

GOOD OLD BOAT

Still sailing after all these years!



SEPTEMBER/OCTOBER 1999

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Creating a community

Good Old Boat magazine is about:

Creating a community of sailors – Through our directory of sailing organizations and contacts, we're developing links between sailors.

Offering a resource – By pooling the knowledge of our readers, we're creating a directory of the suppliers of parts and services we all need.

Keeping our boats afloat – Our technical articles focus on maintenance and upgrade issues and give them the space they deserve.

Celebrating older-model sailboats – We emphasize pride of ownership.

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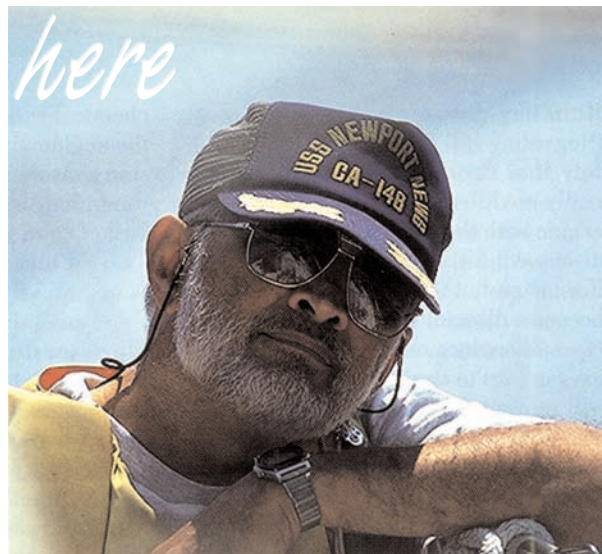
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About the cover...



Sandy Larson raises her fist in a salute to independence. They made it! Semi-retired, Sandy and John are cruisers at least half the year. Their Nicholson 35, *Passport*, is their ticket to paradise. For more, see Page 30. Photo by John Larson.

the view from here



Coastal cruisers ... pecking orders ... philosophy ... time ... and motives

Nothing exceeds like excess. It's not an original line, but I've forgotten where I first heard it. It is interesting to speculate on the origins of excess in our culture and on the effect of excess in our lives.

Some excesses are relative and fairly innocuous. Have as much sugar as you want in your coffee; no one else has to drink it. Other excesses are quite significant. The design of a sailing vessel is a fabric woven of compromises. Any excessive feature is certain to diminish and minimize other features. We can't have it both ways. Why do we even want to?

It is fairly well accepted that a bluewater boat is a better choice for ocean voyaging than a coastal cruiser. But what is not said is that a coastal cruiser makes a better coastal cruiser than a bluewater boat. Is this heresy? Don't we want the ultimate in resistance to capsize, the maximum comfort in a heavy sea, the largest possible displacement and length on deck, and the fullest possible keel just to be extra-safe out there?

What are we afraid of? Where do we get these fears? They come in large part as a method of advertising and selling. Find a small, but real, risk. Magnify it. Focus on it. Get members of your audience to visualize themselves threatened by it. Offer them protection from it, and watch them whip out their credit cards. It's turn-of-the-new-century commerce. A protection racket dolled up with scantily clad maidens. It works very well. If it didn't, we would not be a nation driving heavy off-the-road vehicles whose main challenges are climbing slippery driveways in suburbia.

I knew a wonderful philosopher once who was very concerned with all of this. He wanted to choose his faith, philosophy, and way of life without basing those choices on fear. He thought about it a lot and worked hard at it. He was fortunate to have lived much of his life in the time before

commercial motivation by fear was well-refined. Sure, he had to deal with the depression and a world war where if you lost you really lost, but those were things worth fearing. He picked his boats for other qualities.


We are living in a culture that needs a very simple, single figure of merit. Something by which we can judge a boat to see if it is for us. I submit that smiles are the factor to maximize, not length, displacement, or board feet of topside teak. To judge a vessel properly, look to the body language and facial expressions of the skipper and crew. If they are clearly happy, the vessel will usually look good on them. It will have satisfied its design intent.

This is a call for sanity. There is good advice that says go small, go with what you've got, go now. Good advice, but go where? Pecking orders evolve. In some circles you aren't a player unless you are planning a long cruise or, better yet, have already been on several. Going around the world is best, lesser distances will do. Your boat should be a good pick for crossing the North Atlantic in winter. Very safe.

Fact is, most sailors are not going around the world, most are not even sailing to the Caribbean this winter. Very few will cross the North Atlantic. They are nonetheless very important people. Their lives are filled with very important things, and sailing is just one of them. Like most people, they will run out of time before they run out of anything else.

If you need a good bluewater boat for bluewater work, that is what to choose because it will excel where a coastal cruiser will only make do. For coastal cruising, the coastal cruisers are best. Both will probably get you to the next port because safety on the water has more to do with seamanship than sheer mass or the length of a keel.

Go where? Go sailing. Anywhere.

Who was the philosopher? My dad. 

by Jerry Powlas

Runaway diesels

(Regarding Bill Sandifer's note in the *July Mail Buoy*), a diesel engine is really no different than a gasoline engine with the problem being discussed. Either one can "run away," if some part of the control linkage becomes disconnected or breaks. Both types of engines require fuel and oxygen (air) to run. Removal of either will prevent the engine from running. The folks who tried to kill the engine with water were, in effect, trying to choke off the air. This would have worked very well if enough water were poured into the air intake to literally fill up the air passage to the intake to the manifold. If not, the engine would just atomize the water and help the fuel burn better. This technique is sometimes used sparingly to clean carbon from the combustion chamber.

All boats should be equipped with fire extinguishers. At least one should be mounted on a bulkhead in or near the engine compartment. A better and safer setup is a halon (or equivalent) system permanently mounted in the engine compartment.

A CO₂ system will also work. Even though there was not a fire in the engine compartment, there was "fire" in the cylinders of the engine which made it run. Hitting the trigger of an engine room halon or CO₂ system would have removed the oxygen from the area, and the engine would have stopped without doing any harm to itself. Either of these chemicals directly sprayed into the engine air intake with a hand-held cylinder will do the same thing. If a dry

chemical extinguisher were sprayed into the engine intake, the engine would stop as it would with great amounts of water, but the engine would then be a basket case.

Lew Williams
Dearborn Heights, Mich.

More on diesels

In response to Bill Sandifer's "run away" diesel in the *July Mail Buoy*, his description of the incident is like the "proverbial rock and a hard place."

A little theory first. It requires heat, fuel, and oxygen to start a fire. It takes the same to make an internal combustion engine start and run. The heat required in a gasoline engine is provided by a timed electrical spark. Starting and stopping the engine is controlled by an ignition switch. A gasoline engine's fuel is provided by a carburetor or a fuel injection system that introduces fuel into the intake manifold. The oxygen gets into the engine through the intake manifold, as well. The amount of fuel is controlled by the air flow, which is controlled by a throttle plate and, when starting, by a choke plate.

In a diesel engine, the heat is provided by high compression. The fuel is supplied by a high-pressure pump and timed fuel injection directly into the cylinder head cavity, which is very small in comparison to the volume of the cylinder. Oxygen comes into the engine through the intake manifold, but there is no operator control of the air flow. No throttle plate and no choke plate.

Most diesel engines are started with an ignition switch, but that only controls the starter and the gauges. On some engines, the ignition switch may control a solenoid valve which opens and closes a fuel valve at the high pressure pump. If this valve fails in the open position, the engine will continue to run, but not in a destructive mode. The speed of a diesel engine is determined by the amount of fuel flow through the injectors. If the fuel control system sticks in some way, the engine will continue to run. If this happens at a high fuel setting and a light load, the engine can "run away." In other words,

go faster than the parts can tolerate. This is an expensive disaster! Another possible cause of a "run away" could be an oil seal failure on a turbo charger. In this case, lube oil to the turbo could get directly into the intake manifold, and the engine would run with no control.

Water poured into the intake manifold in very small quantities would make steam in the cylinder, and the engine would probably go faster. Not what we want. Enough water poured into the intake manifold to cool the engine to stop it, would be enough to overfill the small combustion chamber and become an immovable object in the way of an irresistible force. Something's got to give. Another expensive disaster.

My guess is that the most likely reason a diesel engine would not shut down is the linkage from the helm to the engine is broken or jammed. The engine would then not run faster than its governed speed. This is a nervous time, no doubt, but no disaster.

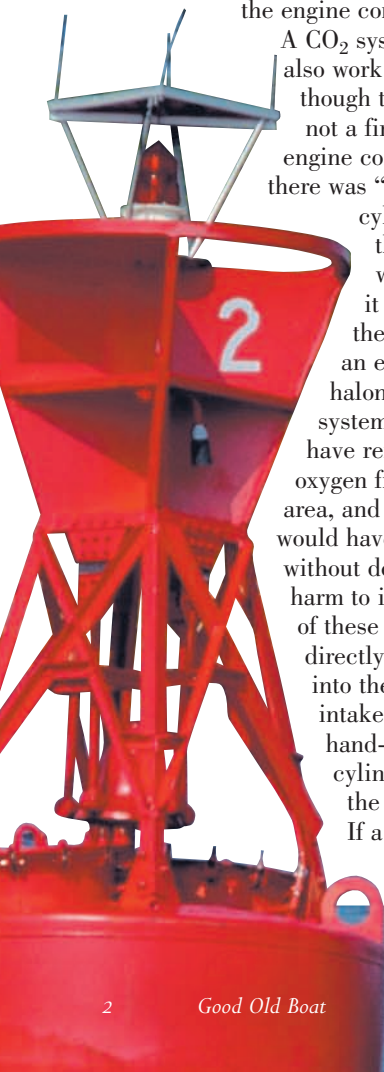
"OK," you say, "but what do I do now?"

The safest way to stop a "run away" diesel would be to stop the oxygen supply. Cover the air intake or air cleaner with a folded blanket and then a plastic sheet or bag. No oxygen, no run.

Bill Barth
Minneapolis, Minn.

Ensigns and etiquette

In connection with Ted Brewer's story (on flag etiquette in the January issue) we draw attention to the recap of the history of the yacht ensign footnoted in the etiquette section of the *Cruising Club of America Yearbook*, which states: "The New York Yacht Club, founded in 1844 and wishing to organize a yacht club cruise free of the need to enter and clear every U.S. port visited, sought help from the Secretary of the Navy. He sponsored a bill through Congress in 1848 to allow documented yachts of the U.S. and certain other craft . . . to proceed from port to port of the United States . . . The NYYC was asked to design a suitable flag. The result is the yacht ensign as we know it today . . . U.S. yachts, whether



documented or not, have been flying the flag for decades, thereby establishing, through the doctrine of squatters' rights, some semblance of authenticity. Hence the reference to the traditional Yacht Ensign."

Harry Anderson, Jr.
Newport, R.I.

What's that on your cover?

We received the July copy of *Good Old Boat* on Wednesday. Just in time to entertain me on a 12-hour overseas flight. Thanks. Great magazine. The cover (U.S. National Ensign) caught me though. While it is a super cover for the 4th of July, it seems to be flying from a degrading hoist. It appears to be flying from the port spreader hoist while a club burgee is on the starboard hoist. Orientation forward and aft is gauged by the mast slot. Going to my Bible on flag placement (*Chapman Piloting* — The Etiquette of Flags), I see that the national ensign should be at either the stern staff or at the leech of the mainsail approximately 2/3 the length of the leech above the clew. In certain countries placement of the national ensign as demonstrated on the cover would cause serious debate with customs and guarda costa.

Dave Richardson
Dallas, Texas

Of course Dave wasn't the only one to bring this to our attention. We took heat from several corners of the U.S. and beyond. Ted Brewer, who had just written about flag etiquette in January, politely held his tongue.

I am shocked

I am shocked and appalled that you could permit the flag photo on the cover of your current issue to be published. There can be no excuse for ignorance and indifference demonstrated by flying our national ensign from the port signal hoist.

The only appropriate location for the ensign on an American yacht with sails furled is at the stern staff. I take the pennant on the starboard signal hoist to be a yacht club burgee, in which case it should be flying from the masthead. Signal hoists are for signals.

I'm afraid that the cat is out of the bag concerning the yachting experience of the *Good Old Boat* staff.

Eugene Reardon
Bay Shore, N.Y.

*Eugene, you're right. We blew this one. The photo came to us from another source, so it was out of context when we reviewed it. To us, it was a great, big, beautiful flag and obviously in a sailboat context, since you could see the rigging in the background. We did not stop to think **where** that flag must be hanging in order to have the spreaders clearly in view. Nor did we take the time to determine that, based on the position of the mast track in the photo, the flag must surely be on the port signal halyard. All we thought, in our naïvete, was that it was a beautiful flag and a*



Meet members of the Shallow family. We suspect this photo was for their Christmas letter. It came to us with this note: "What you're doing helps us do what we're doing! Thanks so much for taking a chance. Your publication is professional, entertaining, educational, and encouraging."

Mike and Lyn Shallow
Oswego, Ill.

Next year, we hope they'll all be attired in Good Old Boat shirts. Then the picture will be perfect. You can do the same, of course. See our ad on Page 71.

gorgeous symbol of our country. We meant respect, not disrespect. But sometimes the best-laid plans . . .

There is one thing we are learning in our new jobs as publishers and that is that the concept of "buying ink by the barrel" is a two-way street. People who have been hurt (unintentionally, we assure you) by something we've printed have reminded us that there's a lot of power in being publishers and that we must weigh our words very carefully. This is true, and we're trying to watch our step.

The flip side, of course, is that when we make an error, as in this case, our mistake is distributed far and wide for all to see and comment. We will now try to be more careful in that respect as well.

There are still just two of us here running this magazine with a part-time helper and a squadron of writers, proofers, and advisors on the side. Occasionally things get a bit hectic around here. Please bear with us while we learn the ropes.

No problem, I'm Canadian

When we asked Dave Richardson for permission to publish the first flag letter printed here, he responded, "Hey, no problem. I am Canadian anyway. People burn flags, so draping them in the wrong place now and again is only a little heretical."

Dave Richardson

Phew! Thanks, Dave. We hope a few of the rest of our readers will be as forgiving.

We haven't heard the last of it

First let me say how much I enjoy your magazine. You took a great idea and smothered it in talent. The result has been such a pleasant change from the wall-to-wall ads in most of the others.

Of course most folks won't take the time to write just to pass along kudos, and I'm as bad as the rest. What prompts this letter is Mary Jane Hayes' BEAUTIFUL photograph on the cover of the July issue. It is a striking bit of photography. The trouble is . . . I fear that such a prominent photo will inadvertently mislead others into the same error of flag courtesy. Although there is no legislation governing the flying of any flag on numbered or

Continued on Page 64

Up the mast

The only sure things in life are death, taxes, and that — sooner or later — you will have to go up your mast. Many people dread going aloft and will do just about anything to avoid it, even putting off needed repairs or rig inspections. But the trip needn't be a white-knuckle affair. With the proper equipment and technique, you can actually enjoy going aloft. I've gone from being afraid of heights to looking for opportunities to climb the mast (anyone's mast) just for the view. Really.

There are two parts to the problem. The first is how to get up the mast. Unless you have a couple of strong deck apes handy to grind away on a halyard winch, this can be a real concern. But this isn't your only consideration. Just as important is the question of what to use for support once you're up there.

Bosun's chairs

For most sailors the answer to this second part is the trusty bosun's chair. For comfort aloft it's hard to beat a well-padded board. But bosun's chairs are also part of the reason most people hate going aloft. It just doesn't feel secure sitting in one of those things. You are tense and apprehensive the whole time, worried that you might fall right out of it. And in fact, if you lean over too far in many of them (like when stretching to reach a spreader tip), you can fall out. Fabric chairs with back supports, waist belts, and crotch straps give more of a feeling of security, but you still aren't secure.

John Vigor notes in *The Practical*

*Ease that fear
of falling:
Techniques for
making
a trip up the
stick safer*

Mariner's Book of Knowledge that he prefers to use an ordinary wooden plank as a bosun's chair "to remain insecure and terrified on the theory that if I don't feel complacent, I won't relax my guard." Avoiding complacency is a good thing, but feeling terrified may keep many sailors from going aloft, even when they need to.

Climber's harness

The solution to this feeling of insecurity

is not therapy, but a mountaineer-style climber's harness. It looks and feels a bit strange at first to be tightly strapped into this contraption, but you get used to it. And the sense of security that comes with knowing you can even hang upside down is fantastic. It was a revelation to find just how relaxed I could feel aloft while using one of these. An

additional benefit to using a harness is that the point of attachment is lower than with a chair. That makes it a little

easier to reach the top of the mast when working at the masthead.

The main drawback to many harnesses is that they can be uncomfortable for long "hang times," since your weight is supported by two-inch webbing. Choose a harness with thick padding on the waist belt and leg loops (as shown). The best I have seen uses a modified rescue harness available from Brion Toss Rigging (*see sidebar for contact information*).

Safety

There isn't much you can do on a sailboat that is inherently more dangerous than climbing the mast. So safety should be uppermost in your mind at every step of the process. Don't try any of these techniques until you are sure you know what you are doing. Always use a "belt and suspenders" approach, with a backup for the primary hoist method. That usually means being hooked to two halyards when aloft, preferably halyards with internal masthead sheaves. If using a climber's harness, hook both halyards to the ring provided. If using a chair, hook the second halyard to a separate chest safety harness. (*Note: for clarity the extra safety halyard was omitted from illustrations on Pages 7, 8, and 9, but this is not a good idea in practice!*) Don't depend on snap shackles! Use only screw shackles, locking carabiners, or good knots to attach the halyards: a bowline, or better yet, a buntline hitch — **never** a square knot. (*The buntline hitch is illustrated on Page 8.*)



***Wearing a climber's harness,
you could even hang upside
down safely, not that you
should do this on purpose.***





article and photos by Steve Christensen

Before you ascend, talk through every step with those on deck who are helping you, to be sure that all of your commands are clear and understood. (The last thing you want is for someone to release the wrong halyard.) Don't depend on self-tailers alone to belay halyards — use cleats. Tie all of your tools to your tool bucket, as it annoys members of the crew to have things fall on them. Finally, don't get complacent when coming down — take your time.

What techniques are available for climbing the mast, and which is right for you? Some of the things to keep in mind in choosing a method include whether you need crew on deck, how much equipment is involved, and whether the technique would work at sea in an emergency.

Mast steps

The most obvious approach for getting up your mast would be to turn your mast into a giant ladder using mast steps. These fixed or folding metal steps are most often seen aboard shorthanded cruising boats and can make getting up the mast as simple as climbing a ladder. The benefits are that they are always ready, give easy access to the very top of the mast, and allow you to climb aloft without the aid of crew. The drawbacks include windage, weight aloft, aesthetics,

potential halyard fouling, and the difficulty of hanging onto the steps in anything rougher than a dead calm. If help is available, you should always climb mast steps with a second halyard attached to a safety harness or a climber's harness, and you should have someone taking up the slack in the halyard to support you in case you fall. Once up the mast, you may still want a bosun's chair or a climber's harness for support while working, as you can't easily reach the spreader tips from the mast steps. Overall, if you are willing to put up with having steps on your mast, it would be hard to beat the convenience of this method.

If you plan on using mast steps to go aloft alone, you should rig an ascender on a fixed line as a backup. An ascender is a piece of mountain-climbing gear (\$50). Well-known examples include the Petzl and Jumar. It fits around a line (of about 1/2 inch diameter) and has an internal cam that allows it to slide easily up a line, but

locks in place if you pull downward. If you have an available halyard of the proper diameter, you secure it near the deck, fasten a tether from the ascender

to your harness, and slide the ascender up the fixed line as you go. If your halyard is not the proper diameter, you will need to hoist a 1/2-inch line aloft instead. Once you get where you're going, you can allow the ascender to take the load. To descend, you momentarily disengage the cam and slide the ascender down a few feet at a time as you climb down the steps.

An alternative to using a halyard or an ascender for a backup would be to clip a safety line from your safety (or climber's) harness around the mast as you work your way up. Use a carabiner on the end, so you can unclip as you pass the shrouds and spreaders. (An alternative to this would be a lineman's belt, or Mast Mate's Tool Bag Workbelt. If you fall, this line will jam up against the next obstruction on the mast. But that still means you could drop from the second to first spreaders or from just under the first spreaders to the deck. To be extra safe (especially if it is turbulent), use a halyard with an ascender and a safety line around the mast.

Mast ladders

What if you don't want to mount those metal triangles on your mast, but still want the simplicity of climbing steps? Then your best bet would be a mast ladder. There are currently two of these on the market, the Mast Mate and Capt. Al's. These are essentially web ladders that are hoisted up the mast with a halyard, then made fast at the deck. To minimize the side-to-side motion while climbing, each has provisions for mounting sail slides



The Petzl ascender slides up and locks on a 1/2-inch line.

(which you provide) to the vertical webbing. You can then run the slides up the mainsail sailtrack to give lateral support. The Mast Mate uses two-inch webbing for its single vertical support strap. It has alternating steps every 17 inches (there is also a 12-inch step version). The Capt. Al's uses three one-inch vertical web straps, with PVC tubing placed over webbing between the straps to form the steps every 12 inches.

A mast ladder has most of the advantages of the fixed mast steps, without the drawbacks of windage, aesthetics, and potential halyard fouling. The major downside to mast ladders is that they can't easily be used underway unless you either drop the mainsail or do without the sailtrack support. And even if the main is down, it may be necessary sometimes to remove much of the main from the sailtrack to mount the mast ladder. The

safety procedures for regular mast steps (a second halyard, ascender, or safety line) should be followed here too. The Mast Mate is about \$250 (35-foot length) to \$350 (50-foot length) while Capt. Al's is about \$150 (36-foot length) to \$250 (50-foot length).

My Ericson came with a Mast Mate left in one of the lockers by the previous owner. I loved the simplicity of the approach and was eager to try it. But I found the sensation of climbing a flexible ladder to be a little unsteady for my taste (not surprising, since I wasn't using any safety backup that day), and I only made it to the lower spreaders before turning back. By the time I needed to go aloft again, I had



Mast Mate steps and the Workbelt patterned after a lineman's belt, above. A close up of the steps, below left.

in a bosun's chair attached to a halyard. There are a few problems with this approach. In the case of most sailing couples, the man goes aloft and the woman stays on deck. Given the small size of most halyard winches, there usually isn't enough mechanical advantage for the woman (or many men, for that matter) to be able to handle the load. Furthermore, if the winch isn't self-tailing, you need a third person to tail.

One way to make things slightly easier is to use a snatch block to lead the halyard to one of the primary winches aboard. But even with a larger winch, this approach can still be too much work. Of course, this method doesn't allow you to get aloft by yourself. And that's one of the drawbacks — you have to really trust the people at the winch, as they do have your life in their hands. (Couples: don't try this right after an argument.)

After the experiment with the mast ladder, we next tried having my wife hoist me aloft in a bosun's chair. But even with the help of our primaries, it was just too much work for her. The only way I made any progress was by wrapping my arms and legs around the mast and shinnying a few inches at a time to create slack in the halyard. But this can lead to overrides on the winch. We had to find another way.

Powered winches

Depending on the equipment aboard your boat, there are a couple of ways to lessen the effort of this grinding. If you

installed a batten car system that blocked off my sailtrack — I needed to find another approach. But a friend with a 45-footer regularly uses a mast ladder and swears by it.

Halyard winches

Another method for going aloft uses the boat's halyard winch to hoist someone

have electric primaries, getting someone aloft is as easy as pressing a button. Lacking these, the next best bet would be to run the tail of the halyard forward to a powered anchor windlass. If you do decide to try either of these options, be especially careful with the last few feet of hoist near the masthead. Without the feedback of a manual winch, it may not be obvious when you have "two-blocked" the rig, and you can jam the shackles in the masthead halyard sheave or even rip out the attachment rings in the chair if you aren't careful. This is why some people argue against the practice of using electric winches or powered windlasses in this application.

Counterweights aloft

An alternative to having your crew winch you aloft directly is to attach a heavy counterweight to one end of an external halyard (internals won't work here) and hoist the weight to the masthead instead. You then attach yourself to the other end of the halyard and let gravity do the work as the counterweight drops. This is supposed to be an old trick of singlehanders, who had no one around to help with the grinding. And I suppose someone could use this technique to get aloft if the crew weren't strong enough to handle the winch. Of course you should at least take care that you weigh more than the counterweight, or you could easily get stuck up there!

I offer the following as an example of just how ingenious sailors can be when there is a problem to be solved, not as a recommended technique for getting aloft. My favorite version of this involved someone hoisting aloft a large, empty, plastic container with one end of a garden hose tied to the inside rim. Once it was in place, the skipper turned on the water to fill the container, and rode up the mast on the other end of the halyard as the container filled. If you do decide to try something like this, please alert your dockmates so they can have their video cameras ready.

Mastlift

What if your partner can't grind you aloft, and there's never a deck ape around to help when you need one? In this case you might consider the Swisstech Mastlift. This is a chain hoist with a 10:1 gear ratio, except that the



load-bearing line is made of Spectra, not chain. In practice, you shackle the Mastlift to a halyard, attach the load-bearing line to a bosun's chair or climbing harness, unroll the load-bearing line as you hoist the 15-pound cylinder to the masthead, then cleat the halyard. Using the endless control line (with double internal safety brakes), you then hoist yourself aloft. This is easily a one-person job, with very little effort. It would be a good idea to lightly fasten a line around the control line at deck level to prevent it from blowing away and fouling, especially if you go up alone. For safety you would want to use one of the backup methods mentioned above.

Downsides to the Mastlift? The first is that the size of the drum makes it a little more difficult to get close to the masthead, as you are probably a foot lower than when using a halyard alone. But the big drawback of the Mastlift is cost. When I contacted the importer a couple of years ago, the introductory special prices were \$1,100 for the 45-foot hoist model, and \$1,300 for the 82-foot model. At that price not too many skippers will be buying them for their personal use. But it would be a great item for a club to own, if you could just figure a way around the inevitable liability issues.

By the way, a solution to the problem of not quite being able to reach the masthead from a chair or harness is to fashion a pair of rope steps, each at the end of a four-foot tether. Once you get as close to the masthead as possible, attach the tethers to the crane with a carabiner. Then

The Mastlift chain hoist makes going up a one-person job.

E. Breineder



place your feet in the steps, and stand up at the masthead. Hold yourself upright with a piece of line tied around your waist and the mast. Mast Mate sells a Workbelt patterned after a lineman's belt that is designed for just this application (*seen being used on Page 6*). An alternative to the tethers is to mount a pair of mast steps on either side of the mast about four feet down.

Block and tackle

If your crew can't hoist you aloft, and you can't afford a Mastlift, you might consider putting together a block and tackle arrangement to help do the work. The simplest version of this is to get a length of 1/2-inch line twice the length of your mast, position a single block at the mid-point, and haul the block aloft on a halyard. Attach one end of the line to your bosun's chair or climber's harness with a good knot, grab the other end, and just haul yourself aloft.

How much work is this? Well, normally you find the mechanical advantage of any block and tackle by counting the number of parts coming out of the moving block. With no moving block, it seems as if there should be no mechanical advantage to this simple rig. But for reasons that still confuse me, there is a 2:1 mechanical advantage in this case, so that you are only lifting half your weight. (The best way I can explain it is to point out that you have to haul in 100 feet of line to raise yourself 50 feet.) So this is actually easier than it looks. To reduce the effort further, you add extra parts to the tackle, but that can add up to a lot of line.

I learned about this approach from rigger Brion Toss at one of his seminars, and thought I'd give it a try. To reduce the effort a bit, I opted for a 3:1 mechanical advantage. This meant putting together an upper single block with becket, a lower single block, and a 1/2-inch line three times my mast's length, or 150 feet (*see Figure A on the next page*). Brion also suggests using a



Steve's current preference is using a block and tackle, ascenders, and a padded climber's harness.

Harken "Hexaratchet" ratcheting block in the upper position, as it greatly reduces the effort required to grip the line.

This tackle approach will work with either a bosun's chair or a climber's harness, but I use a climber's harness knowing I need the feeling of security it provides. After getting the line reeved through the blocks, I haul the upper block aloft with a halyard, and shackle the lower block to my harness. For safety, I use a second halyard attached to the harness, but any of the backup methods would work.

Before hauling away, there are two more techniques to mention. The first is how to belay the line once you're up there. You can make do by passing a bight of the line through the ring in your harness and making several half hitches with the loop. But I like the technique Brion uses in which the standing part of the line is led through a carabiner at the harness and then tied off using a special mountaineering knot — the carabiner hitch (*see illustration on next page*). This carabiner hitch is easy to tie and untie under load — a real advantage.

I added a second technique as a way to feel even more secure. It involves

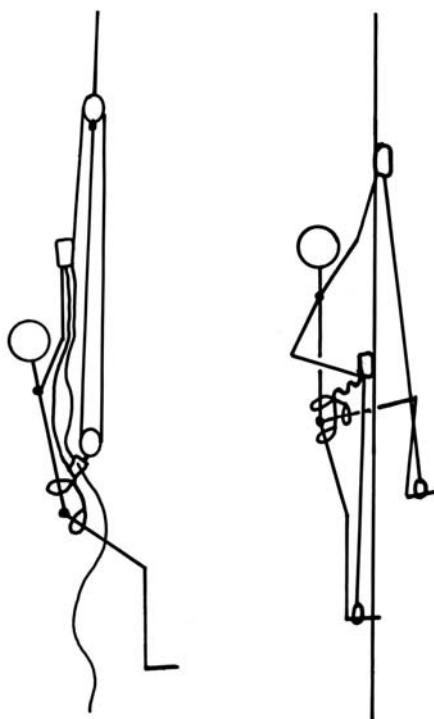
mounting an ascender on the hauling part of the tackle and then rigging a three-foot tether between the harness and the ascender. Each pull aloft is made easier by having the comfortable handle of the ascender, rather than just the line, to grip. At the bottom of each pull, I hold the line fast at the carabiner with one hand and slide the ascender back up the hauling part with the other. The added security comes from the short tether, as I could let go with both hands and only slide back three feet at most. This addition also makes it easy to stop and rest along the way. To get as close to the masthead as possible, I remove the ascender from the line, two-block the tackle, and rig a carabiner hitch. To descend, I just keep a wrap or two around the carabiner and slowly lower myself to the deck.

This combination of tackle, climbing harness, and ascender is a real joy to use. With it I feel secure enough that I've been known to go up the mast while underway just to take pictures from the masthead. (It's amazing how small a 38-foot sailboat looks from 50 feet up!)

This approach is good for single-handers, as you don't need help from anyone on deck. And that means you don't have to depend on anyone else for your safety. But if you do try this approach alone, give some thought to keeping the tail of the line from getting tangled in the rigging on deck. If the line gets caught, you won't be able to lower yourself down. Brion's instructional video, *Going Aloft*, features this approach. I highly recommend it.

