

INTERNATIONAL MARINE

OPTIMIZE YOUR CRUISING SAILBOAT

101 Ways to Make Your Sailboat Better

Your Boat Can Be:

- **More Comfortable**
- **Easier to Handle**
- **More Seaworthy**
- **Faster**
- **Better Looking**

John Roberts

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101 WAYS TO MAKE YOUR SAILBOAT BETTER

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Introduction

This book is for sailors who enjoy cruising on their boats. I use the word *cruising* in its broadest sense, to mean anything from weekend-ing to circling the globe. And by *boats* I mean sailboats ranging from about 24 to about 45 feet.

Optimize Your Cruising Sailboat is based on the notion that sailors generally are on the lookout for ways to upgrade their boats. In fact, I gathered many of the ideas included here by looking at hundreds of boats and talking to lots of people about what might be done to make those boats more comfortable, easier to handle, more seaworthy, faster, and better looking.

The suggestions offered in these pages range from relatively modest improvements that can be easily undertaken by most sailors to some fairly major changes that should be carried out by professionals. Many of these suggestions, of course, involve some kind of hardware or equipment. For the most part, these items are available worldwide from one of three sources: major marine chandleries, directly from their manufacturers, or through the manufacturers' international subsidiaries (see appendix). Alternatively, competitive items of local manufacture may be available. Finally, although I've used the standard English system of weights and measures in the text, a metric conversion table is included after the appendix for the convenience of sailors more accustomed to the metric system.

Optimize Your Cruising Sailboat

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1

MAKE YOUR BOAT BETTER

The Practical Alternative

*I*t's common knowledge. Get a person to purchase his or her first boat, and before another year or two are out that first boat will be traded in on a "better" boat. It may be larger. It will certainly be different in some ways. But it will be "better." Moreover, the cycle doesn't stop there. After a few more years there will be a third boat. And a few years later possibly a fourth.

When you think about it, the pattern is understandable. Sailing and cruising are learning experiences. Usually, one of the key things learned is that features that seemed important before you had much cruising experience seem less important after several weekends or weeks of actual cruising. In other words, you look at your boat needs differently as a result of your newly gained experience.

For example, my wife and I originally built *Sea Sparrow's* interior to accommodate us and our five daughters. When three of our five teenaged daughters joined us in Bermuda for a week one summer, we discovered that three vibrating teenagers and two parents on a 36-foot boat for that time period was as much as we or the boat could handle—the whole family at once would have been out of the question! The next winter, we converted the quarter-berth area to stowage, and we have never missed that extra berth. We've also found that having one or two guests at a time is quite comfortable. (Berths five and six, which we still have, are pilot berths port and starboard. We use them for stowage inshore and sleeping offshore.)

Another thing you learn is that every cruising boat is a compromise. It's a compromise between comfort, accommodations, ease of

sailing, seaworthiness, performance, appearance, and cost. And because every boat is a compromise, few sailors are ever completely satisfied. Hence the frequent trading up, the never-ending search for a better boat—that is, one that better satisfies the evolving needs and desires of its owner.

It needn't always work that way, however. That is, you don't necessarily have to buy a different boat to get a better one. For example, a couple we met at an Annapolis, Maryland, boatyard found what they feel is a more practical alternative. A few years ago they began to grow dissatisfied with their 1976 Pearson 26, and they started thinking about moving up to a "better" boat. They attended sailboat shows and looked at a number of new and recent-vintage used boats. But the more they looked at other boats, comparing them with their nearly 20-year-old Pearson, and the more they considered the costs involved in trading up to a "better" boat, the less certain they became.

First, they realized they didn't really want a bigger boat. They liked the size of their Pearson. Second, when they made a list of the things they didn't like about their old boat, they discovered that there were only four basic problems: they continually had problems with their old engine; they didn't like the existing head (toilet); they wanted new sails, including a furling jib; and their boat had gelcoat blisters that needed repair. "And then we realized," they said, "that we could take care of all of those things for a lot less money than we'd have to spend for another boat that probably wouldn't be as well built as this one." When we met them 4 years later, they still owned the 1976 Pearson 26. Upgrading the boat had cost a total of \$8,000, but they had a boat that they knew well and that suited them and their cruising needs. They were "really happy" with their decision to make their existing boat better instead of replacing it with another boat that would have come with its own list of compromises.

And that's the idea behind this book. It isn't always, or perhaps even often, necessary to change boats to get what you want. It may be as easy as making some relatively minor or not so minor changes to your existing boat. The question is, "Will you be better served by getting a different boat or by upgrading your existing boat?"

