

GOOD OLD BOAT

Still sailing after all these years!



SEPTEMBER/OCTOBER 2000
ISSUE 14

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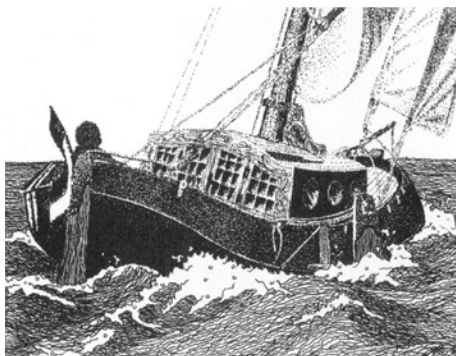


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About the cover...



Good Old Boat paid a visit to Maine to meet one of our earliest subscribers, Art Hall, who had been restoring his Allied Seabreeze since our magazine's earliest days. For more on his refit, see Page 32.

www.goodoldboat.com/suppliers.html

Our new directory of marine suppliers is growing. See for yourself!

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Note: Like everyone else, it seems, we have a new area code (763).

Voices from everywhere

Home ports for good old sailors in this issue



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(and sometimes the back issues you're looking for)

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The view from here

Defining our niche

Good Old Boat magazine is about cruising sailboats 10 years old and older. When we started this magazine we decided to define a cruising sailboat as any boat with a head, galley, and bunks. In the short time we've been publishing, we've tried to keep this niche as broad as possible. We've covered fiberglass boats, steel boats, and wooden boats.

In this issue, we're offering you some very good multihull content. How many hulls should a good old boat have? As many as you want. Author Charles Kanter didn't seek us out. We had to find him and tell him what we wanted. We specifically said, "Please don't waste any time on the safety issues."

I'll lay out our editorial philosophy on that topic right here, and I won't waste much ink either. Multihulls are different from monohulls and have advantages and disadvantages. They are safe enough when they are used in the manner for which they are intended to be used. That's all that may be said of monohulls as well. Anything more edifying needs the comparison of specific design

characteristics among specific boats. The time is long past to put away the generalities associated with these design types — one versus the other.

We sail a monohull and love her. But I read Chris White's *The Cruising Multihull* years ago, and many of the ideas in the book have stayed with me ever since. In my fantasies I sometimes see us in a boat very much like Chris White's Atlantic 42 catamaran. Other times I see myself going to Ted Brewer or

Dave Gerr for a fleet custom monohull. Karen has been smitten with the Ian Farrier F-27 for many years.

This hobby is woven almost completely of emotions supported by a framework of sound engineering, design, and manufacturing. If it's possible to be reasonably rational in selecting a boat for yourself, perhaps you should start with what you want to do, where you want to go, and a target budget. Then look at any boat with a head, galley, and bunks. Choose the number of hulls last.



by Jerry Powlas

Classic devotion

I especially enjoyed Reese Palley's article, "Classic American Sailboats" (*May 2000 issue*). For many years my business partner and I have consulted on marketing strategies and communications for many boatbuilders and marine equipment makers. Our consulting includes interviewing boatowners and prospective buyers on their likes and dislikes of select boats and builders. We had the pleasure of consulting to Lee Cherubini and his dad. We spoke with most of the Cherubini owners and many prospective buyers. The loyalty and pride of ownership among Cherubini owners consistently surpassed that of other yacht-builders. And prospective buyers seemed to suggest a willingness "to give up everything" to own a Cherubini — even in the midst of the luxury-tax days. Despite the rapid popularity in lighter, faster production and semi-custom sailboats during the past 20 years, the high devotion to a boat and its builder, such as Cherubini, seems to remain most prevalent within the classic boat market segment.

Neil Smith
Cambridge, Mass.

Charcoal in the bilge

I wrote earlier this year to request help for cleaning my bilges. Ours are remote, and were coated with a black goo. Jerry (Good Old Boat *technical editor*) sent some wonderful suggestions which I followed. I am happy to report that the problem seems to be cured! Simple Green was a big help, as it did seem to attack the goo. I also used spray Gunk which helped with the heavier deposits.

Permanent corrections: 1) The fuel tank vented diesel directly into the bilge. Fixed. 2) The shower drained directly into the bilge, apparently common on European boats of the early 1970s. I added an enclosed shower sump with its own sump pump. 3) I can't say enough about the benefits of a bilge drainplug which was installed at the lowest point in the bilge. This facilitated rinsing the bilge and also allowed for good drying out over the winter.

Regarding charcoal as an odor absorber, I used regular charcoal briquets in plastic bags — the kind with a heavy netting. This worked, but I made the mistake of filling the bags while on the boat. A lot of charcoal dust got on my cabin sole. However, the odor was greatly diminished!

Then, I read Tom Medin's suggestion in the May 2000 issue to use fish tank



A Rappahannock River (Virginia) regatta featuring sailboats designed before 1975 welcomes you Oct. 14-15. 100-150 participants. Info: 804-462-7018, kenandkaren@yankeepointmarina.com.

charcoal. I had never heard of it, but my local pet store carries it in bulk, along with an assortment of net bags. I tried it and am pleased with it so far. Actually, I placed a bag in the head since the bilges are no longer offensive. The head has all new hoses and a new holding tank, so I am hoping the activated charcoal will help keep it smelling sweet all summer. Rinsing the activated charcoal after filling the filter bag eliminated the dust before I brought it onto the boat. Thanks to you all for the help!

Steve Edmondson
Cape Elizabeth, Maine

About that R boat

The article about Ray Greene (*May 2000 issue*) caught my eye. I know where a New Horizons 26 is for sale; it's been on the hard for at least four years. I've thought of buying it just to restore and have the first S&S design in glass.

The R boat in the article belonged to my father's cousin. Art's last name is correctly spelled Shomer; my dad says Schulmer is a common misspelling. My dad, orphaned at an

early age, was raised by Art's father, P.J. The Shomers were members of the Cleveland Yachting Club. I believe the pictures were taken at CYC. Art was a notoriously fierce competitor in the R-boat fleet in the 1950s and early 1960s. When the glass hull was equipped with all the hardware, Art had the bow and transom of the old wooden hull made into plaques, which hung in his office. Art's

boat is *Poppinjack*. Lee Wilson's boat is *Cotton Blossom*. The last time I was at CYC, both boats were still sailing and racing. I'm inspired to go check on them again, as they're not far from my home.

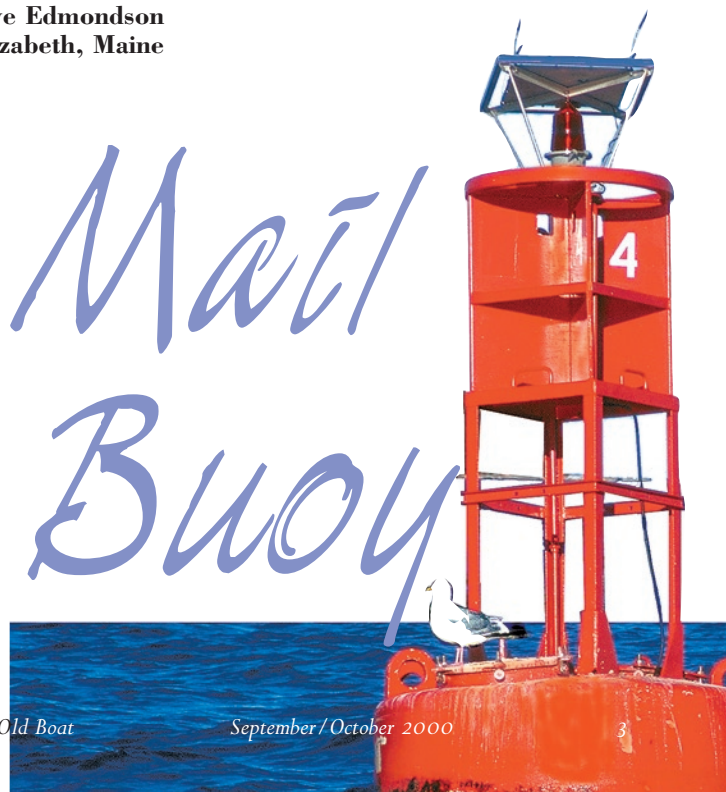
Second, my first sailboat was a West Wight Potter 15, #1723, which I bought in 1988. I sailed on some inland lakes in Missouri and Iowa and then brought it north to Ohio that fall. I sailed on Lake Erie with it, including an epic cruise from Rocky River to Sandusky, where my dad and I encountered 8-foot waves. The Potter handled beautifully.

Jon Paulus
Parma, Ohio

Bristol Bronze

We wanted to let you know how thrilled we were at the articles on Bristol Bronze (*May 2000*). It's difficult to find information on marine metals; what a fabulous resource. Being southern (hot and humid!) and coastal (salt!) sailors, we are constantly battling rust on our 1975

Continued on 64



Westsail the



Adagio, John Geisheker's Westsail 32 dances on Lake Superior's ice cold water before her move to Seattle's Lake Union. John and partner Michaelle Wetteland sewed her sails themselves using Sailrite kits and acres of tables in a company cafeteria.

World

FROM AFAR, IN HER ELEMENT, THE WESTSAIL 32 IS THE STUFF romantic dreams are made of. Her mast is tall, her bowsprit long. A wooden tiller sweeps gracefully over a pointed stern, and a deep gunwale forms a beautifully curved sheerline that runs unbroken from the bows to just aft of the cockpit.

But as you get closer you begin to realize that there's brawn behind this beauty. The Westsail 32 is a massive boat in many ways. At 20,000 pounds displacement, 7,000 pounds of it in her keel, she is probably the biggest 32-footer afloat. Her fittings are huge. Her decks are wide. Her topsides are high.

Compared with other boats of her vintage, going below on a Westsail 32 is like entering a cathedral. Her 11-foot beam and 27-foot waterline was enormous for a 32-footer in the early 1970s when she was born. Here, against all the odds, was a boat big enough to swing a cat in, a mini studio apartment floating on the water, and one that could help you escape to the places you'd read about, romantic-sounding destinations such as Bora-Bora, the Galápagos, even Cape Horn itself.

The fact that the Westsail 32 could also be purchased as a kit, completed to various stages, helped fuel a frenzy of escapism in America. In the mid-1970s, demand for this boat was so great that the factory couldn't supply ready buyers with one for 18 months. Between 1971, when it all began, and 1981, when the production run ended, about 1,100 Westsail 32s were launched. Almost all are still afloat, and almost all are increasing in value.

Bud Taplin, first general manager of the builders, Westsail Corporation, figures that the increase has been 3 to 5 percent every year for the past five years. Talk Westsail 32, and you're talking \$50,000.

"Westsail boats are one of the few lines that are worth as much now — or more, at 15 to 20 years old — as they were new during the 1970s," he claims.

Bud is the man Westsail 32 owners turn to when they need help or advice. His Worldcruiser company offers a wide variety of services, including spare parts, instruction manuals, service manuals, and original plans.

The brawny Westsail 32 came along at just the right time to tap into a huge pent-up demand for a solid, seaworthy boat built of maintenance-free fiberglass, and her sterling qualities have kept her in constant demand ever since.

Basic design

The origins of the Westsail 32 are clearly Scandinavian. Bill Crealock, who had a hand in the design of the earliest models, believes the basic hull was a William Atkin design, greatly influenced by Colin Archer's larger Norwegian sea-rescue ketches of 70 years before.

Indeed, in his book *Of Yachts and Men* (Sheridan House, 1984), William Atkin features a gaff-rigged ketch called *Freya* which has the exact dimensions of the Westsail 32. *Freya* was, in fact, a 47-foot Colin Archer scaled down to 32



Chicago makes a fine backdrop for Russ Oldfather's Elohsa Repus. This name has a long story and is a "backward spelling," as his partner Judie McGlinchey explains tactfully.

feet by Atkin, Art Hildebrand, and William Washburn Nutting, former managing editor of the magazine *Motor Boat*.

The Westsail 32 has a long, full keel with no pretense of a cutaway up forward. She's a double-ender with a lifeboat stern and an outboard rudder. She's beamy and high-sided and has a long bowsprit from which to set a lot of sail. She needs it. She's about the heaviest 32-footer afloat.

The hull is solid fiberglass, laid up by hand, while the deck and the long, low cabintop are made of plywood-cored fiberglass. The first 30 or so hulls were finished with a Crealock-designed flush deck and interior, but when Snyder Vick acquired the molds in 1971 he added a trunk cabin for extra light and headroom.

Almost half of the hulls produced were sold for home finishing in kit form. You'd think this would lead to a wild array of different interiors, but in fact choices were limited by the components provided, so most 32s ended up looking pretty much alike down below. The differences are mainly in the quality of the joinerwork and the quality of the fittings. Many amateur-built boats are as good as the factory-built boats, if not better, but some, naturally, fall short even of average. You can tell which boats were home-built by checking the hull identification plates. If the ID number contains the letters WSSK, the hull was sold to be finished as a kit; if it contains the letters WSSF, it was factory-finished. Incidentally, Westsail 32s were produced on both the East Coast and the West Coast.

Her keel is 5 feet deep for almost the full length of the boat, which adds up to a very large underwater area of resistance. The 7,000 pounds of ballast, originally a mixture of lead pigs and steel punchings, is contained within the hull. From 1975 onward, the ballast was a solid casting of lead.

The decks are spacious, making for easy movement fore and aft, even with bulky sailbags in tow. The cockpit is tiny and exposed, little more than a footwell with 9-inch coamings on two sides, but it does have a substantial bridgedeck to separate it from the main companionway. It's an extremely seaworthy cockpit, of course, but it offers about as much

by John Vigor

Jeff and Julie Mack write of Oo-La-La, their Westsail 32, “She is a prime example of a W32 with a homebuilt interior finished to factory specs. She is finished inside in African ribbon mahogany. On the outside, she is nothing but fantastic.”

Oo-La-La also has a rather unusual custom foam core and fiberglass hardtop. Of this, Jeff notes, “It is supported by aluminum tubing and is stiff enough to crawl around on.”



comfort and protection from the elements as does a bicycle in a hailstorm. If you approve of hair coats and self-flagellation, you'll like this cockpit. If not, you'll want to invest in a large dodger.

A choice of engines was offered, the three most popular being the Volvo Penta MD2, the Volvo MD3, and the Perkins 4-107. The MD2 is not a good match for this boat. It's just too weak in the knees. The MD3 has a little more muscle, but the Perkins is the workhorse that gets the job done when the chips are down.

Accommodations

In a boat with a cavernous interior like this one, you've pretty much got room for all the necessities of life, with a few luxuries thrown in. In comparison with other boats of its length, everything down below on the Westsail 32 is huge. If you want to become a liveaboard, and can afford only a 32-footer, this is the one to choose.

Just aft of the generous chain locker in the bow is a wide, very wide, V-berth. It's actually a giant double berth to port and a fat single to starboard, very suitable for a seagoing ménage à trois.

Aft of this sleeping cabin there's a bathroom to port with a hand basin and storage for linen, while to starboard there is a bureau. A hanging locker with bedding storage is outboard of the bureau.

A door in the main bulkhead leads through to the main saloon, where there are four additional berths: a double to port, formed by dropping the dinette table, and a transom berth with an outboard pilot berth to starboard. All very suitable for an additional ménage à quatre, of course, except that crossing an ocean cheek-by-jowl with seven people on a 32-footer, even one of this size, is apt to spawn the wrong kind of emotions, certainly not those of the cordial type.

Another hanging locker for wet oilskins is opposite the large galley, and a proper navigation den to starboard has a chart table big enough to bring tears of joy to any navigator's eyes.

After all this profligate use of space, there's precious little room left for a cockpit, and neither (luckily) is there a quarterberth.

The rig

The deckstepped mast and the 16-foot boom are made of aluminum painted with linear polyurethane. Most of the masts were made by LeFiell, while others were supplied by Sparcraft, Superspar, and Royal Marine.

She's a masthead cutter with a sail area of about 630 square feet, 300 of which is in the mainsail, 150 in the staysail, and 180 in the jib.

The original rig had one forestay and one jibstay. A single backstay ended on a small boomkin outboard of the rudder head. The mast had a single set of spreaders, with a topmast shroud and sets of forward lowers and after lowers on each side.

It's a strong and conservative rig, although not particularly closewinded because the shrouds, fastened to outboard chainplates at one of the beamiest parts of the hull, preclude narrow sheeting angles for the headsails. No matter, she needs the added drive anyhow.

The mainsail will normally have jiffy reefing with three reef points, and the large, fairly flat cabintop provides a roomy, stable working platform for the crew doing the reefing at the mast.

Performance

Ah yes, performance. Despite her racing successes, there are many people who give the Westsail 32 poor marks for performance. *Practical Sailor*, for example, claims “its performance is mediocre, even offshore” and adds: “It can be wet to sail and clumsy under power.”

On the other hand, the Northern California PHRF rating list gives the Westsail 32 a rating of 216, which means her performance under sail is certainly nowhere near disgraceful. It gives her the same speed as Gary Mull’s Ranger 23 and the Downeast 38 cutter. It makes her much faster than a Folkboat, at 234. Furthermore, Westsail 32s often surprise fellow competitors by doing very well in ocean races. One has even won the Pacific Cup outright on handicap, as noted under the heading “Owner’s opinion.”

The point here is that this hull does not reach its maximum speed quickly. She’s not a fast-accelerating boat, responding quickly to every puff, so she will fare poorly on an Olympic course around the buoys. But her waterline length of 27 feet 6 inches gives her a theoretical top speed of more than 7 knots and, even if she normally reaches only 90 percent of that speed, she’s going to be sailing faster than most other 32-footers with shorter waterlines. That’s why she does well on long passages, where it’s not maximum speed that counts, but sustained high average speeds.

As for her being clumsy under power, she’s only as clumsy as the person at the helm. There are ways to maneuver a heavy-displacement boat like this in confined areas, but they require the skill that comes of good seamanship, practice, and familiarity with the capabilities of the boat and her engine. To describe her as clumsy is really to expose one’s own limitations.

