



## **Choosing a design for Home Build**

Radio Yachting and Model Yachting in general has always lent itself to home building with the satisfaction of racing your own build hard to match. As with any commercially available build though, careful thought should be given to the entire project before proceeding. Below we would like to offer some general advice before you get stuck in to a Radio Sailing build.

### **What class to build?**

Of the mainstream racing classes we are involved in the IOM (International One Metre) offers itself as the better option given its generous weight tolerances for a base competitive build. Others such as the Marblehead, 10 Rater or RG65 require more finite attention to detail as without a minimum class weight restriction, any weight added through build can affect performance.

### **Which design to choose?**

Are you a racer looking to compete at the highest level or are you a social club sailor? It is here between these two extreme end points that a level of honesty needs to be applied to any choice in design. Let's work from the competitive sailor level as no designer willingly aims for a less than competitive design.

The competition sailor should really be doing his or her homework before rushing into a build. Research on designs, designers, and performance at events of the standard or level you are aiming to race at is a must.

### **Will the design you have chosen be a good fit in the conditions you race in?**

A known heavy air design for predominantly light wind venues may not be a wise choice, likewise a light air flyer racing weekly on the open sea may be equally disadvantaged. It is here where 'one trick' designs should be taken on with a degree of caution, over choosing a more balanced design form.

### **What is the designs track record?**

#### **Has it performed well at the level of competition you aim to race at?**

Get along to an open race and talk with the competitors. Look through actual results online. National body and class websites are an easy source for this information without the bias of self promotion clouding the picture on social platforms.



**How old is the design?**

**Is it an evolution of something with a known track record or someone's latest experiment?**

**How often does the designer come out with another 'latest' design?**

Recent years with design software availability have seen a large number of designs rushed to market following the 'fashion' of winning designs with it not uncommon for multiple variations offered from some designers within a calendar year!

**Does the designer race and have experience at the level of competition you are aiming at?**

**Does the design come with the back up knowledge of a class manufacturer who will talk you through any build or tuning issues?**

A less than desired performance from your new boat will need the right advice to help you get the best from any design as there is far more to performance than hull design alone.

**Can the design be built at home with a degree of care to a competition standard in materials of your choice?**

**Are the design lines available in an easy to build 'kit' style form?**

**If so, are these done to a competition standard of layout by the designer, complimenting the design?**

Some boats may be a little easier or quicker than others to construct with kit sets now becoming more common, but an over build with added weight in the wrong places can harm performance more than any design differential. A good designer will know if a feature is a little harder to build, yet persist with that feature if the benefit outweighs compromise for build ease. Little worth doing is easy.

**Does the designer recommend foils or internal components of a known standard for their design?**

**Is there a rig layout guide available?**

**What cut of sails will suit the rig geometry defined by the shroud base?**

As mentioned earlier, performance goes far beyond a basic hull design.



As we can see above, there are a large amount of questions the competition sailor should ask and answer honestly before starting out on a home build design purchase, or any commercial purchase for that matter. In understanding that not all sailors have the same levels of competitive aspirations, naturally the above levels of priorities in choosing a design reduce to a stage where boat setup and skipper abilities are a greater performance factor.

Whatever your level though, given the 'overflow' of information now available more than ever online, particularly on social media, it is important to take the time to understand there is more to good yacht design than being proficient in CAD drawing systems, how many times you can post pictures of your latest work or how many designs you can render in a year.

The great thing for our sport is that there are a number of very good lines plan or kit designs available from experienced designers for home building who have competed at the highest level and understand their craft. You will rarely, if ever catch them on the social pages self promoting but if you do your homework and seek them out by asking wisely, the largest expense of your build, being time, will be time (and money) well spent.

Source a good design, work closely to the plan and back your designer to have had an experienced reason for each and every detail. If you are unsure on anything, they will be the best person to contact and guide you through.

Choose wisely and enjoy your home build



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