

# topdeck

news & views from

**dixon**  
yacht design

**Antares - “A yacht apart”**  
**Motor Sailors - The new generation**  
**Royal Denship - A growing fleet**

Issue 4

## ...the skippers briefing

A year which started well ended brilliantly and there were plenty of high points throughout it as well! The Royal Denship '80 Open' made the headlines, winning the prestigious Superyacht Society award for best superyacht in the 23 to 32 metre range. To end a great year, what could have been better than attending the launch of Antares, at 40 metres, our largest sailing superyacht to date. You can read about how our relationship with Royal Denship is growing and why we think Antares is a truly great superyacht in this edition of Topdeck.

It's been another busy year in our office, with design work started or continuing on many interesting projects. We take a lot of pride in being seen as innovators in yacht design. Yes, we can do 'me too' work, and do it very well, but there is a great deal of satisfaction in sitting down and considering how to do something better and then finding the solution. The motor sailor design in this *Topdeck* is a case in point: a detailed client brief, giving the requirements



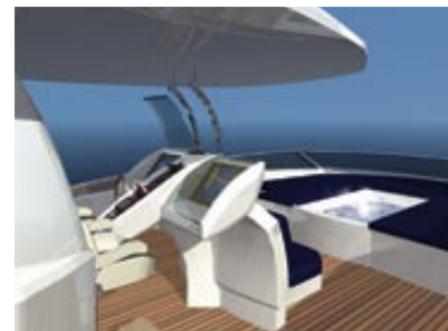
Bill at the helm of Antares

for both looks and performance led to many hours design and testing before arriving at a satisfactory conclusion. The final result will have many of those who dismissed motor sailors as being part of 20th century history looking again with renewed interest.

We believe we are one of the foremost design teams in the world when it comes to our experience with deck saloon sailing yachts of all sizes, and in this edition you can see how, with two yachts, we have moved the design of these vessels forward. Antares presents a new way at looking at the relationship between the saloon and the deck living areas, while the 73 foot deck saloon performance cruiser shows our latest thinking in the growing market for fast, but comfortable, long range cruising yachts.

Our next year looks equally demanding with new designs commissioned in both sail and motor categories but as I mention above, we relish a challenge, so if you have an idea which you think might stretch us, we would love to hear from you.

*Bill*



It's several years since we first worked for Royal Denship and it is a relationship which has been growing ever since. For some months we have been working on the new Royal Denship 85, a sophisticated, contemporarily styled flybridge motor yacht. She is the first in a range of large motor yachts that will be marketed by Peters Superyacht, a division of the highly regarded company, Peters PLC.

The 85 is another of our wide beam motor yacht hull designs which provides the vessel with a voluminous interior, excellent stability and performance. It is not just the beam of this vessel which endows her with a feeling of being even larger than she really is; the saloon and dining area is in excess of 11 meters in length!

As can be seen from the illustration, her flybridge has been designed to be much more than just a control centre for the yacht when at sea. The 85's is also the major outdoor entertaining area, with a sunbathing position and a Jacuzzi forward of the slightly raised helm station, and a bar, fridge, barbecue and large dining area behind it.

## Royal Denship a growing fleet

The ergonomically designed helm position is protected by a fixed bimini, while an electric powered awning can be extended out over the dining area. The use of free standing furniture in this area will extend the superyacht feel.

The Royal Denship 85 will be powered by twin Caterpillar engines giving her a top speed of 35 knots.

No article about our association with Royal Denship would be complete without mention of our great success in last years Superyacht Society's Design Awards, the 'Oscars' of the yachting industry. Our design for the Royal Denship '80 Open' won first prize in the 23 – 32 metre class against 25 other nominations and 5 finalists.

The '80 Open' has a new, slightly larger sister, in the recently announced '82 Open' which is capable of 45 knots using surface drive propulsion.



82 Open at speed

## a new generation of motor sailors?

Motor sailors went out of fashion many years ago. Nicknamed 50:50's on account of their supposed ability to only achieve 50% of the performance of their pure sailing or motor boating rivals, times have moved on dramatically.

