

# THE SNAPSHOT

The Monthly Newsletter of Project Torpedalo

“Only by setting distant and difficult goals do we truly succeed.”

PROJECT TORPEDALO

Number 14 - April 2011

[www.torpedalo.com](http://www.torpedalo.com)



## TORPEDALO TEAM MEET BOTH CHARITIES

A couple of weeks ago, the entire Torpedalo team (Mark and Mike, plus our colleagues Andy and Nick) travelled down to the offices of the MND Association to meet with them and Karen England from Make-A-Wish. This was the first time we'd all been together at once, and we spent the afternoon discussing our progress and planning the PR strategy and various fundraising activities for the rest of the year. It was fantastic to come up with new ideas and have some professional fundraising input, and we were also proud to show off our new Curvature Group 1:12

scale mode of the boat. We're now in the process of drawing up a detailed promotion plan for the coming months, which will hopefully see Torpedalo appearing in more and more magazines before progressing to radio and TV. We've recently added a page of links to all of the online articles about us on our website, so you can see how we get on!

We'd like to thank everyone for joining the meeting, and give special thanks to the MND Association for hosting the meeting and providing a delicious lunch!



## TRAINING STEPS UP A GEAR

With the start of our challenge now eight months away, our training has moved up to the next level of intensity. We've made the switch from one two-hour training session per day to two 75 minute sessions, either side of the working day. While this means being up at 5am and in work at 5:45 every day, it's the only way to get fit enough for our journey! We're now in a pattern of four weeks on, one week off, and every time we repeat the cycle we'll increase the duration of each session by 20%. By June, we'll be training for four hours a day, five times a week. We'll then add in longer endurance sessions over the summer, and our 24-hour simulation, before increasing the target power above what we'll use on the boat to develop our strength further. We both have a long way to go to be ready, but we feel fitter and stronger every week and know we'll be ready! You can support our training efforts by going online and donating to our charity cause now, by clicking the link on the right.

SUPPORT US  
HELP US REACH  
OUR GOAL

DONATE

## SOLAR PANELS ALMOST FINISHED

We recently paid a visit to solar panel sponsors Sharp to see the first of our custom, lightweight panels being assembled. The units have been designed to fit into the roof of the boat, are extremely light and produce around 70W each. There'll be three of them on the boat, to power our desalination, communication and navigation equipment and other electrical systems. Thanks to all the team at Sharp for doing such an awesome job!



# Live Events Update

## Cycle Show added to Event Plan

After the cancellation of the Liverpool Boat Show, the Torpedalo team has been working hard to secure new promotional events for the project.

Mike recently travelled to London to meet with Andrew Brabazon and Sarah Gill from Upper Street Events, to talk about a possible Torpedalo stand at the 2011 Cycle Show, to be held at the NEC in Birmingham from 29 September until 2nd October. While we'll have exhibited at several different marine industry events by the end of the year, we realised that we were missing an event that highlighted Project Torpedalo to the cycling industry and community. We're delighted to report that Andrew and Sarah loved the project, and have agreed to us having a stand at this year's Cycle Show. Not only that, but they'll let us pick where in the show our stand goes and have asked us to give a talk about the project to an audience of visitors. Their enthusiasm and commitment are fantastic, and we're very excited about being at Cycle Show this year.



In 2010, almost 25,000 people visited the show. Hopefully this year will see even more visitors, and we're already looking forward to speaking to cycling fanatics who will hopefully be able to relate to our training and the physical demands of our challenge. We're also delighted that at least one of our sponsors will be exhibiting at the show, and we'll be able to use the show to highlight all of our cycle industry sponsors (Science in Sport, Wheelies Direct Cycle Solutions and CyclePowerMeters).

Cycle Show falls straight after the Southampton Boat Show, which is another event we are hoping to be at. We're currently in discussions with the organisers regarding the Torpedalo presence at the event, but we're hoping to have the boat in the water with the ability to do live demonstration runs and from that generate a lot of publicity and media interest. Many of our key equipment sponsors will be at Southampton, and we'll be aiming to promote their involvement as much as possible at the event. Over 120,000 people attended the 10 day show last year, so Southampton could be the most significant event that we promote the project at. All the latest news will be posted online via Facebook, Twitter and at [www.torpedalo.com](http://www.torpedalo.com), and we'll continue to provide updates in this newsletter.

www.torpedalo.com

# Design Debrief

## The Finished Design - Exterior

As we approach the start of manufacturing, we'll round off the Design Debrief section with an overall look at the finished design. This month the exterior design will be described, and next month we'll look at the interior and finished drivetrain design.

The boat will be 8.3 metres long and 1.6 metres wide at the widest point, and built entirely of two-skin carbon fibre with a 10mm foam core. The hull has been shaped through practical hydrodynamic analysis, while the upper surfaces have been analysed through CFD for aerodynamic performance. The net result of this work is a hull that has less water-borne drag than the rowing boats, and a boat shape that has the same assistance in a tailwind as the rowers but a lot less resistance in a headwind.

