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**THE DESIGN PROCESS**

We are often asked how the process works when a client approaches us for a design, or has ideas they want to bounce around before committing to a project.

Our projects are quite diverse and we find that the most successful way of approaching a new design is to split the project into 'Preliminary and Working Drawing' stages.

The Preliminary Stage allows the designer & client to get a clear understanding of what is required and to put this into initial drawings. It is the foundation of all future work and everything that follows will be based on these drawings. Costs for the preliminary work depend on the project on hand and we would supply a quote on a project-by-project bases.

Preliminary work would include:

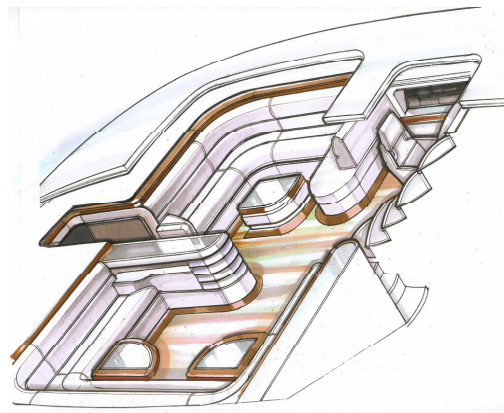
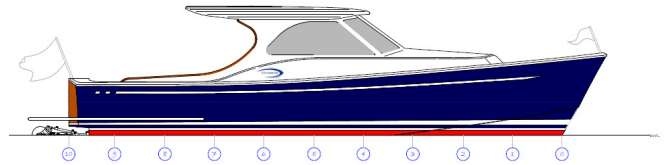
- General Appearance Plan
- Deck Plan
- Sail Plan
- Accommodation Plan
- Initial Renders

These plans allow the client to know exactly what can/will be achieved during the next stages. There is **no commitment** for the client to go further into the Working Drawing Stage of the project, but the Preliminaries would allow them to have a clear understanding of the aesthetics, ergonomics and performance criteria, that will be achieved.

Once they are happy on where we are heading, they can, if they wish, initiate the Working Drawing Stage. This is normally split into three phases:

The Phase-1 stage is the minimum package we would allow builders to work with. These are the primary drawings and are well detailed.

The Phase-2 stage are secondary level drawings such as systems, joinery etc, that some well established Boat Yards prefer doing themselves based on past successes.



The Phase-3 stage would be for those details that the yard could/should handle, such as metal work etc.. We would discuss our standard drawing list with the Yard, and the areas they aren't comfortable with, we would do for them.

Overall, we find that if we approach the design process in this way, it allows clients to really understand what can and can't be done and to be assured that their dreams and wants are achievable. The process needs to be enjoyable for all involved, and some fantastic results are achieved.

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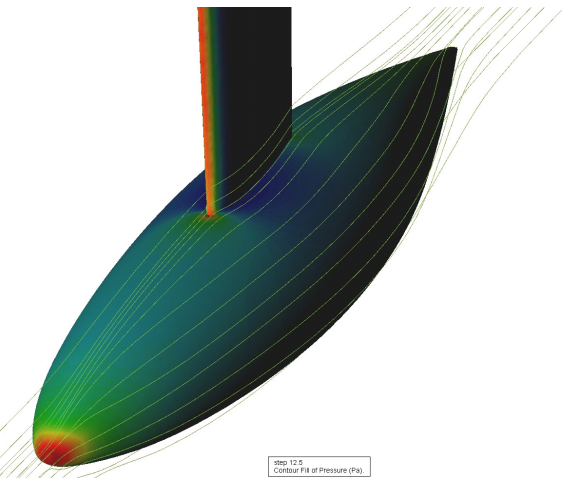
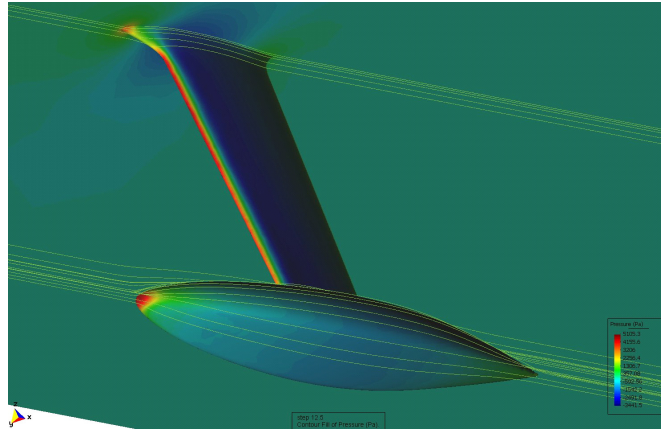
**Web: www.dibleymarine.com**

## IRC DESIGN UPDATES

### DIBLEY 42 IRC OPTIMISATION:

Recently we received the go ahead from one of our overseas client to take the initial IRC 42 yacht we designed for a local New Zealand client, and optimize it for light air conditions in Phuket and Asia. This involved a total re-think on hull shape, appendages and sail plan to make sure we produced the best performance for its rating, in the conditions that the yacht would be raced in.

To make sure we produced the best package that we could, Dibley Marine engaged the services of fellow yacht designer, Christian Stimson, to help us analyze a range of hull and appendage packages against a known group of other designs out there that we had details on. Christian is a well established yacht designer from England who designed the Reflex 38, which is currently the 2010 RORC Yacht of the Year and won the 2009 RORC Offshore Championship overall, under IRC. We have worked on a number of projects together and the collaboration works very well.