Line climbing

Two final methods for getting up your mast are based directly on mountaineering techniques and are



A - Two blocks B - Stairstep

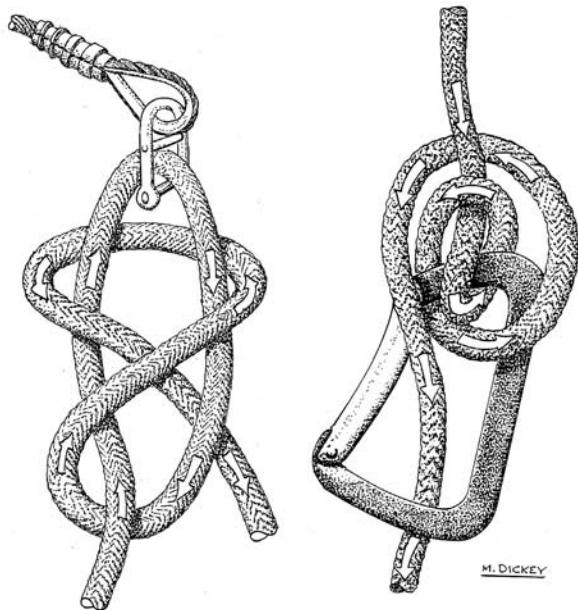
probably the least familiar to sailors. In these, you climb up a fixed line with your feet in rope steps at the end of tethers rigged to the fixed line with ascenders. You could use one of your halyards as the fixed line (if it's the proper diameter), but since the cams of the ascenders are hard on the line, I recommend hoisting aloft a separate

little easier to understand. In this approach, two ascenders are mounted on the fixed line, each attached to a rope step on the end of a three- to four-foot tether. At least one of the ascenders is also attached with a tether to your climber's harness (or to a safety harness if a bosun's chair is used). To begin, position the steps above the deck, place your feet in the steps, and grab the ascenders for support. Then raise one leg and its corresponding ascender at the same time. After that, step up onto that upper step, and finish by raising up the other leg and its corresponding ascender to just under the first ascender.

By alternating one side after the other, you can "stair step" your way up the line. You will need to adjust the length of the tethers between the ascenders and the steps to suit your reach and height, or you can purchase two étriers at \$24 each from a mountaineering store. These are short web ladders with four to six steps in a line, about 15 inches apart. One of the steps should be at just about the height you need.

By comparison, the "inchworm" method looks a little strange. This method works best with a climber's

Buntline hitch, at far left, and carabiner hitch. When using the buntline hitch on a halyard, for added safety, pass the line through the thimble, rather than the shackle, if it will fit. If not, tape the shackle closed.



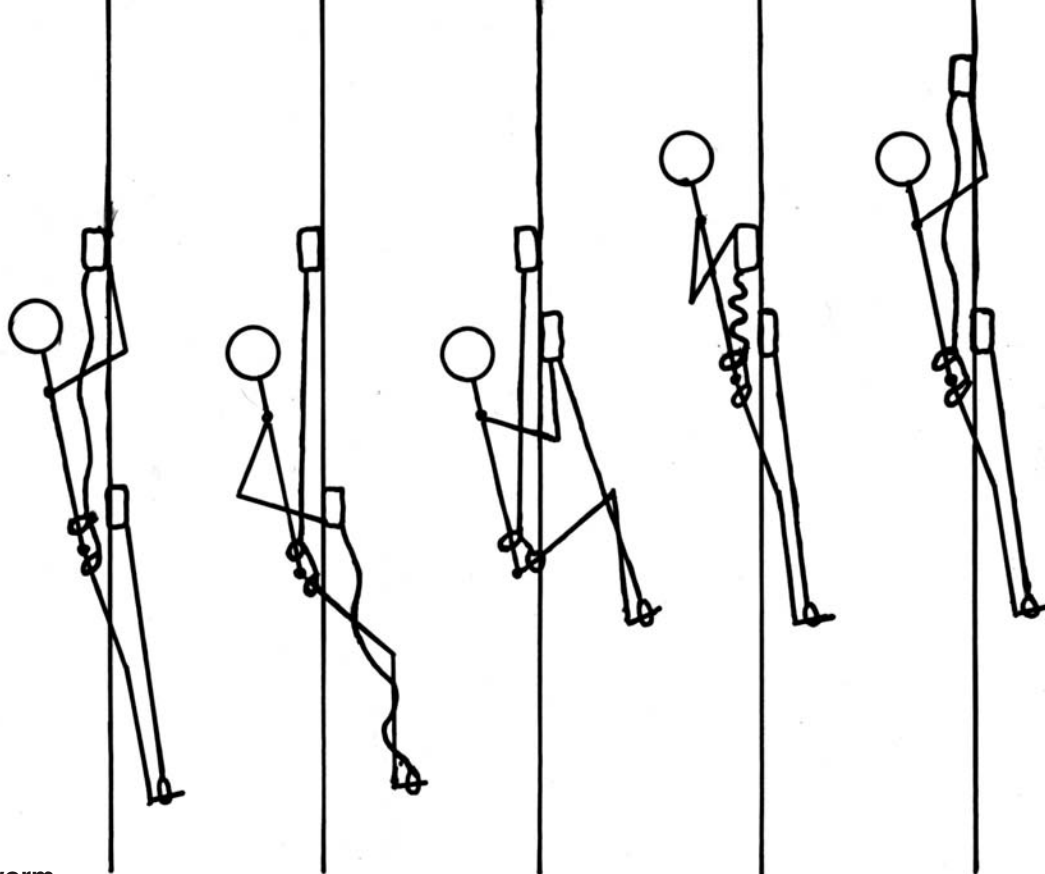
harness, but a bosun's chair will work in a pinch. After rigging your fixed line, attach a short tether of about three feet between your harness and the first ascender. The second ascender is then added to the line underneath the first and attached to a pair of rope steps, each on a three- to four-foot tether (or a pair of étriers).

To begin climbing, position the steps above the deck, place your feet in the steps, and grab the fixed line for support. First, slide the upper ascender up the fixed line as far as you

length of 1/2-inch rope to reduce halyard wear.

I think of these two methods as the "stair step" and the "inchworm," based on the action used to climb the rope. The "stair step" method is perhaps a

can reach, then sit back to put your weight on the harness. Next, slide the lower ascender up the line as far as possible while bringing your knees up. Finally, extend your body and step up onto the steps, holding onto the fixed



C - Inchworm

line for balance. After that you extend the upper ascender up the line again and sit back into the harness. Repeating these steps allows you to “inchworm” your way up the line. You will need to experiment a bit to find out how long the upper and lower tethers need to be for the most efficient progress.

The “inchworm” method is probably slower, but the motion is a little easier to learn and uses the strength of both legs at once to do the climbing. While the “stair step” method can be faster, it can take some time to get the hang of the technique (sort of like the diagonal stride in cross-country skiing). A drawback to both line-climbing methods is that getting down can be a little slow, since most ascenders are a little difficult to slide down a line as you descend.

With either of these methods, be sure to practice a bit before tackling a big job. Both are well-suited for use by singlehanders. You will, of course, want to use one of the safety backup methods with or without crew on deck.

Which is best for you?

Which approach is best for you depends on your boat, your age, and your bank account. Just like everything else in sailing, each approach is a

compromise, and no single method is right for everyone. I like my current block-and-tackle rig, but if I could afford it, I would have a Mastlift instead. I strongly suggest that you consider trying a climber’s harness for support aloft — unless you like feeling insecure and terrified.

Above all, please be safe up there.



Steve Christensen, a research chemist, moved from Utah to Michigan and took up sailing to replace skiing. Steve and Beth sail Rag Doll, an Ericson 38, on Lake Huron. They spend each August cruising the waters of The North Channel and dream of retirement as liveaboards someplace warm.



Contacts

Brion Toss Rigging

(modified rescue harness and *Going Aloft* instruction video)
311 Jackson St.
Port Townsend, WA 98368
800-488-0855
<<http://www.briontoss.com>>

Capt. Al’s

P.O. Box 370153
West Hartford, CT 06137-0153
860-232-9065
<<http://www.captainals.com>>

Mastlift sold by IMTA

P.O. Box 6652
Annapolis, MD 21401
800-606-0589
<<http://www.imtacorp.com>>

Mast Mate

P.O. Box 5035
Augusta, ME 04332
800-548-0436
<<http://www.mastmate.com>>

Mountain Gear

(ascenders, climbing harnesses, étriers)
730 N. Hamilton
Spokane, WA 99202-2045
800-829-2009
<<http://www.mgear.com>>

West Marine

(mast steps, bosun’s chairs, modified rescue harness, blocks, line)
P.O. Box 50070
Watsonville, CA 95077-5070
800-262-8464
<<http://www.westmarine.com>>

Contessa 26: A legendary



The Contessa 26, also known as the J.J. Taylor 26, is one of many variations on the basic Folkboat theme, but she has several unique claims to fame. Not the least among them is the name of her designer, British naval architect David Sadler, who also designed the Contessa 32.

You may recall that the Contessa 32 was the only yacht to finish in her class — the smallest class, incidentally — in the infamous Fastnet Race of 1979. When a particularly vicious storm hit the racing fleet between England and Ireland, five yachts sank, 19 were abandoned, and 15 lives were lost. Only 85 yachts of 303 starters crossed the finish line.

Although the Contessa 26 is far different from the Contessa 32, above the waterline and below, Sadler's ability to design safe, seaworthy boats is quite evident in the Contessa 26 as well.

The 26 was also well publicized by the circumnavigations of Tania Aebi and Brian

Caldwell. Aebi became the youngest woman to sail around the world alone in *Varuna* — although she was technically disqualified for sailing one short leg with a companion. Later, Brian Caldwell chose a bright red 1975 Contessa 26 called *Mai (Miti)* *Vavau* — “Waves from a Distant Storm” — for his attempt to become the youngest person to sail around the world alone.

From the very first, the 26 gained a reputation for seaworthiness combined with good performance. Many of the entrants in the early singlehanded races across the Atlantic chose Contessa 26s, and they were also well represented in the Round Britain and Ireland Race.

The English boatbuilding firm of Jeremy Rogers first began building the Contessa 26 in 1966, and the demand for them was so great that in the first three years of production, 350 of the fiberglass hulls were laid up. But molds were shipped in 1969 to Toronto, Canada, where the firm of J.J. Taylor & Sons also started production.

In 1983, the Canadian firm redesigned the deck and interior and started using lead ballast instead of iron, which lowered the cabin sole and gave more headroom. A year later, the Canadian manufacturer dropped the name Contessa 26 and changed it to the J.J. Taylor 26.

Some 400 Contessa/Taylor 26s were built in Canada, and many of them found their way to the United States where they are still going strong.

Basic design

When you look at the lines of the Contessa 26, you can't help but think “Folkboat.” The raking stern with its outboard rudder; the long, curved tiller; the sweeping sheerline; that gracious bow overhang: they're all signs of her Folkboat heritage. That's where her seaworthy genes and her classic Scandinavian good looks came from. But perhaps it would be more accurate to describe her as a Folkboat modernized and improved.

She's thoroughly traditional, with her full-length keel, but her masthead sloop rig is taller and skinnier, her foresail is bigger and more efficient, and she is more powerful to windward. A smidgen more beam has improved her accommodations without destroying her performance under sail, and a tip-tilt main hatchway has given her 5 feet 8 inches of

headroom below — at least over a small portion of the cabin.

The hull is solid fiberglass, and the decks

and cabintop are fiberglass cored with end-grain balsa. Balsa is good for insulation, and it's pretty effective at containing water damage to a small area. Nevertheless, deck leaks over a long period can lead to delamination, so check all the upper surfaces of the boat carefully if you're buying an older model.

The cockpit is of average size for a boat of this displacement and is self-draining, but it might be made smaller for extended ocean passages. If a breaking wave fills it, the boat will become vulnerable to the next wave approaching from astern, because she does not have excessive freeboard.

Taylor models built after hull #300 incorporated an anchor well in the bow for the first time, which created handy stowage for the

by John Vigor

little circumnavigator

*The voyages of Tania Aebi
and Brian Caldwell
popularized
this sturdy 26-footer*

ground tackle and kept the foredeck clear of toe-stubbing obstructions.

The standard engine is the 7-hp Farymann, a single-cylinder, raw-water-cooled diesel thumper that is reputed to use only 1 quart of fuel an hour at a cruising speed touching 5 knots. As the Contessa's fuel tank holds 12 gallons, that indicates a range under power in calm conditions of 240 miles.

Maximum power is developed at 2,500 rpm, but the propeller shaft, working through a 2-to-1-reduction gearbox, runs at only half that speed, pushing a 12-inch diameter x 9-inch pitch two-bladed prop. It's a no-frills engine installation with a reputation for reliability, but it's neither smooth nor restful in action, and you continually need to make sure it can't succeed in its frenzied efforts to shake itself loose from the engine mounts.

Accommodations

There is a small bulkheaded forepeak up forward that acts as a chain locker. It's not the best place for much weight, so close to the bow, but there's not much choice. Aft of the chain locker comes the usual forecabin, dominated by a V-berth with stowage and tankage beneath it. If you're planning to sail a 26 around the world, you'd be better off with a workbench and more stowage space up there. You're not likely to want to cross an ocean with four people on board in a boat this small unless you're also interested in hair shirts and self-flagellation.

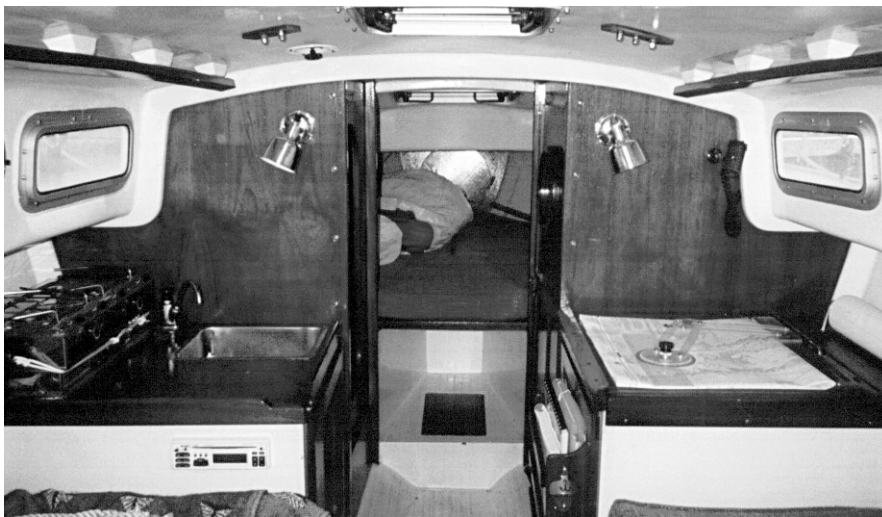
Aft of the V-berth there's a hanging locker to port and a head compartment to starboard. Then comes a split galley, a good way to provide decent working space for the cook in a boat of this size, although some people find it easier to cook in the usual place

under the main sliding hatch, where the light and ventilation are a lot better. On the Contessa, the stove and a top-opening icebox are to starboard, while the sink and counter space are to port. Aft of the galley there are settee berths on either side, the ends of which tuck under the cockpit seats. Removable companionway steps on the centerline give access to the engine compartment, and you can also get to the engine through a panel in the cockpit sole, but it's mighty cramped in there.

There are two large opening hatches on the later Taylor 26 models, one in the forecabin and another conveniently above the galley area. They help distribute light and air down below, but some people still find the living quarters of the 26 rather cavelike because there is no sliding hatch over the main companionway. Instead, the coachroof slopes up sharply at its after end to form what amounts to a half-round solid dodger, except that it doesn't extend aft over the cockpit. It looks like the back hoop of a prairie schooner. Some people call it a bubble, others call it a hump. Whatever it is, it's

***Rory and Carol
Turnage's Wyvern,
named after a 1600s
Danish pirate ship, sits
ready for launching on
the Chesapeake Bay.***





To spruce up the interior of their Contessa 26, Rory and Carol Turnage gutted Wyvern's cabin and began again: varnished teak, new lighting, new companionway steps, and new cushions.

quirky. It makes the entrance to the cabin very strong and seaworthy, but it takes some getting used to.

The rig

The rig is strong and simple — she's a single-spreader, masthead sloop with

Roland Barth, author of Cruising Rules, enjoys Maine coastal time on his Contessa 26, Mare's Tail.

fore and aft lower shrouds. The forestay is housed well inboard so you can sit down, wedge yourself in the pulpit facing aft, and handle the staysail from up forward if you need to.

The sail area is modest — the mainsail has an area of just 154 square feet. She's designed to take a No. 1 genoa of 251 square feet, a No. 2 genoa of 208 square feet, and a No. 3 genoa of 178 square feet. The working jib has an area of 126 square feet, and the storm jib is a very manageable 70 square feet.

The spars are anodized aluminum, the reefing is jiffy, and the mainsheet secures at the aft end of the cockpit. All very standard and well-tested. No surprises here.

Performance

The Contessa 26's PHRF rating is 252, exactly the same as the Nordic

Folkboat and the Cape Dory 25D, which also are part of this series of articles. With her 21-foot waterline, her maximum sustained speed is a little over 6 knots, but of more importance for deepsea cruising is the fact that she'll reach a high percentage of her top speed fairly easily under sail, without being overpressed. That adds up to good daily runs and fast passages.

The design has proved docile and well mannered under all conditions. Tania Aebi proved that the Contessa 26 could be handled with perfect confidence by a 95-pound woman.

Known weaknesses

- As on all boats with balsa-cored decks and coachroofs, watch out for hollow-sounding areas where water may have entered and begun the delamination process.
- Some owners have added a shoe to the aft end of the keel. It overlaps the bottom of the rudder and prevents stray lines from jamming between the rudder and the keel.
- Depending on the boat's fore-and-aft trim, the scuppers on the sidedecks may not be able to drain all the water that gathers there. Some owners have made new scuppers in better places.
- If you're venturing into stormy waters, you may want to beef up the rudder with a third pintle and gudgeon, just in case.

Owner's opinion

B. J. Caldwell's *Mai (Miti) Vavau* was rolled over in the stormy Indian Ocean. One night, at midnight, with the tradewinds blowing at 40 knots, he

Continued on Page 14



We're looking for the Flicka, International Folkboat, and Pacific Seacraft 25 next

Editor's note: Now we're looking for Flicka, International Folkboat, and Pacific Seacraft 25 sailors. Sailors of these vessels, let us know if you've got photos of interiors, your boats at the dock, and especially of your boats under sail; old brochures and manuals; line drawings; owners' comments; or resources (organizations or vendors) which might be helpful to other sailors with your boats.

We will return all materials and savor the comments. We look forward to hearing from you! The Flicka is scheduled for our November issue, so the deadline is right away (Sept. 1). You've got until Nov. 1 if you've got a Folkboat (to run in our January issue) and until Jan. 1 if you've got a PS 25 (which will appear in our March issue).

Tania recalls life with *Varuna*

Almost 12 years have gone by since the single-handed circumnavigation (*the awfully long and unshortenable descriptive title I've had to use so often in those years*) when I buckled the belt, finished up in New York, and moved ashore from *Varuna*. I lived for several months in my father's loft in Manhattan before moving to an apartment in Newport, R.I.; a co-op apartment in Brooklyn, N.Y.; and finally to my current home in Vermont where we have been living for the past four years. The anchor has dug in here. The roots reach deep into the rich brown dirt of these gentle, stationary hills where unpredictability and storms come from nature as much as from everyday life and people. I live here with my family: the husband I met with *Varuna* in the South Pacific, our two boys (Nicholas is 8, Sam is 5) and Tarzoon, the cat who sailed nearly halfway around the world with *Varuna* and me.


On every floor of our small, three-story rectangle with a roof, porch, and small office addition, there are pictures of *Varuna* swinging at anchor in idyllic coves, being knocked around by waves, or gracefully soaring over crests under sail. These are moments fixed in time . . . often moments that preceded a great crash and soaking from spray. There are also paintings, drawn from different pictures and imaginations, which were given to me over the years. And I still have a slide show I present to interested groups. The show is chock full of frozen frames from my days with *Varuna*. In every picture, a royal crown insignia on the mainsail identifies my little Contessa.

I remember her small winches, winch handles, sails, halyards, anchor chain, lifelines, dorade vents, and mast steps. They were dainty and manageable, very ladylike, a perfect Contessa. Her design has crossed many oceans with others — sailors undaunted by the smallness — or rather the petiteness, that belies the total ruggedness and endurance of her feminine lines. I can also remember how we worked together and how I often felt she was guarding my entire world and existence within her protection. She was a maroon dot steadily plugging across the heaving, watery vastness, from one safe harbor to the next. I had named her for the Hindu goddess of the cosmos, a name befitting such a lady.

Nowadays, I can't see any water from our house, and I like it like that. I do see it several times a year when I leave these green, brown, and white hills to teach others to sail on clumsier, bigger, more comfortable, faster, and drier charter

boats. Three or four times a year, on these 10-day international trips, I get my fixes of life on the water. Then I return to my house, Tarzoon, my husband, and my sons, who are teaching me new things every day. *Varuna* was my classroom, as the world ashore has been ever since our trip together. (In fact, I just graduated as an undergraduate and am thinking about continuing with school because I still like my classrooms. I will never forget the one who has had the biggest impact, the one who once helped to develop the standards that have been incorporated into my life.)

Not only was *Varuna* my teacher, she also was my ally, my foe, my nemesis and, ultimately, a dependable friend with some quirks to keep things interesting. *Varuna* was a regal, proud, indomitable, and forgiving teacher. She was also incredibly beautiful. As with the pride I now feel when driving up the driveway to my pretty shingled home with green trim and flowers, I once approached my first home by dinghy and along docks in harbors and anchorages around the world. She was beautiful, and she was mine, all 26 feet of slenderness and grace. I also haven't forgotten the price I paid for that beauty. For my house now, I pay taxes, mow the lawn, and tend the garden, but with *Varuna*, in addition to her maintenance needs, we took on the ocean. Literally. She was also 26 feet of submarine in anything above the gentlest of downwind breezes. But we always resurfaced.

Varuna taught me how to trust the resurfacing, how to stay afloat with aplomb and grace, even in the crappiest conditions. The one thing we can rely upon is the nature of change — in itineraries, plans, weather, and life in general. As I continue to grow, change, and navigate a course through time, picking my way across the meadows, ice, rocks, and water, I return home and continue to walk past the paintings and pictures hanging on the walls. I look at the little maroon dynamo, note the crown, and remember how much she once meant to me, how her importance in my life may have been replaced by other things, what she and that little crown once taught me, and how it will never be forgotten. 

These days, Tania goes to sea as part of occasional educational charters. Call 888-994-7245 for information on upcoming trips to the Bahamas this November and Thailand in February, 2000.

by Tania Aebi

The Turnages' Wyvern was launched in April, 1998.





In short

Contessa 26/J.J. Taylor 26

Designer: David Sadler (1966)

LOA: 25 feet 6 inches

LWL: 21 feet 0 inches

Beam: 7 feet 6 inches

Draft: 4 feet 0 inches

Displacement: 5,400 pounds

Sail area: 280 square feet

Ballast: Encapsulated iron or lead

Spars: Aluminum

Auxiliary: 7-hp diesel

Designed as: Seaworthy racer/cruiser

In comparison

- **Safety-at-sea factor:** 7 (Rated out of 10, with 10 being the safest.)
- **Speed rating:** PHRF 252. A good performer, particularly on long ocean passages.
- **Ocean comfort level:** One or two adults in as much comfort as might be expected in a two-tonner, which is not much.

Continued from Page 12

heard the deafening roar of a breaking wave approaching from astern. An explosion engulfed the boat, he said, and she was rolled upside down. He found himself lying on the cabin roof inside the main saloon and praying for his boat to right herself.

As the ballast keel slowly pulled her back upright, he pulled out a hatchboard and scanned the deck for damage. Miraculously, he said, the mast was still up and in one piece, but the rest of the boat was in complete disarray.

Although it took him the rest of the night to restore order, the only permanent damage he found was a blown-out staysail and a broken solar panel. He faced another severe test when he rounded Cape Agulhas, also known as the Cape of Storms. In fact, southwesterly gales blowing over the fast-flowing Agulhas Current forced him back into port five times over a period of two months, but his boat survived without serious damage.

Tania Aebi also experienced her share of heavy weather and frights, but

Varuna also escaped permanent damage. Both skippers were of the opinion that they could not have found a stronger, more seaworthy boat for the price.

Conclusion

This is a Folkboat that has grown a little wider, a little longer, a little deeper, and a little heavier. She somehow doesn't look as delicately pretty as a Folkboat, but she's probably more seaworthy, if that's possible. Her trademark companionway hump makes for accommodation that resembles a badly lit, cramped dentist's waiting room — unless a large opening hatch has been fitted overhead — but it does provide reassuringly solid shelter and separation from bad weather.

If you're serious about cruising, and especially if you're a singlehander, this

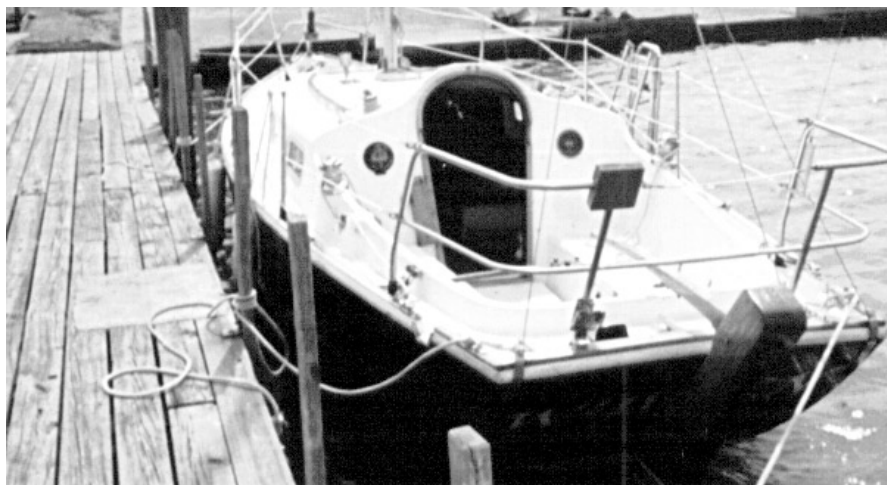
boat will perform well and look after you when the chips are down. She's small enough to give you the feeling that you're always in control, but large and tough enough to survive really bad weather. For somewhere around \$15,000, you should be able to find one in reasonable condition. Good seaboats don't come much cheaper than that.

© John Vigor

John's new book, Twenty Small Sailboats to Take You Anywhere, to be published by Paradise Cay (800-736-4509) later this year, will be available on Good Old Boat's bookshelf.



Wyvern displays that unusual hatchless companionway bubble or hump. The Turnages replaced her navigation lights; refinished all the exterior wood; scraped, sanded, and painted the bottom; sanded the hull; and painted it with Interlux.



*Bill's new old
boat is a 1976
McInnis-designed
Bristol-built
Eastward Ho 31.*



by Bill Sandifer

Do-it-yourself rigging

*When all is said and done,
it might be worth hiring a rigger*

There was no question about having to re-rig my new-to-me good old boat, an Eastward Ho 31. When I surveyed the boat, I noted the barbershop spiral bands of discoloration on all of the standing rigging and that the bottom eye terminal on the headstay had a severe crack. I wouldn't even have daysailed the boat with that defect.

Once the boat was trucked home to Bay St. Louis, Miss., the first priority was to strip the mast and make up a needs list for the new rigging. The most difficult part of the job was trying to free the port and starboard upper shrouds from the aluminum plates holding them to the spreader ends. The boat, at 23 years old, still had its original rigging. The 6 x 32 stainless steel machine screws were firmly corroded into the aluminum end fittings on the spreader. I unpinned the spreader from the mast sockets and took the sockets, wire and all, to the shop. I succeeded in twisting off the screwheads and freeing the wire, but that left the problem of reassembly. I took the spreaders to a machine shop which drilled out the existing machine screw studs and tapped new fasteners into the old spreader body. They did a great job and cleaned up the surface corrosion in the process.

I had initially contacted a rigging supply firm in Rhode Island in an

attempt to buy new spreader end fittings, but I had no luck because the Schaeffer mast is oversized, and the spreader tubes are 1 5/8 inch outside diameter. This company said they carry replacement parts up to 1 1/4 inch only. They suggested sleeving my spreader tubes to fit the smaller endpieces, but I wanted to keep my oversize system intact.

Speaking of oversized, once I was able to assess all of the standing rigging wire, I found the port and starboard upper, headstay, and backstay to be 9/32 inch 1 x 19 304 stainless steel while the port and starboard lower were 1/4 inch 1 x 19 304 stainless steel. This difference would be important when re-rigging. Since the boat's intended use is to be in tropical waters, I wanted to re-rig with 316 stainless steel wire for increased corrosion resistance. This created problems since the 9/32 inch 304 stainless steel wire had, when new, a breaking strength of 10,300 pounds while the 9/32 inch 316 stainless steel wire's breaking strength was only 8,700 pounds. The 316 stainless steel wire would have to be 5/16 inch (having 10,600 pounds breaking strength) to equal the 9/32 inch 304. The 1/4 inch 304 was rated

at 8,200 pounds while the 1/4 inch 316 was 6,900 pounds.

I did not want to reduce the strength of my rig, nor did I want to increase the size of the wire, since this would affect the size of the required terminations and the mating sizes of the masthead fittings, turnbuckles, and tangs. Inspection of the turnbuckles, tangs, and other fittings proved they were solid and in no need of replacement. This was good news, as those are expensive items to buy.

If I had to use 5/16 inch wire, all of my turnbuckles and chain plates, previously fitted with 7/16 inch pins, might have to be replaced or re-drilled to accept the larger pins that go with the larger wire.

Choices, choices

As I discussed in an earlier article (Good Old Boat, May 1999), the rigging on a boat is a system. The pieces are carefully orchestrated to work together. Change one size, and everything is affected. It began to look like I had to decide between 304 stainless steel wire for strength or 316 stainless steel wire with less strength but greater corrosion resistance. That was not an easy choice.

Doing further research, I found another type of rigging wire called Dyform. This wire has a different cross-section profile than stranded 1 x 19 stainless steel wire. It is made of 316 stainless steel and has 30 percent greater breaking strength and 25 percent less stretch than conventional wire. Because of its additional strength, a sailor can use a smaller diameter wire, create less windage aloft and have a smoother, aerodynamic shape. Unfortunately, it is also 50 percent more expensive.

In figuring out my needs for this project, I found the wire to be the least costly of the components needed to re-rig the boat. A 50 percent increased cost in the wire only added \$300 to the total cost for the project. Calculated over a 10-year time span, \$30 per year was a reasonable cost to pay for the increased strength and corrosion resistance of the Dyform wire.