This, incidentally, is not a paean in praise of the Westsail 32’s maneuverability. It’s merely a plea for fair play. Compared with a fin-keeler, she takes more careful handling, just as a school bus does when compared with a family minivan. Nobody calls a school bus clumsy. Like the Westsail 32, it’s just built to do a different job.

Known weaknesses

Watch out for:

- Low-powered engines. She needs a very hefty shove against high winds and seas.
- Leaky toerails.
- Rot in the bowsprit, Sampson post, boomkin, plywood deck, and cabintop core. Check the rudder cheeks for rot also, but it’s not a structural weakness because the load is taken by a metal fitting underneath.
- Osmotic blistering. Some Westsails have blistered, but usually not badly.
- Check the swaged ends on the standing rigging for hairline cracks or corrosion.
- If it hasn’t been done recently, recaulk all the deck hardware.

Owner’s opinion

David King of Portland, Oregon, has owned two Westsail 32s in a period of 23 years. He is a professional delivery skipper who also works on boats. He has had his present boat, *Saraband*, for 11 years.

In 1988, in *Saraband*, he won the prestigious Pacific Cup race from San Francisco to Oahu, Hawaii. *Saraband*, a stock

Russ Oldfather’s Elohssa Repus, at top, and the Macks’ Oo-La-La, at center, show comfortable all-wood interiors. Elohssa Repus’ deck at bottom.



In short

Westsail 32

Designer: William Atkin/
W. I. B. Crealock

LOA: 32 feet 0 inches

LWL: 27 feet 6 inches

Beam: 11 feet 0 inches

Draft: 5 feet 0 inches

Displacement: 20,000 pounds

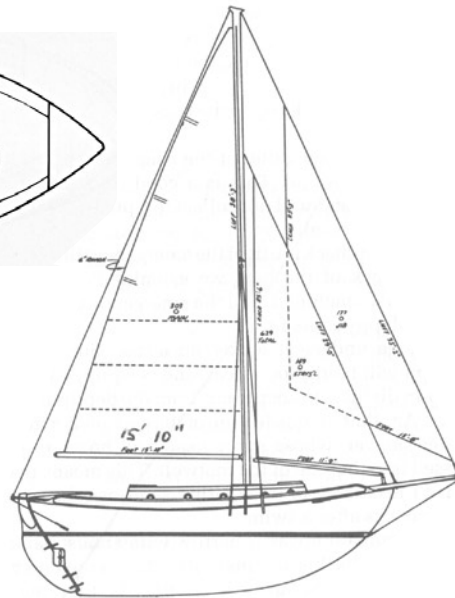
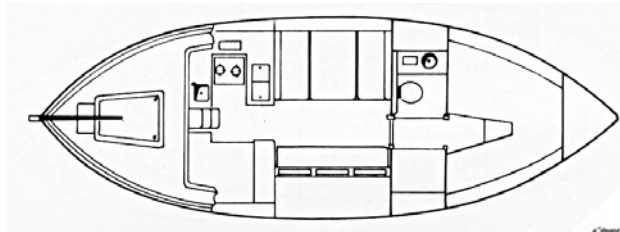
Sail area: 663 square feet

Ballast: Encapsulated, 7,000 pounds

Spars: Aluminum

Auxiliary: Diesel

Designed as: Roomy, rugged world cruiser



In comparison

- Safety-at-sea factor: 8 (Rated out of 10, with 10 being the safest.)
- Speed rating: Not as slow as some people think. PHRF rating 216.
- Ocean comfort level: Four adults in reasonable comfort.

Westsail 32, came first in class and won first place overall on handicap.

Naturally, there was an uproar, especially among the owners of larger racing boats commissioned at huge expense and carrying trained racing crews. There was not a single racer in *Saraband's* crew of five, although all were experienced cruisers.

In 1990 King decided it was his duty to show the racing world that the Westsail 32's success had not been a one-time fluke. He entered *Saraband* for the Pacific Cup again, and this time she was first in her class to finish and first in her class on handicap. She came third overall on handicap.

Three protests were handed in, and all three failed. One protest charged that *Saraband's* spinnaker was too large. When it was measured it was found to be a 168 percent spinnaker, rather than the 180 percent spinnaker the rules allowed.

What was the secret of *Saraband's* success?

"Most Westsails suffer from having to drag a big three-bladed propeller through the water," King said. "We have a Max-Prop automatic feathering propeller, and it makes a big difference. *Saraband* gets up to 7 knots pretty quickly."

She sustains her speed well, too. She has sailed more than 180 miles in 24 hours on three occasions, two while racing and one during a singlehanded passage. "I did 184 miles all by myself one day," he said.

Saraband experiences a little weather helm as she heels over, "but it's never excessive," he added. "She's always

under control."

If the wind rises while his cutter's on a beat, the first action King takes is to reduce the size of the genoa jib. "I reef it down to the size of a working jib," he explained. "The next step, if the wind continues to rise, is to tuck a reef into the mainsail. Next in order is a second reef in the main, after which I'd drop the jib completely. Now, under double-reefed main and working staysail, she's good for 40-knots-plus."

Westsails are often criticized for not being able to beat.

"That's a huge exaggeration," King said. "It's just not so. She goes to windward at the speed of a 29-foot or 30-foot boat. OK, that's not so good because she's a 32-footer, but it's not terribly bad either because most 30-footers are half her displacement and don't have her comfort or seaworthiness."

King and his wife once sailed *Saraband* from Palmyra to Hawaii, a passage of about 1,000 miles, in "reinforced trades" and averaged 110 miles a day on a hard beat.

"Compared with other boats, she goes best on a close reach," he said. "In fact, it's very interesting that she goes from her comparative worst (the beat) to her comparative best (the close reach) in a matter of a few degrees."

King said he couldn't recall either of his boats having any structural problems. "Nothing stands out. I did know of one boat where the mast compression post tended to impale the cabintop, but Bud Taplin worked out a quick and easy solution by fastening bolts through the coaming to the main bulkhead."

Resources for Westsail sailors

Westsail Owners' Association

Eileen Oelschlager

5701 Forest Road

Cheverly, MD 20785

woax@erols.com

<<http://www.erols.com/woax>>

Webmaster is Rick Kennerly nh2f@abs.net

This group produces a nice bimonthly newsletter — *Windblown*.

Worldcruiser Yacht Company

Bud Taplin

898 W. 16th. St.

Newport Beach, CA 92663

714-549-9331

800-310-WORLD

Fax 949-631-0313

btaplin@westsail.com

<<http://www.westsail.com/>>

Bud was the first general manager with Westsail Corporation and now is a supplier of Westsail parts and gear.


Conclusion

This is a serious world cruiser, a rugged example of a traditional design that excelled in everyday conditions in Northern European waters in the days of sailing workboats.

She is roomy, exceptionally so for a 32-footer, and performs safely and adequately, sometimes brilliantly.

At \$50,000 she is not the cheapest used 32-footer around (nor, by a long chalk, the most expensive) but she does offer good value for money and — significantly — seems to maintain that value indefinitely. There are times when boat values rise and fall *en bloc* — witness the sudden plunge of the early 1990s, for example — but the Westsail always appears to bounce back.

A few people, particularly singlehanders, might find this boat a little bulky sometimes, a lot of hard work for one person to handle and maintain, but most adventurers have no need to be intimidated by her size, which shrinks with familiarity.

There is no sign, even after nearly three decades, that the Westsail 32's strong appeal to would-be world cruisers will wane any time soon. 



John Vigor is a professional journalist. The author of The Practical Mariner's Book of Knowledge, The Sailor's Assistant, and The Seaworthy Offshore Sailboat, he has worked for major newspapers around the world and is a frequent contributor to leading sailing magazines. He has sailed for more than 40 years in boats 11 to 40 feet in length and logged some 15,000 miles of ocean voyaging. In 1987 he and his wife, June, and their 17-year-old-son sailed their 31-foot sloop from South Africa to the U.S. This series of boat reviews is based on articles from John's book: Twenty Small Sailboats to Take You Anywhere, which is available from The Good Old Bookshelf (see Page 63 for more information).

An owner's view of the W32

by John Geisheker

ONCE KNEW A LADY WHO COLLECTED DOLLS OBSESSIVELY AT age 80 because she failed to get one for Christmas at age 5. I bought my Westsail 32, *Adagio*, seven years ago solely because the "Westsail the World" brochure hung like a taunt on my office wall while college, children, grad school, and work sped by.

The W32 is the Humvee of any marina: old-fashioned lifeboat lines, high bulwarks, massively over-built, the look of indestructibility. With something like 200 ounces of glass in every square yard, it has one of the hardest lay-up schedules in the fiberglass boat world, creating a hull that could withstand, it is said, decades of osmosis. (In one famous anecdote, a W32 took a week's pounding on a coral reef, only to be sailed off dry.) Unfortunately, the resulting 10 tons must be lugged around for the boat's life, a combination of armor plate and millstone.

This weight and a full keel create an ultra-heavy displacement-to-length ratio of 418 and give the W32 the feel underway of a mini tall-ship, rather than the sports car handiness of a more modern fin-keeler. Luckily, the motion is easy on the queasy. The hull is so rigid that even in a breeze there are no Hollywood Foley machine sounds of wracking bulkheads and torquing deck.

The reassuring motion offshore is purchased at a frightening cost in harbors, however. Maneuvering awkwardly in any confined space, she wields that long bowsprit like a weighted centerpunch. This is a boat meant to travel, rather than frolic in harbor or club race — or dock.


So naturally, on 15 minutes notice, I sail this ocean behemoth for an hour or two, quite content, on a freshwater lake in downtown Seattle barely one mile long. Thirty seconds clear of the slip, both furling headsails are drawing, and we ghost on fluky winds glancing off skyscrapers. I tack a lot.

Contrary to the rumor that W32s need a gale even to stir, mine sails best, all plain (and home-sewn) sail, in 14 knots of wind. She must be reefed at 18 knots of wind. Lots of fin-keel cruisers can stand up to their sail area better than that. This bottom-of-the-wind-scale performance is partly explained by the large sail area for her length. *Adagio* carries a 40-foot boat's sail area of 800 square feet on a 27.5-foot waterline, 500 square feet forward of the mast. (Owners who upgrade find that larger headsails and short-

foot mains set to leeward balance the famously wearisome weather helm.) And the W32 has less ballast than you might guess: at 7,000 pounds, only 30 percent of total provisioned weight.

Below decks there is storage for everything except people, though the W32 is a popular liveaboard boat. Like a Victorian home, the stock boats designed for long-range voyaging had way too much "furniture" and even when alone, I find myself occasionally daydreaming of pushing everything back a foot on each side. Fortunately it's nice furniture, if dated; barely a hint of fiberglass and much 2-inch Burmese teak (now unaffordable by mortals). The many lockers — I was still finding more in my second season — when filled, do keep the below-decks quiet in a marina.

I have sailed her alone in winds above 50 knots, worrying only about captain mishaps, not structural failure, and logged a few 150-mile days (also alone), a tolerable mid-pack average of 6 knots. The foamy wake is a sure sign there is no rocketship potential here. And I've found that with a bluff entry, full midsections, and slack bilges aft, W32s "porpoise" atrociously in a steep chop and must tack through head seas when motoring.

But at \$45 grand or so — like hamburger, \$2.25 per pound — and for all their faults and lack of modernity, W32s are still a lot of cruising boat. Much sought after and easily re-sold, the 800-plus hulls are unlikely to disappear anytime soon and will continue to be a familiar sight in marinas all over the planet. 



*After stints in the U.S. merchant marine and careers as an English teacher and maritime lawyer, New Zealand native John Geisheker now directs Sailboats Inc. Sailing School, in Superior, Wis. When he is not teaching on the Great Lakes, delivering boats, or visiting his native land, he lives on his Westsail 32 on Lake Union in downtown Seattle and sails Puget Sound. He has sailed the Great Lakes since 1967 and has taught sailing and cruising, as the expression goes, "man and boy these 30 years." *Adagio*, his WS32, is shown on Page 4.*

Oh, for a cruising

You're thirsting for a cruising catamaran. You just came back from the boat show, and you're in love. You've made the decision that, for your purposes, the many sterling advantages of a cruising catamaran outweigh the few disadvantages.

Unfortunately, most of what you saw was beyond your budget. Not to

worry; there is an ever-increasing "pre-owned" market, and you might just find the catamaran of your dreams there. Let's explore that used market, specifically the catamarans beyond 10 years old, and see which boats are enduring, which meet your needs, and perhaps even which to avoid.

A thumbnail history

The prosperity of the 1950s, coupled with the new materials and building techniques developed during World War II, launched the current pleasure boat industry, and catamaran cruising sailboats have been a part of the market and the industry since that time.

Most of the catamaran-building frenzy of the early period took place in England, led by stalwarts like visionary James Wharram. Wharram reintroduced the traditional sailing vessels of the Polynesians who colonized the Pacific a thousand years before the United Kingdom even had an ocean sailing ship.

Sailors who were businessmen began production of what have become some of our most enduring cruising yachts. Legendary designer Rod Macalpine-Downie and Tornado sailor Reg White built the Sailcraft line of catamarans: Iroquois, Comanche, Cherokee, Apache, and Arapaho. Tony Smith, producer of the modern Gemini, began his meteoric career with the TelStar folding trimaran. Tom Lack produced the 8-, 9-, 10-, and 12-meter

Catalacs (Catalac being an acronym of: Cat of Lack). The Prout brothers, who began building around 1950, without doubt produced the most varied line of catamarans: the Sirocco, Ranger, Quest, Snowgoose, Quasar, and many others. There are also the high-quality vessels

built by Solaris Yachts.

These notables, along with many others, sparked the formation of the Amateur Yacht

Research Society. It's interesting to note that the British have an extremely high regard for the American Indians and thus named many of their catamaran vessels after various tribes as a way of honoring them.

Escapist movement

On our side of the pond, the 1960s brought about a decade of social unrest and change. In the yachting world, this resulted in a great escapist movement led by Arthur Piver, Jim Brown, and others. This movement was centered in southern California and gave rise to such concepts as "seasteading," where persons on their floating homes could live entirely off the sea and be free from the increasingly restrictive confines imposed by governments.

"I suggest that those purchasing used catamarans or sport trimarans can look forward to an era of increasing value . . ."

Although there was some merit in these ideals and the trimaran technology they proffered, the movement created a certain disdain among establishment types which has continued to color the development and acceptance of multihull technology in the United States until the present era. Therefore, except for the early-model Geminis and Telstars, the used market of vessels 10 years old or older is almost entirely British.

It took the French and their world view of chartering to bring the virtues of catamaran technology to the general public. In the 1980s the French government, in a pact with the labor unions and manufacturers, embarked upon a bold course of designing, producing, and spreading to the world at large a fleet of charter yachts the likes of which had never been seen.

Beginning with aesthetics, these boats revolutionized the sailing world. Completely rejected were the old aesthetic values of low freeboard and graceful sheer. This new breed of cat looked far more like a rocket ship from Star Wars than a sailing ship from history. The public loved it. Within two decades, French-built and French-styled catamarans dominated the charter industry worldwide.

The state of the market

The state of the market is healthy. Based upon past demand trends, I suggest that those purchasing used catamarans or sport trimarans can look forward to an era of increasing value and/or low depreciation. Of course, maintenance is critical. As with junk cars, junk vessels are always available someplace.

Prices— It's difficult to get reliable pricing data from traditional sources such as BUC, NADA, or ABOS. First, many sales take place privately. Next, few sales are reported to those sources. Finally, a large part of the connections are made outside the traditional marketplace through publications such as

MULTIHULLS magazine and through brokerages such as 2Hulls in Ft. Lauderdale, Fla., and Patrick Boyd in England.

The demand side— The demand side of the market is rising. Prices of older catamarans are not likely to ease off in the foreseeable future. Take, for instance, the ever-popular Hironnelle 24. I purchased Hironnelle hull #51 in 1971. I

multihull!

paid \$9,500, which included an engine, sails, and spinnaker gear. Today these boats sell for as much as \$17,000. I almost bought an Iroquois 30 that year instead of the Hironnelle. It was \$15,000 including engine and sails. Now they sell for as much as \$40,000. Prout catamarans are a better story yet, sporting above-average resale prices.

The supply side— There are two distinct groups of cruising multihulls: the trimarans and the catamarans. Catamarans can be broken into several groups according to their countries of origin and whether or not they were custom-built. These groups are further subdivided into racing boats, charter boats, and private boats. You may also distinguish between those designed for southern waters and those designed for the north. Of catamarans 10 years old or older, it's my observation that the best built are British, Canadian, and American, in that order.

The best of the 1980s

Prout— This is a sea-going tank, designed to brave the storms of the North Atlantic. It's the most ubiquitous of catamaran sailboats. It's doubtful that there is a port anywhere in the world without at least one Prout catamaran. Prout claims some 2,000 vessels launched by 1990. The early models were the Shearwater in 1954; the Flamingo in 1955; then the Ranger 27 and 30, followed by the Snowgoose 34, which was upgraded to the Snowgoose 35, and then to the Snowgoose 37. In the late 1970s, the Sirocco 26, Quest 31, Quest 33CS, Event 34, Escalade 39, and Quasar 50 were introduced. Those are the vessels most likely to be found in the United States. There is also an entire fleet of custom and semi-custom boats built by Prout but owner-finished. These occasionally wind up on the market.

Prices will range from \$45,000 upward for the smallest, oldest models.

