

Quantum Network–Newsletter Spring 2013

Easter is often seen as the start of the season. So in this edition we look at some of the changes we have made to *Quantum Leap* over the winter and some of the potential highlights of the coming year. Last year we followed the Vendee Globe, the ultimate solo event on the sporting calendar, this year we have the **America's Cup**. For crewed boats, this is the Formula 1 of the sailing world, with the top crews competing for one of the most prestigious trophies in the world. More on that below:

What we've been up to in the Winter

Over the winter there's been lots happening on *Quantum Leap*. As well as the usual maintenance activities, we have added a number of upgrades ready for the coming season.

With a fresh coat of antifouling below the waterline and the hull cleaned, polished and waxed, *Quantum Leap* does look really good. We use a soft antifouling, often called self-polishing antifouling. Over the course of the season the layers of paint applied erode, ensuring that nothing is able to stick to the hull and that the remaining surface is always smooth. It will ensure that *Quantum Leap* glides through the water beautifully this year!

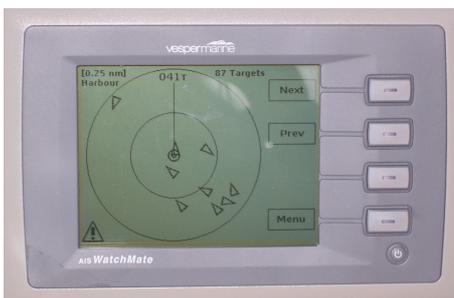
The upgrades we've made are mostly driven by the RORC requirements for offshore racing but many of them will be of benefit when cruising too. Some contribute to the overall safety of the vessel and all onboard, taking us well beyond the coding requirements for commercial charter.

The changes include re-housing the liferaft on the cabin roof, to enable it to be fitted with an automatic hydrostatic release. This mechanism ensures that a sinking vessel never takes the liferaft down with it, even if the crew do not launch it themselves.

We have also added some more electronics. We now have an EPIRB, or Electronic Position Indicating Radio Beacon, installed on *Quantum Leap*. With built-in GPS and automatic activation, this wonderful gadget, is the ultimate distress beacon when sailing offshore. The distress signal, giving the vessel details and the position to within 100m, is relayed via satellite to Falmouth Coastguard. They handle all of the EPIRB distress calls for the northern hemisphere, coordinating with the local emergency services to execute the rescue. I was lucky enough to visit Falmouth Coastguard station a few years ago and found it fascinating to listen to them coordinating the response to a Russian fishing boat that was on fire off the Canadian coast.



In addition we have also installed an **AIS Transponder**. AIS, or Automatic Identification System, is similar to radar, in that it gives you the position of other vessels on a screen, but it operates very differently. Radar works by pinging a signal off the distant object, which it uses to calculate its position. AIS on the other hand works by the vessel itself transmitting information on its position, course and speed over VHF, which is then picked up by AIS receivers. From the information provided, the kit can then calculate the CPA, or Closest Point of Approach, reasonably accurately. One advantage of AIS is that it also provides the vessel's name and MMSI number (Maritime Mobile Service Identity – effectively your phone number on the radio), so that it is very easy to contact them by radio. AIS is compulsory on large commercial shipping, anything over 300 tonnes, but is also becoming more accessible for the leisure market. Receivers are relatively inexpensive now, so you can monitor other shipping.



Transponders (i.e. equipment that will transmit your own AIS position) are more expensive but not prohibitively so. So does this mean Radar is finished with? I think not. AIS will only display other vessels that have an AIS Transponder onboard. Radar will pick up other vessel and also has some uses for navigation, so I am pleased to have both this and AIS available onboard. If you are interested in AIS, there are a number of receivers around our coast, which publish the information on the web. Go to www.shipais.com to get a view of current shipping from around the coast.

Quantum Leap's mast has been out this winter and 'doubler plates' added to provide additional strength around the areas where the stays connect to the mast. So all in all, we should be well set up for the season and the rigours of the Fastnet race.