We are currently working on this radical 24.95 metre motor sailor design for a client who requires a yacht which will not only be a good sailing performer, but which will allow him to move his yacht to new locations, at speed under power, when he requires it.

Arriving at a hull design which would allow good sailing and power performance took a considerable amount of design and testing but we now have a vessel which will both sail well and motor at up to 13 knots.

This yacht is what we call a 'cross over' boat. It's one

which would satisfy any owner looking for good cruising yacht sailing performance combined with displacement motor boating speeds.

The 'cross over' extends not just to performance but also to the interior and exterior design of the yacht; this is a sailing yacht with a flybridge and the interior design of a motor yacht.

The flybridge will be the centre of activity when sailing and motoring. Apart from port and starboard steering positions it has large seating, dining and sunbathing areas, plus a barbecue and wet bar.

Among the yachts many other features are concealed tender and Jet Ski storage. All in all, this motor sailor design represents a huge leap forward from what was available in the past.



SPECIAL FEATURE

# Antares

“A yacht apart!”

You would expect us to be delighted with Antares, your biggest sailing yacht to date, built at the prestigious Royal Huisman yard to the very highest of standards. Others however, are singing her praises for us; it is David Glenn of 'Yachting World' who gives us the headline to this section. Antares is not extreme in her outward appearance, as required by her owner, but she has a subtlety of design which makes it instantly obvious that this yacht has had a great deal of time and care dedicated to her by both the design team and her builder.

David goes on to explain that, "there are less obvious design details which set this yacht apart". The subtlety of design extends not just to such major elements as the relationship between the saloon and the rest of the aft deck area. A host of smaller but important individual details like the helmsman's positions, the steering system itself, and the operation of the stern platform combine to demonstrate that a design team who follow a clients brief, innovate, but not just for innovations sake, and a builder of enormous experience and ability can produce a really outstanding yacht worthy of the accolade - Super!

continued overpage



## SPECIAL FEATURE - Antares (cont)



Antares' elegant lines are the result of an owner who wanted a yacht which would not date as the years pass, but would have a timeless feel to them. As Royal Huisman state on their web site, "Walking aboard Antares, one starts to appreciate the influence that Bill Dixon has brought to the design table. With a striking superstructure that has taken form with the use of complex multi directional curves, the entire feeling as you step down into the aft adjoining cockpit is one of security and bold good looks".

Part of the owners brief concentrated the minds of both the design team and the builders more than usual. Apart from simple clean decks was the requirement to ensure that the whole area from the front of the pilot house, through the cockpits to the steering positions is seen as one contiguous part of the vessel. This is very much the heart of the yacht, and open to enjoyment by all, whether actively involved in sailing her or just relaxing. It has been achieved with just one small floor level change and an aft bulkhead that opens up to integrate the inside and outside spaces. Technically this was made possible with the considerable help of Royal Huisman who produced the slide-away glass partitions and the hinge and slide away pilothouse door.

The steering positions are another notable feature of this yacht. The helmsman's seats are controlled by tiny joysticks and powered by an electric motor. They move on custom built slides so the helmsman can adjust the seat to suit the angle of heel and the point of sail. Together, with what can only be described as a commanding helmsman's position, the seat adjustment ensures the instruments and headsail luffs are never out of site and adds even more to the pleasure of sailing this yacht.

continued overpage





## SPECIAL FEATURE - Antares (cont)

...and pleasure is probably not a strong enough adjective to describe the feelings one gets helming her. David Glen has sailed many superyachts, but of Antares he writes "We sailed her in light airs off Palma recently and, despite the yacht's 211 tons, the steering system allowed enough feedback to make sure you want to hang on to the wheel, even in the light airs."

The most remarkable fact of all perhaps, is that there is no power assistance in this mechanical steering system, just outstanding design and superb engineering.

From the moment we started the Antares project it became very apparent that a real team spirit would exist between Royal Huisman, Patrick Yeoward, who is the skipper of Antares and project manager, and ourselves.

The final result is a testimony to the value of teamwork: teamwork which has encouraged all concerned to produce a yacht with such an array of new design features which, we are sure will find their way on to many superyachts of the future. As Mike Koppstein of Huisman says of the helmsman's seats, "It might look simple but it's a complex bit of engineering which really works – now everyone will want one!"

