ACCIDENT

Aircraft Type and Registration: Denney Kitfox Mk 2, G-BSDD

No & Type of Engines: 1 Rotax 582 piston engine

Year of Manufacture: 1995 (Serial no: PFA 172-11797)

Date & Time (UTC): 30 October 2018 at 1458 hrs

Location: Field behind John Ruskin School, Coniston,

Cumbria

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Left wing tip distortion, left landing gear collapse

and propeller strike

Commander's Licence: National Private Pilot's Licence

Commander's Age: 62 years

Commander's Flying Experience: 148 hours (of which 57 were on type)

Last 90 days - 10 hours Last 28 days - 3 hours

Information Source: Aircraft Accident Report Form submitted by the

pilot

Synopsis

The pilot was attempting a precautionary landing due to his concern about a fuel leakage. In the latter stages of his descent, near to the ground, the left wing stalled, and the aircraft struck the ground damaging the wing tip, propeller and landing gear. The pilot considers the cause of the accident to have been his failure to monitor airspeed during the final stages of the approach.

History of the flight

The aircraft was being flown on a local flight in the Lake District when the pilot became aware of a "drip" near the fuel priming pump. It was significant enough for him to initiate a precautionary landing to investigate. He selected a suitable field near Lake Coniston and began his descent. On base leg he committed to landing the aircraft and configured it accordingly. As he turned the aircraft onto final approach, he noted his airspeed was at first 48 mph and rising, to slow the aircraft he fully extended the flaps. He noticed two trees either side of his flight path and considered it an unnecessary risk to attempt to fly between them, so applied a small amount of power to overfly them. He then closed the throttle and continued his descent to land. Between 15 to 20 ft above the ground the left wing dropped, the aircraft entered a left descending turn and the wing tip struck the ground. The aircraft continued to turn, at which point the propeller hit the ground and the left landing gear strut collapsed. The pilot made the aircraft safe and vacated uninjured.

Discussion and pilot's comments

The pilot decided to carry out the precautionary landing due to his concern that the fuel leakage would worsen and result in an engine stoppage. He estimated the leakage rate was two drips per second, which he later found to be coming from shaft seals of the hand priming pump.

From the description of the event by the pilot, it would appear the left wing stalled near the ground as the aircraft landed. The pilot considers that several factors led to the stall. The prime cause was that he did not monitor his airspeed in the latter stages of his approach. He used the flaps as "airbrakes" rather than lift augmentation devices.

He usually applied a small "burst of power" to control a three-point landing, normally with one stage of flap into wind, and had never encountered a wing stall when landing. In his opinion, this gave him the false sense that this aircraft never drops a wing when configured correctly, but he now acknowledges this was an incorrect assumption at low speed and full flap.

The primer pump leakage was considered by the pilot to have been due to premature wear of its shaft seals. The limited capabilities of the lightweight battery fitted in this aircraft meant the pilot had to operate the primer pump whilst cranking as an aid to starting the engine from cold. In the pilot's opinion, it was this technique that led to the premature wear of the seals.