Sailcraft— The Sailcraft boats consist of the Iroquois, Comanche, Cherokee, Apache, and Arapaho. Of those, the



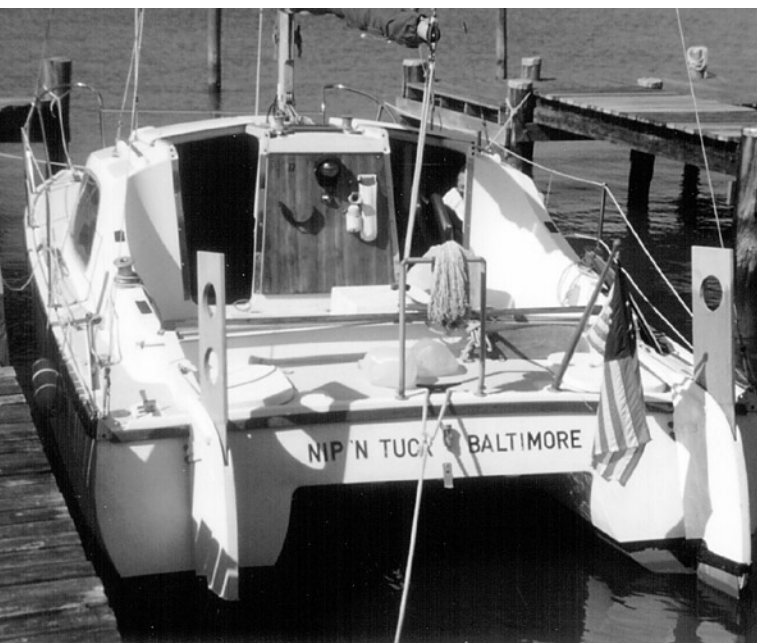
A Catalac 27 sets out to sea.

Chuck Kanter explores the world of older catamarans and trimarans. His conclusion? It's thriving

Iroquois and the Cherokee are the most popular in the United States, although others can be found on the market. Recent prices of Cherokees range from \$60,000 to \$99,000. There is wide variation in prices, depending upon condition.

Catalac— Catalac might be considered the “Energizer bunny” of catamarans. They just keep going and going. The original issue in the early

1970s was the Catalac 9-Meter (30). This diminutive 30-foot by 14-foot vessel still has, in my opinion, the best layout for a cruising boat. That opinion is backed by an astonishingly high resale value. Introduced only slightly later, the Catalac 8-Meter (27) was built in the same bottom mold but with a different deck mold and interior. Toward the end of the decade came the Catalac 12-Meter (41) and the Catalac 10-Meter (34).



The Sailcraft Apache 45, at top, and a Hironde 24, above, the only boat in this size range with standing headroom.

Catalac 27s occasionally sell in the high \$20,000s, low \$30,000s. A fully equipped twin-screw diesel 27 sold recently in the \$70,000-range. There is one twin-diesel Catalac 30 with three Atlantic crossings to its credit now for sale for \$45,000. The larger ones are proportionately higher.

Gemini— This one's in a class by itself. It is far and away the most popular and best-selling cruising catamaran; sort of the Volkswagen of catamarans. The builder claims: "It is the most cruising boat you can get for the money." <<http://www.gemini-catamarans.com>>. Based on my knowledge of the industry and experience in surveying

them, that's true no matter how many hulls the vessel has. However, you most assuredly cannot buy premium quality for a bargain price. Consider the differences between a Chevrolet and a Cadillac, and you will have the differences between Gemini and some of the more expensive cats.

Prices vary widely. Occasionally you may find a distress case or a poorly equipped Gemini in the mid \$30,000s. However, most fetch considerably more. A well-maintained and equipped Gemini in good shape will hover close to its original selling price.

Hirondelle 24—

As previously mentioned, do not expect any real bargains for these boats, not even with boats in poor condition. The Hirondelles are extremely popular, as they are the only

boat in that size range that has full standing headroom in the galley and head, a queen-size berth, and two double berths, plus a big cockpit, daggerboards, and a 13-inch draft.

Former charter boats

If you're thinking of buying an ex-charter boat to get the largest boat for the fewest

dollars, consider the following:

Condition— A very high percentage of retiring charter boats need a complete overhaul, including expensive items like engines, sails, trampolines, and interiors.

Location— Most of the bargain boats will be in remote locations, adding to the cost of surveying (never buy a boat without having your own surveyor look at it), transportation, inspection, outfitting for return to your home port, delivery, and so on.

Equipment— Most charter boats have the bare minimum of equipment such as anchors, storm sails, and electronics. In addition, the European electrical systems are two-wire, 220-volt, 50 cycles, while our essential AC electrical systems are three-wire, 110-volt, 60 cycles. Major refit work is required to make European boats usable at U.S. docks and marinas.

Aft steering stations— This affectation may play well in Europe, where they separate the proletariat crew from the aristocratic charter clientele, but on a personal cruising vessel nothing could be more distracting from safe and secure cruising. Visibility from the helm on these vessels varies from very poor to atrocious. Especially to be avoided are boats like the Dufour 39, where you actually steer from the top of the transom with no real seat and only a little thin wire between you and eternity.

The other side of the world

Australia and New Zealand have been building catamarans almost as long as the British. They are decades ahead of the Americans in their development. A few units have shown up on our markets, but the cost of transportation is a serious impediment. I note Australian power cats being used by U.S. Customs officials. For those intrepid folks looking for a real challenge, Australia is a good place to shop for a catamaran. That is especially true right now with a strong U.S. dollar and a very favorable exchange rate. Check Terry Travers (ttravers@tpgi.com.au) and his Web site,

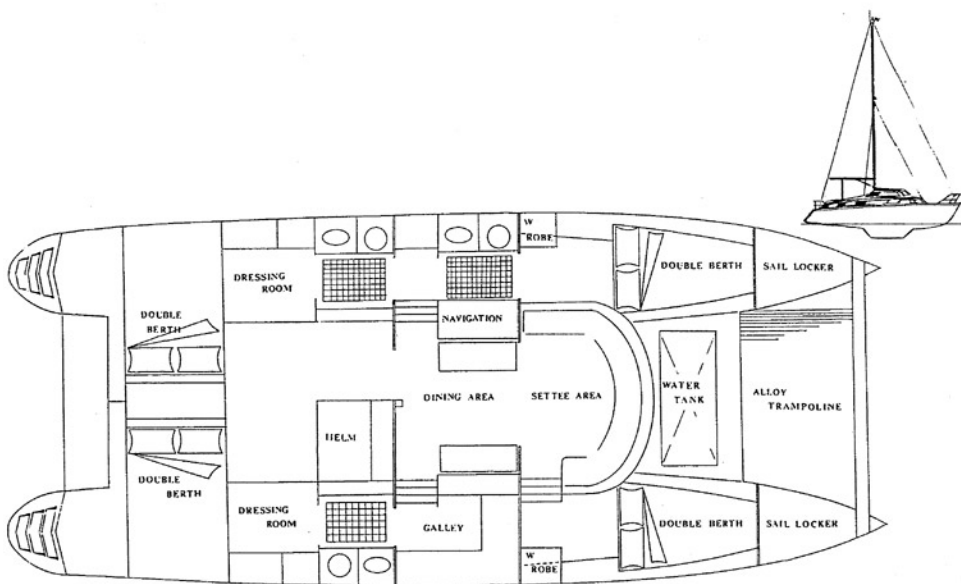
<<http://www.insidemultihulls.com.au>>, for an inside track to the Australian market. In New Zealand, contact Malcolm Tennant (malcolm@tennantdesign.co.nz) and his Web site <<http://www.tennantdesign.co.nz>>.

“Australia and New Zealand have been building catamarans almost as long as the British. They are decades ahead of the Americans.”

Custom-built boats

Custom-built boats will have the least resale value. That applies to all boats, no matter how many hulls they have. Therefore, good bargains may abound among them. Your best ally in a search of this kind is your surveyor who should have familiarity with the construction method, materials, designer, and design intent. Be ready to accept lower prices when you sell.

Wharram— In a class by themselves are the Polynesian catamarans of James Wharram. Virtually entirely homebuilt, they represent a large segment of the multihull cruising community. They are inexpensive, seaworthy, and very basic. They range in size from 21 feet to 51 feet. There are no bridgedeck cabins on designs built to Wharram's specifications, and therefore no luxury amenities associated with modern production cruising catamarans. It's hard to collect real data, but I suspect if catamaran circumnavigations could be tallied,



The Solaris 37

Wharram would show more than all others combined.

History of repair

High-maintenance items— These include the trampolines and forward cross-beams. The catamarans with the lowest overall maintenance and repair histories will be fully decked over, with no forward cross-beam or trampoline, and auxiliary powered by outboard engines. Next would be fully decked-over cats with a diesel engine and sonic drive leg; for instance, most Prouts and some newer Geminis. However, the sonic drive leg itself can be a chronic problem if it's not properly maintained.

Marginal construction— Many of the French-built boats have marginal scantlings and are plagued with breakages, delamination, window leakage, equipment failure, and poor service records.

Blister— The history of blistering in catamarans is roughly parallel to that of all other fiberglass boats. However, those in search of bargains may find them in blistered boats. Good surveyors, who understand the problems and potentials, are your allies.

Design considerations

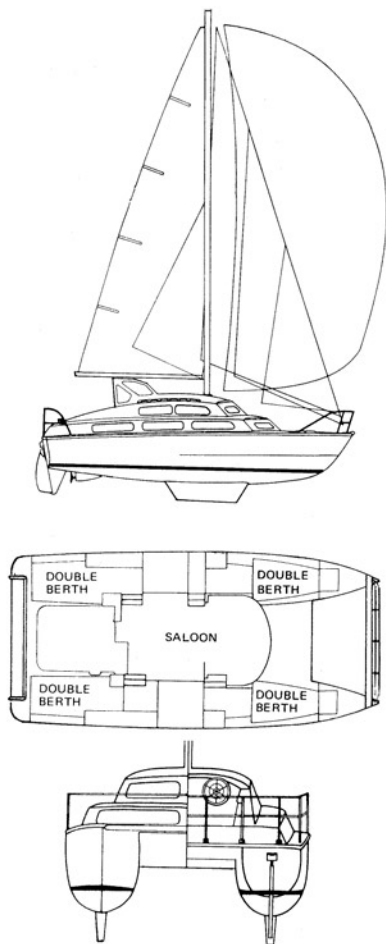
In the early days of construction, for a host of reasons, stainless steel was not universally used. Therefore, certain major structural and operating

components of many of the vessels were built of mild steel. For instance, the Prout tiller system used automotive tie-rod ends as connectors. Catalac used steel for tillers, tiller bars, and emergency tiller sockets. Sailcraft used steel main beams and chainplate bases. In vessels that have been properly maintained, this has not been a problem. Many of the vessels have had these components changed over the years as new materials and techniques were developed.

As is the technology today, most decks were balsa cored. However, the catamaran industry was far ahead of the curve in the use of new materials and foam cores. It is not at all unusual in

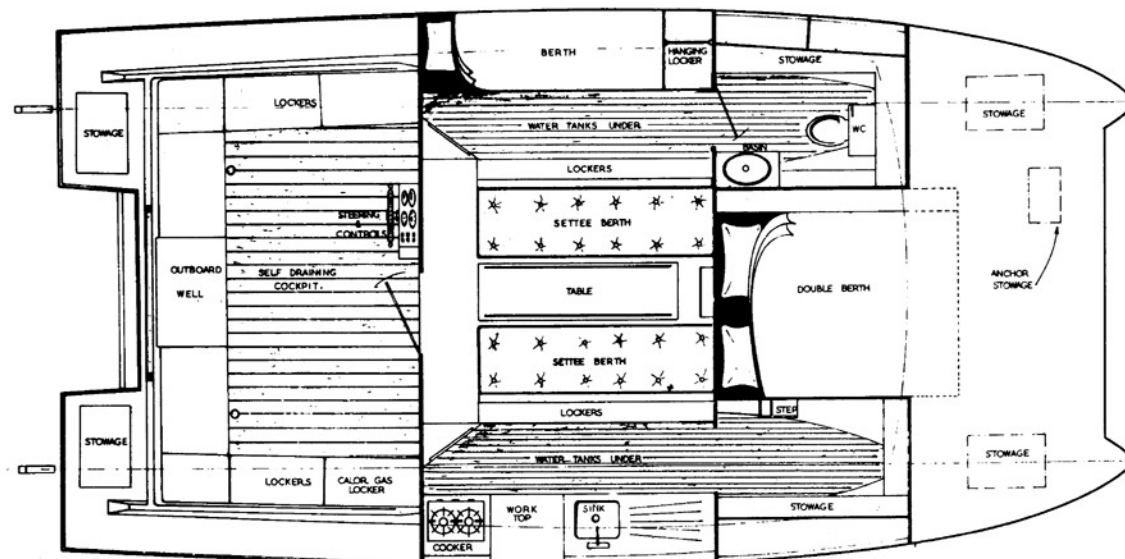
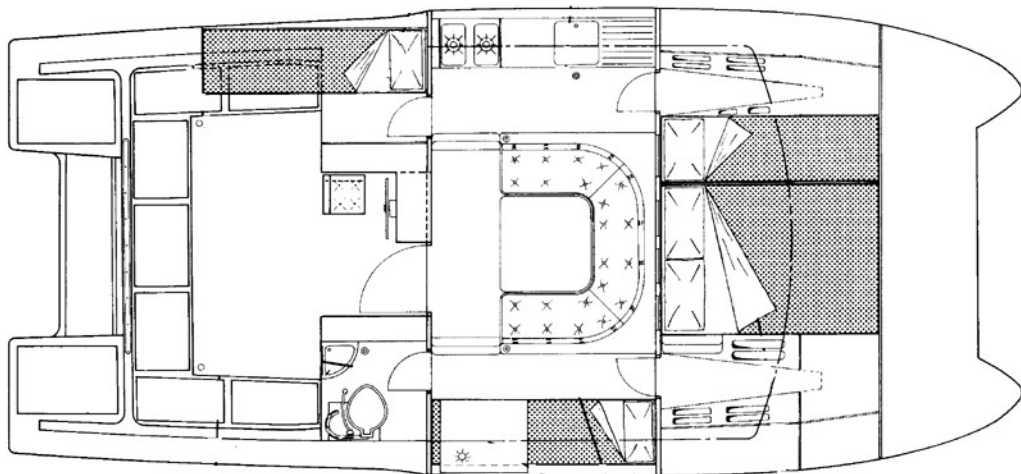
“Except for the early-model Geminis and Telstars, the used market of vessels 10 years old or more is almost entirely British.”

boats built as early as the 1970s to find foam cores. Many of the early multihull enthusiasts were aircraft designers, and the vessels clearly show their impact on the industry. Airex foam core was first used by catamaran builders. It is my opinion that the modern design revolution seen in today's production monohulls clearly has its roots in the pioneering done by the multihull designers and builders.



The Sailcraft Cherokee

According to the author, the Catalac 30, at right, offers the best layout in a cruising boat. The Catalac 27, below, was built from the same bottom mold as the Catalac 30, at right, but with a different deck and interior.



Fallen by the wayside

There have been no production cruising trimarans and only a handful of custom trimarans built in the United States, Britain, or elsewhere in recent years. The only exceptions are a few custom-built racing boats. The reasons are obvious: the crowding of harbors, the replacement of marine railways with travel lifts and just plain economics. Whatever virtues cruising trimarans may have had, they were overcome by the negatives.

On the other hand, there is a meteoric upsurge in sport trimarans. The performance virtues of the trimaran, plus the ability to quickly fold it up on a trailer, have captured the imagination of sailors the world over. However, only a very few meet our 10-year-old criterion.

The future

We can look forward to some high-quality vessels of South African and Australian manufacture in the not-too-distant future. Significant production is taking place and considerable innovation is built into many of the units I survey for clients. It will not be long. In addition, highly regarded vessels like the Manta, the TPI-built Lagoon 42, and others will reach the magic number of 10 years old shortly.

Chuck obtained a Venture 15 catamaran as a demonstrator for an Annapolis dealer in 1969. By 1994 he had sailed or surveyed every production catamaran traded in the U.S. Chuck and Corinne live in Marathon, Fla., and sail their 32-foot custom-built catamaran, La Forza. They are the authors of a large number of sailing books and articles. Chuck is an Accredited Marine Surveyor in The Society of Accredited Marine Surveyors (SAMS), where he is known as Mr. Catamaran.



Resources

Charles E. Kanter, AMS, Web site

<<http://www.sailcopress.com>>

MULTIHULLS magazine

<<http://www.multihullsmag.com>>

Multihull International magazine

<<http://www.multihull-int.demon.co.uk>>

2Hulls brokerage

<<http://www.2hulls.com>>

Adventure Yacht Sales brokerage

multihul@pcix.com

Patrick Boyd Multihulls brokerage

<<http://www.multihulls.co.uk>>

Yacht World

<<http://search.yachtworld.com/boats/>>

Books

The Cruising Multihull, by Chris White.

Sailor's Multihull Guide, by Kevin Jeffery and Charles Kanter. Considered the "bible" of available vessels.

Cruising on More Than One Hull, by Charles Kanter. Out of print. (To be updated as: **Cruising in Catamarans**.)

Cruising is Contagious, by Charles Kanter. Recently released.



Yacht delivery by sea: Does it pay?

Maybe you've found the exact boat you want and have the money to pay for it, but you don't have the free time to bring it home. Maybe you dream of cruising far from your home port, but you have only a month's vacation and don't want to spend it all at sea. Or an inviting rally/race coincides with your three-week holiday but getting the boat home

means a windward slog. A perfect cruise would be ruined by setting off into foul weather to cover the 1,000 miles home.

Each of these scenarios leads to considering yacht delivery by sea, truck, or ship. Sea delivery usually costs the least, but there can be hidden expenses and potential pitfalls as you search for the right skipper and create a good contract to cover both of you.

Then there is the opposite side of the coin. You dream of skippering a yacht beyond the waters you know. You love a

fine passage and being at sea but are without a boat or the funds to pay for your habit. You have cut the ties with life ashore and are out cruising but find your funds running low when someone offers you a chance to deliver his boat back to the mainland. (This happened to us 31 years ago.) How do you handle this opportunity so it leads to becoming a successful delivery skipper? The first step, as the owner of the boat should know, is to accept that delivery jobs are

business deals, and every business deal has two sides.

Simply put, the owner of the boat will be handing his yacht, which is almost as dear to him as his 15-year-old daughter, to a complete stranger who will take it on a journey full of potential dangers. The owner wants his boat to arrive in the same condition in which it left, as soon as possible, for the most affordable rate.

The yacht deliverer, on the other hand, sees a Pandora's box — a boat full of hidden problems. All he wants is to move

it from point A to point B as quickly as possible with no breakdowns or delays so he can collect his fee and get on with his own plans.

