

ACCIDENT

Aircraft Type and Registration:	Pegasus Quik, G-XJJM
No & Type of Engines:	1 Rotax 912ULS piston engine
Year of Manufacture:	2007 (Serial no: 8306)
Date & Time (UTC):	23 July 2015 at 1747 hrs
Location:	Hall Lane Farm, Burtonwood, Cheshire
Type of Flight:	Training
Persons on Board:	Crew - 1 Passengers - None
Injuries:	Crew - 1 (Serious) Passengers - N/A
Nature of Damage	Aircraft damaged beyond economic repair
Commander's Licence:	Student
Commander's Age:	27 years
Commander's Flying Experience:	45 hours (all of which were on type) Last 90 days - 4 hours Last 28 days - 3 hours
Information Source:	Enquires by the AAIB

Synopsis

The flex-wing aircraft, while being flown at low level by a student, struck an electrical transmission cable and crashed into a field to the east of Hall Lane Farm, Burtonwood, Cheshire. The student reported that due to "post-traumatic amnesia" he had no recollection of the accident flight or the events preceding it.

History of the flight

The student was undergoing flex-wing training at Manchester (Barton) Aerodrome for his National Private Pilot's Licence (NPPL). At the time of the accident he had accumulated 39 hours dual and six hours solo flying. His instructor stated that he had completed the BMAA NPPL Microlight Training Syllabus and had passed his Human Performance and Air Law ground exams.

On the day of the accident the student flew with his instructor for 15 minutes who then authorised him to fly solo for one hour during which he was to practise basic handling including climbing and descending turns. The student was briefed to remain within the normal training area, which was bounded by the M6 to the west, the M62 to the south and the M61 to the north. He was also briefed to fly between 800 ft and 1,800 ft at all times, except when he was west of the 'River Glaze' (Glaze Brook), located 4 miles to the west of the airfield, when he was not to fly above 1,200 ft. All the flying was to be carried out within visual range of the airfield.

The instructor reported that the student returned to the airfield after approximately one hour and following a break was authorised to repeat the exercise. The instructor reported that the wind was light and the visibility excellent. It was during this second solo flight that the aircraft collided with electrical transmission cables.

The student damaged his spine and sustained a broken ankle, hip, sternum and eye socket, and was taken to hospital by air ambulance.

GPS Data

The aircraft was equipped with a Garmin 296 GPS, which contained a track file for the accident flight. The accident flight lasted approximately 36 minutes. On departing the airfield, the aircraft flew 10 miles to the west of the airfield, beyond the M6 and the 'River Glaze', climbing to a height of 5,000 ft agl. During the transit the aircraft flew into the Manchester TMA. After approximately five minutes, the aircraft descended to a height of approximately 50 ft agl. For the remaining 13 minutes the aircraft was flown between 100 and 650 ft agl during which it entered Class D airspace. During this period, it completed numerous turning manoeuvres while flying between the southern edge of Newton-le-Willows and the M62. The final part of the flight was flown south along Sankey Brook at an average height of 100 ft agl.

Witness account

A witness who lived in the southern part of Newton-le-Willows saw the aircraft manoeuvring close to the houses. He said that many people had come out of their homes to watch the microlight, which he captured on video as it flew south along the route of the canal, which the AAIB estimated was approximately 75 m (260 ft) from where the video was taken. A still from the video is shown at Figure 1. The witness noted that the engine noise was heard to change as the aircraft manoeuvred and the aircraft crashed shortly after the video was recorded. The AAIB estimated that the accident site was approximately 440 m south of where the video was taken and from GPS data it was established that the aircraft would have taken 10 seconds to fly this distance.



Figure 1

Still taken from the video clip provided by a witness

Aircraft history

The aircraft was destroyed in the accident and was not examined by the AAIB. However, the last Permit Renewal had been carried out on 11 December 2014. A new engine had been fitted in early 2015 and at the time of the accident had operated from new for 135 hrs. The last engine servicing had been carried out approximately eight hours previously. The pilot made no mention to his instructor, after he landed after the first flight, of any problems with the aircraft or its engine.

Comment

The aircraft was observed by a number of witnesses flying at low level before it collided with the 132 KV electrical transmission cable before it struck the ground.

The engineers who inspected the cable reported that the aircraft initially struck the top phase conductor, which was measured as being 25 m (80 ft) above the ground and then passed between the top phase and earth conductor, measured as being 30 m (100 ft) above the ground. The aircraft struck the cable at a position midway between the supporting pylons. While the outer copper conductor on the cable had been damaged, the inner steel core remained intact.