You can answer that question by deciding how you'd like your present boat to be different, or better. What is it that you're dissatisfied with on your existing boat? Do you want more comfort? Do you want a boat that's easier to handle? Perhaps you'd like to extend your cruising range and want a more seaworthy boat. Maybe you're increasingly frustrated by your boat's sailing performance—particularly when

acquaintances with some of the newer, high-tech designs leave you astern—and want a boat that sails faster. Perhaps you wish for a boat with a little more eye appeal? Or does your wish list include some elements of all of these?

Whatever you're looking for, it may not be necessary to get a different boat. Your present boat may have possibilities that you haven't considered. Obviously, if you want a bigger boat, I can't offer you a boat stretcher. But if you are satisfied with the size of your boat, I've got any number of suggestions for ways to make cruising sailboats more comfortable, easier to handle, and more seaworthy, to increase their sailing performance, and even to make them look better. In many cases, I provide rough estimates of the cost involved.

But be sure to use your imagination when considering the ideas discussed in the pages that follow. I include ideas for boats about 24 to about 45 feet long. Obviously, not all of the suggestions are suitable for all boats within that range. There should, however, be ideas here for everyone, particularly if you look at the suggestions with an eye toward how they might be adapted to fit your boat.

2

MAKE YOUR BOAT *More Comfortable*

The builder of your boat was working with at least two powerful constraints. First, he had to construct your boat at a cost that would make its price competitive in the marketplace. Doing so meant omitting details that would have pushed the cost beyond his target price point. (That same cost pressure has contributed to the trend toward lighter and lighter displacements.)

Second, he had to respond to the market appeal of then current design fads or trends. Over the past 20 years this has led to relatively shallow hull sections with flat runs and lighter displacements in the quest for “performance.” More recently it has led many builders of cruising boats to adopt lightweight mast sections with highly tuned lightweight, multispreader rigs originally designed for racing yachts—again in the name of “performance.” In most instances, this “performance” orientation has been adopted at the expense of seakindliness and, possibly, rig safety for those whose cruising plans include heading offshore.

The result is that all but a few very expensive production sailboats offer opportunity for improved comfort. And that’s what this chapter is about.

Although the concept of comfort on a cruising sailboat is a moving target—there are some who would argue that no sailboat is comfortable in a seaway—I have chosen to focus on three areas in which you can increase your comfort and that of your crew. Those areas are your boat’s “livability”; its “seakindliness,” that is, the ease and comfort with which your boat sails in a seaway; and the sense of personal

security your boat affords you and your crew while cruising. All three of these apply whether you cruise on weekends in local waters, make vacation cruises exploring waters farther afield, or live aboard your boat and cruise inland, coastal, or offshore waters the year round.

LIVABILITY

Enhancing your boat's livability involves adjusting its accommodations and facilities to meet your specific needs. It can be as simple as changing the decor below. For example, if your main saloon and sleeping cabins are finished in dark woods such as teak or mahogany, you may be surprised to find out how much the strategic use of white paint on the bulkheads and the sides of some cabinets can brighten up both your boat's interior and, more importantly, the crew's mood when you are stuck below for two or three days of cold, rainy weather. Alternatively, if your interior sometimes makes you think of a bleach bottle, I've got suggestions for relieving that shiny white gelcoat finish as well. And don't forget the cockpit since you probably spend more than half of the time you are on your boat there.