I spoke with several rigging companies which concurred with my conclusion to use the more expensive Dyform wire. This decision brought its own set of complications. I considered duplicating the old rigging with swaged fittings, but this meant finding a

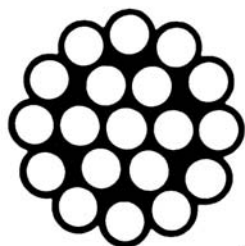
rigging shop to do the swaging. I talked to the rigging shops of two national marine distributors, and they knew of Dyform but had not done much work with it. The Dyform wire has a smoother profile than conventional strand wire, and I worried about the mechanical grip a swaged fitting would be able to make on the hard (316 stainless steel) smooth finish of the wire.

Swageless it is

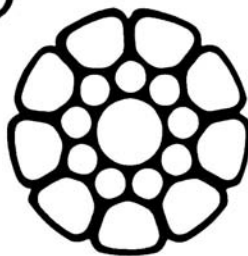
This yellow brick road I was creating seemed to lead me to swageless mechanical rigging terminations such as Norseman or Sta-Loc. In the past, I had installed Sta-Loc and Norseman

fittings on boats as large as 46 feet and was impressed with the design concept. On the opposite side of the coin, I had lost a backstay and a mast on a daysailer and on a 42-foot Gulfstar, each time when a swage failed. And a friend lost his mast when an upper swage let go on his Pearson 365.

The negative experiences with swaged fittings, combined with my concern over the suitability of Dyform wire for swaging made swageless fittings the clear choice.



1 x 19 construction



Dyform 1 x 19

The next choice was between a two-component swageless system and a three-component swageless system. The two-component system uses a cone to spread the wire and the top fitting to form the wire around this cone. (See *Norseman instructions on Page 20.*) The three-component system uses a wedge and a “former” to form the wire strands over the wedge with a screwed-on top fitting. (See *Sta-Loc instructions on Page 21.*) The two systems were comparable in price.

I chose Norseman’s two-part system for simplicity (one less part — no former) and on the recommendation of a rigger with whom I had discussed the project.

Next, I attempted to place the order for the wire, terminals, and the biggest manual wire cutter I’ll ever see with a marine discount house. All the items were in their 1999 catalog, and I was confident of success. Wrong! The person who took the order acknowledged that they were all catalog items, but were no longer being made. Hmmm.

I called the manufacturer’s distributor who assured me they were, in fact, still being made. However, the 9/32 inch terminators with a 7/16 inch pin size (in the catalog) were no longer made. The termination was now 9/32 inch with a 1/2 inch pin size. I called the discount house which received the information with skepticism, but the representative promised to “look into it.” Oh yes, the 9/32 inch terminators were indeed available with a 7/16 inch pin size.

I was getting a little nervous at this point, but the price was the best I could find, and the distributor was well known. I placed the order. Delivery was to be in 5 to 10 days.

I asked for a confirmation number for the order, but one “had not been assigned yet.” I called back in five days to check and was told that they had “not placed the purchase order with the manufacturer yet, so the order

The project begins. In the photo at left, Bill, in foreground, enlists the talents and muscles of his son-in-law, John Cross, at left, and son, Chip Sandifer, in the middle. Above on facing page, Chip cuts and examines a wire bundle.





cutter took another week. Finally, all was ready to fabricate my new standing rigging.

As luck would have it, my son and son-in-law arrived for a visit a week after the wire package arrived, so I had plenty of manpower. Even though we all read the instructions twice and had previously installed swageless fittings, we did not do well with the first eye.

The process itself

What the Norseman instructions do not tell you is to unlay left-hand twisted wire

counterclockwise. If the wire were to have a right-hand twist, it should be unlaid clockwise. When the wire is unlaid, it should assume a tulip shape. (See illustrations below.)

The cone should be positioned below the cut end of the wire a distance equal to one and one half times the diameter of the wire itself. Since I was using 9/32 wire, the cone needed to be 7/16 inch below the end of the wire. When cutting a length of wire, it is possible to cut it at such a point that the curve of the wire will conflict with the cone.

If this occurs, the cone needs to be pushed down into the bowl of the wire and an appropriate amount of wire trimmed from the cut end.

If the cone is too high, the wire will not form over the end of the cone. If the cone is too low, too much wire will close over the cone and the threaded bottom fitting will not be able

to be mated with the top portion.

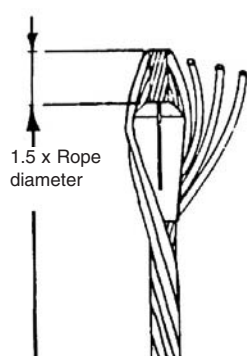
The information the instructions did not give us is to use a little bit of white grease when assembling the fittings so a strand of wire does not get caught between the top and bottom fittings and destroy both fittings. This happened the first time I tried to assemble a terminal on the wire. The way to avoid this is to use white grease and handtighten the top fitting into the bottom fitting. Screw the top down two threads, back off and look inside to see if the wires are forming inward over the cone. If they are, replace the top and tighten a little more, reverse and check. If the wires are not forming over the cone, use a small flat-bladed screwdriver to push the wires inward toward the center. Handtighten the top over the bottom fitting. Do not use wrenches at this point.

If it works, do it several times more, a little at the time, until all wires turn inward toward the center over the cone. Check one more time to be sure they are correctly formed. Then, use two wrenches to tighten the top and bottom together. They should be snug but not overly tight. The instructions advise you to turn only the top fitting if using lefthand laid wire and, if using righthand laid wire, turn only the bottom of the fitting. We followed this advice but still messed up the first fitting. Disassemble the fitting for the last time. Tap the bottom part of the fitting down, away from the cone and wire. Wipe the white grease from the wire and the fittings. Pull the bottom fitting into position over the wire and cone. Fill with 3M 4200 or similar non-acetic-acid marine sealant. Do not use a household bath sealant. They contain acetic acid. If it smells like vinegar, it contains acetic acid, which is harmful to stainless steel.

would be delayed." My calls to customer service were to a series of voice-mail messages that got me nowhere. I called two days after placing the wire order to buy new rope halyards. That order took 30 days to arrive. And it was only rope, just rope!

Finally, with ever-increasing frustration because I could not even talk to a real person to *cancel* the order, the wire and fittings arrived (35 days from the order date). The wire was correct, but the swageless fork terminals with the 7/16 inch pin size? They were 1/2 inch pin size. This would complicate a lot of things, but I'd waited too long to start over.

Oh, I almost forgot to mention the large (huge) wire cutter I ordered. They sent the largest pop rivet tool I have ever seen. When I called, they took eight hours to authorize the return of the tool. Shipping the correct wire



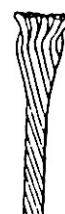
This



Not this



Yes



No



No

The first of these cuts will work. The second two must be recut.

Assemble the fittings and tighten snugly. Do not overtighten. The sealant should ooze out of the bottom fitting. Wipe it clean, and go on to the next fitting.

Measure twice, cut once

When I was figuring out the amount of wire I needed to buy, I measured the old wires from the centerline of the hole in the eye, or fork, to its corresponding point at the other end of the wire. I did not include the turnbuckles in my calculations. When all eight wire lengths had been added together, I added three feet to be sure I had enough. This added wire was a waste. When you think about it, if you cut a wire short, there is no way to add to it. It will have to be replaced, and the extra three feet will not help. Live and learn.

In measuring the new wire to be cut, I used the old wire as a template and cut it exactly to the length from where the wire bottomed out in the old fitting to the corresponding point at the other end, swage to swage. The extra wire I purchased, from centerline of eye to eye, was also a waste, although it was only a few inches per wire.

A concern I had when deciding on swageless fittings was their large size as compared to the aircraft fork and eyes used with the original swaged fittings. This should be investigated by anyone planning to re-rig with

swageless fittings. Be sure you have room to utilize the larger termination. They were not a problem for me, but could pose a problem if mast tangs are very close to the mast surface without room to allow the larger fittings to be used.

The problem of the 1/2 inch versus 7/16 inch pin for the fork fittings caused some grief as I had to drill out the 7/16 inch holes in the masthead tangs to fit the 1/2 inch pin size. Care must be taken when drilling larger holes to preserve the integrity of the tang. The rule is that the amount of material below the hole must be equal to the diameter of the hole. Thus a 1/2 inch hole needs 1/2 inch of metal between it and the edges of the tang. (See illustration below.)

The problem I had was with the tangs for the port and starboard lowers. If I re-drilled the hole to 1/2 inch, I would not have 1/2 inch of metal below and to the sides of the hole. I removed both tangs from the mast and took them to the machine shop where the machinist told me it would be “about impossible” to enlarge the hole up and inboard from the existing location, but he would try.

Using a milling machine, the machinist was able to enlarge the hole to 1/2 inch by taking material away from the edges. Even so, I still had only a 7/16-inch margin outboard and below each hole. I compensated by welding a

stainless steel doubling washer to the tang to increase its strength. This is an ABS (American Bureau of Shipping) approved method of compensating for holes or hatches cut into steel plate for large steel construction jobs. I used a thick stainless steel 1/2 inch washer which was perimeter-welded to the tang. The large

swageless fitting had room to accommodate the increased thickness.

Prior to re-rigging, my good old boat had 3/8 inch, 7/16 inch, and 1/2 inch rigging pins and 1/4 inch and 9/32 inch wire. Now it has 1/2 inch pins and 9/32 inch Dyform wire throughout. This was definitely an improvement. I think the previous owner owned stock in a silicone factory, because everything was coated in silicone — not bedded — coated. There was no way to determine the condition of the bedding for the mast step or chainplates except to remove all of the silicone and start over. I scraped the silicone from the fittings, cover plates, nuts, and bolts and re-bedded everything in 3M 4200, (similar to 3M 5200 but not a permanent adhesive sealer). A careful inspection of the clean parts showed them to be sound and not leaking. A tribute to silicone, I guess.

While you're there

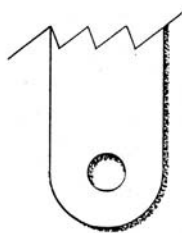
While the mast was horizontal, I pulled all of the old electrical wire out and replaced it with Ancor marine-grade tinned wire. I also rebuilt the foredeck light and bow light assemblies. The original rig had combination wire/rope halyards festooned with fishhooks. You needed gloves to handle them. I'm a firm advocate of all-rope halyards and purchased Sampson XLS 7/16 inch rope for the main and jib halyards. The go-fast crowd will bemoan the weight and windage aloft, but my boat will not feel any difference.

I also added mast steps while I waited for the new rigging since there is one bridge between my home mooring and the sea that we must pass under at less than high tide. With my wife at the helm, I can be at the masthead to make sure we'll clear the span.

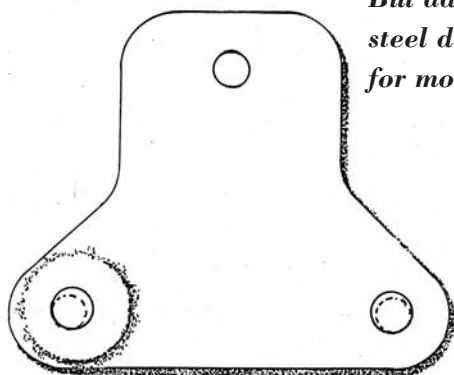
Stepping the mast was supposed to be a non-event at the local shipyard, but at the last minute the cherry picker the yard uses to set masts quit, and I had to arrange for a truck crane to do the job. The smallest crane I could find was a 20-ton model. Overkill for a mast, perhaps, but it worked. The rigging fit as desired, and it was time for rig tuning and sailing.

Worth the effort?

I noticed a wide variation in prices between suppliers of identical products. It should be noted that the cost of



A machinist enlarged the hole in the tang to accommodate a larger pin. The new hole is off-center, in order to keep as much margin as possible around the outside of the hole.



Bill added a stainless steel doubling washer for more strength.

swaged fittings is one half to two thirds that of swageless fittings, you have to add the labor cost to the swaged fittings. With swageless fittings, you can build your own rig at home with your own “free” labor.

Is it cost-effective to build your own rigging? I think not. It is not very difficult work, but it is time-consuming. If you make just one mistake, it can ruin \$50 to \$100 worth of wire. The fitting we ruined cost \$50 to replace.

In addition, there is the cost of the wire cutter at \$140 to \$160. If you do not do your own work, you will not need this tool unless you want it for emergencies aboard your boat. I wanted one for my boat anyway, so the cost is not a total write-off.

The cost to have a professional rigging shop do the work seems to be about \$400 above the material cost for swageless fittings and about \$300 above for swaged fittings. If you subtract the \$140 to \$160 for the wire cutter, the difference is quite small. For this amount, you get a warranted job with no mistakes. If the shop cuts something too short, they replace it.

If you are upgrading your rigging as I was, have the rigger visit your boat to make sure the new rigging will work. The pins for swaged fittings are much shorter than those for swageless. The fitting diameters may be correct for the wire, but may not fit up to the mast-mounted hardware. There are lots of things to think about before you start the work.

I'm proud of the new rigging I built, and I'm glad I did it. However, it took four times as long as I thought it would, cost almost as much as a professional job, and my fingers are just beginning to heal from the wire punctures which are an inevitable part of the process.



Bill Sandifer is a marine surveyor and small boatbuilder who's been living, eating, and sleeping boats since he first assisted at Pete Layton's Boat Shop building small wooden boats. He's worked for Charlie Morgan (Heritage), Don Arnou (Cigarette), and owned a commercial fiberglass boatbuilding company (Tugboats).



A second opinion

When I purchased my good old boat (a 1975 Glander Tavana), I expected to replace the standing rigging in three to five years. The surveyor inspected the lower shrouds and reported them to be in good condition. But he did not scale the mast to inspect the upper shrouds. After trucking the boat from Florida to Minnesota, I inspected the upper fittings before resteepping the mast. The forestay protruding from the roller furling showed significant rust. Rerigging moved to the top of the worklist.

Never having worked on large standing rigging before, I checked out the local library's entire selection of rigging books. My boat, the *Yawl of America* is equipped with 1/4-inch wire shrouds with Norseman fittings. Nigel Calder's book, *The Boat Owner's Mechanical and Electrical Manual* (International Marine, 1996), had a detailed description of the Norseman fitting. It appeared to be within my capabilities. I removed the lower shrouds and brought them home to experiment (the boat is 250 miles from my home and shop equipment).

by Steve Lein

Norseman fittings are reusable except for the inner cone. I decided to totally replace the masthead fittings but to reuse the lower fittings. I ordered 300 feet of 1/4-inch 1 x 19 type 304 stainless steel wire, six complete Norseman fittings and 16 spare cones from Defender. The materials all arrived in just over a week. Unfortunately the Norseman fittings had to be exchanged because I failed to specify the pin diameter. The correct fittings showed up a week later.

Since half the work was to be done at the boat, the next step was to build a portable workbench. I mounted my shop vise on one end of a 3 foot 4 x 6 timber. (This has proved to be so handy that two years later it is still in use.) On the other end of the timber I built a wire cutting jig based on an idea from *Sail* magazine's "Things that Work." This is basically a piece of 2 x 4 with a hole bored through the center that is the same size as the wire. A simple strap clamps the wire in place. A saw cut at a right angle to the wire hole allows my Saws-all to make smooth cuts of the 1/19 wire. Smooth cuts are essential for success with Norseman fittings.

After carefully measuring the lower shrouds for the proper length, I disassembled the old Norseman fittings. With the terminal body held in the vise, I easily unscrewed the eye with a 12-inch crescent wrench. A tap with a two-pound hammer freed the terminal body from the wire. Using the old wire and terminals, I did a practice fitting. If you are careful, the outer strands of the wire will unlay smoothly. The cone is then placed over the inner strands (1 1/2 wire diameters from the end of the wire) and the outer strands are relaid over the cone. The terminal body and eye are then screwed together with 3M 101 sealant around the cone and Loctite on the threads. One of the old Norseman fittings cross-threaded on reassembly and had to be discarded. The key issues seem to be having a clean cut on the end of the wire and accurately placing the cone.

On the next trip up to the boat, I had the mast pulled and proceeded to rebuild the upper shrouds on site. The practice at home paid off, and the rebuild went smoothly. When disassembling the old upper forestay fitting, a single blow from the hammer shattered the wire. (Sometimes it pays to do preventive maintenance.)

I rebuilt the rigging myself for several reasons. First, I enjoy working on my good old boat. If I didn't, I would be better off chartering. I also prefer to be as self-sufficient as possible. I now carry materials on board to make emergency repairs to the standing rigging and have confidence in my ability to do the task. And it is always nice to save a little money. There is always some other task or toy needed on the boat to use up any extra cash. I would definitely do-it-myself again. In fact, I will next year when the mizzen gets the same treatment.



Steve's fascination with sailing began when he spent two years as a teenager building a Glen-L La Gatto sailboat before he had ever experienced the joy of sailing. Next came racing scows and finally his Glander Tavana 33-foot yawl. His latest project is a stitch-and-glue nesting dinghy, Danny Greene's Cameleon.



A note of caution

As we were putting this issue together, we encountered two situations in which Norseman swageless fittings were showing an abnormal amount of corrosion. In one case, this led to headstay failure. We asked Bill to investigate and comment on this:

The Norseman Gibb company, maker of the Norseman line of swageless terminations, experienced a material problem in 1996. A batch of the barstock from which Norseman manufactures the 1/4-inch and 9/32-inch terminations was mislabeled as 317L stainless steel when it was something else. This

by Bill Sandifer

resulted in a number of terminations and body parts rusting and cracking.

Since that time, the company has become ISO 9002-certified and has improved its quality system. According to Mark Swales, commercial director with Norseman Gibb, "The problem only relates to Norseman bodies sizes 1/4 and 9/32. Long before they crack, the bodies go very dull. If any of your readers spot this problem, they should

contact their nearest Norseman agent, who will be aware of the problem, and we will

replace all damaged parts."

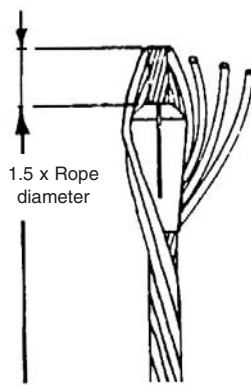
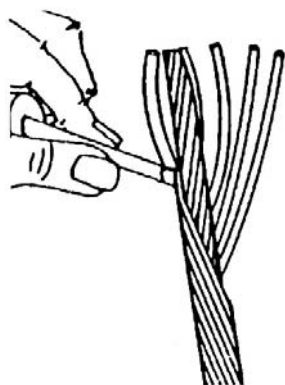
Norseman Gibb has diligently replaced all defective terminations which have been reported, including the labor and parts required to put the rig to rights. Anyone with Norseman

terminations purchased after 1995 should carefully inspect the terminations for signs of rust-colored blush on the outside of the fittings and contact the firm from which they ordered the terminations to obtain replacements.

It is unfortunate that this condition has occurred, but Norseman is responsibly standing fully behind their product with a full material and labor warranty. They are even providing toggles or long studs where required by the repair.

On another note, Norseman also distributes Dyform wire. Recently rolls of this wire have shown pinhead-sized spots of rust discoloration in the wire. This has been caused by tiny pieces of the carbon steel dies adhering to the

Instructions for two-component swageless fittings from Norseman



May be fitted without the use of special tools. Simply slip the body of the terminal over the full diameter of the cable. Unlay the outer wires and fit the cone over the center core. Re-lay the outer wires. Ease the ends of the wires into the head of the fitting. Draw the body up to the head and screw together. (Note: One of the unfortunate characteristics of stainless steel threaded

components is a slight risk of thread galling or seizing. On certain sizes of Norseman terminals, the male thread has been coated with a special anti-friction compound to eliminate the risk of thread galling or seizing. Care has been taken only to apply this coat to approximately half the threaded length, in order that there is sufficient uncoated steel for the recommended thread locking compound to take hold.)

wire during the forming process. The spots are independent of the basic wire and do not affect the wire or its strength. Mark Swales says, "All wire, whether conventional or Dyform, does very occasionally suffer from a pickup problem during manufacture . . . it has no impact on the wire itself and does not affect performance. It does, however, spoil the look of a rig. We do not recommend using Naval Jelly or similar rust removers to remove the spots. Instead we recommend rubbing down with Scotchbrite or some similar abrasive medium."

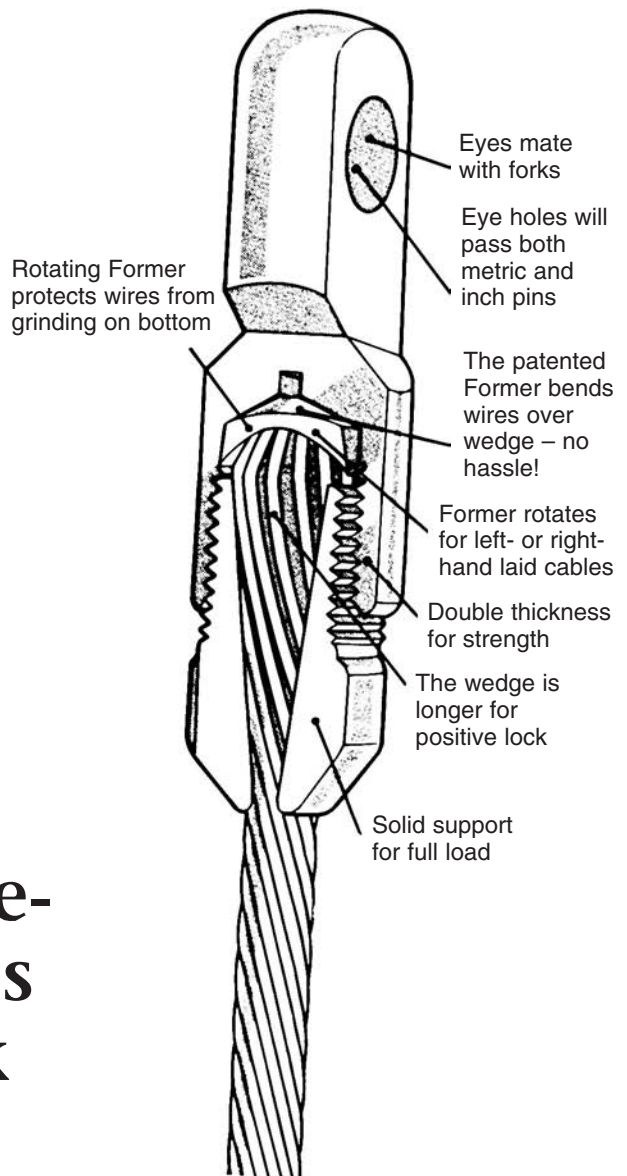
Norseman Gibb is a company trying hard to support its customers with a full warranty when a problem occurs. They are doing their best in a difficult situation.



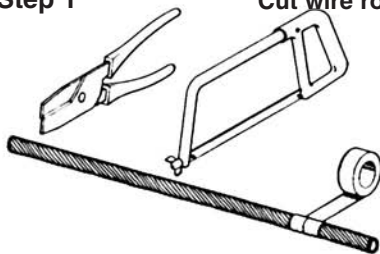
Instructions for three-component swageless fittings from Sta-Lok

Sta-Lok asks, "When ordering, please state clearly if terminals are for use with Dyform wire rope."

This company's step-by-step instructions are as follows:

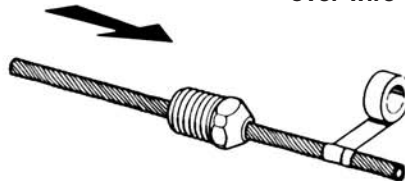


Step 1 Cut wire rope



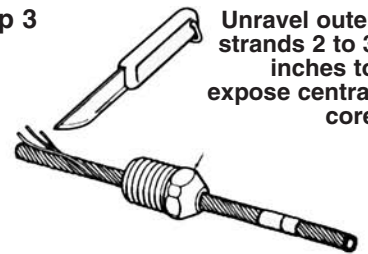
Tip: If using the hacksaw, wind PVC tape around wire and saw through tape

Step 2 Slide socket component over wire



Tip: Wind PVC tape around wire approximately 12 inches from end

Step 3 Unravel outer strands 2 to 3 inches to expose central core

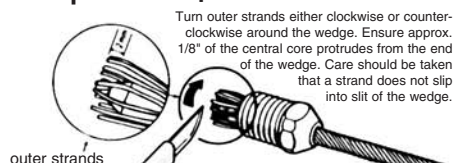


Tip: Use a penknife to prise initial strands out of position

Step 4 Slide wedge component over central core of rope

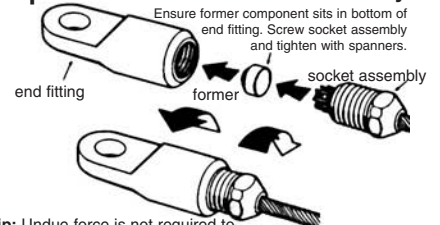


Step 5 Reposition outer strands



Tip: Push the socket toward end of wire, while repositioning outer strands, this will help control. When wire strands are in position, push socket firmly, as indicated, to hold wires in position.

Step 6 Final assembly



Tip: Undue force is not required to terminate the wire.

Replacing your ports: Good news and bad

The Second Law of Thermodynamics states that when things are left alone, they go from the complex to the simple. In the case of a boat, it falls apart. Hence we must constantly maintain our boats or watch them deteriorate. One common project is replacing old, cracked, and leaking ports. Eventually, applying caulking around the outside of the ports no longer cures the problem, and the ports need to be removed and re-bedded. When you go to the trouble to remove an old port to re-bed and stop the leaks, it may be just as easy or easier to install a new one. Many older ports are weakened by exposure to the UV rays of the sun and become brittle and crack. By the time they have been removed, there may be no choice but to replace them.

First the good news: there are many choices on the market when it comes to the replacement of opening ports. They can be purchased in bronze, stainless steel, or a composite material. They come in most popular sizes and, when installed, they enhance the looks and the integrity of the boat.

The bad news is that when it comes to replacing the fixed ports in the cabinsides of your boat, your choices are more restricted. Many of these ports are in odd sizes. Trapezoidal is quite common. If your boat is still in production, it may be possible to order new ports from the factory. However, if your boat has been in production for a decade or more, port sizes may have changed since your boat was manufactured. Many sailboat owners have seen the manufacturer of their boat go out of business in the last 10 to 15 years. Unless you want to enlarge or change

It's easy to replace opening ports – but fixed ports are another matter

**by Norman
Ralph
with illustrations
by Mike Dickey**

the shape of the opening in your cabinsides, a custom-made port may be your only option.

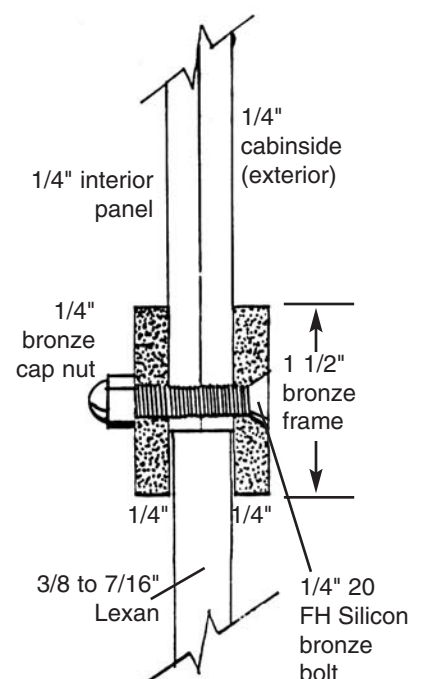
Some years ago I was faced with this problem. I had purchased a late '70s Pacific Seacraft Flicka. It originally had been sold as a "sailaway kit," a boat with rigging but with an unfinished interior. When I purchased the boat many years later, the four opening ports of an unknown white plastic/nylon composite were leaking. The two large fixed ports also leaked, the interior cabinsides were badly stained, and the wood had started to delaminate.

I removed all the ports and replaced the interior wood panels using the old pieces as a pattern. I purchased four new bronze opening ports, complete with screens, from a marine supply catalog, (*JSI/The Sailing Source in St. Petersburg, Fla. 800-234-3220, <<http://www.jsisail.com>>*). The new ports were the same size as the old ones, so installation was straightforward.

When it came to replacing the fixed ports, things were not so easy. The old ports were not set in a frame but attached directly to the outside of the cabinsides with their edges covered and trimmed in teak. Since the old installation had leaked, I wanted a different approach. The opening cutout in the cabinside was 8 x 22 inches. I cut a 10 x 24-inch pattern out of 1/4-inch plywood with a sabre saw. (See *diagram*.) This pattern had a hole 7 x 21 inches cut in it for the finished

size inside of the fixed port frame. This resulted in a frame pattern 1 1/2 inches wide, which would result in a 1-inch overlap on all sides of the opening. I took this pattern and found a small foundry/blacksmith shop that would cast four bronze frames the size of the pattern. The price was very reasonable. In 1989 I was charged \$35 apiece as they came out of the mold or \$40 apiece if they were polished on one side with a buffing wheel. I paid the extra to have them polished.

A word of caution: be sure the foundry understands that you want bronze with as low a zinc content as possible and that you do not want brass. This is an important difference.



Brass is an alloy of copper and zinc. In a marine environment, the zinc dissolves and leaves the copper soft and porous. Manganese bronze is also a brass with almost 40 percent zinc and should not be used. Bronze that is going to be immersed in water or in frequent contact with water should be an alloy of a high percentage (86-96 percent) of copper, with lesser amounts of tin, aluminum, silicon, or nickel such as silicon bronze. (*See marine metals article in the June 1998 issue of Good Old Boat.*)

I took two of the frames and clamped their rough sides together and drilled two holes on each of the short sides and four holes on the longer sides. The holes were drilled 3/4 inch from the outside edge of the frame. The frame that was going to be on the inside was drilled and tapped with 1/4 x 20 threads and the outside frame was drilled and countersunk for 1/4 x 20 flathead machine screws. I did this to the other two frames also. I cut two pieces of Lexan to fit the openings in the cabinsides. This Lexan was slightly thinner (3/8 to 7/16 inch) than the combined thickness (1/2 inch) of the cabinside and the interior wood. Plexiglas or tempered glass could have been used. It can be clear or tinted.

I centered the outside frame over

the hole. This resulted in an overlap of 1/2 inch on all sides of the inside of the hole. When the frame was in place and clamped with several C-clamps, I marked the holes and drilled in the cabinsides. I assembled the frames and the Lexan and fastened them together with 1/4-20 flathead silicon bronze machine screws to assure that everything was going to fit.