The bow is a separate sealed volume, forming an end cap which clamps the hull and top deck together. A similar arrangement exists at the stern, with the carrier for a rear cabin emergency escape hatch designed to clamp the two main boat halves. The main cockpit features a hinged windscreen which we'll open in good weather to ventilate the cockpit. Side visibility out of the cockpit is provided by a pair of polycarbonate side windows, and behind the pedalling position

there's a roof-mounted hatch. Distributed along the roof section are the aerials for the VHF radio, GPS, satellite phone and AIS transponder along with an LED navigation light. Three solar panels are mounted along the length of the boat - one on the bow and two on the cabin roof. Both these areas also have mounting points and guides for ropes and lines from which we can deploy our sea anchor or drogues. A continuous grab line runs around the side of the boat, so that we can haul ourselves back on deck if we're overboard. The bow area also has two jackstays that we can clip on to via harnesses and safety lines if we have to go outside in difficult conditions.

The propeller is housed on the end of a short stub keel roughly in the middle of the boat, while a large foiling rudder is mounted at the stern. All surfaces below the waterline will be painted with copper antifoul material, to prevent marine life growing on the hull and so increasing drag.

We're confident that the design is safe, fast and self-righting. Hopefully, this combination will see us cross the ocean successfully and in record time!



## Sponsor Update

### Marlow, Science in Sport, Barbados Tourism Authority

The last month has seen three new sponsors join the project, and existing sponsor CyclePowerMeters upgrade their sponsorship level. We're grateful to all of them for their enthusiastic support!



CyclePowerMeters originally lent us a pair of SRM power cranks at the end of last year. These systems are essentially pedal cranks fitted with strain gauges, and when fitted to our training rigs measure our input power in real time. This allows us to pedal at a set speed and power input, precisely recreating what we'll feel on the boat. CyclePowerMeters have allowed us to keep the SRM units far longer than originally intended, meaning we're still able to keep track of our training performance and continually monitor how our fitness is improving as we train. Ultimately, the biggest performance factor within our control is our fitness at the start of the race, and CyclePowerMeters are playing a huge role in developing that. We'd like to thank them for their continuing support.



80 metres of anchor line. 100 metres of tripping line. Tow ropes, throwing line, safety lines, retrieval lines,. The rules of the race we're entering stipulate that we must carry hundreds of metres of different ropes, to allow the deployment of sea anchors etc and to

help in case of difficulties. We're most fortunate that marine rope industry experts Marlow have donated all of the various ropes and lines that we need for the boat, saving the project hundreds of pounds. They've chosen specific ropes from their wide range of specifications, colours, materials and constructions so that all of our ropes are perfect for their individual tasks. Our thanks go to the entire team at Marlow for arranging the deal and helping the project!



While we're lucky enough to have secured deals to pay for and supply our main meals and "bulk" food, from the outset of the project we've been aiming to associate with a company to provide supplements and optimised performance products for when we're on a pedalling shift or recovering afterwards. Our first choice for this has always been Science in Sport, who make a range of energy, recovery and hydration products that are used by world-class cyclists and athletes. With this in mind, we're absolutely delighted that Science in Sport have agreed not only to provide a range of energy bars, protein bars, recovery drinks and supplements for the crossing, but have also offered us a great discount on any products we need during training. We are heavily indebted to Michael Fish and Mark Blowers of SiS for putting this package together for us!



On his recent trip to London, Mike also visited the Barbados Tourism Authority to meet Vice President for Sales & Marketing, Petra Roach. Petra was fascinated by the project, and has made the fantastic offer to arrange accommodation for us for when we arrive in Barbados. This means yet another cost inherent to the project is

covered, and having heard Petra's plans for us we absolutely cannot wait to see Barbados for ourselves. Barbados looks to be a truly special place, and if the Bajan people are half as welcoming as Petra was then we're in for a treat! These thoughts are part of the motivation we'll need to keep the legs turning.

## Help Needed

### The kit and services still to find

Despite great success with securing sponsorship deals for the project to help us design, build and equip our boat, there are still areas where we need help. Every month we'll show a brief list of the most important goods or services we've yet to agree. If any readers know of anyone who might be interested in being part of the project, please let us know at [mike@torpedalo.com](mailto:mike@torpedalo.com)!

- Satellite phone equipment

## Contact Us

### We'd love to hear from you

If you'd like to know more about the project, think you might be able to help or generally just want to say hello, please do get in touch!

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PROJECT TORPEDALO

THE PEDAL-POWERED TRANS-ATLANTIC CHARITY CHALLENGE

Fundraising in aid of:



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Our thanks go to everyone who has supported the project so far. We couldn't be doing it without you!



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