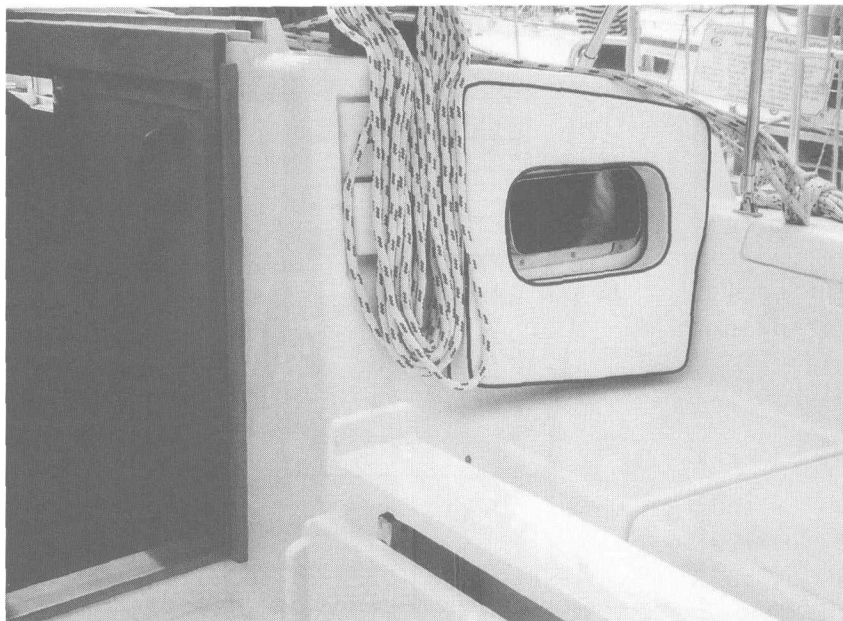
COCKPIT

While a serious racer may need a cockpit that is strictly functional, cruisers usually want a few creature comforts in the cockpit as well.

Cockpit Porthole

An opening port in the after end of the cabinhouse makes a handy communications window when the weather or sea conditions warrant keeping the companionway hatch closed. It can be used for passing a hot drink or just for conversation. On *Sea Sparrow* this porthole (a Bomar 200, which requires a 5½-by-12½-inch hole in the cabinhouse) opens to the galley. You may prefer to have it open to the nav station. In either case, it's an easy installation. If you will be sailing offshore, I recommend a cast aluminum alloy, stainless steel, or bronze frame port that can be dogged securely. If you are concerned that a port in the cabinhouse might make your cockpit seating less comfortable, have a special cushion fabricated with a hole in it for the port. Prices for bronze opening ports start at about \$150. Rectangular stainless steel opening ports begin at about \$250. List prices for cast almag ports such as the Bomar port begin at about \$450 but may be discounted significantly by one or

Cockpit porthole and cushion

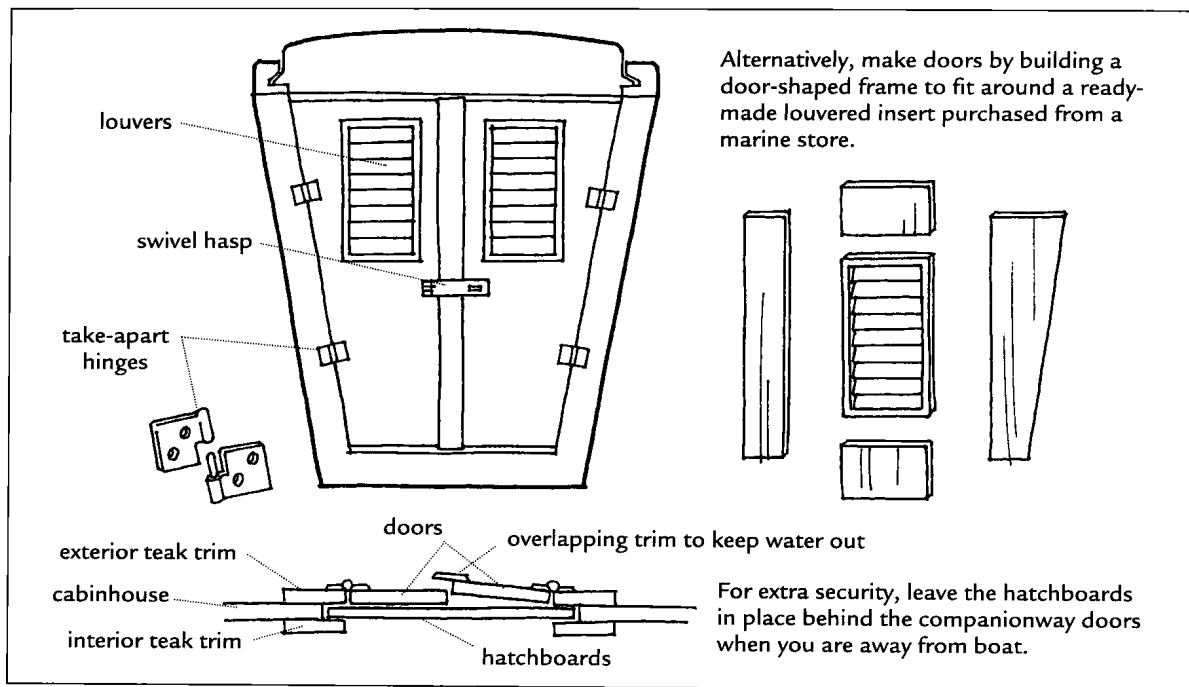


more of the major marine equipment stores. Plastic ports cost from \$50 to \$75 and are widely available.