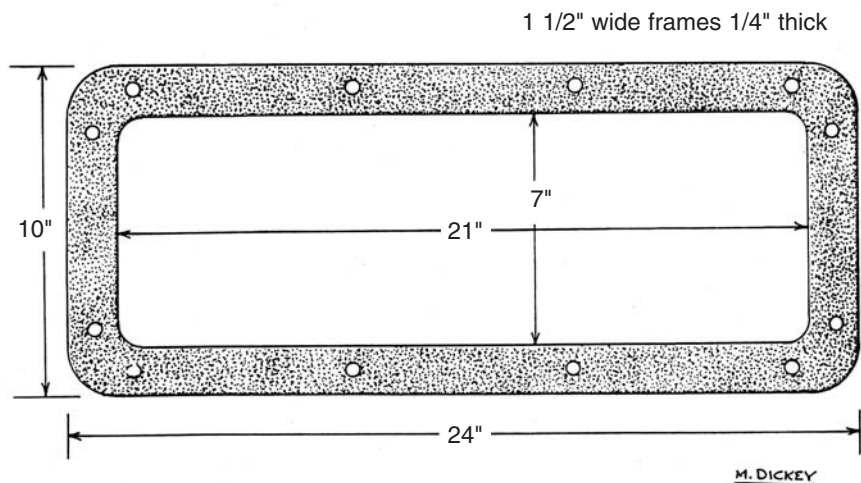
A word of caution: before disassembly, cover the exposed Lexan or Plexiglas with masking tape. I didn't do this, and in removing the excess bedding compound later, I scratched the Lexan. I then disassembled everything, generously bedded them with a bedding compound, and reassembled them. I used a non-adhesive caulking for easier disassembling later, if needed. I covered the protruding ends of the machine screws inside with bronze cap nuts. An alternative would be to drill (rather than tap) holes in the inside frame and to use lock washers and nuts on the inside, perhaps covering the exposed threads with cap nuts. (*See diagram.*)

If you don't want the frames to be bronze because your other ports are of some other material, an alternative could be aluminum. Aluminum 1/4-inch stock can be purchased in any

width at stores that sell metal by the foot or in small lots. This will not be your local hardware store, but you can find a supplier in the *Yellow Pages*. One source is scrap metal dealers. If you have the necessary tools to cut aluminum to match the pattern, you can make the frames yourself. If not, a metal-working shop can cut it for you at a reasonable cost. The frames can be left their natural color or, with proper preparation, can be painted to match the other ports on your boat. When assembling the frames, be sure to use sealant on the stainless steel machine screws to prevent corrosion between the dissimilar metals.



Norman Ralph and his wife, Jeanette, were late bloomers when it came to sailing. After buying a Compac 16 in 1986, they sailed a series of Midwest lakes and reservoirs in a variety of boats. A 1988 trip to the Gulf Coast exposed them to the concept of year-round sailing and sowed seeds that initiated early retirement and a move to Lake Pontchartrain in Louisiana.



A custom-made port may be your only option. Norman made a plywood pattern for his new port openings and had four bronze ports cast from the pattern.

There's the rub

One of the fastest ways to get a good old boat looking and acting *older* than its actual age is to forget about chafing gear. Sheets, halyards, dock lines, blocks, and sails all suffer unnecessarily when you ignore simple, inexpensive methods and materials for preventing excessive wear and tear. In fact, installing some *anti-chafe* gear can make your boat look a little more traditional as well as teach you a few new crafts that were once quite common among sailors.

Good antichafing gear is also a safety issue. Insurance adjusters can always come up with a few dozen tales of boats lost due to dock or mooring lines that chafed to smithereens in a storm. Additionally, races are lost and cruises are truncated when badly worn gear unexpectedly gives up the ghost, and you have to search for replacements. So the small task of installing and upgrading good antichafing gear is always a wise investment of time, usually at very little cost.

Critical chafe first

If you have no chafing gear at all aboard your boat, the first items to address are dock, mooring, and anchoring lines. No matter how smooth your bow and stern chocks are, the

seesawing action created by a storm can make short work of even the thickest nylon lines.

The least expensive and easiest solution is to wrap the line in some old garden hose, or any pliable plastic tubing for that matter. In fact, brand-new clear plastic tubing is inexpensive enough to use right off the shelf. At my local hardware store in Maine, it's \$1.03 per foot for one-inch (inside diameter) clear tubing and less for three-quarter and half-inch sizes.

To wrap a line, simply slit the hose lengthwise. Then open it up and wrap it around the line. Be sure the hose extends well clear (at least six inches) of the chock, both on the outboard side and the inboard side. Duct tape will hold the tubing in place for at least a season — if the line is not repeatedly immersed as a mooring line would be. For mooring lines frequently immersed, the hose can be kept in

*Ignore chafing gear,
and your gently aging boat
will begin showing her age*

place for the season with marline sewn into the ends of the hose and through the line itself.

If you prefer a slightly more nautical appearance to your chafing gear, the old-fashioned procedures of parceling and serving a line still work as well today as they did 400 years ago. Parceling is wrapping a line with a long strip of heavy cloth, traditionally canvas. But as the photo below shows, denim from an old pair of jeans works

just fine too. The parceling cushions the line and, when applied to the uneven surface of three-strand rope, makes a

smoother surface for applying the serving twine.

Nylon makes the best serving twine, preferably a size #40 twine or bigger. Any commercial fisherman's supply store should have nylon twine on hand, usually for about \$4 for 150 yards of the stuff. Simply wrapping the parceling cloth with the twine holds everything in place. But I prefer to put a half hitch in the twine every time I go around the line. (See photo at bottom on facing page) I've found this procedure not only holds everything in place more securely, but you also end up with a

Parceling is the nautical art of wrapping a line with a long strip of heavy cloth, such as canvas or denim, as shown at the left end of this line. The parceling cushions and protects the line and makes a smoother surface for applying the serving twine.





spiral of knots that looks better than just a plain wrapping of twine.

Un-chafe critical points

Reducing chafe at critical points in your running and standing rigging also pays big dividends. The lines on good old boats frequently rub on fairleads, handrails, toerails, standing rigging, and lifelines. Making your running rigging chafe-proof is not practical. Instead, you have to address the source of the chafing.

To de-chafe standing rigging and lifelines, it's back to the local hardware store's plumbing department. Using off-the-shelf PVC plumbing pipe, you can install anti-chafe gear for less than half the cost of comparable marine catalog items. Take, for instance, shroud rollers.

If you have quarter-inch standing rigging, buy some half-inch PVC or ABS rigid pipe at 5 to 15 cents per linear foot. After studying the approximate points at which running rigging lines cross standing rigging cables, cut an appropriate length of pipe. Like the anchor line chafe tubing, the shroud pipe should extend

Copper flashing from the local hardware store or roofing supply company can be used to protect toerails from anchor chains.

a minimum of six inches above and below the point of contact.

Cut the pipe with an ordinary hand or circular saw. Once you've got the appropriate lengths cut, slit the pipe lengthwise. This can be done on a table saw (a friend's or the one in your offspring's shop class) or by renting a small-blade (approximately 4 1/2 inch diameter) circular saw. In either case, a fine-tooth panel blade works best. If you use a hand-held circular saw, be sure to securely clamp the pipe to a workbench before proceeding. Once you've slit the pipe, slip it over the cable and close the slit at the top and bottom of the pipe with rigging tape. Although the photo on the next page shows this idea executed with wooden

(oak) shroud rollers, the procedures are essentially the same.

Static fairleads are another source of running rigging chafe. The simple solution here is to substitute a block for the fairlead. That can be expensive (between \$25 and \$60 each), so sometimes just a larger fairlead will significantly decrease the chafe while still keeping the line where you want it.

Likewise, wooden toerails, handrails, dorade boxes, and the like will chafe lines that regularly come in contact with them. The solution here is to get a piece of copper flashing at the local hardware store or roofing supply store. Cut an appropriate-size square to cover the wood and screw it into place. As the photo above shows, this

Nylon makes the best serving twine. Wrapping the parceling cloth with the twine will do, but Ken prefers putting half hitches in at each wrap to create a spiral effect and to hold the parceling wrap more securely.





procedure is effective where heavy-duty running rigging wires or anchor chains chafe the wood, rather than the other way around.

Noise reduction too

Reducing chafe in some areas can also have the secondary effect of reducing onboard noise. This is particularly true of thump mats for deck blocks. In light air, sheets in these blocks sometimes go slack, allowing the block to slam on the deck. If you're trying to catch a catnap below, this phenomenon is quite noticeable. And even if you can sleep through the racket, eventually the deck or the block (or both) will show distinct signs of wear due to the pounding.

The easy (but expensive) solution here is to install spring-loaded deck blocks. Costing between \$40 and \$120, the block is held upright by a spring mechanism between it and the deck. Alternatively, you can install a thump mat for between 50 cents and a dollar, depending on whether you like the simple modern approach or the old-fashioned style.

A modern thump mat is made out of thin (about 1 inch) closed-cell foam. It's important to use only closed-cell foam, which is sold in many department store sporting goods sections as a "camping pad." It's normally used as a pad under your sleeping bag. Because closed-cell foam won't absorb water, it also makes an ideal thump mat. With a pair of ordinary scissors, just cut out the size you need to cover the area being thumped. Then cut a hole in the middle big enough to fit the base of the deck block. Closed-cell foam stretches, so the hole can be smaller than the block itself and stretched to fit. Use an epoxy glue to hold the pad in place. Ordinary deck paint for fiberglass boats can be used to make the pad blend right in with the rest of the deck.

Alternatively, traditional-looking thump pads can be made from inexpensive polyester clothesline,

Shroud rollers to protect standing rigging and lifelines and the sails and sheets which come into contact with them can be made of bamboo or oak, such as the ones pictured here, or from PVC plumbing pipe at a fraction of the cost.

several hundred feet of which can be obtained from a hardware store for around \$5. Using basic macramé techniques, a half hour's worth of work can produce a thump mat much like the one in photo below. If you want to get even fancier, your local library no doubt either has or can get a book on macramé, which is the sailor's age-old fine art of weaving ropes into usable items.

There are, of course, many other approaches for preventing chafe, both in the areas already mentioned and elsewhere on the boat. No doubt readers of *Good Old Boat* have some of their own inventive ideas and procedures. Please send them in, and we will print them in the magazine or the *Good Old Boat* newsletter for subscribers. In the meantime, some of the ideas mentioned here may help your boat last longer, work better, and look more attractive.



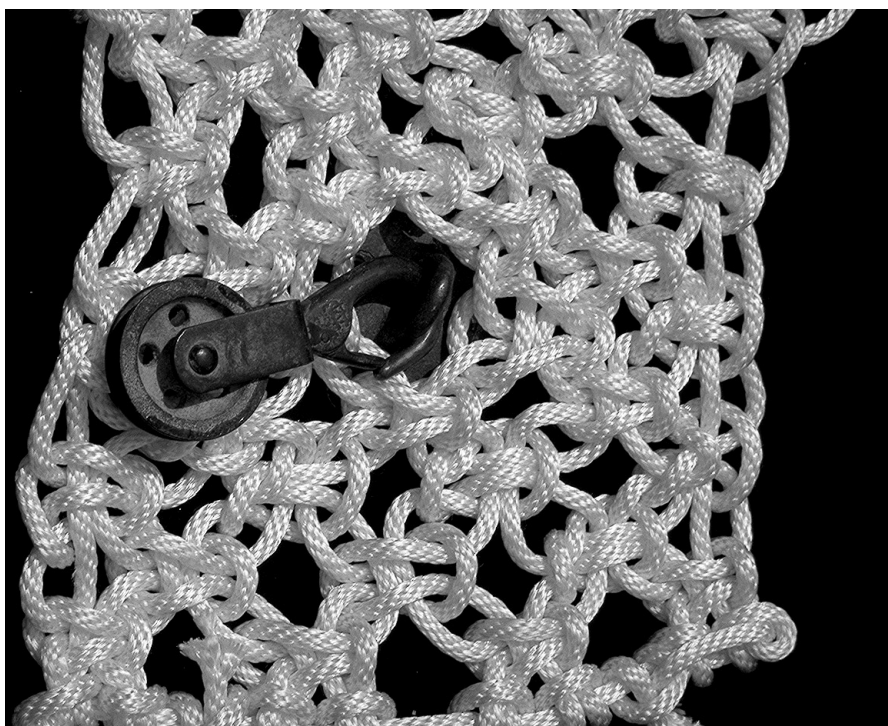
Ken Textor has lived and worked aboard boats for 22 years. In addition to work he did for the former Small Boat Journal (this Small Wonders column is dedicated to the memory of that popular

magazine), he contributes to a number of sailing magazines and has written a book, Innocents Afloat: Close Encounters with Sailors, Boats and Places from Maine to Florida.



Ken also offers boat deliveries and pre-purchase surveys for other mariners.

Like shroud rollers, thump mats come in at least two flavors: nautical and somewhat more practical but generally made from materials right from the local hardware or, in this case, a camping supply store. The mat above is made from closed-cell foam, often sold as a camping pad. This foam works well because it won't absorb water. The mat below is crafted the old-fashioned way using basic macramé knots.



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May/June 1999

Technical articles: Standing rigging; Tillers; Affordable Boat: partnerships, basics, and careful buying;

Restoration of a Bristol 27; Flopper stopper

Boat: Pearson Commander feature boat; Bristol Channel Cutter boat review

Features: Preserving the classics; Mildew wars

Small Boat Journal Remembered: Chip logs and lead lines

Expanded list of sailboat associations and contacts

July/August 1999

Technical articles: Focus on aluminum and steel yachts; New sails for good old boats; The sailor's medical bag and creative ways to face medical emergencies at sea; New mast for an old cat; How GPS works; The poor man's windlass; Yacht design formulas

Boat: Block Island 40 feature boat; Cal 20 boat review

Features: Renaming your boat; The Black Box Theory; Love at first "site;" Ode to summertime

Small Boat Journal Remembered: Three-minute boat, the Walker Bay dinghy

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Of dogs and boats . . .

Way back before Noah, when Someone was first organizing His thoughts on putting together the universe, it seems obvious He was striving for the sweet perfection of balance. Men and women, land and water, darkness and light, good and evil, chocolate and liver. That kind of Balance.

But there was some essential part missing, a sort of universal filler to smooth life's rough spots, to provide a sense of continuity and stability from one day to the next. And I think that dogs were created for this very special purpose. This story is about mine.

Her name was Bandit, later changed to Biddy by kids struggling to pronounce their first words. She was with me for 14 years of ups and downs and all the waypoints in between. We shared steak and beer in Colorado and — at one particularly low point — a small batch of oatmeal for supper in Idaho; hers with beef bullion in it, mine with sugar.

Bandit was born in the Colorado Rockies in a little town called Frisco between Breckenridge and Vail. Her mother was a German shepherd, and her dad was a true junkyard dog: a husky/malamute that lived in the junkyard on the outskirts of town. A week after we got her, while she was still less than two months old, Bandit developed distemper and rapidly went downhill. The vet could tell us only to keep her eating and cross our fingers. For about two weeks, she got hamburger and beef shortribs while we ate cereal. She survived, but she remained stunted, looking for all the world like a miniature German shepherd.

I'd like to think that Bandit had a rich and full life with me, but I know it's the other way around. She actually gave me the rich and full life. Sensitivity, trust, perspective, and loyalty — ideals that I admire and strive for today — their values are retained quite possibly because of one small dog. We swam, hunted, ate, worked, sailed, hiked, and fished together. But what I remember most clearly was the strength and encouragement she gave my projects, especially the sailing ones. When my third application attempt at overhead fabric fell in a sticky impossible mess, when the replacement

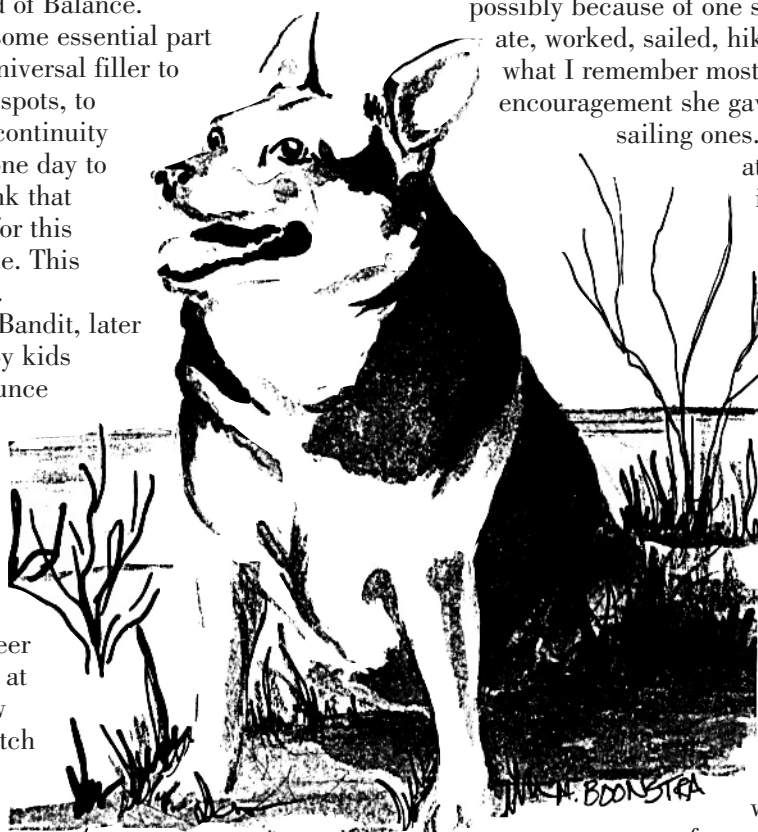
paddlewheel for the knotmeter refused to turn, or the new Y-valve for the holding tank broke in my clumsy hands, Biddy was always there, with a wagging tail when I looked up and made eye contact. She had absolute faith in my ability to put our world right again. She knew, and because she knew, we always worked it out somehow.

She crewed on my old Venture and Westerly sailboats, living aboard and preferring to be wherever I was, as long as it wasn't

forward. Her tolerance of all God's creatures, large or small, from neighboring pier cats to gulls and cranes, was amazing. She liked warm beer and sardines, tomato sandwiches and the rare landfall ice cream cone. Shipboard meals always included a Biddy-portion.

Bandit died in 1991, and I still miss her mentorship. A small candle of pure devotion shining steadily in my sometimes chaotic life, she helped me see — through her eyes — the beauty of new horizons, of life and lives shared. God bless you, Biddy.

Bob Wood learned to sail on small O'Days more than 30 years ago. He has owned an odd assortment of sailboats and sailed them in waters from the Florida Keys to British Columbia's Gulf Islands and beyond.



*by Bob Wood
illustration by
Melissa Boonstra*

. . . this one's for Biddy

Passport

Once John and Sandy Larson had developed a dream for semi-retirement and a two-season lifestyle, they began considering the type of sailboat that might figure in the winter sailing portion of their dream. It should be able to go offshore. It should be between 30 and 42 feet. It should be able to carry a couple of folding bicycles. The list began to grow.

"We thought we'd shop for a while, kick tires, you know," John says. "We really didn't intend to buy that early." Semi-retirement was to begin in 1999. The dream took shape in

1993. The sailboat, a Nicholson 35, became part of the family as soon as the mission was clearly defined. John and Sandy read articles and climbed through many hulls. One boat in particular that stands out in their memories is the Bristol 40 yawl, which Sandy says, "didn't have a head — it had a master bathroom." But it wasn't for them.

**by Karen Larson
with photos by
John, Sandy, and
Ian Larson and
Tom Vandervoort**

They'd read about the Nicholson 35 in *Practical Sailor* (March 1, 1990) and were pleased to find one for sale in *Soundings*. Right away they knew they'd found the boat for their dream.

Unfortunately, the dream wasn't scheduled to begin quite yet. But fortunately, the time was right for buying used boats. (The price was right, if the timing was not.)

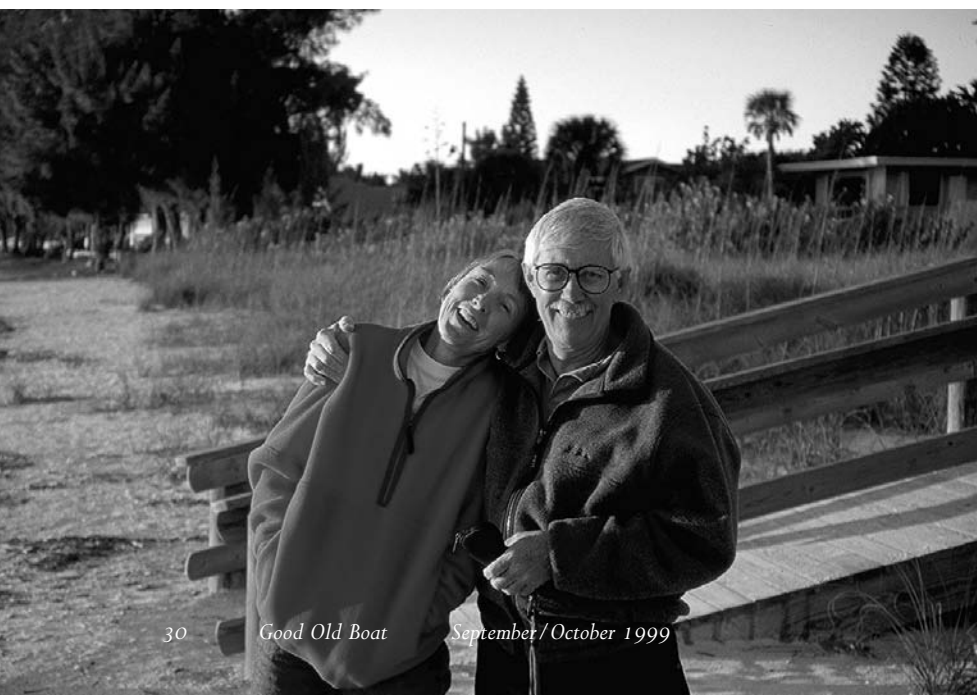
John ticks off the selling points: "She had a real chart table and a wet locker by the companionway. There were lee cloths on all berths. She had two CQRs, a windlass, all-chain rode, an Aries windvane, a Perkins 4-108. This boat was meant for serious sailing. Thinking of our list of items that made a seafaring boat, this one had them."

The boat was built by Camper & Nicholson, one of the oldest yachtbuilders around. The British firm dates back to 1782. The Larsons' Nick 35 was built in 1973 for a French architect who sailed it on the Mediterranean. A nice touch for the French owner, the British boatbuilder provided the boat's manual in French. This has been less helpful for the subsequent English-speaking owners.

The second owners bought it in 1983. Free spirits, as John and Sandy describe them, they had spent much of their lives traveling about in a camper truck. They had never sailed. But the dollar was strong compared with many foreign currencies, so they flew to Europe to shop for a sailboat.

There must have been a few learning experiences along the way, but the pair lived aboard for the next 10 years. They sold the boat to the Larsons in Annapolis with most of her original equipment still in working order and with the interior basically unchanged. The significant modification these

Once John and Sandy Larson chose the lifestyle that would be right for them in semi-retirement, the right boat for winters in Florida, the Bahamas, the Caribbean, the ICW, and places beyond was not far behind.



to paradise



They named their Nicholson 35 Passport . . . indeed she was just the ticket for their journey south

owners undertook was the conversion of the boat's electrical system from the European standard to 110 volts when they brought it back to the U.S.

John, an architect with a passion for building and tinkering, and Sandy, a systems analyst, began the next level of modifications just as soon as the boat was delivered to its temporary home on the St. Croix River between Minnesota and Wisconsin. They added roller furling, an inverter/charger and control panel, gel cell batteries, a bookshelf and storage cabinet, and a dodger. They replaced the standing and running rigging and all hoses below the waterline.

They installed cigar lighter sockets in the cockpit and navigation station; a water filtration system; new

faucets, pumps, and a shower head; a GPS/laptop navigation system; a vented and sealed propane system; and a holding tank, pump and Y-valve. They removed the vinyl overhead, replacing it with wooden battens, and they recovered cushions, rebbed bow and stern pulpits and chainplates, built a cockpit table, and replaced the laminated galley tabletop with teak.

John grew up sailing the St. Croix River. "I fell in love with the water from Day 1," he says. His first boat, acquired at age 6 or 7, was an old tin rowboat from his uncle. It soon became a sailboat with the addition of a piece of

galvanized pipe and a sheet from his grandmother's collection. By the time he'd reached

junior high, John built a Sunfish-type boat as a shop project, and the builder-tinkerer in him was set free. After high school, he built a 12-foot scow.

The usual things came next: a stint in the Army, marriage to Sandy, a couple of kids, and a move back to Minnesota.

The family wasn't in Minnesota long before John was able to find a great deal on a 19-foot Norwegian double-ended keelboat. The wood lapstrake leaked like a sieve, Sandy recalls.

It didn't matter. The boat had beautiful lines.

Sandy's earliest sailing experiences were aboard that boat. In fact, she earned her "captain's license" the day their son Ian fell overboard, and John jumped in to get him. That was the moment that Sandy took the helm and became a sailor.

The fleet grew in size the weekend Sandy traveled to South Dakota to visit her parents. John already had the plans and materials to build a 27-foot sharpie ketch. But a friend offered him a sharpie he'd admired, as

Inside and out, this boat was meant for cruising. Sandy made it her goal to cruise without refrigeration or an icebox. She astounded guests with what a galley "sans ice" can produce.

long as he could buy it by the next day when the friend was due to move out of town. John's phone call to Sandy is remembered by the two of them as the question cum announcement: "How would you like to have another boat?"

The sharpie had nice lines but was not a great sailor, the Larsons agree. It had sitting headroom, and the centerboard was a quarter-inch steel plate. It was not ballasted, John says, "But it could reach like a witch." The planned 27-foot sharpie ketch was never built. Instead, its wood and other materials went into a string of smaller boats John built over the years. These projects are the reason the Larsons have opted for a two-season lifestyle. Sandy says, "If you take him away from his building projects too long he gets crabby."

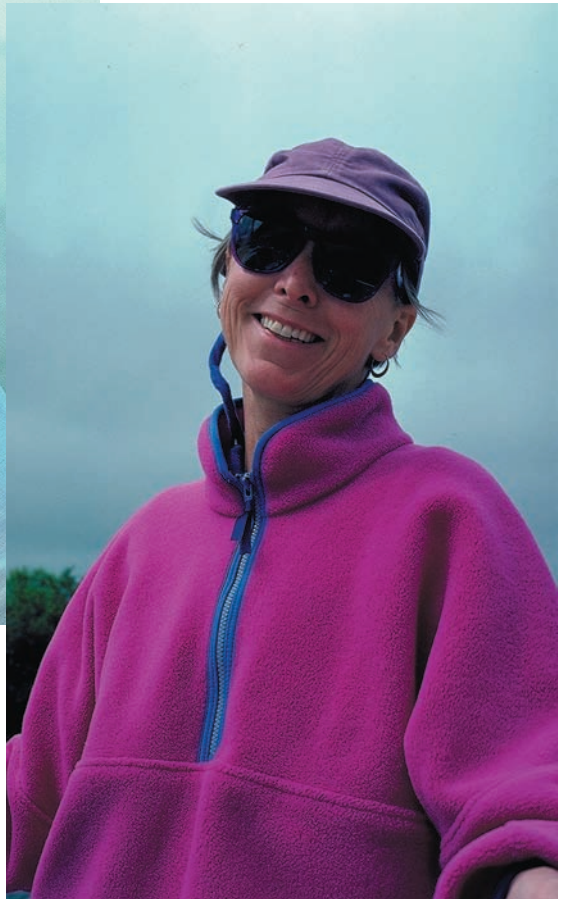
John says only, "We don't want to be liveaboards. We'll have two lifestyles." One, of course, will be in a thoroughly modern home which John designed, with a trailersailer parked

nearby. The other lifestyle is bobbing on the hook in a beautiful bluewater sailer. This second lifestyle, no matter how romantic it may sound, is much more akin to camping. The Larsons just spent three months sailing and at anchor living sumptuously without a refrigerator or cooler. Going without ice was a choice they made to simplify logistics. But we're getting ahead of the story.

The first boat to be named *Passport* by the Larsons was a 23-foot fiberglass Stonehorse. A work of art, John says, it had gorgeous curves at the cockpit rail. Unfortunately, when it was heeled and a powerboat went by, the wake washed over those gorgeous lines and filled the cockpit.

The second *Passport* is the Larsons' Nick 35. This one, too, has beautiful lines but is unlikely to fill up with water. Since she came into their lives a bit ahead of schedule, the Larsons were able to spend the next





four years outfitting the boat and getting to know her while river sailing. At the same time that the Larsons were working on the modifications to *Passport* listed earlier (and many more which good old boaters know never even make the lists), John had one other — *umm dare we call it a project?* — going in the back yard. This project was started with the plan that it would be completed before the bigger boat joined the family. But family planning has never been as scientific as you might believe.

It seems that ever since John built that first woodshop project boat in junior high, there's been a boat or two on his drawing board or taking form in the garage. There have been canoes (an ultra-light one in particular) and dinghies over the years. A recent project is Danny Greene's nesting dinghy, the Chameleon. And there was that sharpie ketch which never got past the planning stages.

But with plans for semi-retirement looming, John had begun another ambitious project — a trailerable sailboat they could use when spending summers in Minnesota. This boat is an 18-foot Norwalk Island sharpie, designed by Bruce Kirby, which John started in 1992. Made of plywood sheathed in Dynell and epoxy, this traditional-looking sailer is a thoroughly modern boat in terms of building materials. The carbon-fiber

unstayed mast and fully battened main are the final proof that, while John may appreciate traditional lines, he is not a believer in reviving or reliving a previous era.

The sharpie was launched six years later in 1998, and has been a pleasure to sail, John and Sandy agree. Her off-center centerboard gives them room below and does not create a noticeable performance difference from one tack to another.

Best of all, this boat was nearly ready to step in as the Larsons' substitute sailboat when *Passport* began her journey back to salt water in 1997. The first leg of that journey took John and Sandy down the Mississippi River to the Ohio River to the Cumberland River and to Kentucky Lake, which they recall fondly as some of the most beautiful country and finest sailing they had experienced to that point. This led to the Tennessee River and to the Tenn-Tom Waterway, which connects the Tennessee and Tombigbee Rivers. A straight ditch 26 miles long, the Tenn-Tom was built by the Army Corps of Engineers in the 1980s. The Tombigbee River reaches the Gulf of Mexico at Mobile, Alabama.

John and Sandy counted 43 locks on the journey. On this trip they saw the

arches of St. Louis from the water, were awed by tugs pushing as many as 54 barges at a time, and learned the fine art of navigating a six-knot boat in a five-knot current.

From Mobile, they sailed to St. Petersburg, Fla., where *Passport* was hauled for the season. Another short trip allowed them to take *Passport* to the west coast of Florida the following season. They had planned to cruise in the Bahamas that winter but John's work demands postponed the departure time, and Sandy's caused an early return to the north country, so they sailed the west coast of Florida, ducking the El Niño storms of 1998. A year later, they were back on track.