Among other notable features is the stern platform which, as it folds down conventionally, a section of bulwark, in very unconventional manner, is recessing into the transom to provide a safer, 'no step over', approach to the platform for swimming or boarding a tender.

Add the beautifully engineered solution to the fully opening doors from the saloon to the aft deck, the dedicated diving fill station and the overall design of the aft deck sections of the yacht to name just a few items and we believe we have together produced a yacht which any owner would be proud to own and sail. Antares is a star in both senses of the word.

# Johnson 75ft more choice

The lengths have varied slightly, as so often happens throughout the planning stage, but the final decisions have been made on the two yachts which will join the already hugely successful 87 to complete Johnson Motoryachts range for the next few years.

The 100 we previewed in this publication last year has grown to 103 feet and will be launched during 2006. She is to be joined by a smaller sister at 75 feet, thus completing the three yacht range. All three yachts share the same styling cues and have brought superyacht styling down to motor yachts of a smaller size.

The 75, thanks to its voluminous hull will have a considerable amount of interior space for a yacht of its size. Such is the space available that we have been able to incorporate two of the most popular design features of the 87, the sky lounge and the country kitchen, as it is called in the United States. In Europe, the country kitchen would be seen as a large combined galley and dining room. Johnson yachts are however, happy to customise interiors to an extent and as with the other yachts in the range, the 75 will be available with different interior configurations. The first 75 should, as with the 103, also be launched during 2006.



Johnson 87



Johnson 103



Johnson 75

## That's It update

Good progress is being made on *That's It* which is currently in build at Holland Jachtbouw. The yacht, due to be launched in the late spring of 2006, is another of our designs where particular attention is being paid to keeping weight down. To cope with the light airs often experienced in the Mediterranean, a large rig will also help ensure good performance, but the sail plan has been designed for ease of handling.

The sleek lines of this contemporarily styled yacht are enhanced by decks which are remarkably clear of equipment. This is being partly achieved by fitting semi recessed headsail furlers, a through hull anchor system, pop up cleats, deck recessed Genoa tracks and concealed hinges for hatches.



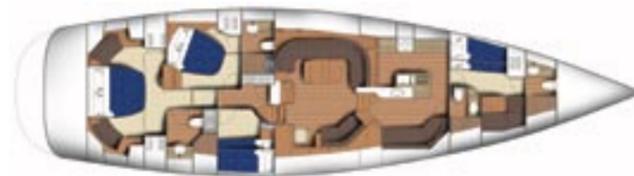
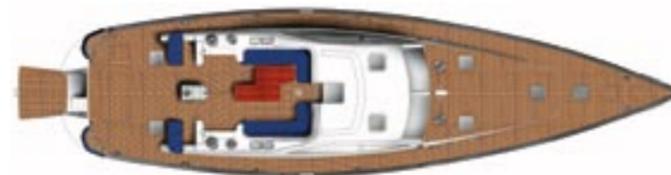
Photo - Holland Jachtbouw

## Deck Saloon design moves on

This new 73 foot performance cruiser design takes the deck saloon concept another quantum leap forward: shortly to go into build she has a superb combination of performance and volume, providing all the comfort of a deck saloon yacht wrapped in sharp, contemporary styling. The fully raised saloon, which is all on a single level, has the engine room beneath it.

Since producing the designs for the 65 foot Liara we have worked continuously to enhance the design features found in that very successful yacht and this vessel is just one of several successors we have been working on. The 73's strong but light hull, produced using vacuum bagged composite construction, will be fitted out with lightweight materials to further ensure excellent performance. The simple rig design, based on a blade jib and a large main will allow her to be sailed and, shorthanded when necessary. Remaining true to her cruising role, this yacht is expected to sail in the Caribbean during the winter and the Mediterranean in the summer; the 73 will be fitted with large tank capacity. She will still be a very comfortable cruising yacht despite the performance requirement.

The interior layout in this first yacht, allows for the crew forward with the owners suite and two further guest cabins aft.



