

## **Mono 1 setup, hull originally built by Chris Osman for 2011**



### **Results :**

2011

3rd - UK NATS - Mono 1 - Chris

2012

2nd - UK NATS - Mono 1 - me

1st - UK NATS - Team Mono 1 with Jim and Aran Bond

1st - Electra - Mono 1 with 6 wins from 6 entries

### **Parts :**

Hull - ETTI Envoy Mono 1 KFK evo 2 - 640mm long 180mm wide

Motor - Leopard LPB 2860 4 Pole 3 wind Delta - 3400kv

Cells - Victory Battery 3S 4500mAh LiPo

Prop - Tenshock CNC aluminium 36mm diameter 50mm pitch

ESC - Castle ICE Lite 100, timing low or auto

Servo - Futaba Digital S3150

Propshaft - ETTI 2mm wire with M4 thread

Rudder - ETTI 80mm standoff, 65 x 25mm blade with water pickup

Turn fin - 1.5mm glass fibre sheet 40 x 25mm

Safety Loop - Tenshock

Coupling - Home made plain brass 2-4mm with grub screws

Radio - Tx - Futaba 3GR Rx - Futaba FF603 or Fs603 or FrSky TFR8S

### **Setup :**

C of G - 33% - 215mm from Transom

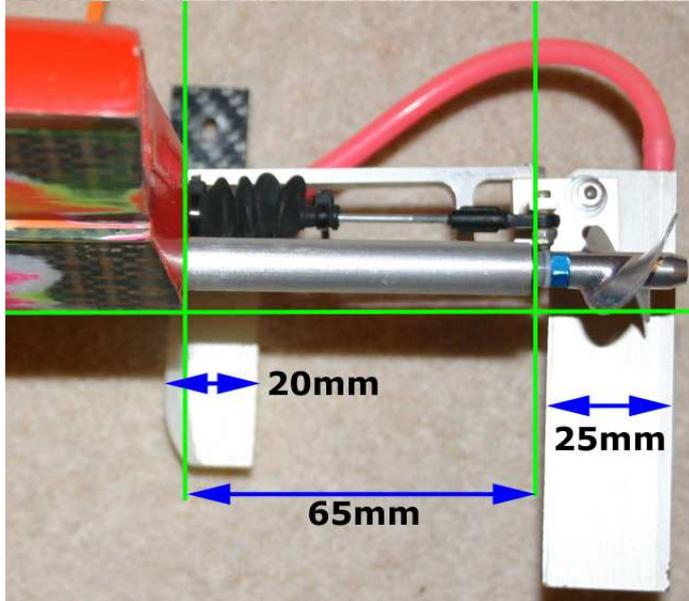
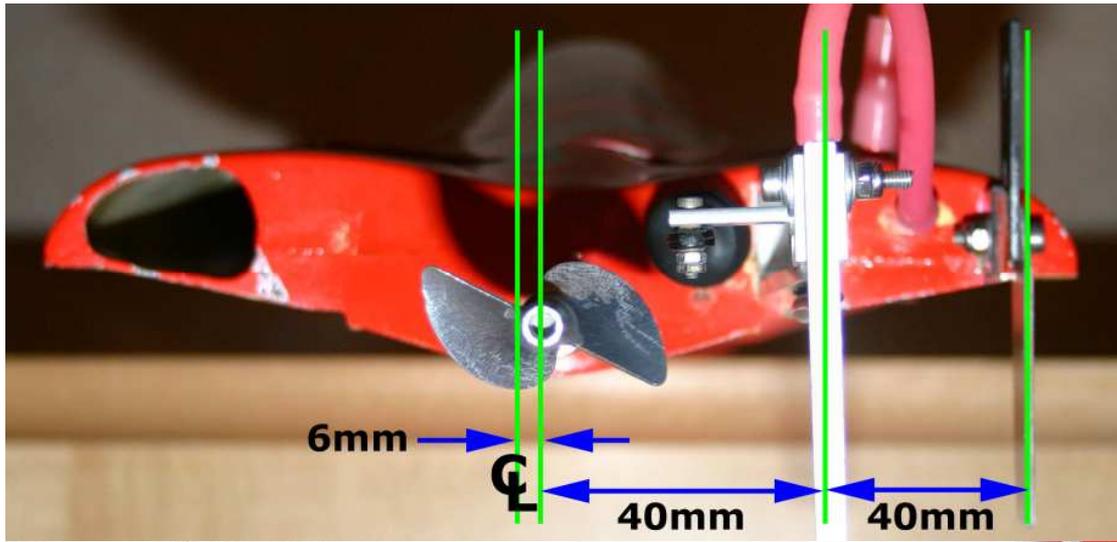
Cooling - Motor cooled from rudder pickup via Leopard jacket, ESC not cooled

Propshaft - 6mm offset to the right viewed from transom, end of shaft 65mm from transom, shaft set so there is a 2mm gap between the prop boss and a straight line between the peak of the step and transom, ie set the hull level on a flat surface. I've fitted ceramic bearings and replaced the inner ETTI plastic bearing with a ball bearing.