They left Tampa Bay by the end of January 1999. The first day's shake-down cruise proved to be just that — pretty shaky. The forestay broke, due to a fitting failure. Luckily, they were not far

John's latest creation, the Norwalk Island sharpie, is a pleasure to sail. It took him six years to build this traditional-looking craft. Traditional-looking does not mean built of traditional materials, however. The plywood for this boat is covered with Dynell and epoxy. The main is fully-battened, and the unstayed mast is of carbon fiber. Below is the Old Town dinghy, which John says drew more compliments than Passport herself. This dinghy arrived in derelict condition as the dinghy for a powerboat which served as John's dockside architectural office for a time. Eventually he could stand it no more and refinished the dinghy, turning it into a work of art and a fine dinghy for Passport. He later completed a nesting dinghy which accompanied Passport on her 1999 cruise.





What a fox! The look on his face tells us John knew we couldn't pass up a photo of Good Old Boat as "de rigueur" reading material in paradise. We didn't get to go on the trip, but our magazine did. (While we're at it, no, the Larsons are no relation to the author of this piece. In Minnesota, don't-cha-know, everyone's named Larson, you bet!)

from the boatyard, and it was soon repaired. They had hoped to sail around the south coast of Florida, and visit a few of the Florida Keys, but the weather was not cooperative.

Instead they tucked up inside the Okeechobee Waterway and started their journey south by passing through one more inland waterway. Fortunately, this is a lovely trip through Florida's orange groves and sugar cane fields. Next, they traveled down the east coast of Florida on the Intracoastal Waterway. After a few days' wait at Fort Lauderdale, they found a favorable weather window for crossing the Gulf Stream. They anchored *Passport* at Gun Cay in the Bahamas under a beautiful full moon.

Next they crossed the Grand Bahama Banks. This takes two days. Overnight they had the eerie sensation of anchoring miles from the nearest land in 12 feet of water. Then they moved on to Chub Cay in the Berry Islands and to Nassau, followed by another jump to the Exuma chain.

Good sailing friends flew into Georgetown to join the cruise for a few days. They island-hopped back up the cays, snorkeling, reading, and hiking. All too soon, it was time to drop the friends off in Nassau.

They counted their remaining days and realized there was no time to visit the Abaco chain this year, although it had been on the itinerary. After a few hours spent studying charts, they decided to go on to Grand Bahama,

stopping at Lucaya to wait for a weather window to cross the Gulf Stream to Cape Canaveral. They estimated the trip to be 27 hours.

This time the Gulf Stream crossing was not so benign. When they were a few hours out, the forecast changed for the worse. Luckily they were in a good old boat. With heavy winds and the Gulf Stream current carrying them along at 9 and 10 knots over the ground, it was quite a ride. Although the waves towered over her stern, *Passport* marched along, building Sandy and John's confidence in their boat. They appreciated *Passport's* seakindliness even more when they spoke to others who had made the crossing at the same time and had experienced any number of saltwater baths from following seas.

Now *Passport* waits near Cape Canaveral for the

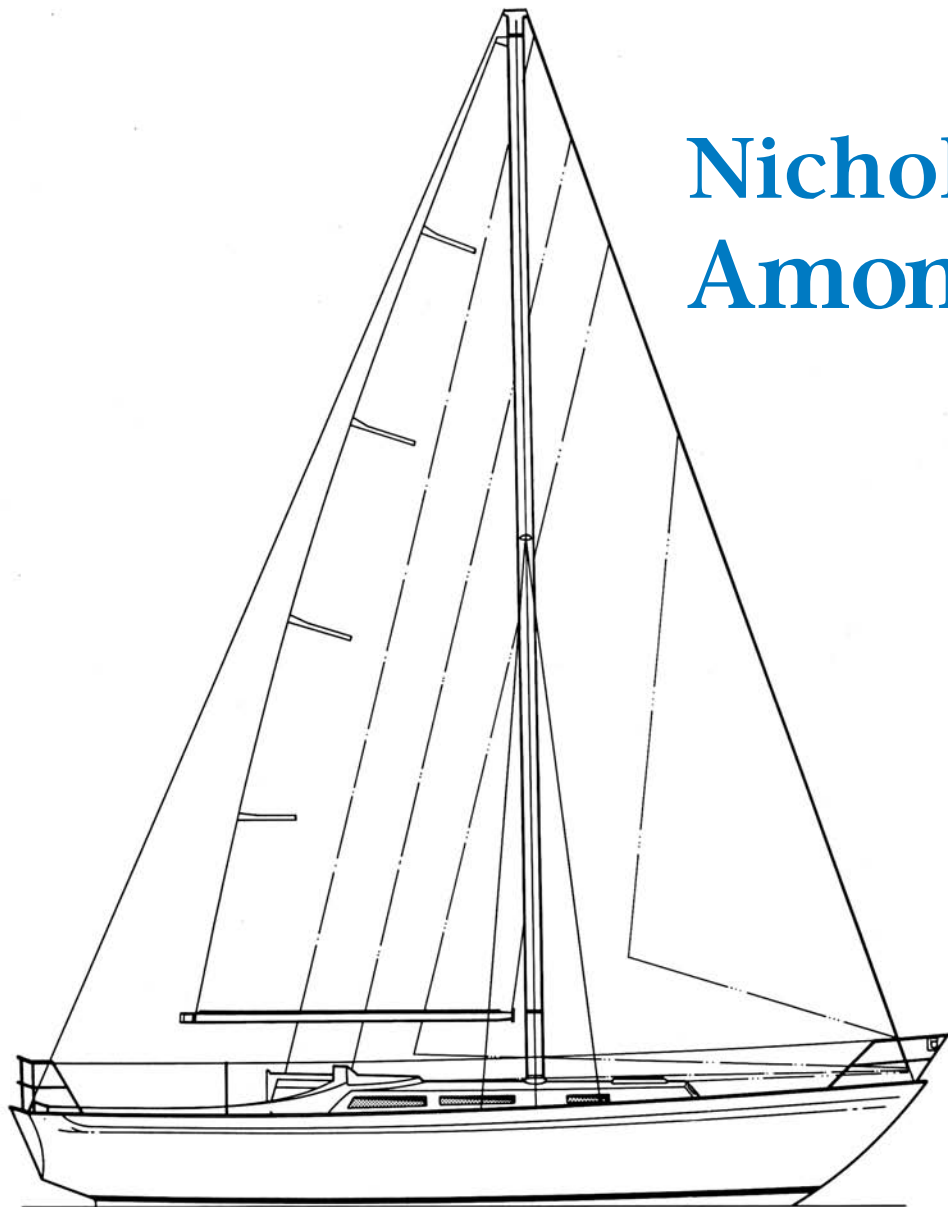
continuation of the cruise . . . up the East Coast after this winter.



Karen Larson is editor of Good Old Boat magazine. She has written about sailing for Sail, Cruising World, Sailing, Northern Breezes, Lake Sailor, and Lifeline. Her publishing career began as a newspaper feature writer and page editor and later grew into a thriving newsletter production business.



Nicholson 35: Among the best



The Nicholson 35 is a handsome yacht with a sweet sheer line and well-proportioned overhangs. Designed in the early 1970s, the vessel exhibits many of the traits of the oceangoing cruiser/racers that were created during the closing years of the CCA and RORC rating rules, and those rules tended to ensure an able craft. A look at the numbers will assure any knowledgeable sailor that this is, indeed, one 35-footer capable of extensive bluewater cruising.

Her capsizes number is remarkably low by contemporary standards, far below the unsafe 2.0+ that I recently calculated for a couple of modern French cruisers.

This is due to her modest beam and very hefty displacement, almost super-heavy in comparison to modern designs. However, this combination would be very reassuring if you were caught out in a full gale at sea. Her unusually high ballast ratio would be doubly reassuring in a blow and will help the 35 stay on her feet in a stiff breeze, despite her moderate draft and beam.

That husky displacement and moderate beam also produce a high comfort ratio for her size, right up there with the Block Island 40 and Bermuda 40 reviewed in the July issue of *Good Old Boat*. She will have an easy motion in a seaway, unlike the corky motion of a beamy, light-displacement hull. That

will help a great deal to quell a queasy stomach when the going gets a bit too bouncy.

Although her displacement is quite high, the 35 will pick up waterline length as she heels, due to her graceful overhangs, so the displacement/length ratio is not as high as it first appears. Even an increase to a heeled waterline of 28 feet will reduce the D/L ratio to 318, a more reasonable figure, so the Nicholson 35's potential speed is undoubtedly higher than the static numbers would seem to indicate.

Below the water, the 35 has a longish fin and a large, skeg-hung rudder which should ensure good tracking and an easy helm. I was pleased to see that the lead ballast was encapsulated in the fin and not hung by corrodable stainless steel bolts as many builders have done in the past and still do. It has always remained a mystery to me why stainless bolts are used with lead ballast when bronze bolts are superior. I expect that the answer lies in the cost of the two materials.

I did not have any dimensions on the sail area and had to calculate this by scaling a very small drawing, so it may be off a few square feet one way or the other. Still, the 35's sail area is definitely on the short side by today's standards, and that will affect her light-air performance. This was quite typical

by Ted Brewer

of the cruiser/racers of her era, as the racing rules permitted very large headsails without

penalty. As a result, designers kept the sail area small to lower the rating and depended on 170-percent genoa jibs and reachers to move the boat through the zephyrs. In addition, British designers were always more conservative than their North American counterparts when it came to sail area, since their creations had to face the

bluewater boats for her size

blustery winds and gales of the English Channel and the North Sea. The storms in those waters are a far cry from the light summer breezes that tend to prevail in Long Island Sound, the Chesapeake, and the Pacific Northwest.

So, if you sail a Nicholson 35 where the breezes are gentle, you will find that a large 160- to 170-percent genoa is necessary to get the best out of her. Yet, despite that smallish sail area, the Nicholson 35 is no slouch, and her PHRF rating is faster than many out-and-out cruisers, such as the Crealock 37 and Tayana 37, according to one report. On the other hand, a small sail area is not a great handicap for ocean crossings. So what if you arrive a day or two later? During the voyage you have enjoyed the benefits of a small and easily handled rig, and that can mean a lot more to a short-handed cruiser than making a fast passage.

The biggest difference between this good old boat and the modern crop of coastal cruisers is the beam. The relatively narrow beam of the 35 and her short waterline give her accommodations not much roomier than a contemporary 30-footer. You won't find the double berths, separate staterooms, or rounded, angled interiors beloved of today's designers. But you will find a very workable galley, an unusually large navigation center, generous storage, and a V-berth that does not dwindle to a point at the forward end. It is, definitely, a sensible and seagoing arrangement.

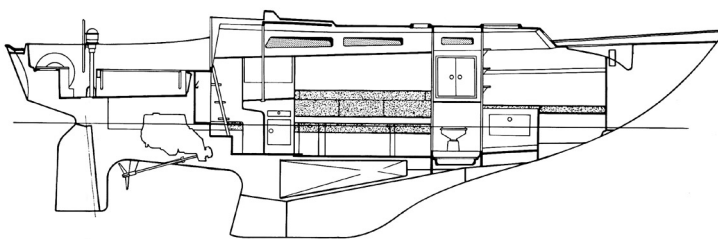
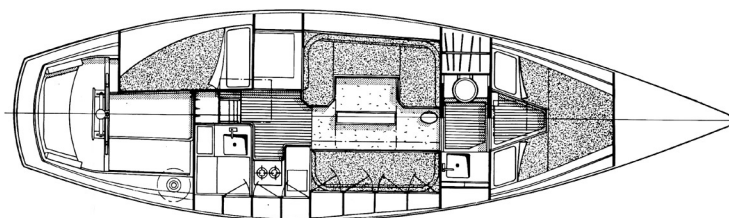
You'll also find quality workmanship, as the Camper & Nicholson's yard is noted for solid construction, integrity, and pride of craftsmanship. Many of the 35s were built under a Lloyds Hull Moulding Note covering the basic fiberglass hull, deck, and bulkheads, and they could obtain the Lloyds 100 A-1 certificate if the owner was willing to pay the added fees for all the additional visits by a Lloyds surveyor. I have gone through

this on a number of designs, so I can assure the reader that any boat that can meet Lloyds' requirements is a strong and well-built yacht indeed.

The Nicholson 35 may not have all the modern conveniences: no room for a microwave, no stall shower, no bidet. But she does have everything that's essential for a safe, oceangoing cruiser. Her good performance, quality construction, seaworthy hull, and workable arrangement put her right up there with the best of the bluewater yachts in her size range.



Ted Brewer is one of North America's best-known yacht designers, having worked on the America's Cup boats, American Eagle and Weatherly, as well as boats that won the Olympics, the Gold Cup, and dozens of celebrated ocean races. He also is the man who designed scores of good old boats, the ones still sailing after all these years.



The Nicholson 35 by Camper & Nicholson's

Length overall	.....35 ft 3 in
Displacement/Length ratio	.....365
Length (waterline)	.....26 ft 9 in
Ballast/Displacement ratio	.....46.6%
Beam	.....10 ft 5 in
Sail Area/Displacement ratio	.....13.53
Draft	.....5 ft 6 in
Comfort ratio	.....36
Displacement	.....15650 lb
Capsize screening number	.....1.67
Ballast (lead)	.....7300 lb
Sail Area	.....529 sq ft

September song*



Remedy, a 33-foot Pearson owned by Stephen and Marilyn Gordet, on the hard at James Landing, above. At right with her mast unstepped, Peregrine, a 30-foot Fisher ketch owned by William Krusell, is ready to be hauled. Charles Hoar, above at far right, removes the compass from his Allied Seawind, Sea Horse. All three photos at Scituate, Mass. Apparently having partied too much or worked too hard, dinghies lie in an exhausted heap below Celebration, a full-keeled center cockpit ketch, in Falmouth Foreside, Maine.

** (Back to the boatyard?
So soon?*



Say it isn't so!)





Singing the boat bottom

People often ask whether gelcoat osmosis problems — generically called “blisters” — are just cosmetic blemishes or a source of damage to the hull laminate. Since I recently completed a blister repair job on *Second Wind*, a 1979 Cal 2-25, and began another on *Can Do II*, a 1971 Ericson 27, I put pen to paper to present my findings, methods, and opinions for others contemplating such work. Not all blister problems are as bad as those recounted here, but I do feel strongly that a thorough investigation of any blister problem is warranted in the long run.

While researching the causes and effects of blisters, I found more than one explanation of the cause and many opinions as to whether they actually damage laminate. The most common explanation of the cause of blisters is that polyester resin (gelcoat) is susceptible to osmosis, and the absorbed water reacts with any solutes remaining in the laminate to create an acidic solution. This solution is under pressure and causes the gelcoat to blister. Certainly, any solution present is acidic, but I’m not certain whether it causes laminate damage.

Whether a cosmetic or structural issue, a thorough investigation of any blister problem is warranted

With regard to effects, there are those who claim that, given time, the solution will attack the laminate, while others are adamant that the effect is simply a “cosmetic” issue. In my opinion, both arguments are correct. It seems to me that the laminate problems on *Second Wind* may well have caused the blisters and were not caused by the blisters. More about that later.

However on *Can Do II*, the gelcoat in a number of areas was actually starting to lift off the laminate. The first layer of laminate could be easily

peeled off for a distance of 1/4 inch around the larger blisters. In fact, some of the larger blisters were surrounded by rotten laminate which extended through the entire thickness of the hull. This was most evident in one area of the encapsulated keel. I eventually drained four and a half gallons of salt water from the keel housing! Obviously *Can Do II* had laminate damage, but was it a result of the blister reaction or

of extremely poor lay-up in the first place? I am not able to answer that question.

I feel that blisters should be looked on as potentially damaging, and it is dangerous to make a statement that they are just a “cosmetic” nuisance without having first removed all the bottom paint and carefully inspected them.

Survey says

When I purchased *Second Wind*, I relied on a year-old survey regarding the condition of the

underwater portion of the hull and my own observations for the rest of the boat. The surveyor stated (*I added the highlighting for emphasis*): “The majority of the hull surface below the waterline shows **extensive** osmotic blistering. The blisters are approximately **1/4- to 1/2-inch** in diameter. Several of the blisters were punctured. The punctured blisters emitted a foul smelling, sour liquid.

by Brian Cleverly

blisters blues

Some of the blisters appeared to have formed over a dark colored fairing compound, **indicating the hull may have had previous blister repairs.** The blisters, opened and probed, showed **no involvement with the underlying glass laminate."**

I called the surveyor and questioned his definition of "extensive." He told me that meant around 200 or so blisters on the hull.

Inspection

Once I had *Second Wind* in my yard, I was able to confirm that the reported blisters had not worsened. There were, however, signs of additional blistering. The bottom paint was very thick, old, and in need of complete removal.

Since I had read a number of favorable reviews of the Peel Away product, I decided to give it a try. After experimenting on a few small patches, I found I could apply it in sufficient thickness (1/8 inch) by laying it on using a 6-inch paintbrush and that between 8 and 12 hours working time was sufficient to soften the paint. The softened paint was easily removed with a wide-blade putty knife.

For those who have not seen or used Peel Away, it is a paste that, once applied, is covered with a plastic material and left to work for a period of time. If it is left too long, it will dry out

and become nearly impossible to remove. I have heard that it will not work very well at temperatures lower than 70°F. If you do decide to use it, experiment with small test areas to determine the working time needed. Also keep in mind that it needs to be applied thickly. Use too little, and it will dry out before the paint is softened.

When the paint is softened sufficiently, you can peel off the covering while lifting the paint with a putty knife. This results in the paint staying on the covering but, as I found, the removed material will get very heavy, so it is best to have an extra pair of hands to assist with removal.

The Peel Away people market an excellent spray liquid for residue removal, but I found that the household

Facing page: Lest we forget . . . the end result is worth all the effort. The Cal 2-25, Second Wind, deserves a second look. This page, Second Wind's progress: during gelcoat removal (note holes in blue gelcoat); with the gelcoat removed (note light-colored voids); blisters and voids filled and roughly faired (note large filled area at the waterline).





409 cleaner was equally as good at a fraction of the cost. I also found that household waxed paper was as effective a covering as the original plastic product, with the added advantage of lower cost and, due to its narrower width, being much easier to use.

Once the paint was completely removed, I was astounded at the number of small blisters that had been uncovered. There were thousands! I popped a number in one area and realized that there would be so little gelcoat left after popping all of them, I would be better off to completely remove the underwater gelcoat.

Gelcoat removal

Having made the decision to remove the gelcoat, I was left with the question of **how** to accomplish the task. I contacted a company in a neighboring town that used a Gelcoat Peeler, but they were not interested in doing the job unless it was in their yard (50 miles away). None of the local sandblasting outfits had experience with gelcoat removal, so I was left with the final option: doing the job myself.

First I tried a high-speed 6-inch orbital sander using 100-grit disks. Then I changed to 80-grit and finally to 50-grit. It didn't take too long to realize that that method was slow and dirty and that I would be spending a lot of money for disks. Next I tried a 6-inch rotary sander which was too heavy for the overhead work. Then I used a 4 1/2-inch rotary sander, using 36-grit disks. This was faster than the orbital, but it was also extremely easy to accidentally grind into the laminate.

So what to try? Chemicals? I left messages on the Internet and didn't receive any replies specifically about chemical removal. My local marine supplier said, "Nobody chemically removes gelcoat." Browsing in my favorite hardware store, I noticed Jasco Premium Paint and Epoxy Remover. The words "epoxy remover" caught my eye, and I decided to purchase a pint can and give it a try.

Second Wind's story continues: sealed with penetrating epoxy; the final fairing mix applied with notched spreader; first coat of tinted epoxy; and the results of six coats of tinted epoxy.

What I found was that it would soften the gelcoat, so it could be scraped off. It worked within two to three minutes, but when left on longer, the active ingredients evaporated and the gelcoat rehardened. The only problem was that the gelcoat was not softened to its full depth. I found that most areas required two applications, with some requiring three. I also noticed that if any of the chemical reached the laminate, it ate into it. So I decided to stop applying it once I could see signs of the laminate through the blue gelcoat. The scraper I used was one of those long-handled paint scraper jobs that have a replaceable four-sided blade.

Armed with this knowledge, I set about removing the bulk of the underwater gelcoat. This went much better: no noise, no dust, just a pile of dried up scrapings to clean up. One item I caution about here: while it does not actually harm or mark the skin, if you get any of the chemical on your bare skin, it really lets you know with a severe burning sensation. If you use this preparation, make sure you are well covered or, as I did, keep a bucket of water handy to wash in. Why didn't I cover up? It was early summer and above 90°F.

The final film of gelcoat was removed with the orbital sander, using 50-grit disks. This proved to be an easy task as, even though the gelcoat had hardened again, it was not as hard as it had been, and it turned to dust easily. During the removal, I noticed:

- The gelcoat was in two distinct layers: an outer white layer and an inner blue one.
- Three out of 10 blisters larger than 1/2-inch diameter contained liquid.
- One out of 100 blisters smaller than 1/2-inch diameter contained liquid.
- The blue layer contained a huge number of perfectly round holes that were not the result of visible blisters in the white layer. I'm not certain whether these holes would have eventually resulted in blisters, but I am inclined to think they would. The only other explanation for these holes is that they were a result of improper lay-up originally. Even if this were so, I still think they would be prime candidates for future blister problems.

To recap, the chemical removal process was probably no faster than sanding or grinding, but it was easier, cleaner, and cost less. The main benefit was that, in the main, I hadn't destroyed the fairness of the hull, a very important factor. Now that the laminate was bared, I cleaned it thoroughly using a high-pressure water sprayer.

Inspection

Careful inspection of the bared laminate revealed a few areas where it was slightly damaged and a disturbing number of areas where voids were visible just under the first laminate layer. A lot of these voids were directly beneath areas where the larger blisters had been. The presence of a void is immediately obvious when looking at bared laminate. Good laminate is usually a uniform dark color, and voids stand out as a much lighter color. The color is lighter where the void is closer to the outer layer.

One void that did not have blisters above it was in the keel housing. Its position was at the lower portside leading edge, 18 inches up from the bottom and 1 inch aft of the leading edge. It extended aft for 6 inches and was 3/8-inch deep. The most disturbing thing about this void is that I spoke with another Cal 2-25 owner who found the same void in his keel housing.

All that was nothing when you consider the many voids, although small in size, at the waterline around the full circumference of the hull. I make the observation that these voids were a result of improper original lay-up based on the fact that they were all under the outer layer of laminate.

Perhaps the worst of these voids was in the shape of a sideways T, 14 inches long on the horizontal, 8 inches on the vertical, and approximately 1 1/2 inches wide, right where the original surveyor had detected a patch of high moisture content. I probed this area and found it contained the dreaded acidic solution.

I carefully cut away the top of this void, washed it out, and inspected it further. It was 3/16- to 1/4-inch deep, and the laminate surface was glossy. This tells me that this void was an air bubble, a result of improper lay-up, which probably always contained an amount of unevaporated solute.

Treatment

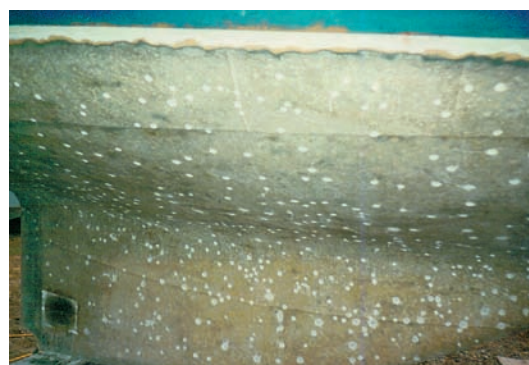
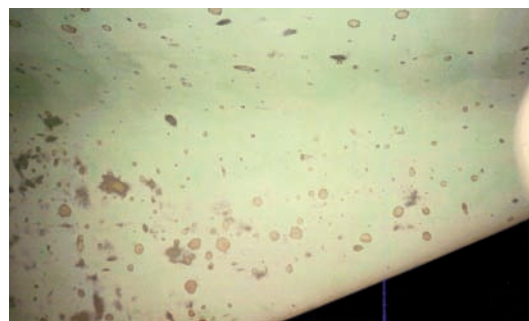
Using a small bullnosed stone mounted in a drill, I ground out the few areas of laminate where blisters had left their mark and opened up the remaining void areas with the 4 1/2-inch sander and 36-grit disks. Then I pressure-washed the hull again and left it to dry out for a full Sacramento summer with its 100°F heat and low humidity.

Correction

That fall I applied two coats of a thin, penetrating, epoxy to the hull. This serves (by capillary action) to seal any bare fiberglass ends and to close any minute indentations in the laminate. I let this coating fully cure for two weeks. Then I sanded the hull with the orbital sander, using 100-grit disks. This sanding is required to give the epoxy coatings that follow a firm-toothed base on which to adhere. It also serves the purpose of highlighting any areas which are not fair. The opened voids were tapered out and filled with epoxy and layers of bi-axial plus mat fiberglass material. I filled areas in need of fairing with an epoxy-microballoon-silica mix putty.

After curing and sanding down these areas, I carefully inspected the hull for fairness. I filled areas that still were not fair with the putty mix, using a notched spreader. The purpose of using a notched spreader is so that when you use a long-board to sand them fair, you are only sanding the ridges. This saves a great deal of sweat. You are then left to fill the valleys with putty, up to the top of the ridges. A final touch-up with the long-board, and you are done. There is one field of thought that, to build up thickness and assist in fairing, you should plaster the hull with fairing mix and then long-board the whole thing. Fortunately, because I was careful in removing the gelcoat, the hull was generally fair and required little

Can Do II's progress: blisters before the bottom paint was removed; blisters after the bottom paint was removed; opened blisters after the gelcoat was removed; blisters in keel housing (note holes through laminate and damaged laminate around the blisters); and finally after five coats of epoxy.



additional filling work, so I didn't fully coat it with fairing compound.

Closing up

Due to the thickness of the original gelcoat, I was unsure about how many coats of epoxy would be needed, but I decided on at least five. Using two people, with one rolling and one tipping, we were able to do one coat of epoxy in less than two hours, by which time the first areas had set up enough so we could immediately apply another coat. I applied nine coats of epoxy. This allowed me sufficient leeway for a sanding to provide a key for the final finish.

Each of these coats was tinted white. I varied the tint amount for each coating. This made it much easier to see where I was placing the new coating, otherwise there is a very real possibility that you will miss areas with subsequent coatings.

Though it probably wasn't really necessary, I then applied two coats of Interlux 3000/3001 barrier system. This was done just to minimize the possibility of future problems. While epoxy is not as susceptible to osmosis as polyester is, it is not impervious, and the 3000/3001 reportedly has additional solids (platelets) to assist in osmosis prevention.

Materials used

The following is not meant to be a recommendation of one product over another; it is purely a list of what I used and the reasons for doing so.

All epoxy products were from System Three in Seattle. I used their Clear Coat product for hull sealing and their Laminating Epoxy for all other work.

I evaluated West System products and, while I could not fault them, I decided on System Three mainly because of price, delivery, and the recommendations of some yards in my area. Another reason for choosing System Three was their claim that subsequent coats of epoxy would chemically bond to the under layer if applied

within 72 hours. This certainly was a big consideration as, otherwise, I would have been faced with occasionally sanding between coats.

I also evaluated some of the lower-cost epoxy products and rejected them because I felt they were lacking in solids for this kind of job. The System Three product has certainly done all I've asked of it and seems to be very forgiving with regard to very small variations in mix ratios. I also used a microballoon-silica mix from System Three because it was easy to have them include it in epoxy deliveries.

The silica I used was West System Colloidal Silica (cab-o-sil), which I obtained locally. Silica, by the way, prevents sagging of the mix and provides greater strength. However, if you use too much of it, you are in for a hard time in areas where sanding is necessary. I took advantage of this fact to apply a layer of epoxy-silica mix to the keel bottom. It definitely resulted in a strong, hard, surface. But it was a bear to sand to shape.

The fiberglass cloth I used was Knytex, a bi-axial/chopped strand material, 23-ounce weight, which I purchased locally. It has the advantage of bulk (mat) plus strength (bi-axial). The three layers are sewn together and, because it is not woven, it results in a reasonably smooth finish.

Conclusion

To quote from System Three's *The Epoxy Book*: "Blister repair, being an inexact science, is one where you pays your money and takes your chances."

The extent of the chances is entirely up to you and your willingness to do the job correctly. I am still unsure whether blisters cause laminate damage or if blisters are a direct result of poor laminate lay-up. Either way, I would strongly urge you to carefully inspect blistered areas. It is not sufficient to simply correct those that are visible through the anti-fouling layer. Where you have some blisters showing, there is a good possibility that there are many more covered by the anti-fouling.

My good friend, Bob Larsen, (*Dutchtreat*, also a Cal 2-25) has reminded me that his boat had some blistering when he purchased it. When the bottom paint was removed, there were thousands of very small, less than 1/8-inch diameter, blisters. Bob had the

gelcoat lightly sandblasted. This opened all the blisters. He then thoroughly cleaned them, skirted the hull with plastic, and allowed it to dry out.

He next filled all the blisters with two-part fairing compound, sanded them fair, and applied five coats of Interlux 2000/2001 barrier system. He reports no sign of recurring blisters in the two years since he did the job. The job was completed over five months of off-season weekends. So, fortunately, not all blister problems are as bad as the ones I encountered. It is a matter of inspection to decide the severity of the problem. Inspect for blistering immediately when the boat is hauled. If left to dry out, many blisters will disappear, only to re-appear once the boat is back in the water.

Periodically remove all the old bottom paint. Check for small cracks in the gelcoat. If any are found, you can be assured that there are small blisters that have drained through the crack. Be wary of using a sand blast process to remove the bottom paint. Prior owners of *Can Do II* had used blasting, and the underwater gelcoat was so thin in places that I initially thought it was just a coat of paint.

Any concentrated areas of blistering may indicate laminate voids and damage. I recommend that you remove the gelcoat in that area and carefully inspect the laminate.

If you do have a blistering problem and intend to correct it, make sure you allow sufficient time for the hull to dry out. Also make sure you sand the hull properly before you apply any barrier coating. Failure to do so will certainly mean you have to redo it in a very short period of time.

Never has the old saying, "If you don't have time to do it correctly now, how will you find time to redo it later?" had more meaning than when it comes to the job of blister repair.

Brian Cleverly runs Anzam Yacht Refurbishing in Sacramento, Calif. When not working on client boats, he buys insurance write-offs for refurbishing and eventual resale. An Australian national, Brian learned to sail while working in New Zealand.



Out, out, bad pox!

Boat pox, osmosis, or blisters . . . call it what you will. Most fiberglass boatowners prefix the blight with a salty expletive deleted. The shock of discovering bubbles on your boat's bottom is merely the prelude to a prolonged pain in the assets.

Parnassus, my beamy Montego 25 sloop, was built by Universal Marine in St. Petersburg, Fla., in 1980. That was just about the time I had sworn off boat ownership in favor of crewing aboard OP (other people's) craft. But last year I lapsed. My reaction to a 40th school reunion in a room filled with geezers jockeying for parking space for their walkers propelled me to recapture the spirit of adventure I vaguely recalled from my youth . . . that of owning a boat.

The sticker price of *Parnassus* removed most of the lumps from under my mattress. And the discovery of a badly blistered bottom has siphoned off the balance.

