# **BOAT TYPES**

## I HESITATE BETWEEN BOAT Y AND Z; CAN YOU HELP ME?

We cannot choose a boat for you but here are some tips:

- Read the study plans page for each boat. Most questions are answered there.
- If you hesitate between hull types or materials, see some books about yacht design. We are constantly adding new information to our website, but it will never replace excellent books like "Understanding Yacht Design" by Ted Brewer.
- See our forum: some of our builders write about their experiences and we answer many questions there.
- If the selection is too confusing, reconsider your requirements. Your program may not be clearly defined, or your expectations may be too high for one boat.

#### WHAT IS THE CAPACITY OF THE XYZ BOAT?

- Safe capacity varies with many factors: the size of the crew members, their experience, the weather, the conditions in which the boat is used etc. For example, in good weather, an experienced crew of three or four can safely use our D4 in dinghy service but a pair of inexperienced heavy weights will be in danger in the same conditions.
- Our study plans specify what we consider to be the capacity under average conditions. Ultimately, the skipper must decide what is safe capacity considering all of the above.
- We help you in specifying the PPI for some of our small boats: this means the Pounds Per Inch of Immersion. In other words, how many lbs. it takes to bring the waterline up one inch at the designed displacement.
- Another good way to estimate capacity is to take the main dimensions listed on our web pages and trace an approximate outline of the boat on the floor. Imagine your crew in that space.
- For outboard powered boats, we use the USCG capacity calculations and usually announce a lower figure to be safe. BTW, there is no requirement for a capacity tag for a home-built boat and there is no
- ✓ USCG capacity tag requirement or standard calculation for sailboats.

#### DO YOU HAVE PLANS FOR A HOUSE BOAT OR TUG BOAT OR SEA SLED OR . . .

- All our stock plans are listed at our website, but we have many other ones in the works. Some are well proven existing designs that we will adapt to amateur boat building, others are new projects.
- Post a request for a new design on our message board/ forum, and if there are sufficient requests for a certain type of plan, we may design it.

### WHAT IS THE DIFFERENCE BETWEEN THE BATEAU PLANS AND OTHERS?

- We design composite boats that use plywood, not fiberglassed plywood boats.
- The difference is important: the structure and assembly method of our boats is like that of fiberglass boats, not wooden boats.
- The advantages are stronger and lighter boats that are easier to build, last longer, and perform better.
- Most other plans for "stitch and glue" are simply plywood boats glued together with some glass and resin. In our boats, the glass and resin are the most important parts.
- All our larger boat hulls, 15' and above, are made of a composite sandwich. Either plywood or foam between layers of directional fiberglass.

#### CAN I BUILD BOAT XYZ IN ALUMINUM?

Most of our boats can be built in Aluminum. The general structure will be identical and all the dimensions from the plans can be used. The weight of an aluminum boat will be very close to our plywood composite hull weight. The developable hull panels can be cut in aluminum directly from our plans. However, we will not specify plate thickness and required stiffeners. If you contemplate the building of an aluminum boat, you should be familiar with those requirements. For plating, you should use alloys such as 5052 or 5086, for extrusions, 6061 or 6063.