

St Paul's Racers at the Environment Agency Sussex Heat, Goodwood 12th July 2009

The Sussex heat of the Greenpower Season took place at Goodwood Motor Racing circuit on 12th July and was the 6th heat with 4 heats to go before the final in October also at Goodwood.

The two St Paul's cars Zytec Aero and iWac Aero lined up on the grid at 1.00pm ready for the start with some minor adjustments to the speed controller on Zytec Aero allowing an additional 5 amps to the motor. iWac Aero settings were left as they were in the Corporate Challenge in April by way of comparison although it had been fitted with new aerodynamic covers to the kingpin and steering mechanism on the front wheels manufactured with the help of Passivent.

After the first hour the two cars from Chipping Sodbury school, R Pods and Rotary Racer had set a fast pace for the rest to chase. Zytec and iWac Aero were in 5th and 6th place respectively with Zytec Aero some 3.5 minutes ahead. Into the second hour Zytec Aero began to slow down over the next 4-5 laps finally coming to a stop within sight of the pit lane but then had to wait 20 minutes for a recovery vehicle to bring it back to the paddock. After some frantic work it was discovered that one of the push fit battery connections had worked loose causing eventually all power to be lost. Having lost some 27.5 minutes, the car went back out on fresh batteries and a new driver to try and make up lost laps. It had dropped from 5th to 21st position.

iWac Aero carried on its steady pace changing drivers and batteries at 2 hours with a great pit stop and managed to hold onto its 5th position building up a buffer of 3 laps or 7.2 miles from the next quickest car. iWac Aero finished the race with 96 miles on the board and a very solid performance by all five drivers.

Zytec Aero with its greater current capability started pulling up the order getting to 14th at 3 hours and 12th by the end of the race at 4 hours. It completed 81.6 miles even with the 27.5 minute unplanned stoppage which was the same distance as Zytec 2 covered in the final of 2007 with continuous running including overheating the motor and wrecking a couple of batteries by discharging them too far. We have come a long way!

At the end of the heat, the four batteries used in both cars still had over 12.17 volts left and the motors in both cars were at 35 and 42 degrees celcius, a testament to the great new heat sinks we received from Thermacore, one of our sponsors.

We also used our Garmin Edge 605 GPS units for the first time in a competitive heat enabling us to analyse driver and car performance after the event. These were kindly donated by Garmin Europe to the school. Some of the graphs can be seen on the last page.

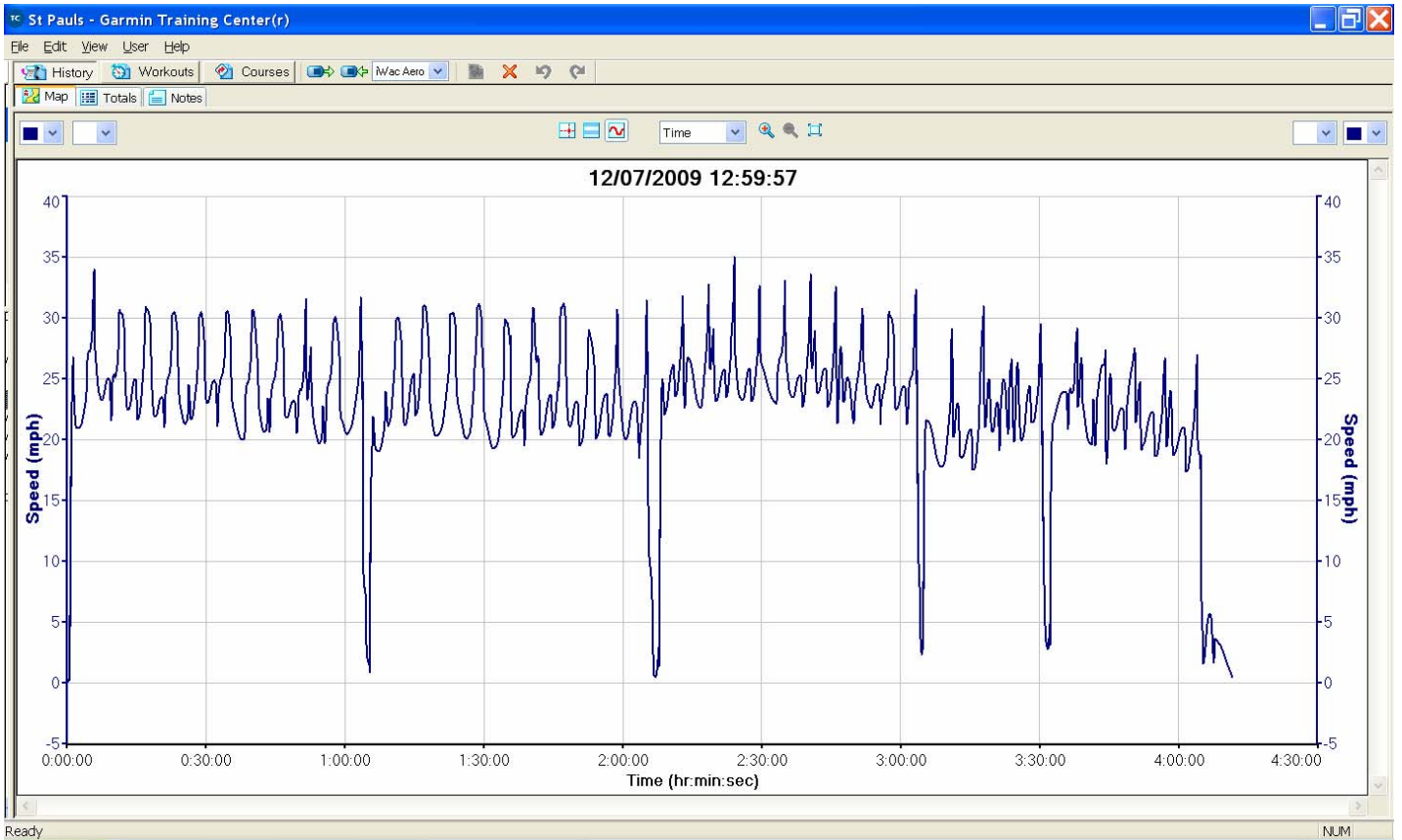
iWac Aero is currently standing in 13th position in the country in terms of distance travelled and Zytec Aero in 28th. Both should qualify for the Final in October with these distances.

The final heat is the Passivent sponsored Greater London heat at Dunsfold, the Top Gear track, at the end of September and both cars will be there.

For more information see www.greenpower.co.uk



iWac Aero's performance



Zytec Aero's performance