Twenty years ago the annual haulout to scrape, sand, and bottom paint an earlier boat was a week-long project. My land-lubberly lifestyle during the interim had not exposed me to the blister blight, which apparently hit its zenith a decade ago when fiberglass, the panacea for all boat hull maintenance woes, mutinied.

Today, many boat owners — including me, now — are aware of the cancerous reaction of water collecting under the hull gelcoat to create an odoriferous vinegary bubble of acid formed when moisture — from the ocean outside, or bilge water inside — reacts to solvents, resin, or additives in porous pockets beneath the gel surface. Those voids, perhaps no bigger than a pinhead, may have been created by just one speck of dust in the builder's boatyard — so you can imagine the possibilities. Or perhaps it was the failure of boatbuilders to totally resin-soak every last fiber of chopped strand mat

between the gelcoat and woven-roving laminated layers. That inner skin of chopped matting supposedly prevents the woven roving pattern from emerging on the surface of the gelcoat, making the hull look like a floating waffle . . . whereas the surface of a blistered bottom — once the pustules have been pricked — resemble the pocked face of the moon.

Unfortunately, the aesthetics of what, primarily, would be the boat's profile under the waterline, is a minimal problem compared to the dire predictions of fiberglass layers delaminating, structural failure, a cracked seeping hull, and death by drowning.

All this and much more, I learned from leather-skinned liveaboards and margarita mariners lined up at the boatlift as *Parnassus* was hauled out

“The shock of discovering bubbles on your boat's bottom is merely the prelude to a prolonged pain in the assets.”

last June. After that, the boatyard manager, Jason Sprague, told me my carefully estimated haulout and bottom job bill would have to be revised upward . . . somewhere near the stratosphere.

A professional labor/cost guess-timate, quoted in one of the many magazines, newspapers, and books about blisters I devoured researching the repair process, projected a \$350-plus-per-foot price tag. That included peeling the bottom to the first layer of

woven roving, re-glassing, fairing, and barrier coating, then repainting the bottom with anti-fouling bottom paint.

Forking out the best part of \$10,000 to float my boat, was not an option. Fortunately, Old Slip

Marine, Riviera Beach, Fla., is a “do-it-yourself” yard. UN-fortunately,

despite abbreviated classes at the Eastbourne Technical School, England — 40 years ago — my handyman skills would make Rosie the Riveter blanch. But, faced with a boatyard hourglass dumping dollars by the day just for storage, I was shocked into becoming a semi-shipwright.

Jason explained the yard's procedure for curing the ills, after waltzing around *Parnassus* with a moisture meter which pegged off the scale (25 percent) from the keel to the rubrail. The moisture meter indicates how much potential liquid is trapped under the gelcoat, poised to provide more blisters.

The blisters needed to be popped then ground off down to the roving. Ideally, Jason said, the hull should be professionally peeled to the roving. Then the boat should sit and dry out until water drained out or evaporated, and the

moisture meter lowered to about five percent. To encourage that, the hull should be pressure washed with a hot-water machine.

Estimated time: two to three months! Florida in the summer is not the most pleasant place in which to don full protective dust-suit, mask, head sock, and filter-respirator. All this prior to entering a still-air cavern created by the

by Jack Owen

“The sticker-price of Parnassus removed most of the lumps from under my mattress. And the discovery of a badly blistered bottom has siphoned off the balance.”



This and the facing page show Parnassus in Phases One and Two. The first shots show the blisters shortly after Parnassus was hauled out. The second set of shots show Parnassus with blister locations, dates and moisture meter readings marked.



environmentally-correct tarpaulin-shrouded hull of *Parnassus* in which to begin grinding.

During the summer of 1998, while Florida went up in flames, boatyard temperatures and humidity readings competed to break the 100-degree barrier. It was a tad nastier under the tarps, where the grinder created intrusive toxic dust clouds of multi-layered old bottom-paint, gelcoat, and fiberglass.

There were more than 100 blisters, from pinhead to half-dollar size, for the grinder to eviscerate. I circled a dozen locations with a waterproof felt-tipped marker and marked them with date and moisture meter readings. Twice during the next two months, her hull was

pressure washed with hot water to encourage the trapped water and acid to seek the surface.

After two months, no new blisters appeared, but there was barely any downward movement in the moisture meter readings. According to some experts, the hull must be totally dry before repairs can begin. On the other hand, there are those who have little faith in moisture meter results and prefer to patch and plop dinged hulls — wood or fiberglass — after an eyeball, feel, and balance determination.

The balance part of the equation is weighing whether the Band-Aid approach or boatyard advice method will leave a positive-dollar balance in the old bank account. Like all things connected with boats, it's a compromise.

We opted to work within the guidelines offered by the boatyard boss, plus snippets garnered from old salts in their slips, marine hardware store employees — most working to keep their own boats afloat — and published pundits, from boating journalists to marine surveyors.

The following list of procedures worked for *Parnassus* and, today, knock-on-wood, she's blister-free and floating.

Parnassus is my getaway floating island, whether she's tied up at the slip, moored in the lake, or day-cruising when wind, tide, and time allow. There are no plans for any solo long-distance bluewater voyages, à la Joshua Slocum or Robin Lee Graham, in her future. She was designed to perform under MORC (Midget Ocean Racing Club) rules and as a comfortable family cruiser. There may be moisture in her hull adding to her weight and slowing her down, but whether she's cruising downhill with a following wind at seven knots or less, we'll be out on the water . . . sailing.

And a pox on all blisters !

The Process

Hauling

At the time boat is hauled and pressure washed, the blisters will be most apparent. Mark them before they drain or deflate. Wear protective goggles when popping and scraping them. The liquid is often under pressure, and a squirt in the eye can be harmful.

Grinding

A grinding wheel should be used to smooth the cavity created by exposing the blister pocket and to fair it down at the edges to allow epoxy filler to meld with the contour of the hull. Sanding with coarse-grit paper does not do the job efficiently.

Drying out

The blisters are visual indications that pockets of acid exist under the gelcoat. But there may be more latent moisture seeping from water tanks or bilges within the boat, trickling through or trapped between layers of fiberglass, moving toward the gelcoat. A two- to three-month drying out period is a prudent step to take.

Wash down

To encourage chemical liquids within the hull to leach to the surface and to speed up the drying-out process, hot water washdowns are recommended.

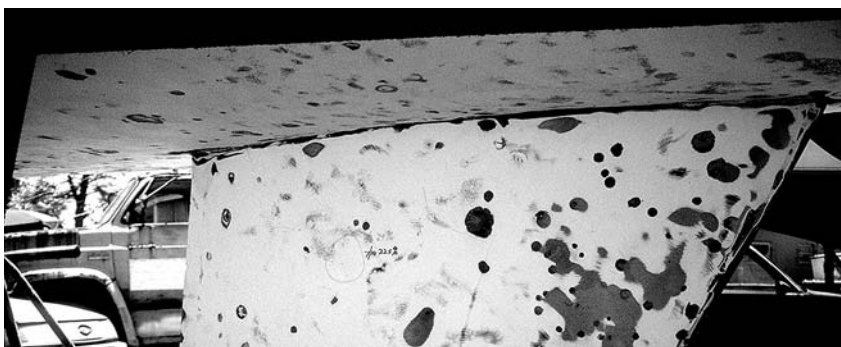
Patching

The most widely touted method for patching blister damage, because of its ease of application, is the West System brand of epoxy products. However, the yard manager at Old Slip Marine claimed fewer customer complaints and a higher success rate when his experts used the Interlux two-part InterProtect Watertite compound. One can contains the base materials, a cream-colored putty-like gook, the other a blue paste containing the curing agent catalyst which binds both elements into a steel-hard set-up finish. The mix is two-parts cream to one-part blue.

Cowboy, the resident yard helper for the past decade, demonstrated the proven consistency, eyeballing amounts, texture, and color until the combination turned aquamarine. He advised only mixing sufficient material for about 20 minutes of work — depending on the temperature of the day. The approved boatyard palette is an ordinary piece of packing-box cardboard. A wooden tongue-depressor is used for mixing.

Sanding

Once the fill has set up, sand the entire hull (80 grit) to level out patched blister cavities and rough the surface in preparation for the barrier and bottom coats. Tip: least used is easiest



removed. Because we were too liberal in applying the mixture with a putty knife, when it set up solid as steel on the hull surface, it added hours to the time needed to sand the fill down fair.

Scrubbing

Scrub the hull down, using a stiff-bristle brush and hot soapy water to rid the surface of dust and any dormant chemical residual. Interlux recommends using their fiberglass solvent wash 202. However, when we tried it, our workgloves dissolved, the linen-rag disintegrated, and our hands looked like bleached prunes.

Barrier coat

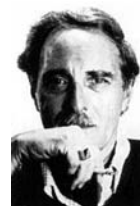
We skipped the next step: applying a barrier coat of Interprotect 2000E/2001E which re-seals the hull and replaces the gelcoat. Although we had more than 100 blisters to repair, more than 80-percent of the original hull finish (gelcoat) remained intact and unblemished. If, as the experts say, blistering is formed where voids exist under the gelcoat because the water is trapped under the skin, we reckoned the integrity of her hull — after almost 20 years — would survive a little longer.

Bottom paint

We opted for Fiberglass Bottomkote ACT antifouling paint, based on the local knowledge of the boatyard

manager. Old Slip Marine has been a family-operated business for more than three decades and is familiar with the barnacle build-up potential of a variety of gunkholes, marinas, and slips in the area. The reputed advantage of ACT as a soft paint permits the surface to wash away by water movement over the hull constantly exposing fresh and effective biocide. It also eliminated bottom paint buildup and, I hope, will require less sanding to prepare the hull at the next haulout. We shall see.

Parnassus was named for one of the twin mountaintops in Greece, sacred to the Muse. Her oft-deflated tender is the party animal Bacchus. Jack Owen is a freelance writer and out-of-print bookshop owner on the poor side of the lake from Palm Beach, Fla. He has crewed on corporate stinkpots and has owned/disowned several disastrous ragbags. He is a leading contender for the newly created "Hard Aground Club" annual award for personally visiting each of the sandbars in the Lake Worth Lagoon.





RVs on the water

From the highways

Three years ago we transferred our wanderlust from pavement to water. The “For Sale” sign was up on our 30-foot RV for a mere day. In the blink of an eye the motor home was gone, and we had the money for our first sailboat. These days, the only RVs we see during our travels are off in the distance. But that doesn’t mean we’ve abandoned the lifestyle we learned to love during our travels across America.

I don’t begrudge the members of the Wanderer’s new family their microwave, fancy sound system, refrigerator, stove, roomy layout, outdoor awning, and other cushy amenities. We

don’t have a microwave on our 32-foot Down Easter, *Chip Ahoy*, but we do have a TV aboard; we wouldn’t want to miss the hockey games! We’ve got a fridge/freezer

as well as an icebox. The stereo is great. Ditto the brass fixtures, charming lamps, and lovely woodwork. The additional bunk built in above our dinette seating/bed has been converted into what amounts to an entertainment center, with a spot for everything from reference books to fishing pole holders and the aforementioned TV.

*“We must confess,
we enjoy
illustrating the
contrast between
plush and
primitive.”*

portside living as well as sailing the high seas. On this vessel a proper garlic press is as essential as a GPS.

*by Cyndi Perkins
with illustrations
by Mike Freeman*

We prefer to sleep no more than four on board. *Chips* can accommodate up to eight. But we’re into cruising, not crewing. The boat is perfectly set up for two people who enjoy

Therein lies one of the distinctions that sets us and sailors like us apart from those sailing sheerly for sailing’s sake. Because we regard our boat as a home, we enjoy having

all the comforts of home at our disposal, from a well-stocked linen and towel cabinet to dinner service for six. Adapting the RV lifestyle to our boat allows us to fully appreciate both our journeys and our destinations.

As we see it, happy sailing means more than a good wind and the right hardware. You’ve got to be warm and have good food to eat and good music while you’re on watch. You should have enough drawers and closets and cabinets to neatly stow clothes, tools, and the miscellaneous flotsam and jetsam. As far as we’re concerned, these amenities are more than “nice.” They’re necessities.

We wanted a boat built for comfort, not necessarily speed. “A true cruising vessel,” is how my husband, Scott, describes the philosophy. Cruising surveys consistently show that the quality of a visit in port is as important as all the fun you have out on the water. The majority of boaters spend more time dockside than they do traveling on the water. Whether you’re smoothing the aftereffects of a rocky journey or whiling away another



to the high seas

glorious, lazy day in port, a cozy candlelit dinner at the cockpit dining table is a true pleasure.

To any hard-core racing sailor, *Chip Ahoy's* dodger would be the first giveaway that the people aboard rank the little luxuries in life just as high as sailing itself. Her spacious cockpit can be totally encased in plastic or screens, creating a virtual "sun room." On chilly Lake Superior, we can sail well into October without freezing our fannies off. Even summer days on the big lake can be nippy. Enclosed in the cockpit, we can peel off the heavy sweatshirts and indulge in a downright tropical atmosphere.

Even when it's rough, we usually have a line off the back of the boat. We fish. A lot. We don't catch our limit — we'd love to see that — but we always try. So we had to have room on our sailboat for fishing paraphernalia. Captain Scott's tackle box is a rainbow-colored treasure trove chock full of sharp hooks and good intentions. He freely admits he's thrown Lake Superior fish everything Wal-Mart has to offer. In a less roomy boat, messing with giant trebles, sinkers as heavy as bricks, and fishing lines would be impossible.

Down below, there's even more evidence that sailing isn't the only priority on this vessel. The décor — complete with kitschy faux leather '70s upholstery on the ceiling — and especially the generous headroom (6 foot 8 inches), gives the cabin a true motor-home feeling. The 11-foot beam means there's plenty of room to stretch out or move about

without stepping all over each other.

There are, of course, some major operational and design differences between RVs and sailboats. The only thing I truly

"On this vessel a proper garlic press is as essential as a GPS."





miss is the RV toilet — boy, could that baby flush! From what I've seen, balky, stinky, cumbersome sailboat commodes simply don't stack up. The toilet and I have reached an uneasy truce. But guests practically need written instructions to operate the john.

Conversely, the gimbaled stove on the boat is one of the niftiest appliances I've ever seen. Scott can keep a pot of beef stew simmering in 3- to 5-footers. We could have used a setup like this as we bounced along the pothole-studded highways of Pennsylvania and New York in the motor home.

Chip Ahoy's user-friendly, unique look seems to invite questions and comments. We must confess: we enjoy illustrating the contrast between plush and primitive. The boat's capacity to house creature comforts has given us the opportunity to perform numerous good deeds. It's a great feeling, for example, to provide hot, thirsty backpackers at Isle Royale National Park with a jug of ice water. Since these wilderness walkers are reduced to boiling or

"Because we regard our boat as a home, we enjoy having all the comforts of home at our disposal, from a well-stocked linen and towel cabinet to dinner service for six."

filtering drinking water during their visits, a cold beverage of any sort tastes like nectar from the gods. We've been offered \$5 for a can of cold pop. But you can't put a price on hospitality. What we have, we are happy to share.


Some sailing purists may think you have to rough it to have a "real" adventure, just as extremists in pup tents will insist that camping in an RV isn't "real camping." But most of the boaters we meet seem to appreciate *Chip Ahoy's* special features. In fact, they are often eager to show off the custom touches that make their boats more homey.

One stormy morning earlier this year, it became clear that our cruising attitude is somewhat untraditional. The crew on our buddy boat began a long series of tacks. We consumed a big breakfast. Eat now. Tack later. Nothing wrong with that, we decided. After all, the leisurely excursion was hardly the Whitbread. If we wanted to race, we'd be racing. The sailor we were buddy

boating with was on vacation from lower Michigan. He rarely gets to sail on Lake Superior. If I were in his deck shoes, I'd probably get a little obsessed about putting up sails as soon

as possible for as long as possible, too.

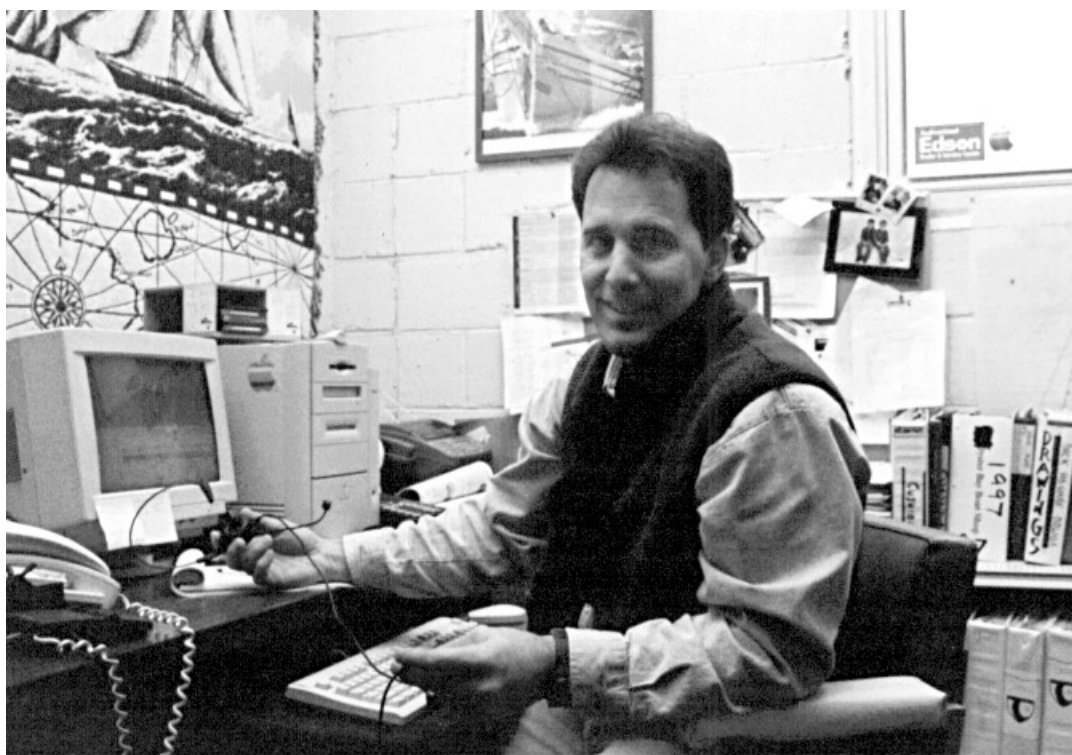
Our first long-term cruise is still a couple of years off. As we prepare, we do so fully aware that safety equipment, maintenance/repair skills and sailing knowledge are far more important than having the right wine glasses or color-coordinated throw pillows. We need a solar panel. A nice windlass. New foul weather gear. A wind generator. Possibly a new engine.

And then we'll get the microwave. 

The former managing editor of a regional newspaper, Cyndi Perkins is a freelance writer cruising Lake Superior with husband Scott aboard the family vessel Chip Ahoy.



Joe Palmer, founder of Classic Sailboat Customer Service Company, participates in a number of email discussion lists, searching for solutions to common problems, and produces a quarterly newsletter through which sailors can share their fixes with others. Joe is the stepson of Ray McLeod, Jr., one of the original partners in Douglass & McLeod Plastics which built Thistles, Highlanders, and eventually Tartans.



Joe Palmer: Keeper of the Tartan flame

Your boat's been out of production for 20 years, and the company that built it shut its doors a decade ago. But you can still pick up the phone and call customer service for technical information and parts.

If your good old boat is a Tartan, that's more than a pipe dream. Joe Palmer's Classic Sailboat Customer Service is a resurrection of the Tartan Marine customer service department that he managed for most of the company's last decade.

When a troubled economy drove Tartan Marine under in September, 1990, Joe convinced its owners to sell him the company's customer service division, complete with technical records, ship sets, drawings, and customer lists, along with molds and tooling for replacement components like rudders, centerboards, and hatches.

Classic Sailboat Customer Service opened its doors Oct. 1, 1990, in the second floor loft of a concrete block building at the Douglass & McLeod

When a troubled economy drove Tartan Marine under, Joe Palmer continued the customer service work as before

boatyard on the banks of the Grand River, about 30 miles east of Cleveland, Ohio. The location of the shop is almost eerily appropriate: Douglass & McLeod built the very first Tartan — the Sparkman & Stephens-designed Tartan 27 centerboarder — on that site in 1961. The loft that houses Classic Sailboat Customer Service was once the deck layout room for the Tartan 27.

The entire Tartan line, which would eventually encompass 22 models, was built at Douglass & McLeod until 1971,

when a disastrous fire destroyed much of the Tartan shop. This precipitated a decision by Tartan founder Charlie Britton to move the business to a separate production facility.

Almost 30 years later, that fire still haunts Joe Palmer. While he has all the technical information and drawings Tartan Marine had in its files when the company folded, many records of the type he relies upon to serve his customers were lost in the fire.

That loss notwithstanding, Tartan owners have in Joe and

his company a resource that many owners of good old boats can only envy. Classic Sailboat Customer Service not only stocks parts for Tartan sailboats, it builds them. On

by Dennis Boese



Eerily appropriate, the location for Classic Sailboat Customer Service is the concrete block building where the first Tartan sailboats were built in 1961. Joe's office is located in the loft on the second floor, originally the lay-up room for the Tartan 27. Joe says, "The smell of the resin has been removed, but the ghosts remain."

the day we visited, the large tables which dominate the room contained a rudder, an anchor roller casting, a tiller and tiller head fitting, teak trim parts, and upholstery fabric awaiting delivery to customers.

While Joe does much of the fabrication work himself, including all the laminating and molding of rudders and centerboards, he does employ a number of subcontractors to handle stainless steel

fabrication and some of the more intricate woodwork, like laminated mahogany and ash tillers. He is quite proud of the quality of his subcontractors' work, like the cabinetry being turned out by an old Scottish craftsman (Joe's term) who built the original cabinets for

many of the Tartans produced in the company's Douglass & McLeod days.

"That's the type of person I want working for me," he says. "Someone who knows what I need, knows how to find the right material, and how to build with it."

"Look at the hard numbers of, let's say, a Tartan 37. You can invest maybe \$70,000, and you'll have a Sparkman & Stephens-designed boat that can take you anywhere."

Replacements for most of the original Tartan deck hardware are still available, though the items in Classic Sailboats' catalog may be improvements on the originals. Many of the old aluminum castings have been replaced with stainless steel. Many custom polished stainless parts have also been fabricated.

Fuel tanks for the classic Tartans are constructed of aluminum plate, and holding and water tanks in aluminum and stainless steel are also manufactured, as are interior components, such as cushions, headliners, teak bin boards, and cabin sole drop-ins. Electrical system parts (AC and DC), plumbing components, and parts for Westerbeke, Universal, and Yanmar engines are also stocked.

Joe's principal tools are the telephone and computer. He reviews about 150 email messages a day, both to his own site and to other Internet sites dealing with older boats, searching the latter for better solutions to problems common to all aging sailcraft, so he can share them with his customers. Through the quarterly subscription newsletter he publishes — also called *Classic Sailboats* — he urges his readers to keep a log of their problems and fixes to share with others. "We shouldn't keep reinventing the wheel on problems," he says.

He also personally answers all the calls that come in on Classic Sailboat's three phone lines. The day we visited, the calls that frequently interrupted our conversation seemed to deal mostly with engines — an owner looking for guidance on replacing an Atomic 4 with a diesel, another from a voyager in transit on the ICW looking for

help with what sounded like a clogged fuel filter. The engine-related bias of questions that day was merely a coincidence; Joe dispenses information on all aspects of Tartan maintenance and restoration, from replacing a teak-and-holly cabin sole to finding replacement parts locally.

In his spare moments, Joe maintains his informative Tartan Internet page — an innovation that he still considers very much a work in progress. Eventually he wants it to be interactive, with on-line ordering from his extensive catalog of replacement parts for Tartans.

Joe admits to certain ambivalence about the brave new online world. He has built his company on a foundation of personal service. He's still working out how to balance the desire to deal directly with customers against the impersonal efficiency of a website. His one-man operation is supported by subscriptions to his newsletter and sales from his catalog, and these, he believes, are best built by sharing his encyclopedic knowledge of Tartan sailboats directly with fellow owners.

The 40-year-old Joe is an accomplished sailor as well as a Tartan technical whiz. He has done his share of racing since he learned to sail on a home-built Sunfish at the age of 14. But today he spends most of his sailing time cruising with his wife and three sons on their 1980 Tartan 33.

"When I race, I race on other people's boats," he says.

The astronomical cost of new boats makes Joe optimistic about the future of good old boat-oriented companies like his.

"Look at the hard numbers of, let's say, a Tartan 37," he says. "You can invest maybe \$70,000 — a third of the price of a new boat — and you'll have a Sparkman & Stephens-designed boat that will outlast you and can take you anywhere. "And, through companies like mine, you'll have quality replacement parts and technical advice pretty much on par with those available to many new boat owners."

Joe has begun branching out in two new directions, both growing directly from his core business. Since his expertise in Tartan restoration and maintenance has led many people to ask him to either help them sell or find Tartans and other classic yachts, Joe has become a broker in classic boats,

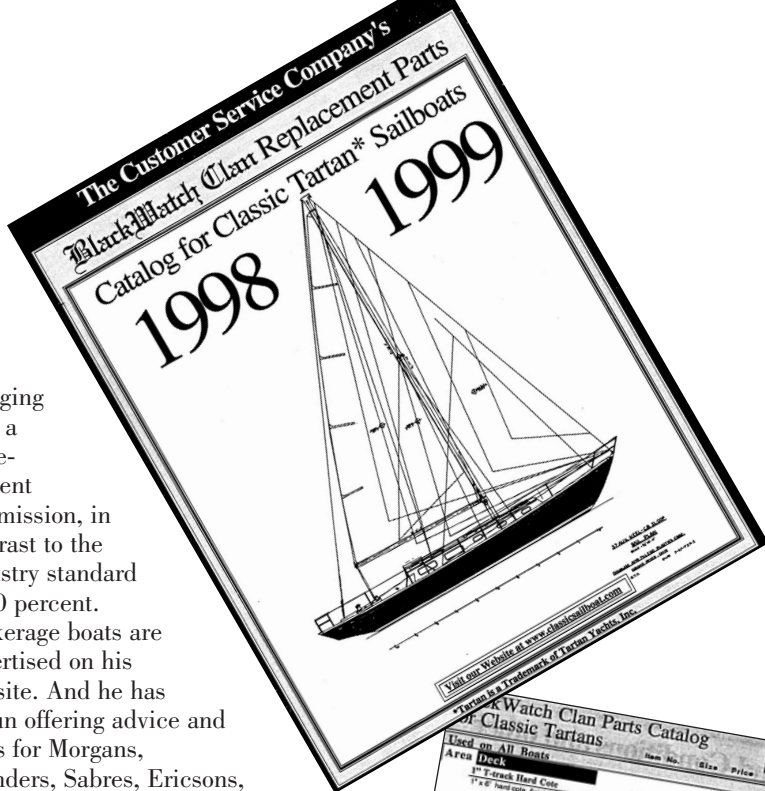
charging only a three-percent commission, in contrast to the industry standard of 10 percent. Brokerage boats are advertised on his website. And he has begun offering advice and parts for Morgans, Islanders, Sabres, Ericsons, C&Cs, and other classic lines.

Though he has not yet assembled the sort of definitive information on these types that he has amassed on Tartans, he notes that there is much about maintaining and restoring older boats that is universal, and he is motivated to fill in the gaps — something others may not be.

"Even existing manufacturers of sailboats may not have the incentive or manpower to provide customer service for all the boats they ever built," he says. "That leaves a big niche out there for someone like me to fill. Right?"

Right! And the more someones like Joe Palmer there are, the better the world will be for those of us who own boats old enough to vote.

Dennis Boese, his wife, Dyane, and faithful boat dog, Cincinnati (sic), spend their summers cruising the Great Lakes aboard their Catalina 28, Whisper. In addition to his work as a freelance writer on marine-related subjects, Dennis worked for the former Bay Mariner and is a staff writer with Great Lakes Cruiser.



Tartan & Watch Clan Parts Catalog for Classic Tartans				ALL BOATS Deck	
Area	Item No.	Size	Price		
Used on All Boats	1" T-track Hard Core	2818HC6	\$27.32		
	1" x 8' Deck 30 with end caps. Deck hardware	2818HC	\$40.65		
1" T-track 12' long with hardware black anodized	1" x 12' T-track	2818HC-1	\$34.08		
	1" x 12' T-track End	2818HC-2	\$1.83		
1" T-track 12' long with hardware black anodized	1" x 12' T-track Sliding Cleat	NE32-11	\$79.83		
	1" x 12' T-track Sliding Cleat	NE32-17	\$86.79		
10' x 1-1/4" T-track Hard Core	10' x 1-1/4" T-track Hard Core	2814HC10	\$30.15		
	10' x 1-1/4" Clear Anodized T-track	2814CL-10	\$43.92		
12' x 1-1/4" Clear Anodized T-track	12' x 1-1/4" Clear Anodized T-track	2814CL-12	\$51.17		
	12' x 1-1/4" Clear Anodized T-track	2814CL-12	\$75.90		
4-1/2" T-track Control Block W/ Cam	4-1/2" T-track Control Block W/ Cam	H565	\$77.00		
	4-1/2" T-track Control Block W/ Cam	H564	\$166.10		
For ordering or questions call 1-800-486-7245 fax 440-354-6695				Page 1	

The rest of us could wish to be so lucky: Tartan sailors can refer to a full manual listing parts and pieces available for older-model Tartans. A similar, if not quite as extensive, offering is being created for owners of Morgans, Islanders, Sabres, Ericsons, C&Cs, and others. Joe can be reached at 800-486-7245, email: jopalmer@classicsailboat.com, website: <http://www.classicsailboat.com>.

Ac-cent-tchu-ate the

Sam rushed on deck to meet us as we rowed across the still starlit patch of water between our two boats. “Hey, good to see you two. When’d you get back? How was your delivery job? Climb on board and meet my wife. She’s decided to join me on this cruise.”

We secured our dinghy and went into the glowing oil-lit cabin on *Delsamb*. Sam poured us a drink as he introduced his tanned, twinkling-eyed wife. “This is Beatty, hasn’t done much cruising yet, but she’s giving it a try. I’m breaking her in the easy way. Short day hops till she knows the boat. Now sit down and tell me about your transatlantic sail. Get into any storms?”

“Not until we were only 35 miles from New Orleans,” Larry began. “We were powering happily along over a flat sea, getting the boat ready to hand over to its owner, crew cleaning her up. About midnight the wind came up, dead on our nose. By 0200 we were hove-to in 50 knots. Temperature dropped from 60°F to 18°F, so cold we had to change watch every hour. We were hove-to for two-and-a-half days. Kept the engine running to try to warm up the galley. Second morning Lin got a weather forecast — waterspouts for our area — sure enough, over six of them formed up over the smoking sea. Kept the engine ready to throw in gear so we could take avoiding action if we had to. Frightening thing; never been around waterspouts before. Only way we could keep the man on watch from freezing was to use everyone’s warm clothes plus wet gear and socks on his hands. Only two days before we’d been sunbathing, planning on what we’d do when we got in. Boat rode well though, hove-to.”

