilot reduced speed to 70 kt and selected full flap. The aircraft crossed the threshold at 80 feet in order that a touchdown could be made as early as possible. On touchdown the aircraft bounced on the main wheels. The pilot considered his best option was to continue with the landing and pushed the control column forward to stop a stall but over corrected and bounced the aircraft on the nose wheel. This caused the aircraft attitude to become very 'nose high' before it touched down a third time very hard nose wheel first. The aircraft remained on the ground this time and slid along the runway before coming to rest. The passengers vacated the aircraft, without injury, through the main door while the pilot turned off the fuel, magnetos and master switch.

The pilot commented in his report that he did not take sufficient account of the upslope of the runway. AAIB enquiries have shown, however, that the runway is relatively flat for the first two thirds of its length before it slopes down to the 07 threshold. Higher ground on the approach to Runway 25 can give the impression to pilots that they are lower than normal on final and hence they tend to make a steeper approach. This results in the illusion that the last third of the runway is level while the first two thirds slope upwards.