In few business relationships do employee and employer have less personal contact. That is why special thought should be given to the delivery contract. The owner should know what he is asking for and whom he is hiring. The deliverer must consider the responsibility he is assuming.

The owner

Deliveries cost money, and there are few bargains. When you hire someone to sail your \$50,000 to \$400,000 yacht across an ocean, you need a skilled person who will maintain your investment while it is underway. The person you hire must know not only how to navigate, sail, handle a crew, and operate engines and generators, but also how to repair almost everything on board with what spares are on the boat. He must know how to find supplies in foreign ports. If the delivery

by Lin Pardey

*Whether you're hiring, or doing the
delivering, it's a business deal —
and every deal has two sides*





Moving your boat

is not across an ocean, but along the Intracoastal Waterway or other inshore route, he must be able to cope ably with anchoring and mooring situations and maneuvering in close quarters. And he must know how to maintain, varnish, and keep your boat interior and exterior clean. This adds up to a very skilled person. Remember that your delivery captain is involved 24 hours a day from the moment he steps aboard, and you'll understand why delivery fees look high at first glance.

At present, a contract delivery will cost you \$1.75 to \$2.50 a nautical mile, based on the normal sailing route for any particular voyage, plus fuel and airfare for the captain and a reasonable number of crew. Tradewind passages would be quoted on a great-circle route, allowing for the extra miles required to get down to the fair winds, not on a rhumb line between two destinations.

Some teams also charge for food and airport-to-boat taxi costs. Or you can hire a delivery captain on a daily basis for between \$150 and \$225 daily plus all expenses including crew costs, food, fuel, and airfares. With a good delivery team, the final fee will come out about the same whether you figure it on a contract or a daily basis.

The alternative

What is the alternative? You can move your yacht by truck for continental deliveries or by ship for transoceanic journeys. If your boat is less than 30 feet and the distance involved is more than 500 miles, the cost by truck will usually be less. But once you reach 36 feet in length or a 10-foot beam, you'll most often pay more for trucking. Moving your boat as cargo on a ship will always be higher than delivery on its own bottom for any boat more than 36 feet in length. This is because the rate must include unstepping the mast, building the cradle, paying agents, relaunching and resteping the mast, and then transporting the boat from a big ship's harbor to a marina. The actual shipping fee is based on the cubic area that the boat and its mast will take up. Figures vary greatly depending on port of embarkation and debarkation but two

examples will give you some idea to go on.

The owners of a custom-finished Bristol Channel Cutter decided to ship their 28-footer with a reputable company for \$10,000 total cost, including insurance, from Auckland, New Zealand, to San Francisco, Calif. A delivery fee for this job would have been between \$11,000 and \$13,000. To sail it home themselves would have taken two to four

"At present, a contract delivery will cost you \$1.75 to \$2.50 a nautical mile based on the normal sailing route for any particular voyage, plus fuel and airfare for the captain and a reasonable number of crew."

months and entailed some windward passagemaking.

Because it was being shipped, they were also able to pack many of their household belongings inside the boat. Unfortunately, the boat was offloaded at a port 40 miles from the originally scheduled docks and, during transshipment by truck, a careless driver hit a bridge, damaging the mast and cabin severely. Insurance claims took almost six months to be settled.

Saved wear and tear

In contrast, another friend shipped his 47-foot gold-plater from Denmark to New York at a total cost of \$18,000. A sea delivery would have cost about \$11,000 to \$12,000. But the owner saved 6,000 miles of wear and tear on the boat and its gear. His yacht did receive some superficial damage: a scarred toerail and a dented boom.

Good professional deliverers are expensive, shipping is expensive, but bargain deliveries can cost you even more. Frank couldn't afford a regular delivery team and gladly accepted when a friend of his said, "I've got two months off. I'll take your ketch back to England for you. Just pay for my food and

airfare." Frank had cruised locally for a few weeks with this fellow and knew that his friend's longest passage offshore had been 200 miles, but the man loved Frank's boat.

Two months later Frank received a message. The boat had been abandoned in a tiny port 200 miles from its starting point. Its gear had been stripped off by locals. The friend had been scared to leave port after a two-day blow outside Cape Town. His crew had jumped ship. The engine had quit. In the end, it cost Frank his boat. He couldn't leave his job in England to go repair the damages. No delivery team would go for the boat after hearing a report of its condition. So Frank ended up selling his dream boat for the price of its lead ballast keel.

Delivering a boat is not fun; it is work. Asking amateurs to do it is asking for trouble. We can cite stories of cut-rate deliveries that took two months to move a boat 800 miles, of boats abandoned during storms, of boats confiscated when non-professionals who had no reputations to protect used them for smuggling drugs. Remember, a person who is not worried about protecting his professional reputation will think first about himself and second about your boat.

References

To protect yourself and your investment, don't hire anyone to move your yacht, by land or by sea, unless you get the names and addresses of at least two or three people whose boats he has delivered. Call these people. Ask them what condition the boat was in when it arrived. If the owner tells you his boat arrived in reasonable time and in good shape, you've probably found a good deliverer.

If you are arranging a delivery through an agency, insist upon knowing the exact person who will be in charge of your yacht. Call that person and get the names of people whose boats he or she has delivered. If an agency is very busy, they might let relatively inexperienced people handle jobs that seem simple. Several years ago we delivered two yachts from Miami to Puerto Rico. The

first time we arrived in San Juan we noticed a beat-up 35-foot charter boat laid up at the dock, its transom black with soot, its diesel out of commission. Three weeks later we again arrived to see a second boat, identical to the first, its transom and engine in the same sad state. Both boats were part of a large contract handled by a firm with an excellent reputation. In each case the deliveries had been turned over to sailors on their first professional jobs, since the distance involved was only about 700 miles. No matter what reputation the agency has, check the references of the person who will be in charge on your boat.

Not so inexpensive

Don't be swayed by smooth talk from a sailor walking down the dock. Check him out. The owner of a 50-foot South African yacht came by one day to tell us he'd found a very inexpensive captain, the crewman from a local charter boat who told excellent sea stories. It was only after the boat was at sea that the owner took a look at the boat owned by the man he hired. It was in terrible condition, secured on a mooring in the most exposed part of the harbor. As the owner said, "If he takes care of his own boat that way, what will mine look like in two months?"

Once you've located the person you will hire, tell him all the problems he may encounter on your boat so plans can be made accordingly. If there is no reliable self-steering, tell him so he can arrange sufficient crew. Tell him the state of your engine, its fuel consumption, your ground tackle, all electronics, and sails. Give the captain a frank idea, or he may fly thousands of miles and find he didn't bring along the right gear or spares. Then he'll have to spend your money and his time getting ready to set off.

An owner got a transatlantic call from his delivery skipper: "Sorry, I can't take your ketch across the Atlantic until it has new standing rigging." The owner replied, "I crossed the Atlantic with it two years ago. It's good enough. Ignore the rust."

The well-respected delivery captain then refused the job, the owner lost the

cost of two airline tickets. A second deliverer came and said the same thing. So the rigging was replaced. If you have hired a good person, trust his or her judgment. He is the one who is risking his life and reputation when he sets off across an ocean.

Remove treasures

The delivery crew will be living on your boat for several weeks, possibly in rough conditions at sea. So if you have any treasures, either take them off the boat or store them carefully away and warn the crew. There is bound to be some wear and tear during any passage, and you must expect to lose a glass or two or have some chafed lines.

If this is a windward delivery, expect some wear and tear on your engine. Most delivery skippers must meet a schedule, so they will motorsail when they can't lay their course. In the case of racing boats, this may actually be cheaper — a savings on the lives of your sails will more than

"The owner of the boat will be handing his yacht, which is almost as dear to him as his 15-year-old daughter, to a complete stranger, who will take it on a journey full of potential dangers."

make up for the added engine hours.

Most professional delivery skippers do not want to take owners along on the trip. Owners want to cruise, learn about navigating, and enjoy the trip. Skippers want to move the boat fast and have a crew who will take orders and do the menial work. It's difficult to tell an owner to scrub the bilge or clean out the head. It's harder yet to say, "We're setting sail today," if the owner wants a few more days in port. Taking owners on deliveries is a conflict of interest.

Be sure to inform your insurance company before the delivery captain actually takes charge of your boat. In most cases, insurers will be more

impressed with good references than with professional papers or skippers' licenses.

Finally, as in all business deals, get a contract. Make sure it gives an estimated delivery time. It should also include the expected route and number of crew the delivery captain will take, plus what expenses he will cover, and what you, as the owner, must pay for.

The deliverer

Delivery work looks like a great idea: 150 bucks a day just to enjoy yourself and go sailing. But, few delivery jobs turn out to be fun. Job equals work. People aren't going to pay you to take a well-outfitted, fine sailing yacht on a downwind, perfect-season cruise. Boats are almost always delivered to windward. Old or neglected boats are delivered. Brand-new boats fresh from the factory full of bugs and untried systems are delivered. And whatever the conditions, the owner usually wants the boat as soon as possible. In most cases, delivery services

figure on one day for every 100 miles, plus pre-departure preparation time. That doesn't allow you much cruising time. On one of our typical long deliveries, 5,800 miles from Spain to the U.S., we spent 10 days preparing the boat, 50 days at sea, and 11 days in four ports for a total of 71 days. Two days in each port we devoted to renewing stores, going over engines, and maintaining the sails and varnish. That left us three days for relaxing in two months, or less than a day per

port.

One boat we took down to Mexico a few years ago shows the general average times for a shorter delivery. We spent three days getting the boat ready for sea, eight days at sea, and one-and-a-half days in Cabo San Lucas waiting for the owner to arrange to rendezvous and accept his boat on the mainland. That worked out at 13 days for a 1,200-mile delivery.

Most delivery captains combine their work with another profession unless they are at the top of the list with a busy delivery service. Otherwise, they will have a hard time earning enough money moving yachts to support a home and family. But for cruising people like ourselves, delivering is good experience



Moving your boat

and a fine way to earn a lump sum of money because it's hard to spend much at sea.

Great responsibility

Delivering someone else's dream boat is a large responsibility. Instead of taking six months or a year to get to know the boat, you have to step on board, survey and assess boat and gear, outfit, provision, and get under way in a week or less. Once on board, you have to be jack-of-all-trades. You must be able to jury-rig, haywire, and maintain a boat you don't know well, using the minimum of spares. The owner is turning the job over to you so he won't be bothered. The last thing he wants is to be called from each port with, "the generator isn't working" or "the pump just gave out."

"Few delivery jobs turn out to be fun. Job equals work. People aren't going to pay you to take a well-outfitted, fine sailing yacht on a downwind, perfect-season cruise. Boats are almost always delivered to windward."

The people who make the best delivery captains are good mechanics and riggers first and sailors and navigators second.

An owner is influenced by first impressions as much as anyone. If the yacht arrives with fresh-looking varnish, scrubbed decks, and the interior in immaculate condition, he will overlook most small mechanical problems. It pays to roll up and store away carpets and curtains. In a factory-fresh boat, avoid using any facilities you can, so the owner has the thrill of stepping into a new boat when it arrives. This could earn you not only a good reference but a satisfying tip or dinner on the town.

Whatever you do, write a contract, then get a one-third to one-half deposit before you leave to pick up a yacht. Make sure your contract states the currency and method of final payment. Include an allowance for expenses during breakdowns. For example, "The

deliverer will allow three days for breakdowns due to faulty or worn equipment during the course of the delivery. After three days, the owner must pay an additional \$100 per day to cover costs of maintaining crew and boat during time taken to repair breakdowns." If the delivery is based on a daily fee, this is not necessary.

Ask for cash

It is safest to ask for the final payment in cash before turning over the boat or its documents to the owner. We have never had any problem with payment but have heard of those who did. To protect yourself in distant ports, carry a document notarized with the owner's signature making you captain of the yacht with full responsibility (other than transfer of

ownership) during a specified time in specified waters. It may come in handy, especially in third-world countries.

Keep a log for legal purposes and also to give the owner information about his yacht, the engine usage times, maintenance you did, spares you used and gear that needs attention.

Transoceanic yacht deliveries on boats 40

feet and larger are the most sought-after by skippers, but make up probably less than 10 percent of the work available. Much more common are coastal passages such as from New York to Maine, or channel crossings from Europe to England and Ireland, or inter-island transits through the Caribbean. These will often involve smaller boats and smaller sums of money. But they must be handled with the same forethought as a 6,000 mile delivery whether you are the yacht owner or delivery skipper. If you do this, a yacht delivery, just like any good business deal, can come off with both parties satisfied and ready to do business again.

Lin and husband, Larry, have been cruising since 1965. They have made an entire library of books and videos on sailing and have won several notable awards.



Crossing

Some people spend their entire lives in one zip code. Others, through career pressures, family location, health concerns, or good old-fashioned wanderlust are moving from one place to another with varying frequency. Let's assume that you don't fit into the one-zip-code category, and the call to relocate comes in not long after you've either lovingly restored the floating apple of your eye or found your heart's desire.

Maybe you live in New Bern, North Carolina, and your situation change puts you in a new office overlooking Puget Sound. For the purposes of this article, I'm going to assume that you don't have time for a leisurely cruise through the ICW, the Caribbean, the Panama Canal, and the Pacific coast of Central and North America. If you're moving and you already have a boat, you can sell it and buy a new one when you get to your new home, you can have it delivered by a professional crew, or you can take it down Route 66. Unless your boat is vastly different from most older boats or you're moving because you just bought another boatyard, you will probably not recover the money you spent doing restoration work. A sea delivery from one coast to another is extremely expensive and not without risk. The over-the-road option might be the most cost-effective.

Selection

Your first step is selecting a trucking company. Find a company you're comfortable with. You will entrust valuable property and a significant emotional investment to someone who is getting paid to get your boat to its destination as quickly as possible. If you feel that the main office of the company is abrupt and uncommunicative, try imagining what their drivers must be like. A good trucking company will know the difference between a hatch cover and a furler extrusion and will spend some time making sure you are comfortable with their level of expertise.

the asphalt ocean

Find a company that specializes in yacht hauling. Joe's Storm Door and Trucking Company would no doubt love the contract, but can they take a look at a boat and see whether or not it will fly apart at 70 mph? A quick search of the Internet will return a handful of companies that specialize in yacht hauling (see list of resources).

A deeper look will show that cargo insurance coverage carried by trucking companies ranges from \$100,000 to \$1 million. You and your 1939 Popcorn 22 may not need gold-plated coverage, but if the company has such a good track record that they can get \$1 million in coverage and not go broke paying premiums, they might be worth a longer look. Most yacht haulers get their business from referrals, so hang around a busy yard when you see a boat come in on a trailer, and ask the owner or yard manager what they've observed about the way XYZ Trucking handles their cargo. Chat up the travel lift operator; he's seen it all . . . twice.

Chris Bunch of Deep Water Transport in Washington, N.C., has a particularly strong caveat for those looking to ship their boat over land: "Never pay a broker or boatyard in advance." He feels there are some unscrupulous agents who will request a 50-percent deposit and then jack the rate up by a couple of thousand dollars when the truck shows up (usually due to an "unforeseen" additional cost associated with your particular boat). The agent then denies your

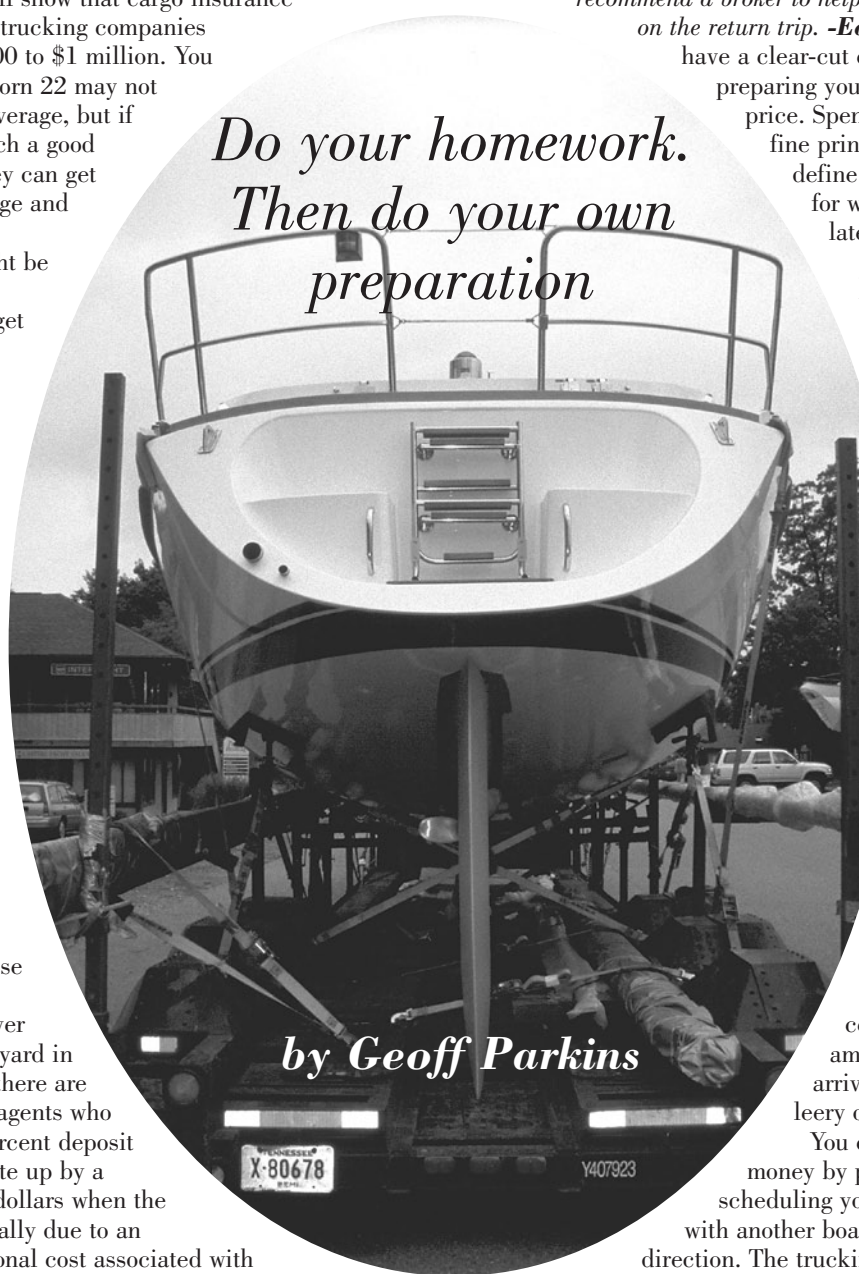
request for a refund of deposit and a different carrier, claiming the expense already incurred in getting the truck to your boat's location. It becomes a "put up and shut up" situation where your checkbook is the loser. Chris recommends that anyone considering hauling a boat on a truck should contract directly with the carrier, with no middleman. (*Other satisfied clients*

recommend a broker to help eliminate an empty truck on the return trip. -Ed.) A reputable carrier will have a clear-cut contract, guidelines for preparing your boat, and a firm fixed price. Spend some time reading the fine print on the contract, as it will define which party is responsible for what damage. More on that later.

