

# THE SNAPSHOT

The Monthly Newsletter of Project Torpedalo

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

PROJECT TORPEDALO

Number 21 - January 2012

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



## NORCO GRP FINISH THEIR WORK - THE BOAT IS BUILT!

After months of hard work and thousands of man-hours, Norco GRP have completed their work on the shell of the boat. The last few weeks of 2011 saw a flurry of activity to finish the exterior of the boat, to ensure that all of the external surfaces were perfect. First up was the application of the metallic copper anti-foul system by CopperCoat. This layer of copper-impregnated resin, which was sprayed on to the underwater portion of the hull, will prevent any barnacles, weed or other unwanted marine growth from attaching to the hull, which would cause a huge increase in drag. With a quick sanding of the coating before the start of our ocean crossing, we should never have to clean the hull during the event - without the CopperCoat, it would be a weekly task at the very least.

Following the antifoul application, Norco's team of Finishers set to work on the boat, sanding and smoothing all of the exterior surfaces and joins. Gloss white marine paint was then sprayed on, giving a perfectly smooth and hard-wearing finish that will reflect as much heat and light as possible, hopefully helping to keep the interior of the boat (relatively) cool. The guys at Norco worked tirelessly to ensure that the finish is immaculate, and the curves of the boat are shown off brilliantly by the finished paint.

Once painted, the boat received three coats of marine-grade lacquer, giving a tough and durable coating that also has a mirror-finish. A temporary spray booth had to be built around the boat to get a perfect finish, as the boat is too big to fit in to a conventional paint oven! With the completion of the painting, Norco's work in building the boat is finished. They've given the same finishing treatment to the solar panel trays and forward windscreen hatch, which we will now start to install.

It is no exaggeration to say that Project Torpedalo would not have been possible without Norco GRP. Finding a company to build a one-off, carbon fibre boat for free was always going to be a challenge, but Mark Northey and his team could not have been more enthusiastic or helpful. Supported by John Burn Ltd, MonsterCAM, Curvature Group, CGI, Sika, SP Gurit, Hexcel and James Latham, Norco have made our dream a reality. It's now up to us to equip and test the boat and then use it raise as much money for charity as we possibly can while hopefully smashing a world record. On behalf of everyone involved with Torpedalo, and our two charities, we thank the whole team at Norco for everything they've done for us.



NorcoGRP



## ELECTRICAL SYSTEM BUILD STARTS

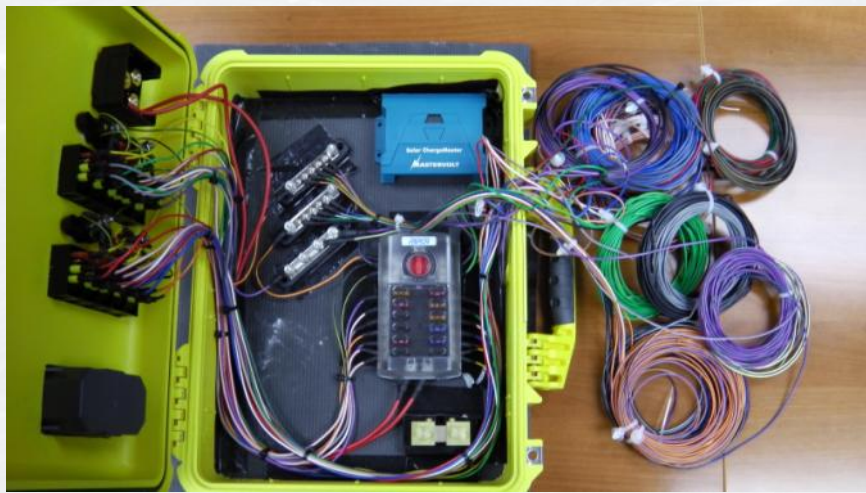
With Norco's work building the boat now complete, it's up to Mark and Mike to start the process of installing equipment and getting the boat ready to go in the water. There's plenty of work to do, including:

- Manufacturing the remaining pieces of carbon fibre, including the rudder, pedalling seat and crank frame
- Machining the drivetrain components and building the drive system
- Fitting all electrical components and installing the wiring.
- Fitting basic interior trim to the sleeping cabin.

Work has already started in preparation of the fit-out. Mike has been building the wiring system, starting with the main electrical distribution box which will be mounted to the cabin bulkhead. The box is made out

of a Peli case, as the contents must be protected from water. The case holds various controllers (for the solar panels, external camera, etc), a battery monitor, power and ground buses plus all of the boat's control switches and fuses. The electrical network is the boat's most crucial system - if it fails, we have to resort to manual water-making and navigation whilst having no means to communicate. So, the system must be robust, easy to repair and modify if necessary and intuitive to use.

