| AAIB Bulletin: 8/2018 | G-RWCA | EW/G2018/04/03 |
|---------------------------------|---|-------------------|
| ACCIDENT | | |
| Aircraft Type and Registration: | Piper PA-18-150 Super Cub, G-RWCA | |
| No & Type of Engines: | 1 Lycoming O-320-A2B piston engine | |
| Year of Manufacture: | 1982 (Serial no: 18-8309010) | |
| Date & Time (UTC): | 7 April 2018 at 1225 hrs | |
| Location: | Beccles Airfield, Suffolk | |
| Type of Flight: | Private | |
| Persons on Board: | Crew - 1 | Passengers - None |
| Injuries: | Crew - None | Passengers - N/A |
| Nature of Damage: | Propeller blade bent, engine shock-loaded and damage to wings, fin, rudder and windscreen | |
| Commander's Licence: | Private Pilot's Licence | |
| Commander's Age: | 54 years | |
| Commander's Flying Experience: | 188 hours (of which 9 were on type) Last 90 days - 7 hours Last 28 days - 3 hours | |
| Information Source: | Aircraft Accident Report Form submitted by the pilot | |

Synopsis

The pilot made a precautionary landing at Beccles Airfield following an engine oil leak and a reduction in oil pressure. This was the first time that the pilot had landed a tailwheel aircraft on a hard surface. During the ground run the aircraft started to ground loop, then nosed over and came to rest inverted.

A photograph of the aircraft taken by the pilot following the accident is at Figure 1.

History of the flight

The pilot departed from his home airfield at Crowfield, near Norwich, on a cross country flight in a PA-18-150 aircraft fitted with a tailwheel.

When the aircraft was abeam Lowestoft, at a height of 1,900 ft, the pilot became aware that oil was dripping onto his left leg. As the oil pressure was satisfactory, at approximately 70 psi, he decided to return to Crowfield which was approximately 20 to 25 minutes away. However, the oil continued to drip onto his leg and cockpit floor, and the oil pressure reduced to 60 psi, which was at the bottom of the green arc on the oil pressure gauge. The oil temperature was normal. The pilot, therefore, decided to make a precautionary landing at Beccles, which was close by. While the pilot did not make an emergency radio call, he did advise the radio operator at Beccles of the situation and joined the circuit late downwind to land on Runway 09.



Figure 1 Accident site (photograph by permission of the pilot)

The pilot was concerned that the engine might fail and, therefore, decided to fly a high approach, initially aiming for a touchdown point halfway along the concrete section of the runway with the intention of stopping on the grass section of the runway. However, following a subsequent exchange with the radio operator at the airfield, the pilot believed that he was only permitted to land on the concrete section of the runway. This would have been his first landing of a tailwheel aircraft on a hard surface.

The pilot reported that there was a 10 kt crosswind and he was slightly fast and high as he crossed the threshold with full flap selected. The aircraft floated for some distance and bounced following the initial touch down before settling down in a three-point landing attitude. The pilot was aware of the end of the concrete section of the runway approaching and attempted to correct a yaw to the right by the application of full left rudder; he did not apply the wheel brakes. However, as the aircraft decelerated it yawed to the right and the main wheels ran onto the grass and the soft ground at the edge of the runway, causing the aircraft to slowly nose over and come to rest in an inverted attitude. The pilot was uninjured.

Beccles Airfield

Beccles Airfield has one runway, aligned 09/27. The surface of the first 500 m of Runway 09 is concrete and the remaining 250 m is covered in grass. The LDA is 624 m. A Google Earth image of the airfield is at Figure 2.

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Figure 2 Beccles Airfield

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