To install your cockpit porthole, mark the hole to be cut using an indelible marker. Use a saber saw to make the cutout after drilling a $\frac{5}{16}$ - or $\frac{3}{8}$ -inch starter hole for the saber saw blade. Before installing the port, don't forget to seal the wood core of the cabinhouse laminate with at least two coats of epoxy resin. When the epoxy sealer has cured completely, install the port following the manufacturer's instructions, bedding both the port and the trim ring well with silicone or acrylic caulk.

Companionway Doors

Most cruising boats spend more time at anchor or at the dock than they do underway. And hatchboards can become inconvenient. There is an alternative, however, that lets you use hatchboards under sail and enjoy the convenience of hinged doors at all other times. Fabricate the doors to fit within the exterior teak trim around the hatchway and use pull-apart hinges (e.g., Sea Dog #204278 RH and LH hinges) to hang the doors. You can put louvers and screens in the doors for ventilation even when it is raining. You can also place the hatchboards behind the doors for added security. When you don't want to use the doors, just lift them off their hinges and put them in a locker.



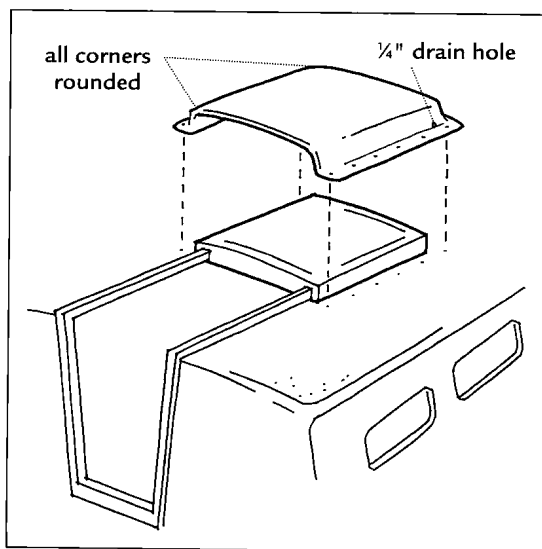
Removable companionway doors

Companionway Hatch Cover

If your boat is not equipped with a turtle cover (sea hood) for the sliding companionway hatch, consider providing one. If your boat demands a wood turtle cover, you should make it of teak because teak's natural oiliness will stand up well to the moisture inevitably trapped inside the hatch. If you want a fiberglass cover, you'll save

Companionway sliding hatch cover

The turtle hatch cover fits over the opened companionway hatch. When the sliding hatch is closed, the cover shields the forward end of the hatch, keeping water from leaking under the hatch. When installing, bed well.



money in the long run by hiring a fiberglass mechanic to make one for you. Then you can install it, bedding it well with a polyurethane adhesive-sealant such as 3M's 5200 or Sika's Sikaflex 292. Don't forget to put drains on the sides near the forward end of the hatch cover.

