ACCIDENT

Aircraft Type and Registration: Spitfire MkT IX Spitfire, G-ILDA

No & Type of Engines: 1 Packard Merlin 266 piston engine

Year of Manufacture: 1945 (Serial no: CBAF 10164)

Date & Time (UTC): 16 July 2018 at 1658 hrs

Location: Goodwood Aerodrome, Sussex

Type of Flight: Passenger Flight

Persons on Board: Crew - 1 Passengers - 1

Injuries: Crew - None Passengers - None

Nature of Damage: Landing gear collapsed, propeller tips ground

strike and distorted left flap

Commander's Licence: Airline Transport Pilot's Licence

Commander's Age: 51 years

Commander's Flying Experience: 15,616 hours (of which 37 were on type)

Last 90 days - 218 hours Last 28 days - 95 hours

Information Source: Aircraft Accident Report Form submitted by the

pilot and inquiries made by the AAIB

Synopsis

The aircraft had landed on Runway 14 at Goodwood after completing a passenger flight. As the aircraft was slowing, the pilot became aware that it had started to deviate from the centre line towards the left side of the runway, which he attempted to gently correct by braking. As he did so the aircraft veered to the right, into wind. Despite the application of full left rudder and brake, the aircraft rotated through 90° and the left main landing gear collapsed. The pilot made the aircraft safe and he and his passenger vacated the aircraft having sustained no injuries. The pilot considers the combination of the crosswind and unusually poor runway surface were contributory factors in this accident.

History of the flight

The pilot was completing his third flight of the day and reported his final approach to land at Goodwood on Runway 14. He was informed that the wind was 250°/13 kt. The pilot observed the windsock, which in his estimation was indicating a wind at 230°, so continued with the landing. The aircraft touched down satisfactorily and started to slow down. Just as the aircraft passed the intersection with Runway 24/06 it started to deviate from the centre line towards the left side of the runway. The pilot attempted to correct this by gently braking, but as the aircraft slowed to between 20 and 30 mph, and had travelled three-quarters of the way along the runway, it veered right, into wind. As it did so, the pilot applied full left rudder and brake but was unable to stop the 'swing'. As the aircraft turned through 90° the

left landing gear collapsed, the right landing gear partially collapsed and the propeller struck the ground and stopped. The pilot made the aircraft safe and assisted his passenger to vacate the aircraft, both were uninjured. The aircraft sustained damage to its landing gear, propeller tips and left flap.

Contributory factors

The aircraft was regularly flown on experience flights with passengers around the south coast and Chichester area from Goodwood. On the day of the accident the wind direction would have normally made Runway 24 the most suitable. However, Runway 24 was out of service and a NOTAM issued accordingly. Runway 14 was therefore in use, but due to the recent prolonged abnormally hot and dry weather, the surface was degraded with hard dry areas and patchy grass.

A mark made by the left wheel appeared to indicate that it was locked and slipping over the surface as the aircraft ground looped. As the aircraft swung to the right the wheel was then presented side-on to the direction of travel. This increased friction combined with the runway surface and the aircraft's weight and momentum, caused the left landing gear leg to fold the 'wrong way' under the fuselage.

The pilot considers the combination of the crosswind and unusually poor runway surface were contributory factors in this accident.