Pricing

I've deliberately left pricing until late in the selection game, as I feel it's more important to find a carrier that has an excellent reputation and a good presentation during your initial contact. Costs will be all over the map, based on schedule, season, boat size, destination, and "backhaul" or "deadhead" miles involved. Typically, you will see prices in the \$1.65 to \$2.15 per mile range (for an average 30-foot sailboat, as of June 2000). Larger boats, obviously, will cost more. Most companies will want a certified check for the full amount, due when the boat arrives at its destination. Be leery of deposit requests.

You can save quite a bit of money by planning ahead and scheduling your delivery to coincide with another boat going in the opposite direction. The trucking company is more likely to be willing to discount the rates if he doesn't have



*Do your homework.
Then do your own
preparation*

by Geoff Parkins

Moving your boat



This mast is padded, although this may not be a good idea due to chafe on attached lines or furler extrusions. Standing rigging is coiled, taped, and padded. It is stowed in the box at lower right of the photo at right. Good keel support is important.



If you have roller furling, leave the drum and extrusion in place, but secure it to the mast on 18-inch intervals. Secure it twice as strongly as you think you'll need, and then add 20 percent. Put a piece of 2x4 or 4x4 in the bottom of the mast to act as an extension that you can use to support the furling drum. Next, remove the spreaders, and stow them inside the boat.

If you have radar, remove the radome and either ship it to your new address or stow it carefully below. Remove and stow all antennas and navigation lights. Make sure you tag the

to drive cross-country with an empty trailer. Your biggest savings, however, will come from preparing the boat for shipment yourself.

As with just about everything related to work on boats, the more you do yourself, the more money you will have left at the end of a job to convince your chandler that you're the next Rockefeller. Another benefit of doing the prep work yourself is that it cuts out a significant layer of finger-pointing if there's damage at the end of the trip. You're going to want to blame the trucking company for damage during transit, and they're going to claim that the boat wasn't prepared properly. A word of warning here: most damage occurs as a result of poor preparation. If you let your yard prepare the boat, you won't know for sure whether the rig was prepared properly or not. That's where the finger pointing begins, and you are usually the loser in that game. Consider these three areas for preparation: the rig, the outside, and the inside.

The rig—This is where the most damage occurs. Prepping the rig for shipment is, without a doubt, a pain in the neck at both ends of the journey. However, good prep work is cheaper than a new rig. Start by having your yard pull the rig and set it on sawhorses in a work area. Remove all shrouds and stays. Coil the wire rope and secure the coils with a combination of nylon wire ties and filament tape. Stow the toggles and clevis pins. Label them accordingly. Label each piece of wire as you take it off, to facilitate reassembly. Stow the standing rigging below, and make sure it won't chafe anything when the boat moves.

wires in a way that makes it easy for you to reassemble at the distant end. Running rigging, winches, and cleats can be left on the rig. Running rigging should be secured as well as the furler extrusion. A driver will simply cut a piece of rope if it's dragging on the ground. You might consider wrapping winches, rope clutches, and other gear with moving parts in plastic to protect the equipment from water and road grit.

Although you might think about padding the mast with bubble wrap, it is not recommended, because the loaders cannot see what they're resting the spar on, and it's too easy to set the mast on the cradle with a rope or furler extrusion between the spar and the cradle. Three thousand miles of chafe will cause all manner of damage to the mast and the sandwiched part. Leave the mast open, and wash it thoroughly when the boat gets where it's going. Similar treatment should be given to the boom. Depending on the size, the boom can be secured on deck, as long as the lashings are extra-strong and you have ample padding between the boom and the deck. More words of advice from Chris Bunch: "Boatowners should be aware that they will be subjecting their boat to hurricane-force winds for several days and should secure gear accordingly." With that in mind, add another lashing here and there, just to make sure. The trucking company will supply padding to go between the mast and the cradle.

The outside—Moving to the deck of your boat, remove all loose gear. Stow or ship your anchor. Remove all exterior canvas, and stow it below. Take off the Bimini frame and stow

or ship it. Take off instrument covers and stow them. If practical, remove cockpit-mounted electronics and ship them separately. Remove and stow genoa cars and other loose deck hardware. Stow your cockpit table. If you can, stow or ship dinghy davits. Make sure that your cockpit locker lids have sturdy hasps, and padlock them shut. Seal the gaps around the lids with tape to keep the wind from lifting them open. Use a strong tape, like filament or duct tape, to secure hatches, opening ports, and your companionway. After roller furling equipment, the most common damage occurs when an inside hatch lock fails, and the hatch cover is torn off at 70 mph. Use adhesive remover to clean off tape residue when you put your boat back together. Take another look around, and if you have any questions, remove the gear and ship or stow it.

The inside— Down below, take off anything of obvious value and ship it separately. Make sure everything below can stand several days of lurching and jerking around. Secure dishes, stemware, and drawers. Remove the television and the lovely brass kerosene lantern. Tie or tape lockers closed. Think hurricane. Another nugget from Chris: “Don’t count on drivers to spot problems with preparation. Often, they’re not thoroughly trained, and they rarely know about boats.” Use your seaman’s eye to spot potential problems. Keep in mind that any damage incurred as a result of improper preparation is the responsibility of the owner, not the trucking company.

A new Sabre 4.5 arrives at her new home port in Annapolis, Md. Also pictured on Pages 19 and 20.

Boat transport resources

A&B Marine Trucking

92 Gibraltar Ave.
Annapolis, MD 21401
800-843-5265

Associated Boat Transport, Inc.

13930 NE 190th St.
Woodinville, WA 98072
800-247-1198
<<http://www.associatedboat.com>>

Boats Express, Inc.

2451 McNullen Booth Rd. #310
Clearwater, FL 33759
727-791-1649
<<http://www.boatsexpress.com>>

Can-Am Marine Transit

S 2669 CTH-V
Hillsboro, WI 54634
800-392-6660
<<http://www.can-amtransit.com>>

Cross Country Boat Transport

11661 Lockridge Ave. S
Hastings, MN 55033
651-437-2454

Deep Water Transport

6610 Clarks Neck Rd.
Washington, NC 27889
800-382-2628
<<http://www.deepwatertransport.net>>

Dudley Boat Transportation

5303 Pacific Highway E #142
Fife, WA 98424-2601
800-426-8120
(Northwest Coast region only)

Hight Marine Transport, Inc.

759 West Austin
Giddings, TX 78942
800-519-2248
<<http://www.boat-transportation.com>>

Jowi Sailboat Yacht Transport

6177 N. Highland Blvd.
Grifton, NC 28530
252-524-5790
<<http://www.jowi.com>>

Nationwide Boat Transport

5005 U.S. Highway 41 N
Palmetto, FL 34221
877-818-2628
<<http://www.boatmove.com>>

Transport broker

Overland, Inc.

118 Kuethe Dr.
Annapolis, MD 21403
800-447-0258





Moving your boat

Timing

The trucking company will be very happy (read: it's cheaper for you) if they can simply drop the boat on the trailer and drive off into the sunset. Haul the boat several days before your ship date to give yourself plenty of time to secure everything and to get accurate measurements of your boat to the trucking company.

Schedule your ship date for a Monday or Tuesday, if possible. Three times this year at my home marina, I have seen drivers show up Thursday afternoon, expecting a quick load and an easy getaway. The boat gets loaded well enough, but then the measuring happens, and the boat is over the legal height. The stanchions have to come off, as does the boom gallows. The owner's nowhere to be found, and the yard already has other work scheduled. The gallows doesn't come off until Friday afternoon, and there's no one available to remove the stanchions until Monday morning. Guess who pays for the driver to enjoy a nice three-day weekend in Annapolis?

Give yourself the extra time to make sure all the i's are dotted and the t's are crossed. Finally, take a hard look at your marina lot. Make sure there are no overhead obstructions like tree limbs or power lines to interfere with the truck. Look for at least 14 feet of vertical clearance. If you don't have clearance, pick another marina to ship from. Do the same at the destination marina. Most trucking companies will not accept responsibility for damage incurred by vertical clearance obstructions at either marina. (*Caution: While this is a good number for rough figuring, remember that Interstate highway bridges are only required to have 13 feet 8 inches of clearance. -Ed.*)

Responsibilities

As noted, any damage resulting from failure to prepare the boat properly is the responsibility of the owner. If your yard does the prep work poorly, you will need to go after them for reimbursement. Any damage that occurs outside of either marina and is not caused by a failure to prepare the boat correctly is the responsibility of the trucking company. In any case, all of the responsibilities of both parties should be spelled out in the contract. Review it carefully and ask questions. If you're unhappy about the wording of the

contract, discuss it with the trucking company prior to contracting with them.

Finally, check with your own insurance company to see what coverage is extended to boat hauling. See if they have any caveats or exclusions that could leave your wallet exposed in the event that something goes wrong. I did some work on a boat that was trucked to Annapolis from Chicago. The driver ignored a low overpass warning and sheared off all of the stanchions and peeled off a goodly thickness of the coachroof. Make sure you understand liability and coverage before you sign anything.



It's essential to have good mast support.

That's the scary stuff. I see boats coming and going via trailer every day: shiny new Clorox bottles from Beneteau and Hunter, salty-looking old Cape Dorys, and high-tech Grand Prix racers. Most of them arrive at their destination without a scratch. The guy who owns the trucking company wants to stay in business, and he wants you as a good reference.

Geoff is a good old boater based in Annapolis, Md. He runs a marine electronics business and lives aboard a 15-year-old Ted Brewer-designed pilothouse cutter named Ocean Tiger with his wife, Lori, and a menagerie of pets.



Size restrictions for shipping a boat over the road

There are certain recommended "Do not exceed" sizes for trucking a boat. In some cases these limits can be exceeded, but only at horrendous expense, say \$15,000 for a trip from Texas to San Diego.

The maximum legal height of a load without the need for special permits and routing is 13 feet 8 inches. The maximum load length without the need for special permits is 53 feet. The maximum width without the need for special permits is 8 feet 6 inches. And the maximum total weight of a hauling rig is 80,000 pounds. Most companies set weight limits for the boats they haul at 36,000 to 38,000 pounds. Check with your transport company about measurements and fees for exceeding maximum dimensions.

Maximum figures can be exceeded, but now you're paying for a wide load and warning vehicles in front and behind the truck. That involves the cost of three drivers and state-by-state permits, fees, and routing requirements. These loads are not permitted to move at night, on Sundays and holidays, or during bad weather.

If you're close to the height limit, think about removing stanchions, lifelines, and pulpits. You get a wonderful chance to rebed your deck hardware, and you won't get billed for inadvertently removing graffiti from freeway overpasses.



Bringing home baby

Lindsay Christine sits next to the carport, miles from the ocean, longing for a stiff breeze and an empty horizon. We are happy to have our trusty Mercator Offshore 30 sloop so close. She's undergoing a refit, and having her here is wonderful.

Older boats eventually need substantial maintenance or a complete refit. A trailer makes it convenient to have your boat at home to do the work as well as for off-season storage.

There are several advantages to buying or modifying a trailer on which to transport your boat to a convenient location. Yard bills come monthly and don't stop when you take time off from your project. After the initial expense of buying, building, or modifying a trailer, storage at your home is free. As you can see from the chart on Page 25, a trailer can pay for itself in a year.

The convenience of having your boat at your house cannot be overestimated. Marinas are never as close as your backyard. Tools, power, water, and materials are all in the same place. Projects can be left where they are, rather than having to be put away every day. No time is wasted commuting to the yard, looking for power outlets, or returning home for a forgotten tool. More importantly, after work it is much easier to walk out the back door and get to work on the boat than it is to load up and drive to the yard. It's also hard to ignore the boat waiting for your attention. Finally, your pride and joy is probably safer in your yard than the marina's.

If your boat is not too large (more than 35 feet can get expensive and complicated), and a trailer is right for your situation, how do you go about getting one you can afford? If you're lucky, you may know of someone with a suitable trailer for sale. Ask around at marinas and yacht clubs. Chances are you'll have to modify it in some way to fit your baby. New sailboat trailers are typically semi-custom and very expensive, ranging from



by Chuck Fort

Modify a trailer for your boat, and do your boatwork at home

about \$5,000 to \$10,000 for a 30-foot boat. Unless you plan to transport your boat yourself over a long distance, this option is not an efficient way to spend your refit budget.

Do it yourself

When the time came for us to bring Lindsay Christine home, we researched the alternatives and, as you can see from the chart on Page 25, the trailer option made sense in our case. In Florida, where we live, there are lots of boats and boat trailers. Surprisingly, after several weeks of searching, we could not find a purpose-built sailboat trailer at a reasonable price. However, Florida is home to a huge number of powerboats, so powerboat trailers are much more common and cheaper. We focused on altering one of these.

Having done it ourselves, we can say that modifying a powerboat trailer to fit a sailboat is not particularly difficult. We spent about \$800 for the conversion, though it can be done for less if the trailer is not designed to be fully adjustable for any sailboat. We were able to modify ours without any welding, though if welding is a skill you possess, it may be easier and cheaper than the bolt-on system we used. We chose to bolt ours together for three reasons, keeping in

mind that we would eventually sell the trailer when we were finished with our refit. First, a bolt-on system is completely adjustable — the supports can be moved anywhere. That makes it easier to ensure a proper fit to your boat or any other boat and makes it more valuable for resale. Second, if necessary we could dismantle our modifications and resell it as a powerboat trailer if we could find no sailboat buyers. Third, welding would have damaged the galvanizing.

Where to find them

Besides local newspapers, check the local *Boat Trader* publication for your area. Local marinas and powerboat dealers may have used trailers for sale. We found our triple-axle trailer lying in the weeds at an Orlando Bayliner dealership.

How much to pay

In the Central Florida area, a used triple-axle powerboat trailer in reasonable condition with a 10,000- to 12,000-pound capacity averages about \$1,500 . . . less than half that of a purpose-built sailboat trailer. The trailer we bought had no brakes but otherwise was in good condition. The dealer was happy to get \$600 to be rid of it.



Moving your boat

What to look for

Gross vehicle weight rating is the first criterion. If the trailer can't handle the weight, the rest is unimportant. Trailers are supposed to have a GVWR tag attached so you can see what the manufacturer designed it for. A 30-foot boat will almost certainly need three axles. Typically, each axle can support 3,500 pounds (including the trailer) and is constrained by the tires' capacities. Trailers with higher capacities usually have larger axles that support 5,000 pounds or more, though they may only have larger tires. For very short distances you may be able to simply increase the tire rating if your trailer's capacity falls short.

Look at the crossbeams on the trailer. The more the better, and they should be fairly evenly spaced. Ideally, these beams should mount on the top of the sideframes, though this will raise the overall height of boat and trailer. Crossbeams that are welded flush to the sideframes are acceptable if the welds are good and rustfree. Open beams will prevent rust better than box-framed beams. Next, look at the axles and suspension. These are typically unpainted and the first parts to rust. Incidentally, some powerboat trailers have their axles too far back to make a good conversion. This is especially true for trailers for cigarette-type boats. Look

for trailers designed for cabin cruiser-type boats.

For longevity, aluminum or galvanized trailers are a better choice than painted steel. Our galvanized trailer is nearly 20 years old and has no rust. Many larger powerboat trailers are never submerged; the boats are often transported to a marina, and a lift is used to launch them. In fact, many powerboat trailers are hardly used at all; owners find it difficult to transport a large boat.

Measure and sketch some candidates and compare them with a profile drawing of your boat. You'll want the center of gravity just forward of the axles in order to have 8 to 10 percent of the total weight on the tongue. Some trailers have axles that allow adjustment fore and aft, making weight distribution easy. And, while the stern can extend several feet off the back of the trailer, you'll want the bow to extend no farther than the point where the tongue and frame come together or the tow vehicle may interfere with the bow. Our trailer is 27 feet LOA, and *Lindsay Christine's* stern hangs out 7 feet.

Most trailers are built 8 to 8.5 feet wide and no wider, in order to be road legal in most states. Your boat may be substantially wider than the trailer, but this poses no problems in fitting the trailer to the boat.

How to modify

Once you have your trailer and are ready to modify, get out your trailer sketch and profile drawings again. Your job will be easier if they are to the same scale. Superimpose the boat drawing on the trailer sketch to get an idea of the boat's placement and where the supports will need to go. You'll need the keel roughly centered fore and aft over the axles. You may need to put some stout timbers on the crossbeams for the keel to rest on. These should be firmly attached to the crossbeams and very strong; nearly the entire weight of your boat will be resting on them. We used two sets of double 2x6s bolted together.

Next comes the transformation from a powerboat to a sailboat trailer: the supports. Ideally, these supports should be at the bulkheads. You'll probably want three screw jack supports on each side plus one for the bow. With luck, you'll be able to mount the supports along the sidebeam in order to get them as far outboard as possible. In our case, some of the supports had to be mounted on a cross beam which brought them in 4-5 inches.