Steering Wheel

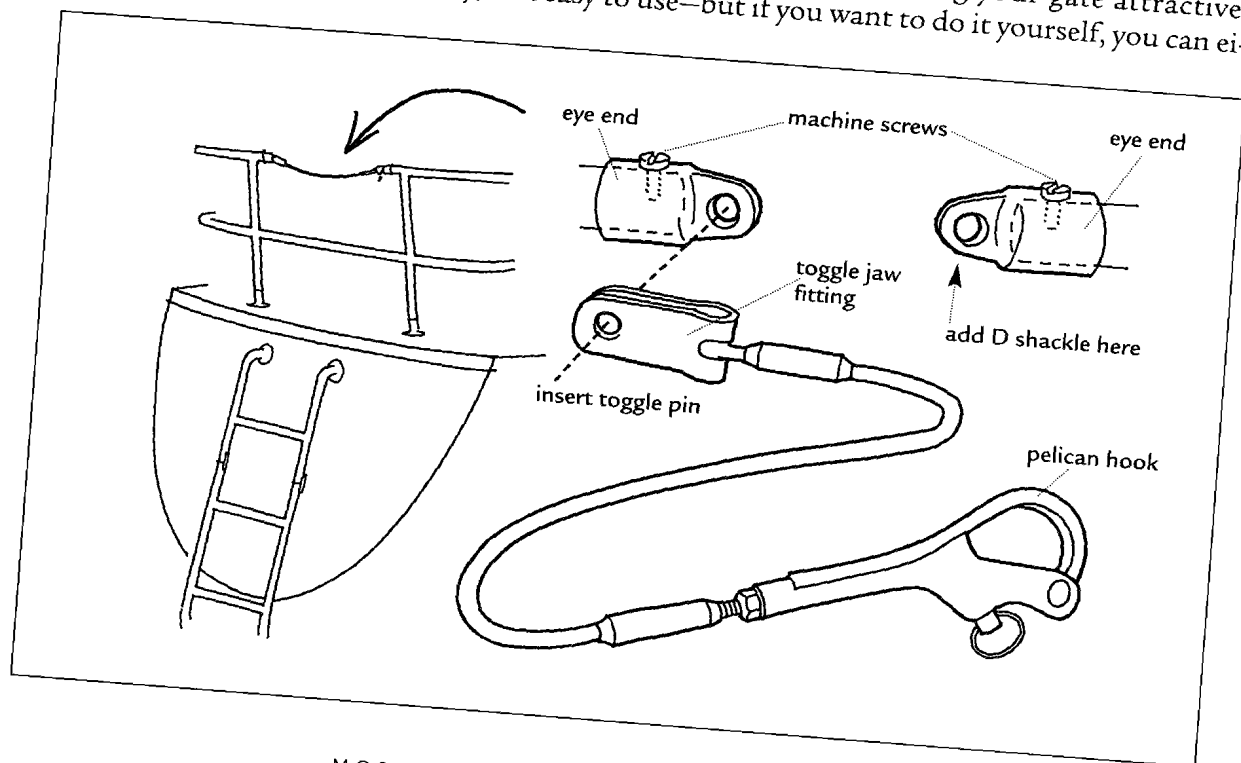
On too many modern sailboats the wheel used for steering is far larger than it needs to be and makes getting around the cockpit awkward at best and dangerous at worst. You probably would find a smaller wheel easier to live with. If the helm feels too heavy, it's probably because you've got too much sail up or the sails aren't trimmed properly. Aside from style, the only justification for a large wheel is that it allows you to sit off to one side or the other in order to keep a close eye on the trim of your jib or to get a clearer view of the fleet when racing. One of the easiest ways to make your cockpit more user-friendly is to replace that monster wheel with a smaller cousin. Destroyer-style stainless steel wheels as small as 18 inches in diameter are available. Depending upon their size, smaller wheels will range in price from about \$200 to \$300.

Stern rail gate

A short section of life-line wire forms the gate, using a toggle jaw fitting at one end and a pelican hook with a spring-loaded pull-pin latching system at the other end. Drill and tap the rail ends so that they will receive machine screws in place of the usual set screws on eye caps. Use Lok-Tite or similar product to ensure screws will not work loose. Use a standard D shackle on one end cap to receive the pelican hook.

Stern Rail Gate

If you have a transom ladder and have to climb over your stern rail to use it, make a gate in the top rail so that you can use the ladder more safely. By leaving the lower rail intact, you retain much of the strength and stiffness of the stern rail. A professional fabricator has more options than you do for making your gate attractive, sturdy, and easy to use—but if you want to do it yourself, you can ei-



MORE COMFORTABLE

ther use a lifeline gate or adapt the stainless tube you have cut out of the top rail to serve as the gate. The necessary hardware should be available from major marine stores. When installing railing fittings, however, do not rely on set screws. Instead, drill and tap the rail to accept a machine screw in place of the set screw.

Stern Rail Seating

Some new boats are equipped with a convenience I think every aft cockpit cruising boat should have—seats tucked into the corners of the stern rail. Moreover, on many if not most boats, it's an easy add-on using ready-made seats like those sold by American Business Concepts under the brand name Stern Perch. The cost for two plain, white ready-made seats and all the hardware required for installation comes to about \$200. Add about \$100 for seats with blue cushions bonded to them. If you want to soften your back rest, blue tubular rail cushioning will cost about \$50 per seat.

You can also make seats for your stern rail, using either $\frac{3}{4}$ " teak (the finished thickness of $\frac{3}{4}$ " teak is a full 1 inch) or $\frac{3}{4}$ -inch marine grade plywood sealed with several coats of an epoxy resin. (If using teak, try to find a piece 12 inches wide; the alternative is joining two or more pieces to obtain the needed width.) Drill holes through the rail to receive $\frac{3}{16}$ -inch round head machine screws (with flat washers top and bottom and lock nuts) used to fasten the seat to the rail. If the design of your seat requires a supporting leg, use 1-inch stainless steel tubing with low round bases top and bot-

Stern rail seats