Once finished, the electrical system will be installed to the boat so that our Mastervolt batteries, Raymarine navigation equipment, Icom radios and Sharp solar panels can be fitted and tested. With the completion of the steering system and drivetrain, we can then float the boat for the first time and sea trials can begin in earnest. 2012 is going to be a very exciting year!



## LATE NEWS - TORPEDALO TO BE AT LONDON BOAT SHOW!

We're delighted to announce that Torpedalo has been invited to exhibit the boat at the London Boat Show. We exhibited in 2011, with our pedalling rig and a model of the boat, but this year we can go one better and display the boat itself! This will be the first time the boat has been on display to the marine industry and audience, so we hope that visitors like what they see! We'll be showing her off on the now finished and galvanised boat trailer built for us by Hancox Equestrian, and with the exterior of the boat now sporting a mirror-finish paint job and its CopperCoat anti-foul, it should look great.

We'll be located at the west end of the North Hall, stand B102 - do come and see the boat if you're visiting or exhibiting. The show opens later this week on 6th January, and closes on Sunday 15th. It's a fantastic day out, especially as from 12th-15th tickets also grant access to the Outdoors Show, the Active Travel Show and the London Bike Show.

Our sincere thanks go to the British Marine Federation, and in particular Ed Mockridge, for inviting us to exhibit. We can't wait to be there!



## FOLLOW THE TALISKER WHISKY ATLANTIC CHALLENGE

The 2011 Woodvale Challenge Atlantic Rowing Race, rebranded as the Talisker Whisky Atlantic Challenge, started on 5th December 2011. Of the 17 crews that started, 11 are still competing with a close fight for the lead. As we went to

press, "Box Number Eight" and "JJ" were competing for the lead less than a mile apart. You can follow the progress of the boats and send messages of support to the rowing crews on the official race website by clicking [here](#).

## Sponsor Update

### Bay Plastics, Vehicle Wiring Products and Armstrong Nautical

Since the last newsletter, we've secured three more fantastic equipment sponsors. Bay Plastics are making the windows and windscreen for the boat, Vehicle Wiring Products have sent components for the electrical distribution box, and Armstrong Nautical have supplied very well engineered waterproof hatches to seal some of our storage compartments.



Bay Plastics Limited are plastic stockists, plastic fabricators, and plastic formists, supplying customers all over the world with quality plastic materials and products at competitive prices. The company offers an extensive range of stock to accommodate the diverse market for semi-finished plastic materials. Their main focus is providing exceptional level of service through their professional cutting department allowing customers to purchase custom sizes in plastic sheets and rods, with rapid delivery time.

Using data supplied by Mark, Bay Plastics are making the windows for the boat from 10mm thick acrylic sheet. The windscreen will be made by drape forming a piece of acrylic over a mould tool made for us by The Design Orchard, and the windscreen will then be trimmed together with the side windows using Bay Plastics' five-axis CNC machine. The windows not only have to have exactly the right shape and curvature, they must be tough enough to withstand wave loadings and anything else the ocean can throw at them. We're delighted that Bay Plastics are on board as we know they'll do a perfect job!



Keeping water out of our storage compartments is vital, not only to prevent soggy rations but also to prevent a large body of free water forming in the boat (which would affect our roll stability). Our research

showed that a great deal of supposedly water-tight hatches can fail very quickly, and we wanted hatches that positively secured using a mechanical lock. Armstrong Nautical make exactly what we need - genuinely watertight hatches that feature a unique design to distribute sealing pressure around the seal itself. They've kindly sent us some hatches to use on the boat, and already we can see that the hatches are ideal for us. Thanks go to them and Brian Raine at Tides Marine for their help!

### VEHICLE WIRING PRODUCTS LTD

As reported on the previous page, we're in the middle of preparing the wiring network for the boat. This needs a surprising number

of components - everything from wiring terminals to fuse boxes and, of course, the wire itself. Together with TheToolBoxShop.com (see November 2011 newsletter), Vehicle Wiring Products have supplied some of the components that we need to build a safe, reliable and dependable electrical system. This kind of product support saves us hundreds of pounds, and has ensured that we're still 100% successful against our commitment that all money donated to the project will go to charity.

## Support Us

Please make a donation!

First and foremost, Project Torpedalo is fundraising project for two amazing charities - the Motor Neurone Disease Association and Make-A-Wish Foundation® UK. Please help us raise as much money as possible by clicking on the button to the right and donating. The donation system is provided by Barclaycard and is 100% secure, so you can give with confidence. Thanks to our amazing corporate sponsors, every single penny donated by the public will go to our charities. Please help!



## 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 know someone that can, 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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fade<sup>2</sup>

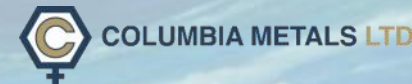


flourish



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Look what we found!



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