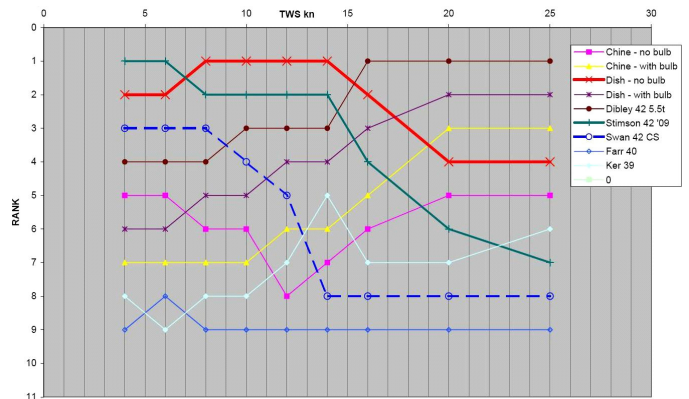


For this particular project, we needed to look at both extremes of hull form and so we had the 'Dished' soft bilge models, as well as the harder 'Chined' models mixed up with various appendage configurations. Once we did this, we had to balance the actual performance against the Rating achieved through IRC. The graph below shows the result under IRC corrected where the already established "Stimson 42 '09" excelled under 7 knots true wind speed, where as the Dibley "Dish—no Bulb" excelled between 7-15 knots, and the "Dibley 42 5.5t" excelled from 15+ knots.

It was important for us to make sure that the IRC Rating for the final light-mode' results came in just under 1.2, and the end result was 1.199 for the light weather mode and 1.219

for the heavy weather mode. Both models, under this rating, excelled against yachts of similar size in the appropriate wind range.

This scientific method of design allows us to not just guess what is going to work, based on past experiences and instinct, but lets us know 'why' one configuration was faster than the other. The results are tabulated and recorded and we can now build up on this knowledge, when and if required.





**WE ARE ON THE WEB!**

**[www.dibleymarine.com](http://www.dibleymarine.com)**

## Sailing Links and News

**2-Illustrate.**  
[www.2illustrate.com](http://www.2illustrate.com)

**Yachting New Zealand**  
[www.yachtingnz.org.nz](http://www.yachtingnz.org.nz)

**Westlawn Institute of Marine Technology**  
[www.westlawn.edu](http://www.westlawn.edu)

**Royal New Zealand Yacht Squadron**  
[www.rnzys.org.nz](http://www.rnzys.org.nz)

**New Zealand Marine Industry Association**  
[www.nzmarine.com](http://www.nzmarine.com)

**Scuttlebutt Europe**  
[www.scuttlebutteurope.com](http://www.scuttlebutteurope.com)

**Scuttlebutt**  
[www.sailingscuttlebutt.com](http://www.sailingscuttlebutt.com)



Design Studio, Westhaven Marina, Auckland, NZ, 2010

### From the Design Office:

One of a designers greatest abilities is to surround him/herself with like minded professionals and talent, from whom they can expand the services and expertise that they can offer to their client and projects. Case in point is our recent collaboration working alongside fellow designer, Christian Stimson, on a project that required specialist work for optimum results. Christian is an already well established designer from Europe, but he was willing to come into this particular project as we shared a common design philosophy and background that allowed us to come up with some amazing results. The same holds true for Brad Heald who does some of our rendering and styling work. Brad is a self taught professional who has a gift for presentation and style that gives the client the 'wow' factor which should be important for all projects. Thank you both for all the work that you do.

Summer Racing/Cruising is now happening in NZ. Fantastic.

Happy Boating. Kevin Dibley

### NEWS & RACING RESULTS:



- The Dibley 55 'Marilyn' was finally launched last month, and is now cruising the Bay of Islands and the East Coast. Congratulations to the co-owners, Mark Woods and Stan Peyton on a stunning result. Stan commented on the fast spinnaker ride north and the ease and of how she sailed at all angles. He is looking forward to a summer season of cruising with friends and family. Full Yacht Review and pictures will be shown in next Newsletter.

- Recently, we worked alongside Laurie Davidson on a new Bulb design for the Davidson designed TP52, 'Jelik V', [re: Alta Vita], which was purchased by Frank Pong in Hong Kong. Optimized for IRC racing, the new bulb will minimize drag but maximize the righting moment compared to the original bulb. At the same time, we designed another Bulb for Frank Pong's, 'Juan Kouyoumdjian-designed' TP 52 'Mui Mui'. Both will be raced hard in the Asian circuits. Pouring of the bulbs had been done in NZ by Mike Rees Castings and they were shipped up to Hong Kong and fitted last month. Results showed immediate improvements and both yachts will be campaigned hard over the next few months.
- Recent projects since the last newsletter include a Keel re-design for a Reichel/Pugh 75-footer; a Bulb re-design for the Australian based, 15-year-old Dibley 50, 'Marnico', to help her be more competitive in her next stage in life; new rudders for a Whiting 29 and a Whiting 44 Yacht; a hardtop for a New Caledonia based Amel 54 cruising yacht which was built beautifully by Allan Legge Boatbuilders in Opuia; and various stability and hydrostatic work for a number of yachts.

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