Quad City Challenger II UK, G-MWFU, 2 May 1998 at 1845 hrs

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Aircraft Type and Registration:	Quad City Challenger II UK, G-MWFU
No & Type of Engines:	1 Rotax 503 piston engine
Year of Manufacture:	1991
Date & Time (UTC):	2 May 1998 at 1845 hrs
Location:	Nr Chorley Hospital, Preston
Type of Flight:	Private
Persons on Board:	Crew - 1 - Passengers - None
Injuries:	Crew - None - Passengers - N/A
Nature of Damage:	Deformation of lower fuselage ribs/tube and damage to fabric
Commander's Licence:	Private Pilot's Licence
Commander's Age:	42 years
Commander's Flying Experience:	360 hours (of which 284 were on type) Last 90 days - 16 hours Last 28 days - 8 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

The pilot had flown his aircraft from his home airfield at Hoghton, near Preston, to Kemble with an en-route stop at Shobdon for fuel. He reached Shobdon after 1 hour 40 minutes and refuelled with 25 litres, which was consistent with his expected fuel consumption of 14 to 15 litres/hour. Whilst performing his pre-flight engine checks, before taking off from Shobdon, the pilot noticed a slight hesitancy and roughness as the engine was accelerated. Consequently, he prolonged his engine checks but was unable to reproduce the rough running. He then flew uneventfully to Kemble, taking 1 hour, and before returning home later in the day, via Shobdon again, he refuelled with 15 litres; this also being consistent with his expected fuel consumption.

The return flight from Kemble to Shobdon, by an indirect scenic route, was into a freshening northerly wind and took 1 hour 35 minutes. At Shobdon, he refuelled the aircraft with 27 litres.

This was slightly more than he had expected, but he was uncertain whether he had refuelled to a full tank at Kemble. The pilot estimated, from his flight time to a point on this first leg of the return flight, that the headwind had been about 10 to 15 mph. He therefore anticipated this wind for the onward flight from Shobdon to Hoghton.

During the pre-flight engine checks at Shobdon, he had a recurrence of the hesitancy and roughness which was more persistent than previously. As a result, he performed extended engine ground running, during which he replaced the spark plugs and cleaned the air filter on the forward carburettor which was wet with fuel. After further ground running of the engine, which then appeared to be operating normally, he took off for Hoghton. The pilot estimated that the total ground running time at Shobdon, after refuelling, had been about 22 minutes.

However after take off the pilot observed, from his handheld Global Position System (GPS) unit, that the wind had increased considerably, beyond that forecast or his estimate based on the previous leg, and his ground speed at one point reduced to 30 mph. A re-estimation of the leg time was made (about 2 hours 10 minutes flight time) which the pilot calculated would give him a half hour fuel reserve at his destination, after allowing for the extra fuel used during the ground running. (The aircraft fuel tank capacity was 45 litres).

Two hours and 16 minutes after leaving Shobdon, when the aircraft was over the north west corner of Chorley with the fuel gauge indicating 1/8 contents remaining and an estimated 6 minutes from his destination, the engine suddenly stopped. The pilot selected a landing field just north of Chorley hospital, but as he manoeuvred for the approach he realised that he would land short since he had not allowed sufficiently for the wind. The pilot therefore sideslipped the aircraft to increase his rate of descent and landed firmly on a small grass area in the hospital grounds. The landing was sufficiently hard to break the right landing gear, but the pilot was able to release himself, uninjured, from the aircraft.

Subsequent inspection of the aircraft by the pilot revealed that there was no fuel in either carburettor and an insignificant amount in the tank. There was evidence some oily fuel staining on the rear fuselage behind the engine.