

Accident

Aircraft Type and Registration:	Piper PA-28-140, G-AWBS	
No & Type of Engines:	1 Lycoming O-320-E2A piston engine	
Year of Manufacture:	1968 (Serial no: 28-24331)	
Date & Time (UTC):	18 June 2024 at 1955 hrs	
Location:	Near Eddsfield Airfield, East Yorkshire	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 2
Injuries:	Crew - 1 (Minor)	Passengers - 2 (Minor)
Nature of Damage:	Aircraft destroyed	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	50 years	
Commander's Flying Experience:	1,475 hours (of which 16 were on type) Last 90 days - 8 hours Last 28 days - 3 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

Shortly after takeoff the aircraft sank as it was climbing over trees at the end of the runway. The pilot adjusted the aircraft's attitude to maintain flying speed but it struck the trees. The aircraft came to rest on the driveway of a local residence with the pilot and passengers sustaining minor injuries.

It was considered whether carburettor icing might have resulted in a reduction in engine power and the pilot stated he would give more consideration to the effect of obstacles on the wind.

History of the flight

The pilot had flown to Eddsfield Airfield to pick up two passengers for a pleasure flight and the aircraft was parked for approximately 15 to 20 minutes prior to starting up again with the passengers on board. Power checks were completed at the parking area adjacent to the Runway 27 threshold followed by taxi checks as the aircraft was taxied along the 725 m grass runway for departure from Runway 09 at 1955 hrs. The wind was 12 kt, gusting 22 kt from 040° with the air temperature of 15°C and a dew point of 12°C.

The pilot applied full power at the runway threshold and held the aircraft on the brakes. Upon releasing the brakes, the aircraft accelerated normally and lifted off approximately three-quarters of the way along the runway. The pilot set the aircraft attitude for a maximum

gradient (V_x) climb to clear the 80 ft trees at the far end of the airfield. Whilst overhead the trees the pilot adjusted the attitude to increase speed and gently turned onto a heading of 070°. Simultaneously he felt the aircraft sink by approximately 10 to 15 ft and it stopped climbing. The pilot then felt the aircraft clipping the foliage of the treetops, jolting slightly and then begin to descend. He did not recall hearing the stall warner or experiencing any symptoms of a stall. The aircraft banked further to the left and pilot directed it through the trees to the only piece of clear space that he could see.

The aircraft came to rest in the garden and on the driveway of a local residence and was destroyed (Figure 1). After completing emergency shutdown procedures, the pilot and passengers were able to exit the aircraft unaided with minor injuries.



Figure 1

G-AWBS at the accident site

AAIB Comment

The engine was tested with the carburettor by an independent engine maintenance organisation and found to perform normally. The weight and balance calculations were verified, along with the takeoff performance calculations and no anomalies could be found.

It is the opinion of the pilot that either a power issue or the gusty wind conditions over the trees were causal factors in the accident. Whilst no evidence was found to explain a loss of power it was noted that there was a possibility of carburettor icing. According to the CAA Safety Sense Leaflet 14 on Piston Engine Icing¹ the air temperature and dew point at the time indicated the risk of serious icing at any power setting. It is possible that the long taxi along the grass runway, late in the day resulted in a build-up of ice prior to take off. The pilot stated he will give more consideration to gusty wind conditions at low speed and the impact of obstacles such as trees, on the wind in the future.

Footnote

¹ [caa9396-piston-engine-icing-v8.pdf](#) – CAA Safety Sense Leaflet 14 “Piston Engine Icing” [accessed November 2024].