

**ACCIDENT**

<b>Aircraft Type and Registration:</b>	Pegasus Quantum 582, G-MZDE	
<b>No &amp; Type of Engines:</b>	1 Rotax 582-40 piston engine	
<b>Year of Manufacture:</b>	1996 (Serial no: 7238)	
<b>Date &amp; Time (UTC):</b>	26 February 2019 at 1150 hrs	
<b>Location:</b>	Kenyon Hall Farm airstrip, Warrington	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 1	Passengers - 1
<b>Injuries:</b>	Crew - None	Passengers - 1 (Serious)
<b>Nature of Damage:</b>	Damage to wing keel, leading edges, control frame, sail, trike keel, nosewheel, wheel spat and nose cone	
<b>Commander's Licence:</b>	National Private Pilot's Licence	
<b>Commander's Age:</b>	61 years	
<b>Commander's Flying Experience:</b>	292 hours (of which 262 were on type) Last 90 days - 2 hours Last 28 days - 2 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

**Synopsis**

Shortly after takeoff the engine reduced power and then stopped. The pilot attempted to turn back into the airfield but contacted tall trees and struck the ground heavily.

**History of the flight**

The pilot was making the flight to revalidate the aircraft's Permit and he checked NOTAMs, weather and the aircraft's weight and CG.

The pilot reports that the engine start and power checks were normal and he started the takeoff run using full engine power, with about 360 metres available. The aircraft reached flying speed within about 100 metres. The initial stage of the climb was normal but as the aircraft approached the end of the runway, at about 200 feet, the pilot heard a change in engine note and felt a reduction in power. He tried a small reduction in throttle, then advanced to full throttle to see whether this would restore power, at the same time pulling on the control bar to maintain airspeed. At this point he thought there was enough height to turn back into the field for a landing.

The engine, however, did not recover but stopped and as the pilot continued the approach back into the field one of the trike wheels clipped the upper branches of a tree and the aircraft pitched sharply downward. The pilot considers that at this point they were only just

above the minimum flying speed and they struck the ground hard, with the trike pitching forward and coming to a rapid stop. The pilot was able to get out of the aircraft, which was badly damaged, but the passenger was experiencing pain in her foot. The pilot was able to help the passenger out of the aircraft and she was later treated in hospital for a fractured ankle.

### **Analysis**

The pilot gave a full and clear account of the accident. In assessing the accident, he considered that he had made an error of judgement in turning back to the airfield, rather than continuing into an open field about 20° to the left of the runway heading. Although this field looked quite rough, the pilot considers that it would have been preferable as it would have given him more airspeed in hand and thus better control for the landing. He also considered that, although he met the criteria for carrying a passenger, he was not properly current and had not recently practiced a forced landing.

The pilot later gave an update to the AAIB on tests he had carried out on the engine. He had carried out four cycles of start-up, warm-up and maximum rpm running of the engine and each time it had performed without fault. It was therefore not apparent what had caused the power loss on the accident flight.