# Commissioning a custom design



Anders Berg  
Partner

## Part 2. Through to build

In the previous edition of topdeck I discussed the process of commissioning a custom design and the importance of preparing an accurate set of detailed tender drawings and relevant technical documentations in order to obtain competitive bids from the shipyards.

A key part of this tender phase is the development of the tender specification, which includes all major equipment aboard, the system performance requirements, hull and deck construction and interior fit out.

The bid packages are sent to a short list of shipyards the client and we think will do a good job. At this point, or even before the bids are sent out, the owner may choose to instruct an owner's representative to manage the project or even write the tender specification.

The designer and client usually visit the top candidates before a decision is made. Once the decision is made to proceed, the client then enters into a fixed priced design contract with the designer for the final design package.

With the shipyard now chosen and an agreed build specification, the next stage in the design process is to develop the concept tender drawings into a well thought through set of working drawings

Depending upon the shipyard's available technical resources, the package will be individually tailored to

meet their specific requirements. It will be further developed with the professional input of all the relevant parties such as the owner's representative, the interior designer, if involved, and the shipyard. Some designers can be criticised for being too dictatorial, but we firmly believe in a team approach, which is often very enjoyable and rewarding during the course of the project.

It does not mean that we will not fight our corner when we need too as after all, the designer is responsible for the overall concept and must be the pivotal force in determining the fitness of purpose of the vessel.

Working drawings will be necessary for the construction of each part of the vessel. The designer will be responsible for defining the geometry drawings and the principal construction. He may also be responsible for specific design features, such as the bathing platform.

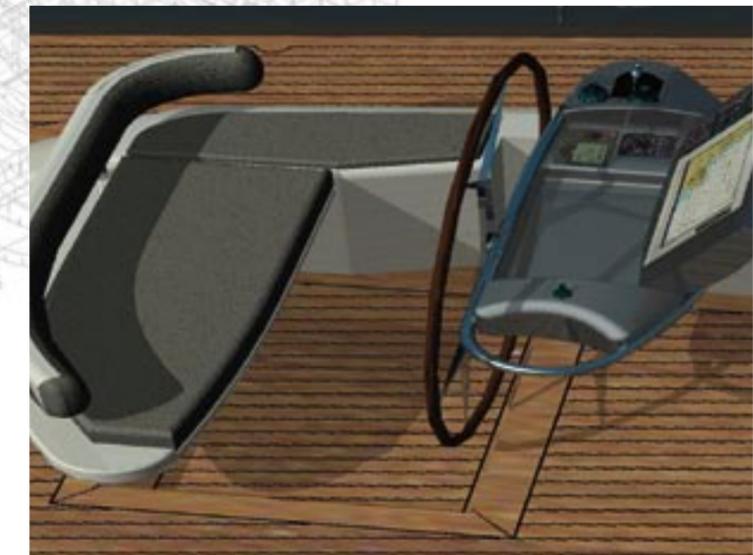
It would be usual for the shipyard to take responsibility for the ships systems and engineering details, but the designer must determine the position of the primary machinery before this can be done.

The construction design package would typically include the following groups of drawings, obviously dependent upon our role within the project:

- Primary construction drawings
- Hull lines and appendages drawings
- Deck geometry and 3D detailing drawings
- Principal engineering drawings,
- Interior detailing drawings.

During the construction of the both Custom and Production designs, the designer will typically monitor the project, usually at "milestone events". On larger Custom yachts, this may be done by the owner's representative or by the Captain, who may well be available during the final stages of construction. Otherwise, local surveyors, usually from a major classification society such as ABS, will be available for regular audits.

In the next edition of topdeck I will take you through to commissioning a new design.



DIXON YACHT DESIGN  
t: +44 (0)23 8040 5280  
e: [info@dixonyachtdesign.com](mailto:info@dixonyachtdesign.com)

Greydowns, School Road, Old Bursledon, Southampton,, Hampshire SO31 8BX

Designed by Jacamar (UK) Ltd  
[www.jacamar.co.uk](http://www.jacamar.co.uk)  
+44 (0)23 92410 108

Produced by Marketing Connections International  
+44 (0)1489 890 749