In order to make the supports adjustable fore and aft and in and out, we chose to mount them on hinges made from angle-iron strapped down by U-bolts. These can be customized inexpensively at a truck suspension service facility. We chose Grade 8 bolts for the support pivots, since they may take lot of force during transport. The supports can be made out of 1 1/2-inch (inside diameter) round steel tubing or black pipe available at about a dollar per foot. The screw jacks that slide inside the pipe are 1 7/16 inches in diameter and are specifically designed to fit 1 1/2-inch ID pipe. They are available from Brownell Boat Stands Inc., <<http://www.boatstands.com>>, 1-800-533-8433, and can be shipped by UPS.

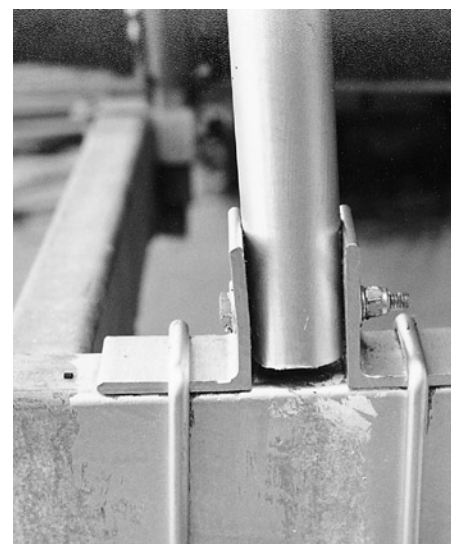
These are the same heavy-duty screw jacks (minus the tripod supports) that marinas use and, with luck, you may be able to find used ones since the tripods

Lindsay Christine is loaded on her trailer, far left. Detail of the screw jack and scaffold swivels used to get a snug fit, at left.



	Yard	At home	
		By truck	By trailer
Mast removal	\$0	\$250 in and out	\$250 in and out
Boat stands	\$0	\$80x7= \$560	\$0
Trailer	\$0	\$0	\$2000
Moving expense	\$0	\$900 round trip	\$200 round trip
Travel lift	\$240 round trip	\$240 round trip	\$240 round trip
Monthly expense	\$175x12=\$2100	\$0	\$0
Total cost for 1 year	\$2340	\$1950	\$2690
Assets after 1 year	\$0	-\$400 (stand value)	-\$2000 (trailer)
Actual cost for 1 year	\$2340	\$1550	\$690
Actual cost for 2 years	\$4680	\$1550	\$690

Yard costs are for marinas in the central Florida area. Truck transport costs are the average of three companies. Trailer cost is an estimate after modifications have been done based on prices in central Florida. Actual trailer value after modifications may be higher. Round trip costs used in order to compare accurately with yard storage.



Detail of the hinge mount.

usually rust out while the jacks remain sound. Cut the tubing supports short enough for a range of adjustment (the screw jacks have about 27 inches of adjustment) but not so short that the screw jack doesn't have good support. When *Lindsay Christine* was loaded on the trailer, two of the black pipe supports proved to be slightly too long, which necessitated sawing off a couple of inches. If we or someone else ever loads a boat with a shallower draft on the trailer, cutting the pipe will enable the proper range of adjustment. Be sure to prime and paint your black pipe.

The item that made our project fully adjustable is a swivel scaffold mount by Safway Scaffold <<http://www.safway-scaffold.com>>. This device, used for building scaffolds, allows the tripod support to move athwartships as a unit, allowing each support to be custom fitted to any shape. Somewhat expensive, these greatly simplify building and adjusting the supports. Take careful measurements of your boat and try to adjust the supports as close as you can in order to lessen the time needed to load.

Load 'em up

If you were accurate, loading will be smooth and considerably faster than setting up tripod supports in the marina yard, despite what the yard manager may say. We were warned of expensive lift time in the event extra time was need to load the boat, but it was loaded and adjusted in 20 minutes. Be sure you're

happy with the boat's position on the trailer. Once the lift is gone, you won't be able to move the boat.

How to transport

Unless you run a heavy equipment company, you'll find it advantageous to hire a local company to transport your boat. While your boat/trailer combo may look intimidating to you, it's just another job (albeit an interesting one) to a tow-truck service. During our last cruise, I worked a short stint as a tow-truck driver, and I can assure you that after pulling semis from rivers and working multicar pileups, pulling a trailer to your house is a breeze. Also, due to the assistance they provide at traffic accidents, tow-truck companies typically have good relationships with law enforcement officers. Pulling an oversize load a short distance with emergency beacons flashing is usually tolerated. If your boat has to travel on an interstate or other major highways, ask the company for advice.

Because tow trucks were designed to tow large uncooperative vehicles, trailer brakes are probably not necessary. The truck that towed our boat was rated to tow 50,000 pounds, and the driver remarked that he couldn't tell the 12,000-pound load was behind him. Expect to pay \$75 to \$100 plus \$1 to \$2 per mile, though you may be able to negotiate a better price. Trucks with wheel lifts are able to mount the towing ball on the lift which is adjustable fore and aft as well as up and down, making custom height adjustment simple. Speaking of heights, make sure

you measure the maximum height of the boat on the trailer (usually at the bow pulpit) and verify that there are no low bridges, power lines or trees along your route home. Our neighbors peered out of windows and shook their heads (again) as I walked down the street holding a 15-foot tall pole, checking for obstructions. *Lindsay Christine's* height of 14 feet 3 inches was not a problem for the 5-mile trip home. (*Interstate highway bridges are only required to have 13 feet 8 inches of clearance. -Ed.*)

Once your baby is home, level and shore up the trailer with timbers. It's a good idea to put a tarp down first if your boat will be on the grass. It's tough to mow under a trailer, and the tarp will catch dropped tools and spills.

Bringing home baby on a trailer for an extended stay may be the most cost-effective way of doing that refit. She will stare you in the face after work every day, and you'll also have the satisfaction of paying for a valuable trailer with the money you saved on yard bills.

The master contemplates his canvas. An escaped corporate executive, Chuck "sold out" to go cruising with his family. Now 10,000 miles and nine countries later, he is refitting their sloop for the next adventure. He holds a USCG Master License.



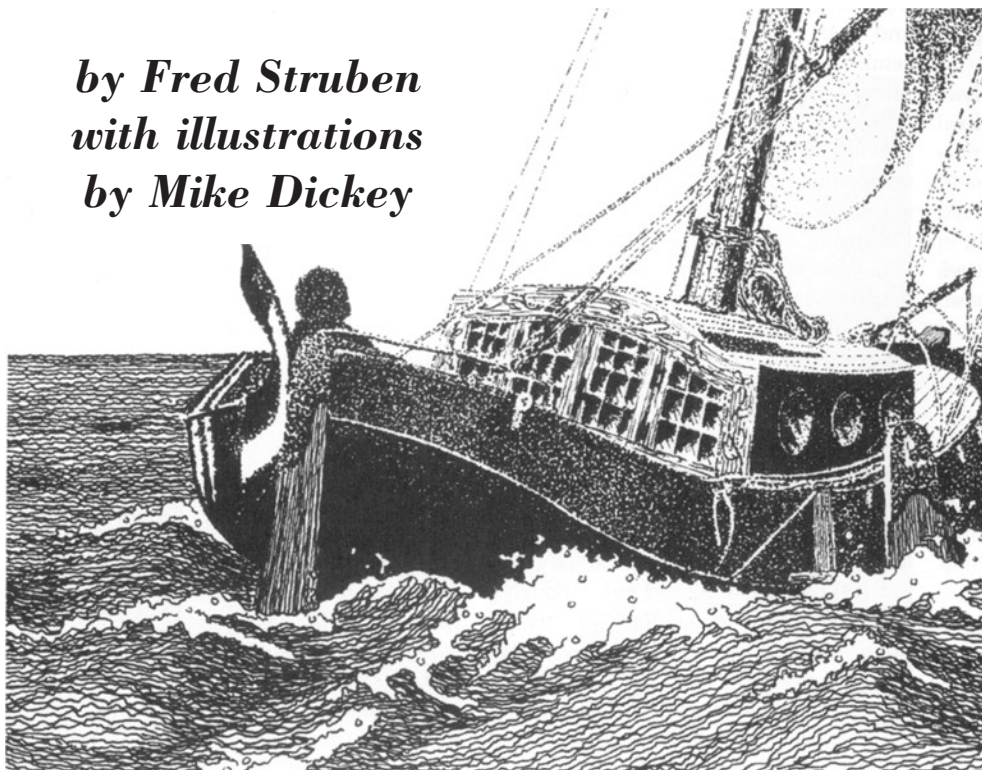
Survival *of the* fittest

The Netherlands is often called the Venice of the North, due to the great number of canals, waterways, inland lakes, and the sea. For several centuries, the Netherlands was a maritime nation with far-flung possessions. The Dutch were proficient as naval architects, designers, and builders of merchant vessels to sail the worldwide trade area they served.

Long after that era was past, shipbuilding was still an important industry in Holland. The Dutch became adept at designing shallow-draft commercial vessels suitable for trade generated along their own local system of waterways. The basic design was also adapted for use as a pleasure vessel. Leeboards were developed to compensate for the lack of a keel or centerboard in the characteristic flat or round bottom. The wide beam and the bottom shape resulted in larger below-deck spaces than those found in conventional hull configurations. These designs often had a mast-step arrangement that allowed for easy and quick striking or stepping of the mast, without the use of a crane, in order to accommodate passage under the many low bridges. It was customary for a carved wooden figure to be mounted on the rudder head; often it was a dolphin or lion's head.

Among Dutch yachts of various vintages and sizes, all of which have leeboards and flat or round bottoms, are types known as Schouw (scow or punt), Grondel, Schokker (fishing boat), Lemsteraak, and Ooszeetjalk (East Sea barge).

*by Fred Struben
with illustrations
by Mike Dickey*



The Boeier

One of the most successful shallow-draft boat designs from Holland is the Boeier (pronounced Booyer). Well over 100 years ago, sailing yachts of this particular design were plying local waters. They were so well-suited to prevailing conditions that the design has survived over the years, and a modern version is still being built and sailed. A prime example of a contemporary version of this venerable design is the Boeier 630 (indicating that her length on deck is 6.30 meters). The 630 is modeled after a famous racing yacht called *Sperwer* (Sparrowhawk), which has a permanent home in a maritime museum in Enkhuizen, the Netherlands, in recognition of the many trophies won during her outstanding racing career. *Sperwer* was designed by Eeljfe Holtrop van Der Zee in 1880.

The principal dimensions of the Boeier 630 are:

LOA 25 feet 4 inches

LOD 20 feet 6 inches

Beam 8 feet 4 inches

Weight 4,409 pounds

Ballast 1,102 pounds

Mast height 30 feet 7 inches

Mast lowered 5 feet 4 inches

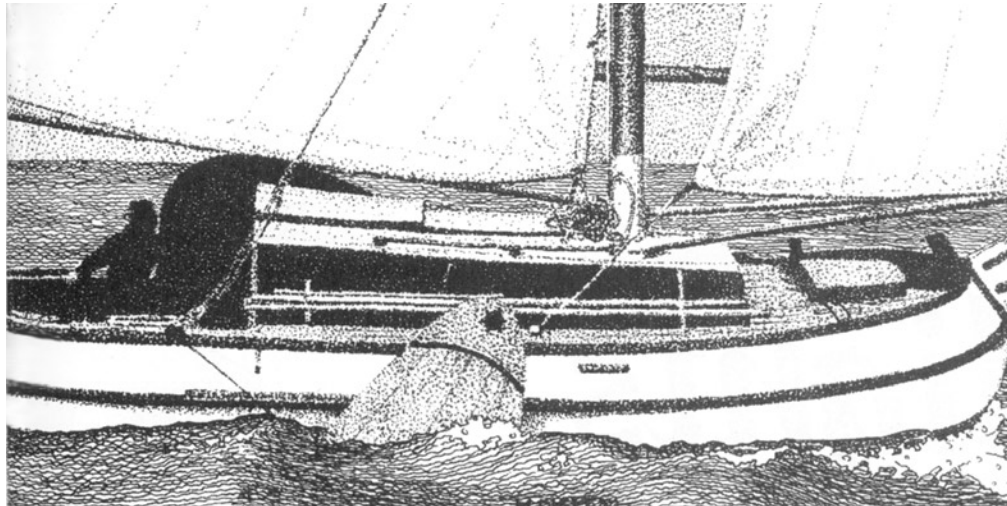
The hull can be constructed of wood, steel, or glass-reinforced plastic (GRP). If fabricated of GRP, thickness above the waterline is reported to be 5/8 inch; below the waterline it's just over 7/8 inch, and the deck is almost 1 5/8 inches thick. Boeiers do not heel as do keel or centerboard yachts. This is in part due to the width of their beam, which also makes for the characteristically spacious area below deck. The hull design results in a cockpit that stays relatively dry in

stormy weather. It is equipped with two benches that can convert into a berth. The cockpit, rudder, and leeboards are all of oak.

Mast tabernacle

The mast is constructed of Oregon pine and equipped with a counterweight at the base. It is mounted in a tabernacle to

The modern Boeier yacht at left, at right, and at far right. At top on facing page, another similar Dutch sailboat. The Boeier boats have been built in many sizes. The Dutch royal yacht is a 65-foot Boeier, Royal Dragon, which Queen Beatrix uses often in the summer.



An old Dutch design lives on because it's just right for its home waters

facilitate striking the mast without disconnecting the shrouds. The mainsail is loose-footed and attached to the mast with hoops. The sail is laced to the curved gaff. The jib and staysail are also loose-footed. The headstay is secured to the 6 foot 6 inch jib boom, as is the jib. The boom facilitates striking and raising of the mast. Sail dimensions are: mainsail, 207 square feet; jib, 88 square feet; staysail, 75 square feet.

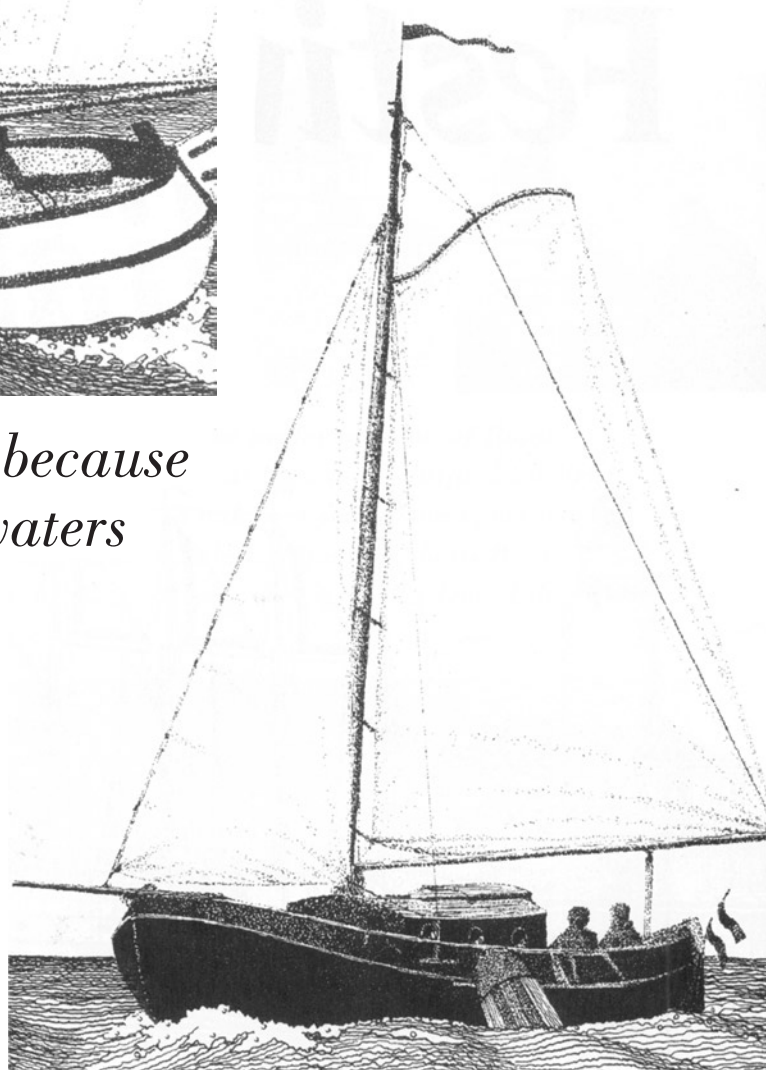
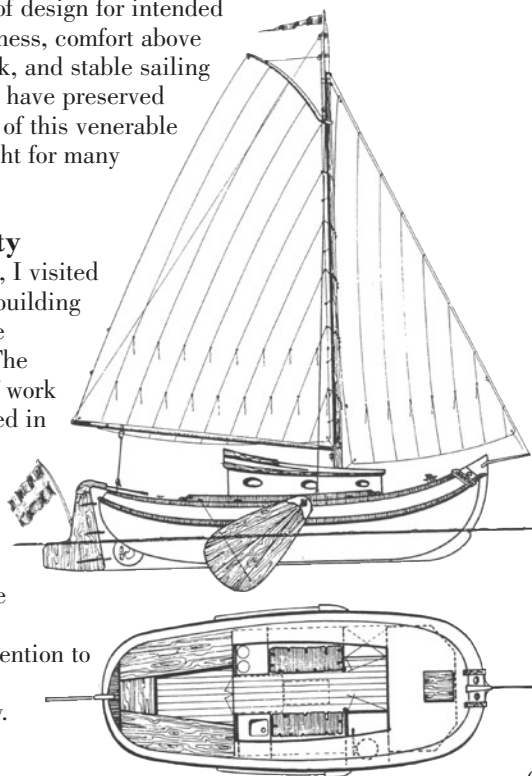
The cabin is entered from the cockpit through double doors. Joinerwork is of wood, and there are two settees: one each to port and starboard, which can convert into berths. The head is located to starboard. The galley is situated in such a manner that the cook has standing headroom. In the forepeak is a double berth.

There is an option of inboard engines — a Mitsubishi 9 hp or an 11-hp diesel engine. The 9-hp engine may be sufficient on canals and lakes. The 11-hp engine is recommended for using the yacht in strong current rivers or at sea.

Suitability of design for intended service, sturdiness, comfort above and below deck, and stable sailing characteristics have preserved the usefulness of this venerable old type of yacht for many years.

