ACCIDENT

Aircraft Type and Registration: TL-3000 Sirius 600, G-SBOI

No & Type of Engines: 1 Rotax 912ULS piston engine

Year of Manufacture: 2022 (Serial no: 22 SI 215)

Date & Time (UTC): 10 August 2023 at 0800 hrs

Location: Fishburn Airfield, County Durham

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 1

Injuries: Crew - 1 (Minor) Passengers - 1 (Minor)

Nature of Damage: Extensive damage to the aircraft

Commander's Licence: National Private Pilot's Licence

Commander's Age: 66 years

Commander's Flying Experience: 252 hours (of which 49 were on type)

Last 90 days - 24 hours Last 28 days - 4 hours

Information Source: Aircraft Accident Report Form submitted by the

pilot and additional enquiries by the AAIB

Synopsis

The aircraft performance was not as expected during the takeoff and it failed to climb, despite the engine appearing to be developing full power. The aircraft suffered extensive damage during the subsequent impact with the ground. The cause of the poor performance was not established.

History of the flight

The pilot intended to fly to Blackpool Airport with a passenger. He elected to take off using the slightly uphill Runway 26, as the wind was calm and the runway was aligned with his intended direction of travel. The temperature was 21°C, the dewpoint 16°C and the aircraft's weight and centre of gravity were within limits.

On application of full power, the pilot reported that the engine rpm indicator and engine sound were consistent with the engine delivering full power, but he noticed that the acceleration along the runway was "somewhat impaired". Despite the poor acceleration, the takeoff was continued and G-SBOI briefly left the ground but re-settled twice, before becoming airborne much further down the runway than anticipated. However, once airborne G-SBOI would not accelerate and the stall warning horn sounded continuously. Having only attained a height of 10 to 15 ft, the aircraft rolled to the left and struck the ground.



Figure 1Damage sustained to G-SBOI (used with permission)

Damage to the aircraft was extensive and hindered the pilot's egress from the wreckage, but only minor injuries were sustained by the pilot and passenger, who were both wearing full harnesses.

Conclusion

No definitive cause was established for G-SBOI's poor acceleration, but the use of a 'stop-go' point and takeoff decision making is covered in the UK CAA's GA update of January 2023¹.

Footnote

¹ UK Civil Aviation Authority, Clued up GA Update, January 2023. Available at Rejected Take Offs (caa.co.uk) [accessed October 2023]