Rudder - 40mm to the right of propshaft

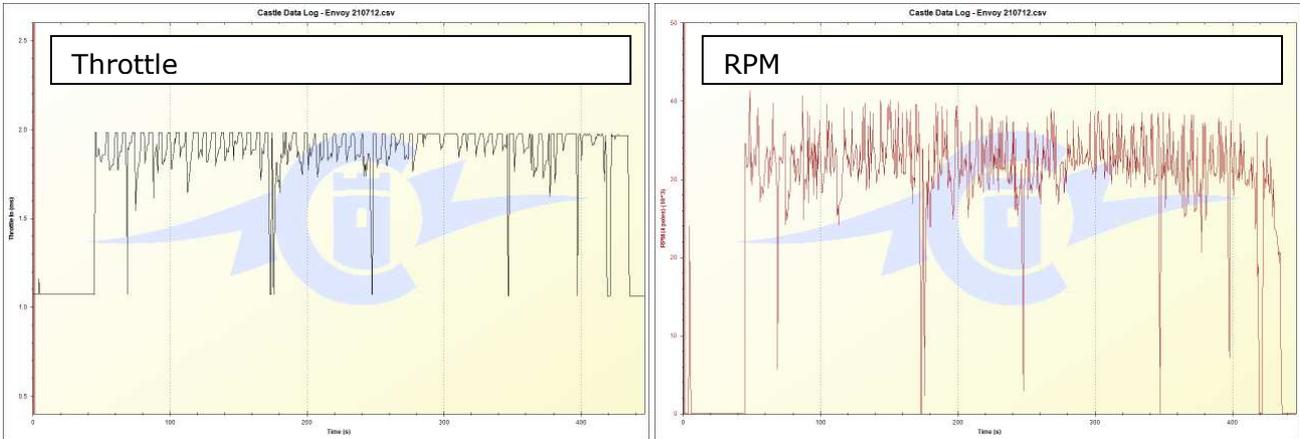
Turn fin - vertical - 40mm to the right of rudder

Motor mount - 3mm CF sheet, 275mm from transom, drilled for 19mm motor mounting holes.

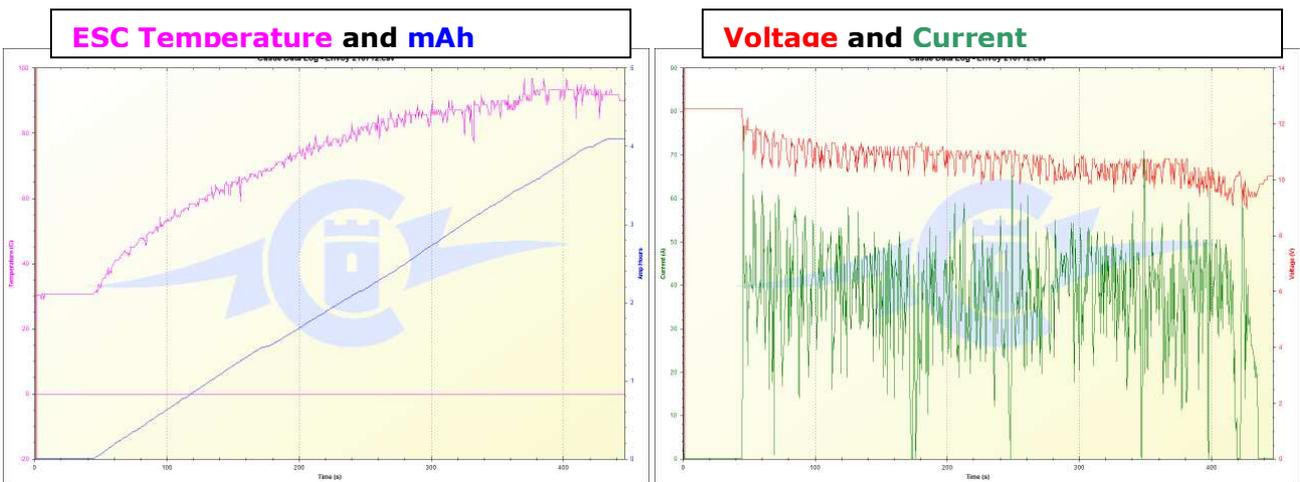


## Data Logging:

Output from race 2 at 2012 Nationals



Throttle trace shows two peaks per lap, one for each straight of the Naviga oval, you can actually confirm the lap score, as the voltage dropped I managed a couple of laps at full throttle, I think I had the course to myself at that point. Revs peaked at 41,330 and averaged 31,655 for the race, 33,744rpm at full throttle is a more useful number.



ESC temperature peaked at 97°C.  
4.09 mAh used (4090 from a possible 4500).  
Voltage averaged 10.6 for the race duration, dropping to a min of 9V.  
Current averaged 37.7A for the race duration, peaking at 76.6A on recovery from a flip or spin.