High quality

Some time ago, I visited several yacht-building facilities in the Netherlands. The high quality of work being performed in all phases of construction was noteworthy. What really caught my eye was the expertise and careful attention to detail given to interior joinery.



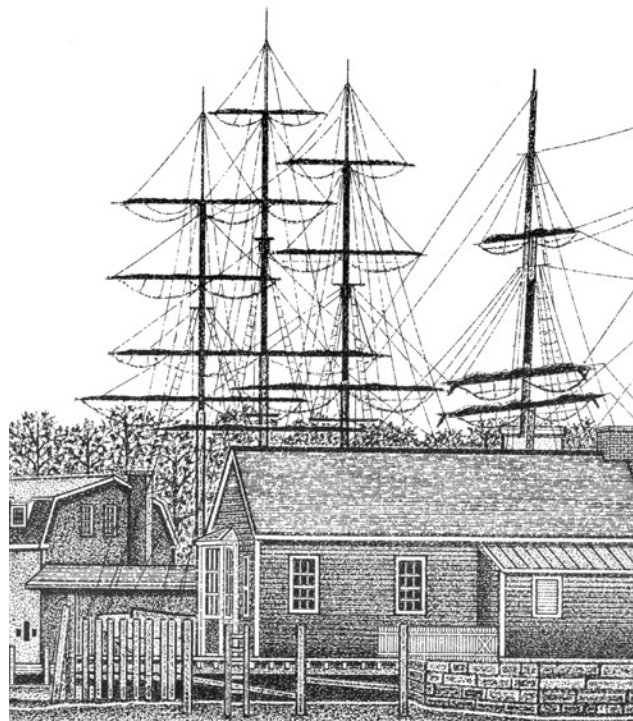
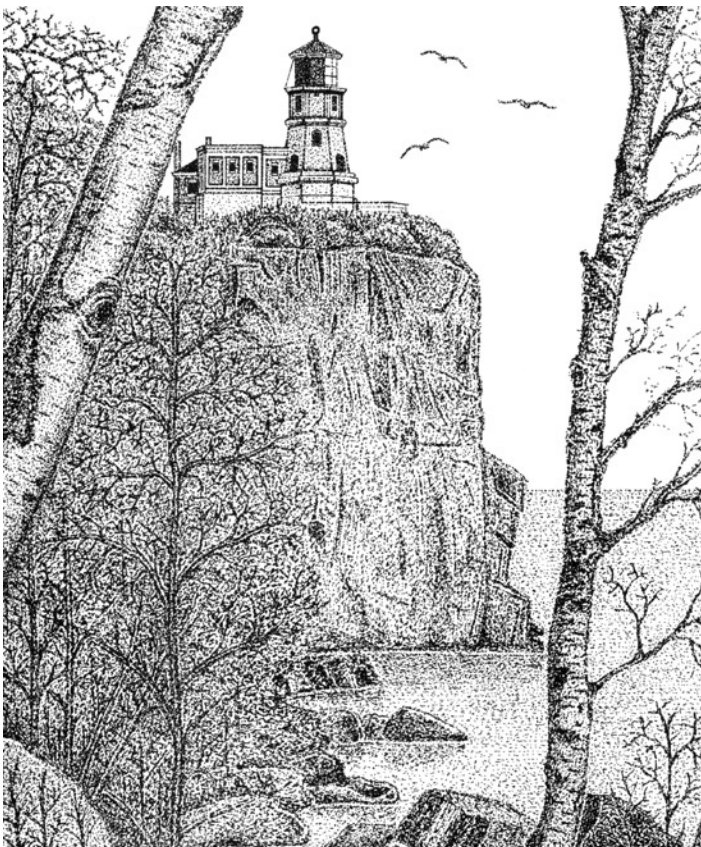
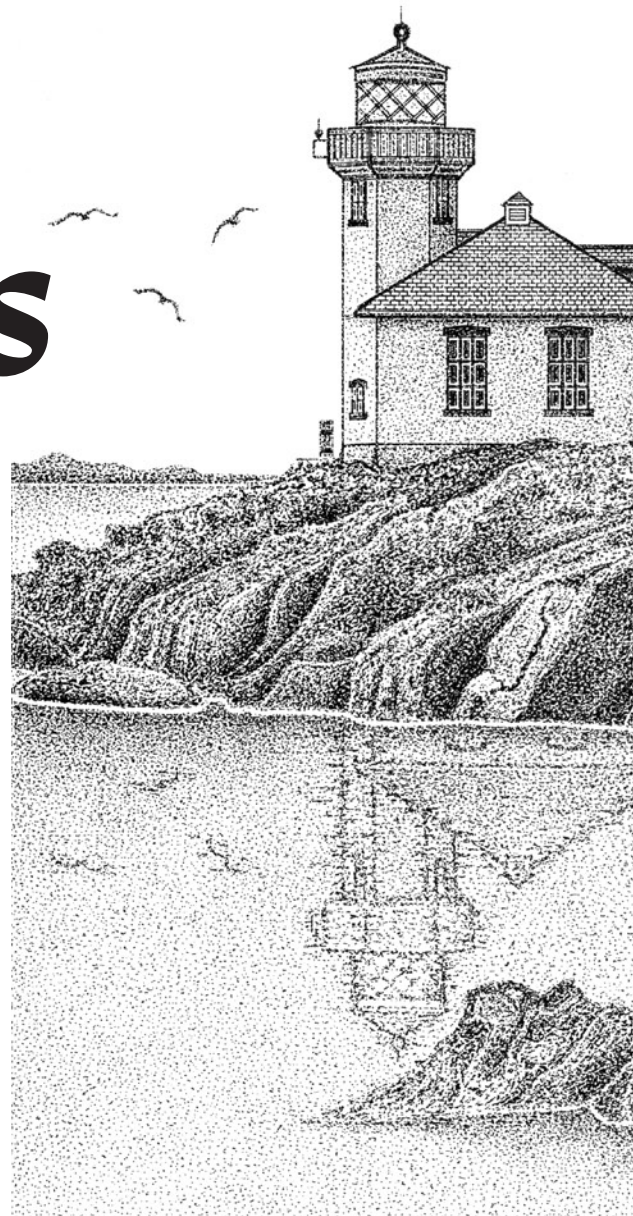
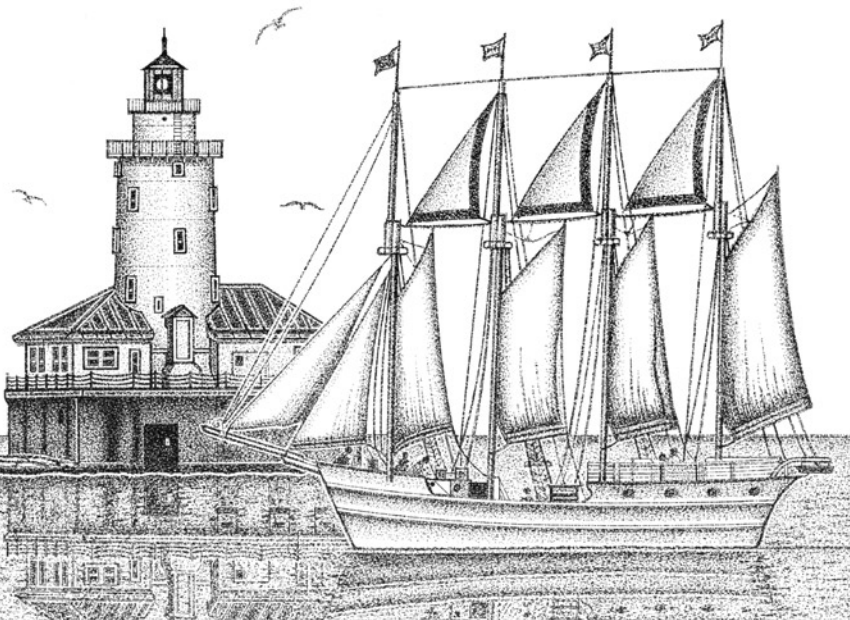
Beautiful custom-crafted elements of teak, mahogany, oak, and rosewood (especially favored by British customers) were being created. The workers were predominantly well beyond middle age and some were quite old. It pleased me to see these gnarled old hands still putting out the same quality of craftsmanship that had been the standard in the olden days. It was disconcerting, however, to see how few young apprentices were on hand to learn from the masters.

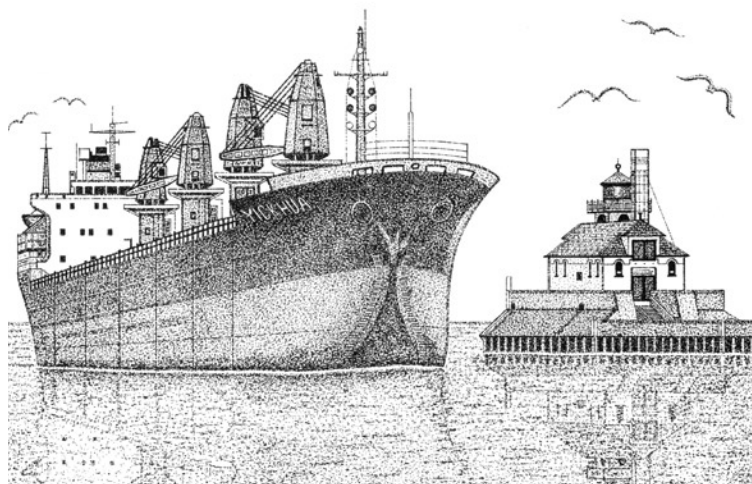
Although traditional methods of producing these boats have changed and will continue to change with the constant development of new technology, in my view the features that made the Boeier so successful in past years will continue to prolong her desirability and usefulness, and she will sail away into the next millennium.

As many Dutch boys do, Fred notes, he started sailing at age 12 in Holland. After arriving in the U.S. in 1938, he skippered and crewed many boats and campaigned a *Flying Dutchman* during the 1960s and 1970s. He retired from a career in energy and pursued a career as yacht surveyor/appraiser until he was well into his 80s. He and his twin brother just celebrated their mutual 90th birthday in Holland. Fred notes that he must have been born on the starboard tack. He arrived 10 minutes earlier than his brother.



Festival of lights





His friends call him “the dot guy,” but we prefer to think of Randy Peterson as the lighthouse man. Check out his site at [http://www.light house-artist.com](http://www.light-house-artist.com), and he’ll answer to either. A few of the lights from his collection clockwise, starting above: Duluth, Minn.; Tibbetts Point, N.Y.; Mystic Seaport, Conn.; Split Rock, Minn.; Chicago, Ill.; Lime Kiln, Wash.



Cruising memories...



Cecile is equally at home on the trailer and at the dock.

We christened our little sailboat *Cecile* (se-sl) after my wife's grandmother, a kindergarten teacher from Williamsburg, Iowa. First sailboats and kindergarten teachers share a mutual goal of exposing people to new experiences. After a season of daysailing and several weekends on our 16-foot Newport, we ventured into chartering larger boats. Big boats and big water began to make *Cecile* appear inadequate. Her virtues were overshadowed by her lack of size. The recumbent cabin seemed barely comfortable. You could sit upright while on the Porta Potti only with your head sticking out of the main hatch like some nautical jack-in-the-box. Everyone knew what you were doing; they just couldn't see you doing it. We needed to change either

our boat or our attitudes. Our decision came during a week of camping and sailing on Lake Michigan's Green Bay.

The journey from western Illinois to Wisconsin's Peninsula State Park was the biggest trip we've ever attempted with *Cecile*. Every nook and cranny of the hull was packed with camping equipment, food, clothes, and sailing gear. The added weight tamed the normally bouncy nature of the little boat and trailer on the road. When the wheels stopped turning, we had covered 416 miles in eight hours, making it the longest and fastest trip with our sailboat. Nothing makes a sailboat go faster than a trailer.

During our charters, we had always pushed the boat and ourselves to meet

Sail-

destination expectations. Sailing became a marathon, running within the time window of the charter. *Cecile's* diminutive size forced us to let go of our self-imposed distance goals and enjoy moment-by-moment sailing. Weather, wind, and waves determined our daily agendas. Rough-weather days kept us in the shelter of the smaller bays. If the weather became severe, we knew we could load *Cecile* on the trailer in minutes. However, in typical late August style, tranquil weather prevailed, allowing us to leave *Cecile* at anchor each night in Peninsula State Park's Nicolet Bay.

We could have spent one or two of those nights on the boat, but decided to enjoy the end of each day by the glow of a campfire. Camping gave us a new independence we had not achieved on any other sailing trip. More than once, I slipped away from camp with my morning coffee to watch the sunrise change the colors of Nicolet Bay. We also found that independence came with wheels. One day we explored the back roads of Door County. Our memories of Wisconsin's thumb will always include a winding blacktop road leading through quaint hamlets and villages and ending at the water's edge. Staying on land also allowed us daily showers (long ones with hot water). So every morning after breakfast, it was off to the showers before packing up a bag of essentials and strolling down to the boat.

Leaving *Cecile* at anchor was a major advantage on the trip. Within minutes she was ready for the next day's sail. We don't have a dinghy on a 16-foot sailboat, so getting to *Cecile* took some ingenuity. A long looped rope was threaded through a shackle at the end of the anchor line and led to a secure object on shore. We tied the boat onto this loop and drew it up tight against the shackle at night. This gave us two anchor points.

Each morning we untied the line on shore and pulled *Cecile* to us. With the rudder and keel up, she beached so well we hardly got our feet wet.

This part of Door County seems ideally suited for the short-distance, small-boat cruiser. Bays and towns dot the shore with enough frequency to allow the sailor a safety

by Craig Brady

camping bliss

net should the weather deteriorate or equipment failures occur. Stable late-August weather gave us some safety from violent storms. Warm water also meant embarrassment, rather than disaster, should one or both of us go in the drink. Each day we cautiously ventured farther out until our keel finally split the waters of Eagle Harbor, Fish Creek, and Sister Bay. In the evenings we returned to Nicolet Bay.

The Fish Creek fuel dock was our first landing after leaving the Nicolet Bay area. Light early morning winds made the six-mile trip seem a lot farther. After entering the harbor, we followed the marker buoys around the field of moored boats and ended up pointing directly at the dock. My wife, Ruth, passed our lines to the attendant as I reached back and popped the Johnson into neutral. The thrill of arriving at a new harbor is always the same, whatever the distance or the size of boat. As we started up the sidewalk into town, I looked back at the little boat that brought us safely to this new destination. She seemed a little bigger.

The next morning we flew twin headsails for a quiet glide downwind to Sister Bay, five miles to the northeast. This time Ruth brought us into the harbor while I handled the dock lines. We alternate boat-handling roles while sailing to learn from each other. *Cecile* has been an excellent boat for this, due to her size and simplicity. While we were closing up the boat, an elderly gentleman stopped and visited. He had admired our little sloop as we entered the marina and wanted a closer look. As he walked away, he complimented us on our perfect little boat. I smiled in agreement, sliding the padlock into the hatch of the main hatch.

Horseshoe Island is located just a mile outside of Nicolet Bay and became

a nautical milestone for us. It was our first circumnavigation and took a little over an hour with numerous tacks and sail changes. You can imagine the island's shape from its name. On its lee side, Horseshoe Bay was perfectly still as we motored in. Several larger boats dotted the bay, so we tried to make our arrival as unobtrusive as possible. In an out-of-the-way spot, we quietly lowered the anchor through the clear water and watched it settle into the sand below. The wind that had powered us now wasted its energy on the hardwoods and pines of the island. Ruth and I stretched out in the afternoon sun on the cockpit cushions. We had come full circle around this piece of land and in our attitudes toward the little Newport 16 that brought us there.

Although our Newport will never sail great distances, and although I will never sit upright inside the cabin, I have come to respect the little sailboat for the things she does so well. Her shallow draft allows us to slip into any place a herring can walk. She can handle more weather than either Ruth or I want to. With her

versatility and mobility, daysailing and longer vacations are equally achievable. Trailering the half-ton boat down the road is undemanding on the equipment and the driver. If some day we find another boat that fits our sailing needs better, it will be because our needs have changed. For now, the combination of camping and short cruises makes the adventures that lie ahead seem vast and endless.

Craig learned to sail in 1997 with the purchase of Cecile. He and Ruth obtained their ASA certificates a year later and have chartered on the East Coast and in the Midwest. Craig believes trailer sailing is their best option for unlimited destinations. A new dog (known as their Chief Petting Officer) expanded the family, so this year they gave in to three-footitis and sold Cecile for a West Wight Potter 19.



Could Ruth Brady's smile, at left, be any bigger on a larger boat? Could the view from the cockpit be any more glorious?



Secret



Leaves turn to muted rusts, reds, and golds in Down East Maine. The weather cells move more quickly and winds pick up, flinging sea spray against the multi-colored lobster buoys. There are fewer sails on the water. The visitors have gone. Maine residents know winter is coming, and they're preparing for it.

After a three-year refit, 1999 was the first season Art Hall had had his Allied Seabreeze in the water, and he was having a hard time facing the season's end. When *Good Old Boat* technical editor Jerry Powlas and I asked him to go for one last cruise, he did not resist. His wife, Sandy, and two teenage daughters prefer

summer to late-fall sailing and had become involved in other activities, abandoning Art to the role of quasi tour guide for a couple of sailors "from away," as they say in Maine. Nevertheless, he was happy to have an excuse for one last weekend cruise before hauling his boat in Belfast.

Just south of Belfast, in the cottage community of Bayside, is the mooring where *Secret Water*, Art's Seabreeze, awaited her last sail of the season. *Secret Water* is the name of one of the books by Arthur Ransome in his

classic children's series about childhood adventures and sailing which begins with *Swallows and Amazons*. In *Secret Water*, the children have a password that they must be able to say forward and backward: "akarabgnadabarak" and "karabadang-baraka." The Peapod tender that serves *Secret Water* is a double-ender that teases the casual observer by having both variations of the password as names, one painted on one side and the reverse painted on the opposite side. Art says this is the source of untold queries and explanations.