I noticed Beatty shaking her head and I thought, “Here we go

again, telling ‘sea-fearing’ stories. Why is it no one ever tells about the good times?”

It’s hard to remember and describe all of the wonderful days because they are definitely in the majority. During that same delivery job, we had fine days such as one when a tropical sun warmed us thoroughly and our American crewman, Richard, who’d hitched a ride back from a walking tour of Europe and the Middle East, grabbed his huge duffel bag, and pulled out a hammock. He strung the hammock from the forward shrouds and as the *Vagrant Gypsy* surged over the seas, beam-reaching at close to 7 knots, we took turns swinging in the sunshine. Our English crewman, Chris, made his first attempt at making yeast bread after three weeks of watching the cook. So at tea time we all tasted a very successful loaf, smothered in butter and jam. Richard strummed his guitar, and we discordantly tried to sing Beatle favorites, “Here comes the sun, it feels like years since it’s been here . . .”

It’s not only men who are guilty of telling sea-fearing stories. I hate heavy weather and love cruising and sailing, yet as soon as the reunion kissing and hellos were over after a two-year separation from my parents, I caught myself telling two people who enjoy sailing but have done no offshore cruising, “We stayed too late in the Baltic. Everyone warned us, ‘Leave by September 15 or take your boat out of the water.’ But we were having too much fun. We waited out a nine-day gale and all of a sudden it was the middle of October. So as soon as the one hundred fishing boats clustered in

Ronne on Bornholm Island finally set off to fish, we wanted to be underway. Weather report was fair. Well to make a long story short, as dark fell the following wind increased until it was blowing Force 10. Dropped all sail but had to keep running, couldn’t heave-to ‘cause all the fishing boats were trying to work back toward the island, and we had to have way on to maneuver around them. Could have been run

down otherwise. *Seraffyn* was running beautifully under bare poles when all of a sudden one wave broke right on top of us.

Covered the boat completely. Mast must have been at least 30 degrees below the horizon.

Companionway was partially open. Every oil lamp lens burst, and as soon as we righted I crawled out of my bunk and stepped into water 10 inches deep.

Boy did I start pumping!

Bent our stanchion 45 degrees.

Ripped the dinghy almost completely off its chocks. Washed our binnacle overboard. A 400-ton freighter sank in the same storm, and a 200-ton coaster that limped into the same port we did lost its whole deck cargo and needed assistance to make port.”

My mother asked me, “And you enjoy this?” I realized my mistake at once. Why hadn’t I told them instead about sailing for three months under the wonderful midnight sun, through the maze of 20,000 Swedish islands and 30,000 Finnish ones, safe anchorages less than two miles apart? I should have talked about the time we were whispering along on a following breeze, wearing just shorts, jerseys, and bare feet. Tree-covered islands crowded down on the narrow channel. The navigation marks on our excellent charts corresponded perfectly.



positive . . .

We glanced behind to see a Finnish Eight-Meter yacht running up the channel, slowly gaining on us. We rushed for our cameras; they ran for theirs. At the narrowest part of the channel they caught us. We joined their laughter and shouted greetings as the skippers on each yacht pulled in their winged-out mainsails so we could sail closer together and miss brushing the trees on either side. For six or eight lovely minutes we traded sailing gossip. I noted the special anchorages they told us about as Larry kept *Seraffyn* gliding along on course, less than 20 feet from the beautifully varnished racing machine. Then they slowly pulled ahead in the 8-knot breeze, and we settled back on our sunlit deck, happy to be alive.

Because we've led a cruiser's life for many years, we're constantly meeting new sailors. Often they are on the verge of making that big decision. They want to set out and go cruising. So they come on board to gather all the information they can, just as we used to when we were building and preparing *Seraffyn*. Soon the conversation turns from iceboxes and water systems to the question of storms. Or, three or four cruising boats arrive in the same port and everyone gets together in the largest cockpit to trade news.

Inevitably one of the couples is new to cruising and the question comes up, "What about the storms?" And so the frightening tales begin. Yet when Larry and I went through our log, we found that in 10 and a half years and almost 42,000 miles of cruising on

board *Seraffyn*, we've spent less than 31 days in winds of Force 8 or above. Most of the time we had wonderful sailing spiced by hard beats and slow drifts. On the six deliveries I've been on, we've covered about 16,000 miles and had only two and a half days of winds over gale force. If you figure that out, it's less than one percent of all the sailing we do. We've discussed this with other long-term cruising people, and they confirm it. With proper planning, there is little reason to spend much time in storms. Yet let a new sailor come on board, and we all drag out the sea stories rarely considering their effect.


I know happy days don't make nearly as dramatic an impression, but aren't they worth telling about? What of working slowly into a deserted anchorage just at sunset, then rowing ashore to start a small bonfire so you can roast some sausages or a steak? What about the delights of a wall-to-wall suntan, carefully cultivated while you watch the porpoises weave their magic around your bow?

And then there's that perfect passage, a beam-reach of 20 or 200 miles when you never have to change sails or steer by hand, when your dinners are a gourmet's delight to an appetite whetted by a 12-knot breeze over a sea speckled with smiling

whitehorses. Next time you're in a crowd of sailors and would-be voyagers and catch yourself starting to tell a sea-fearing story, look around. Could your story be the one that makes a sailor chary of his dream? Would some sailor's mate, just ready to go along on this great adventure, stop and

reconsider after your tale of flying spray and soaked bunks? Instead,

how about telling of the wondrous days when the winds blew fair, those days we really go sailing for?

I know it's hard, but I'm trying to do it, even if I'm dying to tell you about the time I was on watch alone, running out of Palma, Mallorca, in 25 knots of wind, when I noticed a ferocious squally cloud racing up behind, rain hissing at its foaming base . . . 

From The Self-Sufficient Cruiser, revised edition, 1997, by Lin and Larry Pardey. Available from Paradise Cay Publications, 800-736-4509, and soon to be available from the Good Old Boat Bookshelf.

Lin and Larry Pardey have cruised together since Oct. 31, 1968, when they took their marriage vows and launched their boat. That first boat, Seraffyn, was a wooden homebuilt Lyle Hess-designed gaff cutter.

The headline is from a 1944 song introduced by Bing Crosby in a musical with Betty Hutton, Here Come the Waves. Although that seems all too apropos, the "waves" being celebrated in this movie were the kind in uniform. The song was written by Harold Arlen (music) and Johnny Mercer (words).



. . . Eliminate the negative

Can't find one? Make your own

If your good old boat is powered by an Atomic 4, a valve job is in your future sooner or later. When I purchased my Pearson Triton, I was told the Atomic 4 had been “running fine” three years earlier when the boat was hauled. I nonetheless decided to tear it down and rebuild it over the winter and was glad I did as I found all the valves thickly crusted and several sticking open. Perhaps a contortionist can complete a valve job with the engine in the boat, but the opportunity for dropping tiny irreplaceable parts (like valve keepers) into the bilge is far too great for me. Pull the engine, place it on a bench, and life is much better.

If you don't already have it, get Don Moyer's manual (*Moyer Marine*, 717-564-5748) before attempting any work on your Atomic 4. It makes life much easier. The first thing you will find in attempting your valve job is that you need a valve-spring compressor. Don recommends a “C” type valve-

spring compressor. (He uses a Wilde 600.) I remembered the type from my very first car — a '51 Merc with the famous flathead V-8. Unfortunately, all engines — automotive or marine — now come with overhead valves, and the compressors for an OHV engine will not fit in the tiny confines of our Atomic 4.

I called every automotive parts store within a 50-mile radius of my home and found no one who had an appropriate tool. The only helpful suggestion was to try a small engine repair shop since many small engines are still “L heads.” Of course, finding a shop willing to lend you their valve-spring compressor may be a challenge.

Fortunately, a workable tool is easy to make. For those who have not yet opened up their Atomic 4, the valves sit in the block right beside the pistons. When the head and access plate are removed, one can easily see the valves, springs, retainers, and tappets. The work is much easier if the engine is placed nearly upside down, resting so the valves are toward you, and the top of the block is down. (See picture on facing page.) All that is needed is to rotate the cam until the tappet is off the valve stem (the associated piston will be at TDC of compression stroke), then place your thumb on the valve face and one finger on either side of the retainer and

compress the spring while removing the keepers with your other two hands. Of course the real problem is that you lack three hands and may also lack the strength to compress the valve spring with your thumb and fingers. Besides, the Atomic 4 lacks the space for three hands. What is needed is a tool that has the thumb and fingers shape and can be as smoothly and easily controlled.

How to make one

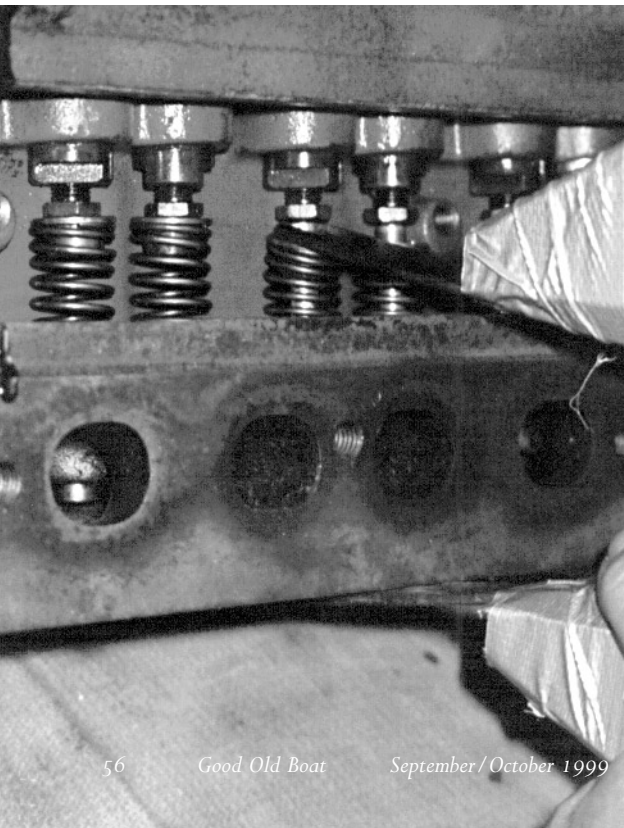
The valve-spring compressor must have one arm (the thumb) to rest on the valve face and another (the fingers) with a notch wide enough to let

you get the keepers out but narrow enough to bear on the retainer and fit into the confines of the block. It must be capable of being applied and released smoothly. To make such a tool, you need two pieces of hardened steel about 1 inch wide, thick enough not to bend (approximately 1/8 inch) and 5 to 6 inches long. I used the handle ends of the two wrenches that came with my Porter-Cable router, but you probably have something similar around the shop. (This procedure does not impact their intended use once you are done.)

Take one piece and grind a notch to create two fingers. I used my 7-inch right-angle grinder with a metal cutting blade, but a similar blade can easily be used in a table saw (probably with more safety). Work carefully and leave enough “meat” on the fingers so they can't bend. (See close-up picture in insert on facing page.) When the fingers are complete, attach them to a Jorgenson-type wood clamp with duct tape. (I was going to drill the wrenches and attach them to the clamp with screws, but the hardened steel proved too difficult to drill.) The duct tape will stretch and need replacing after about four valves, but that is a small price to pay for the convenience.

by Mark Parker

Adjust the jaws open just wide enough to fit over the valve spring and at a slight angle so that when the spring is compressed, they will be parallel.



valve-spring compressor

Putting it to work

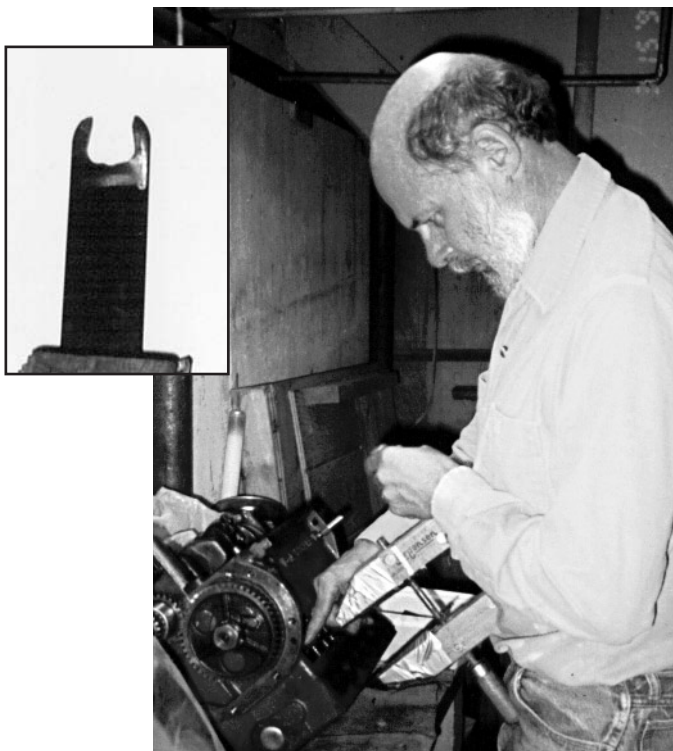
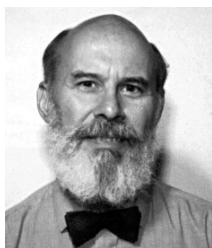
To use your new valve-spring compressor, position the engine (with head removed) upside down on the bench. Adjust the jaws open just enough to fit over the valve spring and at a slight angle so that when the spring is compressed, they will be parallel. With the thumb on the valve face and the fingers on either side of the stem, turn the rear screw to compress the spring until the keepers are exposed. They usually fall off at this point. If not, you can remove them with an awl or small screwdriver. Slowly release the compressor, and you can slide the valve out. You can then remove the spring and retainer with your own fingers.

Carb cleaner and an expendable wood chisel work well for removing all the crud built up under the valve heads. In the April *Good Old Boat* newsletter I recommended using nail glue (the type used for fake fingernails) to attach the standard suction cup-type lapper tool to each valve to aid in lapping them. (*That recommendation is reprinted in the sidebar at right.*)

Reinstallation is the reverse of removal. Position the valve spring and retainer in place with your fingers, slip the valve back in place, and then position your compressor and crank it down. You will need both hands to wiggle the keepers in place, but if you have the appropriate physique with adequate belly for bracing, you can control the compressor without using your hands as I am doing in the picture. Once the keepers are in place, release the spring slowly, and you are done. Your valve-spring compressor may now be disassembled and returned to its former uses none the worse for wear.



Mark Parker, M.D., is the assistant director of the Emergency Care Center at The Cheshire Medical Center in Keene, N.H. He's been sailing since he attended college — Sunfishes, Lasers, Hobie Cats. He has begun work on a 16-foot trimaran, a "work in progress" temporarily sidelined when the Pearson Triton, Always, received a higher priority rating. Mark sails with his wife and family in Narragansett Bay.



"Body mechanics" is the name of the game. This technique requires an adequate belly for bracing.

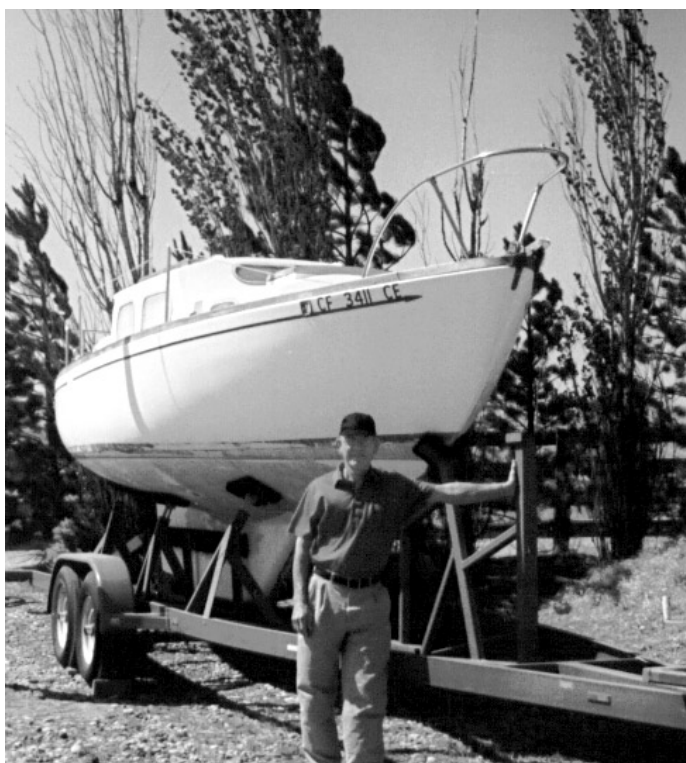
Nail glue? A few drops will do

This will come in handy sooner or later for all A4 owners. When hand lapping valves on the engine, the usual way to do it is to use one of those little suction-cups-on-a-stick holders to rotate the valve and apply some pressure for grinding. They never seem to really grip that well, especially after you've gooped the grinding compound everywhere. The alternative is doing it with your fingers working from above and below. That is hard on the fingers and slow going.

Here's a better idea: nail glue. No, not Liquid Nails construction adhesive, but the modified super glue sold with those plastic nails for ladies' fingers. A couple of drops of that on the suction cup, press firmly, and it's stuck. You can grind away to your heart's desire, spinning the stick between your hands (like a Boy Scout starting a fire). When you have finished that valve, carefully peel the suction cup off the valve, apply more glue and proceed to the next. The process eventually will ruin the suction cup, but you can get about four valves from each cup. Since there are two cups on each stick, you can do the whole engine on one \$2.99 stick plus a few drops of your wife's nail glue! (So even if you have to buy the fake nails, they're under \$10.)

Mark Parker
Hancock, N.H.

The “rest of us:” Winners of the *Good Old Boat* subscriber sweepstakes



Three good old couples with good old boats are receiving a little something extra as a part of their subscriptions. They are as alike and as different as three couples selected at random from names around the country could possibly be. They're from both coasts and the deserts and prairies in between. They have big boats and small ones. They own well-known production boats and one virtual unknown. They've sailed all their lives, and they're just getting started.

They represent a cross-section — as well as any three couples can — of the readers of *Good Old Boat*. When we say this magazine is “for the rest of us,” we’re talking about the Kowalczyks of Mendon, Mass.; the Laws of Kennewick, Wash., and of Apache Junction, Ariz.; and the Nelsons of Springfield, Mo.

In the *Good Old Boat* subscriber sweepstakes drawing in mid-June, **John and Sue Kowalczyk's** number came up first, making them the winners of the handcrafted model by Tom Thomas. John laughed when he heard this, saying, “Oh no, not *THIS* boat. Not NOW!” Then, reconsidering as the concept sunk in, “Maybe it *should* be this boat. It's so unusual.” (See *John's comments in the sidebar.*)

John and Sue sail a 28-foot Bluewater 277, hull #1. (*Ever heard of that one? We hadn't either.*) She's a 1974 fiberglass hull with an unusual dome-shaped deck. John has searched the East Coast for more information about her pedigree, but to no avail.

Coincidentally, John has been doing a bit of writing for *Good Old Boat*. Look for his first article for the magazine, on the choices and systems involved in Marine Sanitation Devices (MSDs), in the November issue.

Rick Laws, winner of a terrific personalized seabag by Weekend 'R Products, has a better-known boat. Of his 1963 Columbia 24, hull #66, Rick says proudly, “This is

Winners continued on Page 60

Rick Laws was immediately infatuated by the pretty lines in the Columbia 24. Before he knew it, he'd taken on a retirement project, one which should also be a source of relaxation in the long run. But first the gelcoat has got to be removed and replaced. Of her husband's newest adventure, Pat Laws says only, “This boat is strictly Rick's project.”



by John Kowalczyk

My 9-year-old daughter, Lea, was listening when I played the phone message informing us that we were winners of the *Good Old Boat* sweepstakes. She was confused. I told her that an expert model maker was going to make an exact replica of our boat. She looked up at me and said, “You mean with the rust and the chips and everything?” Out of the mouths of babes.

Our boat is a Bluewater 277, and we just got her last fall. She’s 27 feet 7 inches long, has a beam of 11 feet 2 inches, and draws 5 feet 4 inches. She was made in 1974 by a company called Recreation Marine, Inc., in Warren, R.I. They no longer exist. I have searched extensively and have found nothing about the company or the model. The previous owner said she has seen one other boat like ours (a red one) on Narragansett Bay. We were proud to learn that our boat, while with a previous owner, was featured in print on the cover of the Spring 1989 West Marine catalog. (See photo at right.)

What would possess someone to buy a 25-year-old boat of virtually unknown origin? Sheer volume is the answer. Her wide beam makes for a massive interior. A fairly new Volvo diesel didn’t hurt either. We felt that this boat will be small enough to sail comfortably and big enough for our family. We have two daughters, ages 9 and 11.

We’ve been thinking about this for a long time. I’ve been sailing on various small boats (mine or other people’s) since I was 19. Between finishing school, raising a family, and building a house, it took a while before Suzanne and I could finally get away to go sailing together. A friend of mine had a daysailer he wanted to fix up for sale. We agreed to make it seaworthy if we could use it for a season. We sailed it on a nearby lake. Sue found sailing to be as fun as I said it would be (*what’s not to like?*), and we were ready to move on.

The next step was a 22-foot MacGregor Venture. It was a clean boat for an exceptional price, but it was a boat in need of work. We replaced the wiring, lights, electrical panel, and winches. We removed just about all of the woodwork and hardware, painted and detailed every inch of the hull, and then replaced everything. We sailed it out of a slip in East Greenwich on Narragansett Bay. It was so much fun we couldn’t help but think of buying a bigger boat. We sold it and started a new search.

We looked at a lot of classic boats in the 28-foot range: Bristol 27s, Pearson Tritons, Hunters, etc. Any of these would have been perfect for just Sue and me, but we needed a family boat. There was some apprehension about plunking down a large chunk of money for an old, unknown model made by a company that no longer exists (*downright scary is more like it*), but the confidence we gained from fixing two other sailboats allowed us to go with our gut feelings. And yes, this one needs some work also . . . so much so that it’s currently in our yard instead of the water.

I discovered *Good Old Boat* while searching the web for information about our good old boat. I couldn’t resist the free issue offer. It truly is a magazine for the rest of us, and its time is long overdue. Thanks again for the magazine and this wonderful opportunity. And if anyone can tell me anything about a Bluewater 277, I sure would appreciate it. (Email: johnsue@kersur.net or phone: 508-478-4563.)



John and Suzanne Kowalczyk are not screening their eyes from the sun. No, they’re looking for signs of water. John’s more than a little frustrated that his boat is not launched yet. Note the rounded cabintop of this “mystery boat,” a Bluewater 277.





Larry and Dellene Nelson are sailing snowbirds who have figured out how to make money sailing while also having fun sailing in the off season. In the summer, they run a charter excursion boat on Lake Branson in Missouri; in the winter, they escape to warmer climes with their trailersailer.

Winners continued from Page 58


my first sailboat, although I've crewed on other people's boats." While he was always fascinated by sailboats, Rick was able to ignore their siren call until he saw this Columbia sitting, dejected, in a car lot. "I drove by it," he recalls, "and thought, 'that is the neatest-looking boat I've ever seen in my life.' I bought it for about the cost of the trailer it was sitting on."

In their retirement, Rick and his wife, Pat, "commute" between Washington State and Arizona, but the Columbia is bound to be a Washington boat for the summer months when they're in the north country. It will keep Rick plenty busy in his retirement. As Pat says, "This boat is strictly Rick's project." He started scrubbing at mildew and refinishing her teak trim last summer, but he has just learned the awful truth: the gelcoat, which is cracked and peeling in spots, has got to go. He expects to launch the boat next year after full gelcoat removal and a paint job. She'll get her official new name by that time, no doubt. But for now, the old one was removed with the first gelcoat removal experiment on the stern.

Like Rick and Pat, **Larry and Dellene Nelson** lead a snowbird life, which is perhaps why they also won a Weekend 'R Products seabag. Their migration takes them from summers in Missouri, where Larry works as an architect and runs a 49-passenger catamaran as an excursion boat on Lake Branson, to winters in the Florida Keys or the Sea of Cortez with their 1978 Chrysler 26. "We've got long-distance trailering down to an art," Larry chuckles.

A Nebraska boy, Larry found lakes and rivers to sail while growing up, beginning with a Southcoast 22 which he figures he "liberated" from slow decline in Milwaukee. Then came a Chrysler 22 and now the Chrysler 26 which he notes is a Halsey Herreshoff design. It's built like a tank and perfect for gunkholing with its 30-inch draft when the board's up or six-and-a-half-foot draft when the board's down.

The catamaran he's been operating on Table Rock Lake at Branson, Mo., for five seasons is an entirely different critter. Called *The Spirit of America*, she too can go in fairly thin water, but her beam is 28 feet. Larry has earned his Coast Guard captain's license in order to take passengers along. But winters in the south are spent more peacefully with just the two of them on the Chrysler.

The name of the Nelson's bigger boat, *The Spirit of America*, describes the winners of the *Good Old Boat* sweepstakes and the many other readers as well: can-do folks . . . truly a cross-section of this country's finest. Our thanks to all who supported "the sailing magazine for the rest of us" during its inaugural year. 

Going offshore with that boat? John Vigor says you can, shows you how

In *The Seaworthy Offshore Sailboat*, John Vigor offers a hands-on guide to the evaluation and upgrading of a production fiberglass boat for long-term bluewater cruising. He shows what to look for, what to avoid, what equipment to buy or make, and how to get ready for the big move. John uses the price of a beer to add up the cost of various pieces of equipment mentioned in his book. He does this because retail prices change

quickly. "At any date in the future, you need only to inquire after the current retail price of a bottle of beer served in a restaurant or a yacht club bar, and simple multiplication will give you a pretty good idea of the current price of the equipment mentioned in this book," he says. An interesting theory.

John compares characteristics of coastal versus offshore cruisers. He emphasizes the importance of the ability to maneuver clear of dangers in all kinds of weather and the "habitability factor" to accommodate human beings comfortably and safely. The design must allow the boat to right herself quickly from capsize and to resume her voyage safely.

His unique diagnostic questionnaire tells us if our boat is capable of offshore voyaging, and his step-by-step illustrated instructions show us how to refit for ocean passages. Once you have passed the seaworthiness indicator test, you move on to the detailed inspection of the hull, deck, cockpit, and rudder with descriptions of necessary repairs or modifications.

The end of each chapter lists a synopsis of helpful hints relevant to it with the heading "Think Inverted." This brings forth such pleasant

thoughts as, "Is there a quick-release snap hook or carabiner right there at your chest so you can reach it to free yourself if you're dragged underwater?"

Those with Atomic 4s will cheer to read: "There is a modern fashion for replacing gasoline engines with diesels, but this is not always the wisest move. Gas engines are cheaper, lighter (or more powerful for the same weight), easier to repair and service, quieter, and much smoother-running."

(See *Good Old Boat*

article on the subject in the June 1998 issue.) However, if you insist on changing, John advises you to aim for 3 or 4 hp for each ton of boat weight. "If you're determined to have a dirty, smelly engine, it might as well be a powerful, dirty, smelly engine," he summarizes.

John believes that there are more forces than luck involved in survival at sea. Cautious and intelligent preparation is necessary, so his chapter on safety equipment goes over all you need to

know including how to deactivate your self-steering gear in case you fall overboard.

"No one who has experienced the tyranny of the tiller will ever go to sea again without some form of self-steering device . . . for no more fiendish a punishment could be devised than to force a sailor to sit at the helm hour after hour, day after day, week after week," pleads John. This chapter gives you a good understanding of the theory of CLR (center of lateral resistance), secret forces, weather and lee helms, directional stability, flattening the sail, raking the mast, autopilots, wind-vane gears, and twistle yards.

John Vigor has given us a book which not only hands us practical advice in a clear format but also the hope that an offshore voyage is fully within our grasp if we are willing to follow his road map. For the price of 10 beers, the purchase of *The Seaworthy Offshore Sailboat* is a bargain to add to our nautical library.

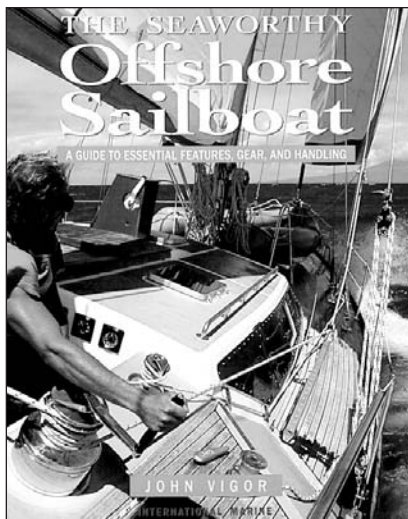
The Seaworthy Offshore Sailboat: A Guide to Essential Features, Gear and Handling, International Marine, \$29.95 (\$42.95 in Canada).

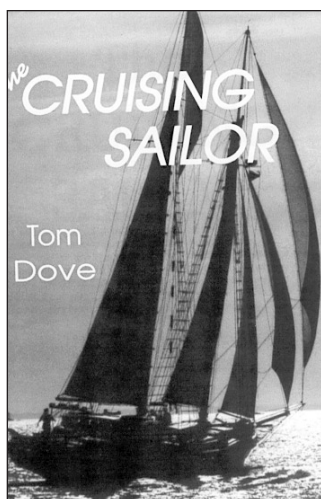
Reviewed by Hope Beecher Wright, Port Washington, New York.

Need resources? Tom Dove creates a "great little book"

It may be an oxymoron, but Tom Dove's book, *The Cruising Sailor*, is a great little book. Its 133 pages are only 8.5 by 5.5 inches but full of helpful ideas and information. The author's aim is "to introduce newcomers to cruising under sail, although experienced sailors will find useful information and a bit of entertainment." And that is exactly what he has done.

I have long admired Tom's storytelling and writing ability. In this book he intersperses three fiction-based-on-fact stories among all the details and explanations to keep the whole thing interesting. I had a good laugh with one of his stories of inept skippers trying to anchor in a sheltered cove prior to an afternoon Chesapeake Bay thunderstorm. One can pick up tips





and ideas — from correct anchoring procedures, to standing watch, to meal preparation in advance — just from the stories.

Tom also writes of basic things like hull and cabin sizes and types, weight, power, speed, rigging, construction techniques, surveys . . . all very helpful if you are determining what type of sailboat to purchase for cruising, or if you'd like to know more about that boat which commands a significant portion of your life and income. He gives excellent boat-handling advice, for example, on chain-rope-chain-rope anchor rodes and how to use a spring line to dock alongside a pier or to enter a marina slip stern-to, first time, every time, and make everyone watching think you're a pro.