Major 2013 sailing events

Cowes Week and the Fastnet Race - Part of British sporting tradition since 1826, this year the Cowes week regatta takes place between 3rd – 10th August. As tradition dictates, the start of the biannual Fastnet race follows on from Cowes week. This year the start is planned for Sunday 11th August. The 608 miles race starts at Cowes, rounds the Fastnet rock off SW Ireland and the Isles of Scilly before making for the finish line at Plymouth. Entry for the race this year proved more popular than ever, with entries being over subscribed within 24 hours of opening on 7th January. The organizers have added a further 40 boats to the normal 300 allowed but still there is a long waiting list. Quantum Sailing have entered a crew, so we expect *Quantum Leap* be on the start line with the other crews, professional and amateurs together. We do have to complete a number of pre-qualifying races first and you can follow all of our preparations in our race diary on our web site – www.quantumsailing.co.uk/fastnetracediary.html .

Clipper Round the World Race – Clipper, the organization founded by Sir Robin Knox-Johnston, offers individuals from all walks of life, and with no previous sailing experience, the opportunity to participate in a true ocean racing experience. The next race starts in August 2013, boasting 12 brand new 70-foot ocean racing yachts for the 40,000-mile circumnavigation over 11 months. Participation includes a full training programme and individuals can choose from a single leg to completing all 15 races. As the boats are based in Gosport we often see them out and about training. Details can be found on their web site - www.clipperroundtheworld.com

America's Cup – 2013 - The autumn of this year sees the 34th America's Cup challenge. This is the oldest trophy in international sport that is still being competed for! The competition started in 1851 but the America's Cup itself was first presented in 1857, when it was donated for a 'perpetual challenge for friendly competition between nations'. This is a match racing series, i.e. two boats going head to head, one representing the holder and the other the challenger. Any yacht club that meets the requirements specified has the right to challenge the yacht club that holds the Cup. If the challenging club wins the match, it gains stewardship of the cup.



The race isn't actually named after the country but *America* was the name of the schooner that won the first race around the Isle of Wight in 1851. It was held by the New York Yacht Club until 1983, which is also the record for the longest winning streak in international sport at 132 years.

Traditionally this match race was between the holder and a single challenger but in 1970 there were, for the first time, multiple challengers. So a select race series was initiated, with the winner having the right to challenge the holder. From 1983 the Louis Vuitton Cup has been the trophy for the challenger selection series.

This event has always pushed the boundaries of the sport and has thrived on innovation and often on controversy and legal challenges. From the original 100 foot plus schooners weighing over 200 tonnes, through the classic 1930s J-Class design, the America's Cup boats have continued to evolve to the current state-of-the-art, carbon fibre, wing sailed catamarans.

Never was the design innovation more crucial than in the classic 1983 series, which attracted huge media attention across the world. Alan Bond, a flamboyant and controversial Australian businessman challenged with a radically designed winged keel yacht. The Australians kept this secret, draping large 'modesty skirts' from the deck to the ground when the boat was hauled from the water. Despite legal challenges, *Australia II* went on beat Dennis Conner's *Liberty* and take the America's Cup 4–3 in a thrilling final.



This was the first time the NYYC had lost the cup in 132 years and 26 challenges. Even now, only 4 countries have held the cup. The current holders are the Golden Gate Yacht Club, having successfully won the 2011 event, again after a court battle, with their BMW Oracle Racing rigid wing sailed trimaran *USA-17*.

The 34th America's Cup will therefore take place in San Francisco bay, this Autumn. It will be in a new class of boat, the AC72, a state-of-the-art, wing-sailed catamaran. In addition there are a series of preliminary events in different venues leading-up to the main event, called the America's Cup World Series. The challenger selection series, the Louis Vuitton Cup, starts on July 4th, 2013 in San Francisco bay, culminating in the America's Cup final, a best-of-nine match race, in mid-September.

Britain has never won this event but with Olympic greats such as Ben Ainslie focussing on this now, we must have a decent chance to break our duck. Watch out for this later in the year or follow it on www.americascup.com .