

# *Spira International Boat Building Articles*

## **Can You Really Build a Boat for \$50?**

By Jeff Spira

To answer the question if you can build a boat for \$50, you have to add some qualifiers. First, you must chose the right boat design if you're planning to build it for \$50, then you must select your materials correctly, and finally, you need to use some creativity in how you build the boat.

First of all, to build a boat for \$50, you must first select the right boat design. There are free boat plans aplenty all over the Internet, but most of these plans are recycled boats from old magazine issues from the 30s, 40s, and 50s. Well, quite a few things have changed from those bygone eras including materials, adhesives, fasteners, techniques, and tools, so to idly pick one of those freebee scans from old magazines is a little like trying to build a 1930s radio. These days you can do with one small chip what used to take an array of tubes, high voltage transformers, capacitors, resisters, chokes, coils, and other assorted parts all soldered together in a sheet metal frame and encased in an exotic hardwood cabinet.

When you pick a modern, engineered design developed on CAD, you have something that is lighter, uses less materials, fasteners, and requires less gussets and fillers to achieve the required strength. I'd also highly recommend finding a design that utilized standard milled construction grade lumber. There's no way to hit the \$50 mark with exotic plywood that can cost as much as several hundred dollars per sheet and expensive hardwood framing. If you can buy it at Home Depot or any lumberyard, you're more likely to bring it in under that number than if it takes anything you have difficulty obtaining.

The Huntington Harbor kayak offered for free from Spira International at <http://www.spirainternational.com> is just such a design. First, the design is free and may be downloaded directly from the web site, second it is designed and engineered on a modern CAD system so there's no lofting or scaling errors, and third, it is designed to be built with materials available at any lumberyard or warehouse home supply store. It uses construction grade lumber shapes and molding and is covered with common, inexpensive ¼" mahogany plywood.

Using a design such as this that is bonded together with epoxy or polyurethane “Gorilla Glue,” little concern needs to be made for the fasteners used to hold it together. After the glue cures the fasteners may be removed, so selecting specialty fasteners that must resist weather and water is not necessary, Standard zinc plated drive screws not requiring pilot holes may be run in with an electric screwdriver and the plywood planking may be affixed in-place using a construction hand stapler. This makes it inexpensive and quick to build.

Most people’s garages are equipped with many of the items required for a modern boat design. Have a jar of zinc plated drywall screws? How about some molding stashed in the corner or some 1x4 pine or fir lumber pieces? Do you have a construction stapler and staples or maybe some urethane varnish? If you have one or maybe all of these items already, you have what it takes to make an inexpensive boat. Using some scrounging and creativity here might get your first boat even below the \$50 target we’re looking for.

Building an inexpensive fun kayak gives the first timer a taste of the fascinating hobby of boat building without having to expend a lot of money or effort. If you select a modern design available for free download that uses standard construction grade materials, yes, you can indeed build a boat for less than \$50.

Visit my website at <http://www.spirainternational.com> to see the many different designs of dories you can build at home, including being able to download a free set of plans to build the Huntington Harbor \$50 kayak.