I appreciated the three Appendices. Appendix One lists useful boat design formulas, including how to figure maximum hull speed for a displacement hull. (*We often discuss this at the dock, but no one ever seems to remember how to calculate it.*) Appendix Two lists a couple dozen excellent sources for equipment, books and magazines (*yes, our favorite, Good Old Boat is listed*). Appendix Three offers excellent checklists of tools and supplies for small cruising boats without electrical or plumbing systems and for medium and larger cruising and liveaboard boats.

There is an index and a fairly complete glossary written in "straight-forward English" so anyone can understand. However, I was a little confused with this definition: "Mile: A statute mile (land mile) is 5280 feet. A nautical mile (water mile) or knot is 6080.2 feet." Of course, we all know that a "knot" is not a nautical mile (distance), but a nautical mile per hour (speed).

So that this book can go cruising and last, Bristol Fashion Publications

publishes it on acid-free, mildew-resistant, archival-quality paper placed between heavily laminated covers to prevent water penetration and mildew. The binding allows the book to lay flat on any surface.

Tom makes the point that cruising can be enjoyed in any number of ways and that cruising does not have to be reduced to camping on the water. Cruising, he

says, is "the achievable dream," and he has gone a long way toward helping us reach that goal. It's a great little book indeed. 

The Cruising Sailor, Bristol Fashion Publications, \$21.95. Phone 800-478-7147, email bristolfashionjk@sunset.net

Reviewed by Davis Main, Chesapeake, Va.

Too many topics, not enough depth for this reader


I purchased my good old boat at the end of the 1997 sailing season. As a first-time boatowner I knew that what I didn't know was what I needed to know the most, but I didn't yet know what that was. I immediately went in search of materials that could educate me. One book that would not have found its way into my reference materials is *Boat Improvements for the Practical Sailor* by Stephen Fishman.

When I first saw the cover, I thought, "Great! This is a book that will give me direction on how to make accessory covers." Instead, it simply told me what they are used for. Disappointment aside, I started looking for information that would benefit a first-time boatowner. Many chapters started out with helpful information but fell short of making me feel I had learned something.

Stephen spent time creating a helpful-tools-of-the-trade list, but he stopped short of completing it. Spare parts are equally as important in the toolbox as the tools. A novice needs to know the importance of both. Seasoned owners already have their tool needs figured out.

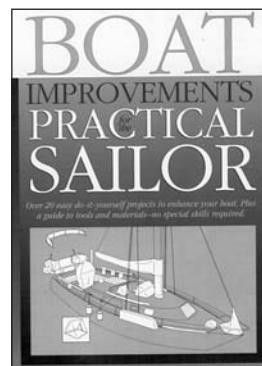
The few pages dedicated to weighty topics such as refrigeration,

moving/adding a radio, or adding more power were not enough to begin or finish the project for the average boatowner. And, when it comes to spit-and-polish or wood refinishing, it only glosses over what is necessary to make a boat shine. The book seems to be written for the first-time boatowner. The information for the novice is good, but it lacks completing details. The seasoned sailor already knows much of what is covered.

His book would have served the reader better by following a clearer path. In an attempt to cover too many topics and too many levels of boat maintenance skills, it falls short of meeting most readers' needs. 

Boat Improvements for the Practical Sailor, Sheridan House, \$23.95. Phone 914-693-2410.

Reviewed by J.R. Holm, Apple Valley, Minn.



Ready for a change? This one's in a class of its own

A camera is probably the only tool that Dee Carstarphen and her husband, Stu Hopkins, don't use in telling the tale of a trip down the Intracoastal Waterway.

Dee's book, *Narrow Waters: An artist's memoir of sailing through sound, swamp, city, forest, marsh, and glade*, was created with pen and ink and colorfully illustrated on every page with lovely watercolors and other media. Most amazing of all, it was hand lettered. *Hand lettered!* This immediately puts it in the rare and unusual class.

Yet the snapshot analogy is the best way to describe the book. It is a compendium of snapshots recording moments in time on their journey. In one small book Dee captures the essence of the cruising lifestyle as she and Stu experience it with their Allied Seawind, named (*would you believe?*) *Sea Wind*. Dee provides brief notes of what they eat and how they store food without an icebox. She gives a glimpse — a snapshot really — of their activities as they travel. Their fondness for remote anchorages, taking walks (often in search of wood for their woodburning stove), and observing wildlife is just as obvious as their interest in the history of the communities through which they pass, the fun they have in people watching (rubbernecking as they call it) in the populated areas, and the routine and emergency boat maintenance which must continue as they travel.

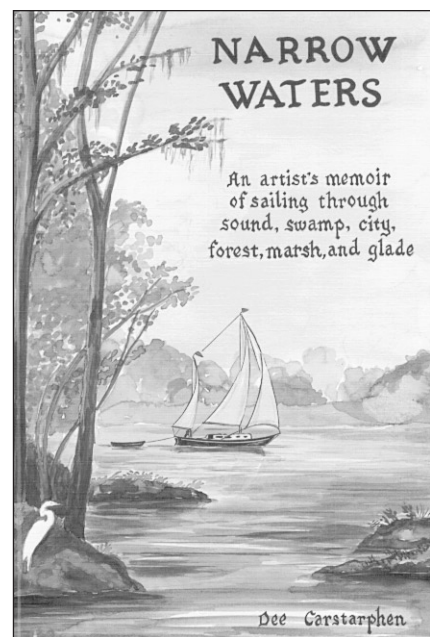
With a few strokes of the pen and paintbrush and a couple of descriptive words, Dee describes the boats they see

along the way and offers snapshots of people they meet. For instance, just this is offered about a boat they pass: "*Sea Wind* carries on, however, past the Hobucken Swing Bridge. Here are docks where working shrimpers and small freighters tie up. One old dear named *God's Mercy* catches our eye." That's it! That's all she says. It's enough, however. A drawing of the "old dear" at the bottom of the page fills in any detail missing in that brief

mention. In this case, a picture truly is worth a thousand words.

People get the same brief treatment, although at least one couple merits a couple of sentences: "Nearby powerboat with exotic couple living aboard. Man sports lavender pants, yellow shirt, and captain's hat. His lady with a long gown and braid. Boat's name *Bismi Ilahi R-Ahmani R-Ahim*, port of Pashtunistan. A large black bug insignia, a black flag, and black dinghy."

In the same compressed prose, reminiscent of a jotted note, Dee shares snapshots and snippets of local history, a touch of the local tourist information, and a chance to appreciate local color.



When their journey ends, a mere 131 pages later, following a circumnavigation of South Florida, the brief snapshots have melded to provide a rather detailed portrait of the author, her husband, their Allied Seawind, their cat, and their cruising lifestyle. They are people I'd enjoy cruising with. My kind of people. Maybe yours also.

Although the beautiful illustrations on each page may remind you of a children's book, make no mistake: this is a waterway guide in a class all its own. It is a glimpse of coastal cruising at its best, supplying in painting and prose the reasons we're all out there sailing and gunkholing with our good old boats.

This little illustrated book should be presented as a gift to anyone heading down the ICW. It is a treasure.

Narrow Waters: An artist's memoir of sailing through sound, swamp, city, forest, marsh, and glade, Pen &

Ink Press, \$19.95. Phone 804-580-8723.

Reviewed by Karen Larson, Minneapolis, Minn.



Mail Buoy continued from Page 3

undocumented vessels, according to Chapman's *Piloting Seamanship and Small Boat Handling* and the U.S. Power Squadrons, the U.S. Ensign is not flown from a spreader halyard but rather from the leech of the aftermost sail 2/3 of the way up the clew (under sail) or from a stern staff (sailing, powering, anchored, or made fast). If an overhanging boom requires that the staff be off-center, it should be on the starboard side.

Please be assured I am not questioning your patriotism. Obviously, your choice of cover photo demonstrates a love for the flag and all it represents. Perhaps in this age of every other car dealer and fast food restaurant flying Old Glory 24 hours a day in all weather and frequently in a condition which should have retired it months before, I am being overly sensitive. But I do feel that if we are going to fly her, we have a responsibility to bone up on the traditions and customs of displaying the national ensign.

I subscribe to several sailing magazines, and yours is my runaway favorite. Keep up the good work.

Bob Endicott
Ft. Walton Beach, Fla.

What'd he say?

I am stumped by the caption and the diagram at the bottom of Page 25 (in the July issue). With all due respect to author and copy editor, I suggest the caption would better read something like:

"When a sailboat heels, it tends to want to round up into the wind. This is due to the fact that the waterline becomes asymmetrical, with the leeward side of the hull being more rounded than the bottom of the boat. This induces the boat to want to round up. Too much sail area, too far aft in the sailplan, will also contribute to rounding-up. Easing the mainsheet will help reduce weather helm, as will keeping the boat less heeled."

The caption states: "... forward propulsive force from the sails is offset to leeward by the backward resistance created by water flowing past the hull ..." This would have been redlined as unreadable in any class except, possibly, fluid mechanics. And water does not flow past the hull. The hull moves through the water.



The dog ate my homework. No, REALLY!

We've all heard stories about the dog that ate the homework, but now we know they're true. This letter arrived in another envelope. It stated: Unfortunately our dog got to the subscription/order blank envelope before it got in the mail . . . This should be the information you need.

Susan and Tom Nebrick
Bryson City, N.C.

We contacted Susan and Tom about running a scan of their envelope. Susan replied: "At the time, I was so mad at our dog. Her name is Rainey. She is a Portuguese water dog. Maybe a few of your readers will know what this breed is — they love the water and are a working dog breed. We're sending along a photo. It's called: 'This face gets me out of a lot of trouble!'" Thanks for a great magazine. P.S. I'm an elementary school teacher, and I hear "the dog ate my homework" a lot.

I have not read the article, but will do so as soon as possible. But I had to react quickly to this egregious caption. Otherwise, thanks for a great magazine!

Peter Allen, Sr.
Rochester, N.Y.

It was like that for me, too

It was great to see the story/analysis of (purchasing) the Tartan 34 (May 1999) because that is exactly what we went through when looking through the hundreds of possibilities here in Annapolis. We bought our Tartan 34 two and a half years ago and are now doing a serious refit for cruising.

Frank Himes
Annapolis, Md.

Impellers are at it again

We have an S2 9.2. Sandpiper had the same impeller problem (mentioned in an earlier issue). We had an overheat light come on in 40-50 mph winds. It was 1 a.m., and our dock had separated during the storm. We made the decision to go out. It took my husband a week or more to find the impeller fin wedged in an elbow on the cooling system. It had broken off before we bought the boat.

Jeanne White
Gates, Ore.

Cal 20 racing sure has changed

A few weeks ago my wife and I were



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moored in Avalon aboard our Mariner 31 ketch when another Mariner moored nearby. Naturally, the skipper and I visited each other and compared notes. He referred me to your website and magazine. You sent me your May edition, in which you indicated that your next issue would feature the Cal 20. What a coincidence!

I had just donated my Cal 20 to a junior sailing program after owning two Cal 20s over most of the past 39 years . . . In the fall of 1961 my brother and I sailed a Lightning from Cabrillo Beach to the Isthmus at Catalina as a part of a Cabrillo Beach Yacht Club annual function. One of the participants was Bill Lapworth, the designer of the Cal 20. He was there with Jack Jensen, the owner of Jensen Marine, builder of the then-successful Cal 24. Lapworth was extolling his new design — the Cal 20 — and showed some pictures and specs. For me, it was love at first sight. I placed an order on the spot and took delivery of hull #30 within a few weeks.

. . . In those days the Cal 20 was strictly a husband and wife boat, and the national organization seemed determined to keep it that way. Spinnakers and go-fasts were outlawed, and the boat was raced pretty much the

way Bill Lapworth designed it.

I raced #30 for three years and then sold it and campaigned Snipes until 1972. In the spring of 1972, my kids wanted to sail with me, so I decided to get a bigger boat — like a Cal 20. I bought hull #377 in Los Angeles. My 12-year-old and I sailed it from Marina del Rey to San Diego in time for the 1972 nationals. The class rules hadn't changed much — still no spinnakers; however, the jib fairleads were allowed to be placed closer than the 20-degree angle of the original design. I raced that boat with my kids for the next 10 years or so. The San Diego fleet members generally raced wet. In other words, the boats were kept in the water. The LA fleets raced their boats dry — launching them from hoists for every race. Nevertheless, we were reasonably competitive.

. . . my kids went on to other interests. My youngest son wanted to campaign sailboards all over the world, so I gave him #377 to sell for an expense stake. The boat was sold in the mid-1980s, and I didn't see it again for nearly a decade.

In 1995 I was strolling along the dock at Mission Bay Yacht Club when I saw #377 with a "for sale" sign. I bought it a second time with a view to

campaigning it . . . I received quite a shock when I tried to race the boat. It was still quite competitive against the local boats, but the Cal 20 had become something akin to a development class in the Los Angeles area. There were split backstays, exotic travelers, complicated multi-adjustable fairlead tracks; and a standing rigging plan that would do justice to the star class.

But the really big surprise was the expense to which avid racers went to modify their hulls. It was not unusual for owners to have their keels trued and professionally mounted and faired. The cost of a new rudder alone exceeded the price I paid for my own boat. Stories abounded that some sailors spent tens of thousands of dollars on their boats. Bill Lapworth was likely turning over in his grave. I was, however, able to renew my acquaintance with some old hot-shot Snipe sailors who were now into the hot-shot Cal 20 class.

I tried racing in the 1997 class championships with my daughter — then in her mid-30s. To use a common expression, I couldn't get out of my own way. I am enclosing a picture of #377 rounding a mark in one of the races.

Continued on Page 66

Continued from Page 65

The boat behind mine is another San Diego boat. The LA boats had rounded sometime earlier. (*Philip did indeed enclose the photo, but we have not printed it here. Sorry. -ed*)

... #377 has now found a good home. I donated it to the junior program and bought my Mariner. I do miss the old boat, but there is good news. My wife just loves our Mariner ketch and has made several trips to Catalina and various Southern California destinations. It's not very fast; but, then again, neither was my old Cal 20.

Philip Raffee
Encinitas, Calif.

Thanks so much for telling that story. We had already printed the Cal 20 article by the time your historical perspective arrived in our mailbox, but it was a perspective worth retelling, particularly to the younger Cal 20 sailors out there.

Kudos

Happy Birthday!

Thank you for the additional copies of the July *Good Old Boat*. I'll pass on my extra copies to potential subscribers and warn them that *Good Old Boat* can become addictive ... Congratulations on your successful growth and establishment of your magazine in this highly competitive and somewhat limited field. May your birthdays be many and joyful reflections on a fun and rewarding endeavor ... Regards and again thanks for being my very first publisher.

Dick Bunker
Muscatine, Iowa

Dick's article, "Love at first 'site'" on the blue-footed booby, appeared in the July issue.

It's the camaraderie

I sail a 1976 Bristol Corsair and need the tips, advice, and camaraderie that I find in your magazine. Needless to say, I have decided to subscribe and will be forwarding my check in the mail.

Frank Knowlton
Columbia, S.C.

Anyone can fix and sail a new one

I sail a 1977 Columbia 8.3, a great solid sailor with an Atomic 4 that just

keeps on ticking. This just does not seem to fit into the new high-dollar, low-maintenance rigs the other mags seem to cater to. I have to work a little bit to keep her up, but that's part of being a sailor. Anyone can keep a new boat up, but you really have to love sailing to keep an older boat going year after year.

Bruce Clark
Westminister, Calif.

You're our kind

We enjoyed the sample copy and are sending our subscription cheque. We both like the types of articles, the style, and the idea that not everyone who sails is ready for the "charter market" or has the opportunity to follow in Slocum's wake.

Bob Fenton
Port Dover, Ontario

On the bandwagon

Thank you for the two issues of *Good Old Boat*. If the first issue had me thinking about it, the second pushed me over the edge. All of it, but especially the article about tillers and the back-to-basics article (*both in the May issue*) were seemingly written just for me.

I have read them all, and the other magazines are very well done if you have a spare \$15,000 or \$20,000 lying around in your fat Swiss bank account to update and fit out your \$300,000 boat for the next season. But finally a magazine comes along that brings practical and fun information to the rest of us who are not only unwilling to go into the hole for our sport/hobby, but just prefer the solid construction and classic, warm, beautiful lines of the old boats. I'm as good as on the bandwagon.

Timothy Moses
Oklahoma City, Okla.

Even in Sweden

It's always exciting when the magazine arrives, since it's a magazine that's interesting from the first to the last page. Keep up the good work!

Peter Augustsson
Gothenburg, Sweden

The owners' association page

The owners' association page (on the *Good Old Boat* website) is absolutely wonderful! I use it almost daily to look up descriptions of different used boats I see in ads, and it has been amazingly

helpful in many, many ways. Kudos to you at *Good Old Boat* for putting in the time and correspondence to keep it updated and so inclusive!

Meghan Kennedy
St. Paul, Minn.

That page is now better than ever. We are publishing changes and additions right from our database and keeping it current as we get information from readers and web visitors. So keep sending notes of boats that we don't have listed yet, class organizations we've yet to discover, and offers to serve as contacts for your favorite boats. Somehow, without really meaning to, we've created what truly can be called the world's most comprehensive listing of sailboat contacts and associations. And it's all thanks to those of you who have contributed. Together we're making something big happen!

What's more

I've really enjoyed your magazine. Just good old folks in good old boats. It seems like you're having fun doing it, too. Thanks for the note. I feel kinda proud to have helped you get started. Your listing of user groups helped both me (Hallberg-Rassy) and my friend (Cheoy Lee) get in touch with like-minded people with many resources. Enjoy the summer and thanks.

Dean Raffaelli
Chicago, Ill.

*Dean's was the first subscription check we received at Good Old Boat. It's dated Feb. 6, 1998. A copy of it hangs on the wall in our office. We couldn't afford **not** to cash it then or now, but the sentiment (wanting to keep it as a keepsake) was and is the same!*

Resurrection

Thanks so much for focusing on the tried and true era of sailing boats. My 1965 Pearson Ariel with its Atomic 4 and I are enthused with your resurrection and interest.

Kent Harrison
Miami, Fla.

A report card

I want to thank you for not insulting my intelligence by sending month after month of renewal notices. I wish all magazine editors and subscription departments would be so enlightened.

Continued on Page 68

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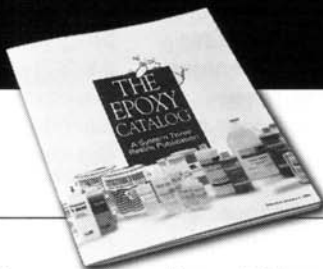
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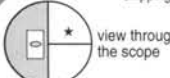


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I'm afraid my review of *Good Old Boat* is going to read just like all the others you've printed in your past issues . . . The only criticism I can possibly come up with is my "good old eyes" have trouble with your smallish text on a colored or screened print background sometimes.

I could offer a slate of suggestions for future articles, but I've grown to trust that even without my asking, you **will** be covering those areas in upcoming issues.

The amount of work involved may be more than you want to get into, but I look forward to the day when you go monthly, with 100 pages! The minds of the notably respected staff of writers you have garnered must be brimming over with valuable information for us to absorb. This is a check I don't mind writing at all. I wish you guys continued success!

Gary Petty
La Mesa, Calif.

Praise for Moyer and CDI

We have a 1976 C&C and have enjoyed your magazine ever since you gave me the first copy free.

You wrote about the Atomic 4 engine and Don Moyer, so Sharon and I attended one of his seminars in Maryland. After listening to all the horror stories about water pumps, cooling systems, etc., from sailing in the Chesapeake, we purchased a rebuild kit for our pump. But after 23 years of Lake Superior sailing, the old parts looked as good as the replacements. Thanks, Lake Superior!

We also purchased a new CDI propeller, designed for our engine, and it makes all the difference in the world. So that alone is worth the price of the subscription. Thanks for your efforts in giving us *Good Old Boat*.

Carl Steinwall
Spring Lake Park, Minn.

Steal this book!

I had to steal this magazine from my gym to be sure to get the address — sign us up! Ben Stavis' group (*Rhodes Reliant and Cheoy Lee Offshore 40*. See the association page on the *Good Old Boat* website or refer to the list in the May issue of the magazine.) is a lifesaver for us, and we're sure *Good Old Boat* will be too. Our check is enclosed. Start us with the July issue,

as we've already ripped off the May issue. We'll atone by trying to share it with many others before returning it.

Blair and Mike Doyle
Annapolis, Md.

Help! I made a mistake!

I've made a terrible mistake! I loaned my November issue to someone to promote your excellent magazine. I haven't got it back and can't remember who I loaned it to . . . Lesson learned: When loaning a copy of your magazine, be sure to get something of value (like boat keys) so that it will be returned.

Keith Kubick
Wichita, Kan.

Seeing results of my marketing?

My family and I just became "owned" by a 1975 Pearson 10 Meter (33 feet) this past summer. It is powered by an Atomic 4, so your articles and advice have been timely and terrific! My wife and I have four great kids, so we have been very excited about being able to afford a "good old boat" large enough for the family and well-suited to the Cape Cod area where we sail. I keep telling my friends about the magazine; you should be seeing my "marketing" results very soon!

Jim Quinn
North Falmouth, Mass.
Jim, many, many thanks. Good Old Boat is still a well-kept secret. But with friends like you, it won't be for long.

Pick a card, any card

You may not be able to imagine the impact of suddenly holding a double handful of different issues all at once. Just leafing through them makes me stop and gasp at some of the photos; reading an occasional technical paragraph shows that your writers get down to the useful detail just

where most are inclined to do the journalistic equivalent of the math professor's "the proof of this will be left as an exercise for the student." It's really an honor to be a part of it!

Roy Kiesling
Santa Cruz, Calif.

Roy wrote the GPS article which just appeared in the July issue of Good Old Boat. Why, you may ask, was he holding a double handful of magazines? It seems Roy, who works at the West Marine headquarters as a technical advisor, was not receiving the copies we had been mailing him all along. Do you suppose someone in the mailroom at West Marine is a sailor? Now we send them to Roy's home. Perhaps the sailor in the mailroom will have to subscribe . . .

Send questions and comments to Good Old Boat, 7340 Niagara Lane North, Maple Grove, MN 55311, or by email to jerry@goodoldboat.com. Whether your letter is published or not, we'll get a response to you prior to the next scheduled publication.

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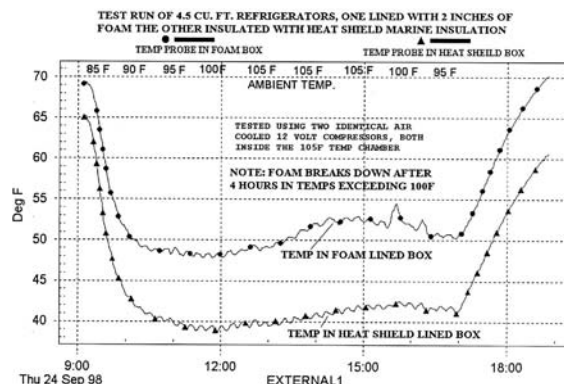
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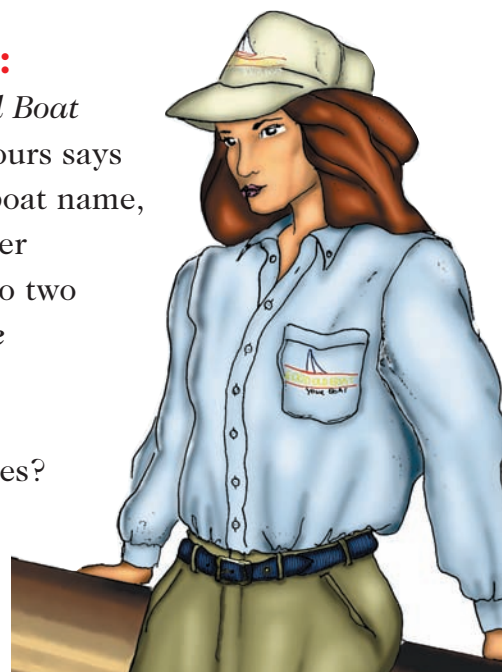
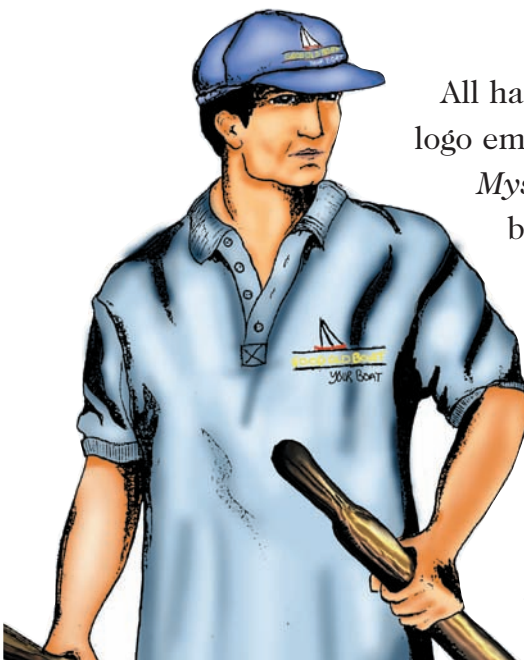
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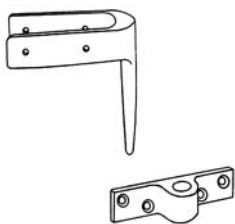
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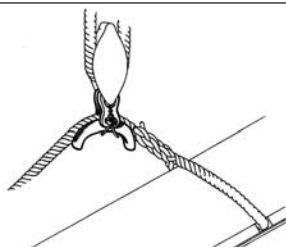
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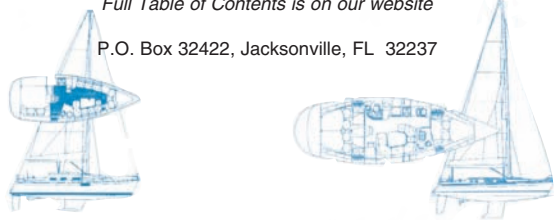


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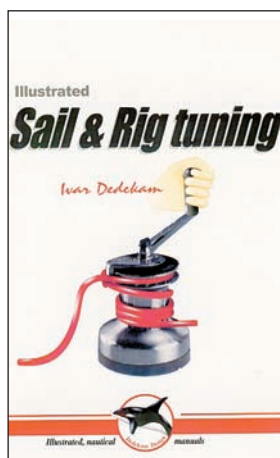
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Last tack

Becalmed

The sparrow wanders aimlessly, tracing lazy arcs in the sky as *Mystic* sits quietly under a curtain of gray. The slate-colored sky paints the water in metallic shades which undulate expectantly, but no breath of wind paints the ripples of an approaching zephyr. Becalmed.


We have no engine in the boat right now to ensure progress toward our destination. Jerry's thoughts turn elsewhere once I announce that I'm happy to stay in the cockpit moving *Mystic* forward microinch by nautical microinch as we slip slowly between zephyrs and calms. Jerry goes below to crawl about in the empty space where our new engine will go. He's engrossed in measuring, scheming, dreaming. I'm alone with my thoughts.

I become transfixed by the science of slow motion. When a zephyr fills in, I watch as the merest hint of a wake traces three narrow waves from midship and leaves them astern in a broad "V." I watch fascinated as bits of pollen on the surface of the water drift lazily by. Never have I studied the shoreline in such detail. Never have I moved (if, in fact, we're moving at all right now) by the shore so slowly. The zephyr fills in, and the bow wake begins to murmur, humming quietly to itself.

I have no digital reminder of how slow this burst of speed really is, since we're saving energy this weekend. The engine is not here to top off the battery, so on this four-day weekend, we are consuming what energy we have carefully, and the knotmeter shows a blank screen.

Occasionally Jerry appears in the companionway or disappears into a cockpit lazarette. Eventually he asks whether I wouldn't like to put up the 170 genoa, as I'm ghosting along under main alone. But I fear a flopping jib could spoil the ambiance of a nearly motionless day.

The clouds slowly clear, moving on to the east and leaving a blue sky to paint the water in new hues. In the distance a forest of scraggly pines looks like a marina full of masts, but we're alone here with a couple of loons and a multitude of unseen bears in the woods beyond the shore.

We're on a floating island of our own. I disappear below briefly to start a sheet of cookies. We have fuel for the stove, water in the tanks, food in the galley, and a bunk for the night. I sit, quietly tweaking the sail occasionally. I'm warm, content, rested, comfortable. A loon calls, and his wail echoes from the opposite shore. We're in no hurry to go somewhere. We've already arrived. 


by Karen Larson

Reflections

by Gary Scurlock

I pass her on each visit to my own boat. The sleek lines are still there. She lies alongside the quay, secured with frayed ancient tethers reluctantly holding her in place against the elements. Rainwater is stored in the lazarette. The boom lies crossways on the deck, the gooseneck broken. The jib is partially unfurled and flapping in the light air. My soul is saddened to see a boat so faded and tattered. The dark blue hull is covered with years of neglect and varicolored mildew. The white deck is nearly black. The teak is cracked and gray. There is not a vestige of varnish left. The mast is covered with lesions of corrosion. A once-proud vessel can only show her sadness by her sagging rigging and lifelines. To be restored and brought back from oblivion is her dream now. To once again ply the warm waters and feel the wind fill her sails. To have the powdered gelcoat polished. To see the gray and cracked teak made bright again. There is always hope the owner will return. Or perhaps a new owner who can see the potential under the dirt and grime. She was once a fine lady who should have never been treated this way. The nameless wraith can only dream of former glory, races won, and summer sunsets. I feel sorry for her.

Seeing a vessel in this condition brings pangs of guilt. My own boat has often lain for weeks without a visit. Could she be feeling the same neglect? To relieve my conscience, I scrub the decks. Polish the brightwork. Adjust the rigging. Best of all, I take her out into the warm waters. She fills her sails, and we watch a sunset. My spirit is restored and my guilt relieved that I have done my part to restore happiness to my boat. As we ply the lake, the wraith is forgotten. Dreams of a long cruise, warm summer nights, a fresh breeze, cool drinks, and foreign ports fill our minds. Upon our return we mentally prepare our checklist for our next cruise together. I secure my boat and promise her I will return next week or as soon as possible.

I try not to look, to avert my gaze. But I can't. As I leave the marina and pass the wraith, her lines appear to sag lower. It is as though the boat knows what has taken place in the last few hours. I am torn between minding my own business and giving the owner a piece of my mind. I should go to the marina office. I should inquire about the owner. Perhaps I should purchase the wraith, taking her from the neglectful owner. The practical side kicks in, and I remember things like slip rental and neglecting my own boat while fixing this one. What to do after she is fixed? Should I sell her? Could I sell her? I put aside my thoughts and plans because it is too much trouble to deal with. I can only watch as she sways at the moorings hoping to break loose and once again be free. The scene is the same. A once fine lady who should have never been treated this way. 

Here's what's coming in November/December:

- Boat Review: the Pacific Seacraft
- The history of Pearson Yachts
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