Like the children in the *Swallows and Amazons* series, Art began sailing as a child. When Art was still in grade school in Connecticut, his father bought *Rondo*,

a secondhand Pearson Triton (hull #124) for family sailing. Back in the 1960s, two adults and four children thought nothing of close quarters and "primitive" amenities for their vacation lifestyle. Many families went camping. Art's family "camped aboard" with the two boys sleeping in the cockpit under a boom tent.

"Mainer" at heart

In the best tradition of an East Coast boy who wanted to make his living at sea, Art went to the Maine Maritime Academy in Castine and became a "Mainer" at heart,

establishing his home there. He sailed in merchant vessels all over the world, ending his merchant marine career as the senior engineering officer aboard Texaco tankers.

Shortly after graduation from college, Art bought a 31-foot C&C Corvette, which he sailed on Maine coastal waters and used to court his Maine sweetheart, Sandy. Following their wedding, they made their escape from the reception aboard the Corvette. Next, Art and Sandy briefly owned a Pearson Ensign, but they primarily cruised as a family aboard *Northern Light*, a 30-foot custom cutter that was designed and built by Sandy's father, Dick Lagner, a naval architect.

In 1990, Art noticed a familiar-looking Pearson Triton in a boatyard. He even pointed out to Sandy and the girls upon occasion: "That looks just like the boat that Papa Bob (the girls' name for their grandfather) used to sail." Eventually he stopped for a closer look, was struck by the similarities, and realized with joy that it was hull #124, the boat he had grown up on. He bought it.

The Triton had seen better times in earlier years with Art's family. Now she was in need of a complete renovation. The deck was delaminated; trim was decayed; from cushions to countertops, the interior was in need of a refit; the plywood cabin sole was shot; the

by Karen Larson

Water's second life

electrical wiring was ready for replacement; and the boat was a cosmetic nightmare. Art says it looked as if it had

been painted with a broom. Three years later this boat was in tip-top condition from the inside to the newly Awlgripped topsides and deck. Shortly thereafter, job upheaval caused Art and Sandy to sell the boat while it was in mint condition.

During the boat's transformation, *Rondo* had been blocked on stands in the Halls' backyard in Pownal, Maine. Once life had stabilized again, Art was encouraged enough by the results of the first renovation to take on another project. He began looking for a larger and more comfortable cruising boat. The next "project boat" was the Allied Seabreeze, which he found in Connecticut and trucked back home to that familiar spot in the backyard.

Project boat

Like her predecessor, *Secret Water* was in need of minor structural and major cosmetic repair. In particular, her spongy deck frightened prospective buyers. About 10 percent of the deck was damaged, but Art had already tackled a delaminated deck, so he bought her for a reasonable price. He says if you're going to buy a project boat, your best bet is to find one that won't pass a survey, can't be insured, and can't be financed. Then, he adds, if you can pay as is, where is, no survey, and cash for it, it's a buyer's market. He offered \$10,000 less than the asking price and says the seller just about chased him away with an oar but later called him up and accepted the offer.

A fine craftsman, Art transformed the boat inside and out over another three-year period. He started with the areas

*After a three-year refit,
a much-loved Allied Seabreeze
goes cruising again in Maine*

with deck delamination. He removed and discarded the outer layer, removed and replaced the rotten core and built up, faired, and refinished the top laminates. He Awlgripped the deck and applied a new non-skid to traffic areas.

And he built new engine beds. As he says, "When the boat was repowered with the Lehman diesel, some 'bonehead' had bolted the engine mounts through the skin of the boat. There were 12 half-inch holes. It was a textbook case of how not to install an engine. I removed the welded steel pedestals that had elevated the forward engine mounts and then glassed in substantial mahogany stringers to form proper engine beds. And I drilled

and faired the 12 holes."

Art also performed miracles inside the boat: repainting the overhead with one-part polyurethane, resurfacing the countertops and

vertical surfaces, completely redoing the head compartment, and rewiring the electronic equipment. (There was more on this in *Good Old Boat*, March 2000.) Before the Seabreeze had begun her trip to Pownal, Maine, in fact, Art had stripped all the wiring, the bulk of the equipment that he says had no value — life jackets, fenders, dock-lines, Loran, knotmeter, depthsounder — and tossed them in the dumpster in Connecticut. The old roller furler and jib were sold, but he salvaged the mainsail, the spinnaker, and the drifter.

Lest you think Art is a carefree squanderer, we should point out that this is one man who made use of every

Secret Water, Art Hall's Allied Seabreeze is as pretty when sailing in Eggemoggin Reach, facing page, as she is at anchor near Stonington, at right.



The view from the cockpit. Art Hall in his glory, at right; Stonington, Maine, below.



salvageable piece of teak and other wood on that boat. If a piece couldn't be repaired and reused in its original location, it was stripped and used in another place. A piece of wood salvaged from the Triton, in fact, has a place of honor as part of *Secret Water's* breadboard.

Art is a self-described "bottom feeder." When parts could not be salvaged, he cruised marine consignment shops for equipment such as winches, a forward hatch, and a traveler. The furler is new, however, and the 135-percent furling tri-radial jib is a new high-tech sail made of laminated cloth. Art notes that this sail was made by his local sailmaker and adds, "You should support your local sailmaker. He'll be there to tweak the minor problem you might encounter. Not so with the mail-order outfits."

During this entire process, Art strove to keep Sandy involved. She thought self-tailing winches would be nice, and Art's only comment was, "No problem, honey." Next thing she knew, *Secret Water* was equipped with self-tailing winches from a local buy-and-

swap magazine called *Uncle Henry's*, which Art characterizes as "a real Maine institution." It was crucial to Art that Sandy have ownership and full partnership privileges from start to finish. He notes, "Her input and contributions should not be underestimated."

Art didn't just restore this Seabreeze, he put his own stamp on the design of the interior. He and Sandy attended a rendezvous of Seabreeze owners and took away from that gathering the best interior innovations and then added a few more of their own. For example, an awkwardly placed oilskin locker (behind the galley space in the sail locker and to starboard of the companionway steps) became the location for a trash container.

He added a lift-out panel for better access to the engine compartment. He eliminated the pilot berth and built cabinets and a dedicated chart locker, sized just right to hold folded charts. Wherever there was an unused spot, Art turned the cubbyhole into a storage space. Finally, three years into the project, as the 1999 sailing season approached, Art said, "It's time to go sailing." It was. The boat's topsides were promised Awlgrip-

ping or a paint job to be done at another time. It was at the end of that first season that Jerry and I joined Art on his last sail.

Season's last sail

We met him one Friday late in September in Bayside, south of Belfast. Before having a chance to fully appreciate the architecture of Bayside, a quaint Victorian community where Sandy's family has spent summer vacations for four generations, we bailed the dinghy, loaded gear on *Secret Water*, and were off. We sailed across Penobscot Bay in brisk winds to Holbrook Island, just south of Castine, where Art had attended the Maine Maritime Academy and fallen in love with Maine.

Seabreeze designer Frank MacLear is quoted as saying that any centerboarder requires earlier sail reduction than full-keel boats. This suggests that the boat should be sailed on her feet. Art, however, was having none of that when we sailed with him. In 25-knot winds, with seas of 3 to 4 feet in the bay, *Secret Water* carried a single reef in the main and a full jib. This pushed the rail under and held it there as Art hunkered down on the leeward side of the cockpit and happily sailed his boat. His faith in the ability of his boat to sail in this condition was complete and, from what we saw, justified.

Jerry's dinghy sailor instincts, however, kept telling him we'd see seaweed on the masthead before sunset. But the Seabreeze continued to have good steering and perfect balance with no tendency to round up. Eventually it became too much even for Art, and he decided to roll a small reef in the jib as we cracked off on a reach near Holbrook Island. We're certain no one will accuse Art of having *Secret Water*

undercanvassed. Perhaps this is a glimpse of how *Secret Water* is sailed in casual club racing where Art picked up a first place in the Around Isleboro Race in his first season with her.

Art has *Secret Water* rigged with a 135-percent genoa with a foam luff and a full-battened main. The main halyard and reefing lines are led to the base of the mast and, with *Secret Water's* wide sidedecks, getting to the mast is no problem. She has a well-fitted dodger, which Art considers to be a necessity on the coast of Maine. He has replaced her original Crosby rig mainsheet system with a traveler mounted to the afterdeck, which, he notes, together with a powerful vang at the toerail, effectively flattens the main.

Frank MacLear and Bob Harris designed the Seabreeze 35 as a keel centerboard boat, a design that was influenced heavily by *Finisterre*, as were so many boats of the time. A total of 135 were built between 1963 and 1972. This was the second boat introduced by the Allied Boat Company (for the history of the company, see *Good Old Boat January 1999*), following in the wake of her popular predecessor, the Seawind, a 30-foot ketch. The Seabreeze was rigged both as a yawl and as a sloop. The Seabreeze has a shallow full keel with an attached rudder. It's just the thing for cruising among Maine lobster pot warps. The 350-pound all-bronze centerboard is housed inside the full keel and pivots from its forward edge, improving pointing ability and changing the draft from 3 feet 10 inches to 7 feet. The board's controlled by a worm-gear winch located in the cockpit. A Monel cable is used to raise and lower the board.

Although the Seabreeze is considered to be an acceptable bluewater boat, Art has modified her to be a coastal cruiser. In the merchant marine, Art traveled all over the world. But he believes the coast of Maine is the most beautiful place in the world and has no plans to go farther than Nova Scotia's Bay of Fundy and other destinations that can be reached during a two- or three-week vacation. "It is said that you can spend your life cruising these waters and not see it all," Art says. "I hope to disprove that."

The next day had lighter winds, so light that we motored through most of the morning until a nice breeze came up around lunchtime. Art recognizes most other sailboats cruising the area. He



The Peapod dinghy Art's father-in-law, Dick Lagner, built to grace the Seabreeze.

knows at a great distance the type of boat, the characteristics of the boat, and in many cases the name on the transom of the boat and where it is moored. He carries the *WoodenBoat* directory along and often looks up the classics he sees on his journeys. The directory provides information on the designer, builder, and current owner. Art loves these boats and knows many as individuals.

Seals and surprises

With Art pointing out boats, harbors, and other points of interest, we circumnavigated Deer Isle, remarking at the vast numbers of lobster traps and thrilled by the occasional sightings of curious harbor seals, which popped up to see what sort of boat belonged with *Secret Water's* keel. The Down East area — so named because of the prevailing southwesterlies which let a sailing craft run downwind and east along the coast — is made up of rocky fingers that extend into the Gulf of Maine, offering vast opportunities for shelter from any wind.

Deer Isle held two surprises. The first was the town of Stonington. This is a last holdout against the tides of Maine tourism, which are turning many coastal towns into something derisively characterized by Art as towns full of "T-shirts and taffy." Not so in Stonington. This harbor lies too far off the beaten path to attract tourists (except for those arriving by boat) and therefore retains the flavor of a commercial fishing village with sailboats thrown in for the sake of diversity. In fact, we were struck by the integration of sailboats and lobster boats in all harbors and on all docks as we toured this part of Maine — polished

Hinckleys tied up next to well-worn lobster boats without an ounce of discrimination, as far as we could tell, from either boater.

We enjoyed a lovely sail up Eggemoggin Reach, past Center Harbor and Brooklin, and the spectacular home of *WoodenBoat* magazine. The second surprise was dredged up from my childhood. Each morning when we awoke in Maine, I invoked the title of a favorite childhood book by Robert McCloskey, *One Morning in Maine*, while appreciating the surroundings. I told Jerry the storyline from memory and described the detail and warmth of the illustrations. Little did I know that Art would take us on a pilgrimage to Bucks Harbor, the scene of the story, and that Condon's Garage would still be there nearly unchanged, almost 50 years after the book was written. Mooring in Bucks Harbor the second night was a special treat.

The next day we sailed back up Penobscot Bay, this time on beyond Bayside to Belfast where the boat would be hauled for the winter. Jerry and I were sorry to see the cruise end. Art was sorry to see the season end, but, like a chapter in the book for which she was named, *Secret Water* was prepared to wait patiently for her next adventure. Spring would surely come, and this beautiful boat would once more sail the coastal waters that Art knows so well.

Karen is editor of *Good Old Boat* magazine.





Allied Seabreeze

I worked quite closely with Allied Yachts in the mid-1960s when they commissioned Bill Luders to design the Luders 33, and I was favorably impressed with the quality of their construction. Bill and I made several trips into the Catskills to visit the plant, and we were able to see for ourselves the craftsmanship and the strength that the folks at Allied built into their products.

An interesting sideline here is that in order to save money on the tooling for their new boat, Allied did not want to make a new deck mold for the 33. So, with only minor changes at the stern, the mold for the Seabreeze 35 deck became the mold for the Luders 33 deck. That should explain the family resemblance if you ever see the two boats side by side!

The numbers comparing the Seabreeze to several other production keel/centerboarders of the late 1960s, early 1970s are shown in the chart on Page 37.

When you study the figures, it becomes obvious that the designers were thinking along the same general lines, producing a type of yacht that was very popular in that era. Only the Tartan 34 has a fin/skeg rudder profile, and the other three are traditional full-keel/centerboarders. In effect, the Seabreeze, Morgan 34, and Pearson 35 are smaller versions of the famous *Finisterre*, Block Island 40, Bermuda 40, and similar keel/centerboard CCA cruiser/racers.

The Seabreeze is the heaviest of the four and has the shortest waterline, so her displacement/length ratio is very high by contemporary standards, and she would be classed as ultra-heavy today. However, all these yachts have long overhangs and will pick up

waterline length as they heel, so the displacement/length figures are somewhat misleading. They will definitely be reduced down to the low 300s, as the yacht heels when beating to windward.

What is a bit confusing about the above figures is that the Seabreeze is not only the heaviest of the group but has the lightest ballast. I expect this is the result of the very husky, thick fiberglass

construction that Allied favored.

According to Arthur Beiser in

his book, *The Proper Yacht*, 400 pounds of that ballast is in her husky bronze centerboard, and this will lower the center of gravity, adding stability as the board is lowered. (*Later models had 350 pounds in the board -Ed.*) However, the board will retract back into its slot in case of a capsize so will not add to ultimate safety. In any case, the capsize screening formula for all of these yachts is conservatively below that of the typical light displacement, ultra-beamy, coastal cruisers being produced today, many of which have numbers well over 2.0 and are almost as stable upside down as they are right side up. Indeed, each of these boats is quite capable of ocean passages in experienced hands, and many of them have made extended voyages.

The rigs in our comparison are quite similar in area with the heavy Seabreeze having the lowest sail area/displacement ratio, naturally. Allied did offer the option of a yawl rig, though, with 25 square feet more area, increasing the sail area/displacement ratio to 16.3. That definitely would be my preference over the sloop rig as it allows the skipper to set a very useful mizzen staysail off the wind and, of course, has the other advantages of the yawl rig, not the least of which is that it is just plain handsome.

Still, I expect that the Seabreeze will be slightly outperformed by the others in this group due to her husky displacement and short waterline. The Sparkman & Stephens-designed Tartan would be my choice for the best performer, due to her reduced wetted area, lighter displacement, and high ballast ratio, with the other three boats right on her heels.

All of the boats favor the single-spreader rig with double lowers, a setup that was standard in that era. The Seabreeze mast is stepped on deck, as are those on the Morgan and Pearson. Only the Tartan 34 has a strong keel-stepped rig. The deck-stepped spar is not my favorite setup as it is substantially weaker in compression than a keel-stepped mast. So, a stronger, heavier tube is required to handle the loads, and this adds unnecessary weight aloft. And in case of a dismasting, it is much simpler to set up a jury-rig with a keel-stepped mast, as there is usually a stub of spar left to start with.

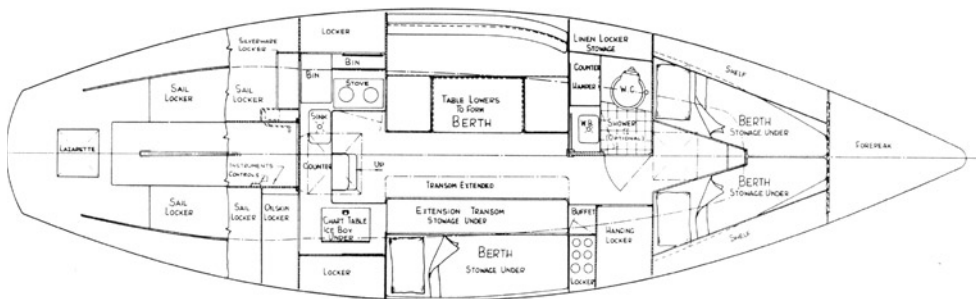
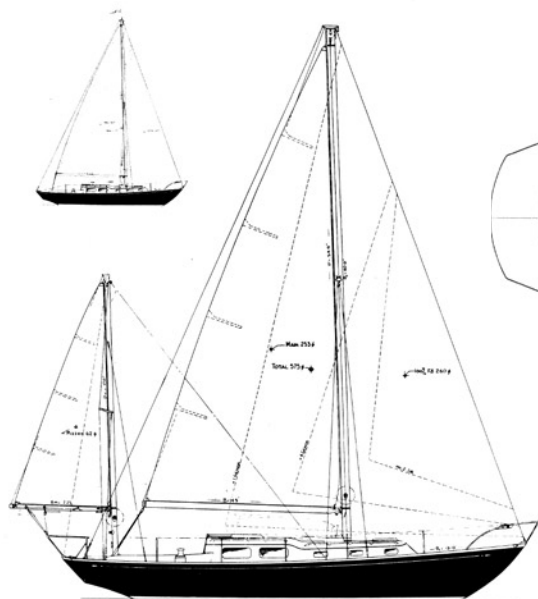
Due to their relatively short waterlines and narrow beam, none of these boats can compete with the contemporary 35-footer in terms of inside layout. Indeed, their interior volume is more like that of a 28- to 30-footer of today, so you won't find double berths or private staterooms tucked under the cockpit. Still, these classic boats can accommodate a family of four in comfort for a week or two and a couple for much longer voyages, and that is what most of us ask of a yacht.

One other thing that many people want in their yacht is beauty, and the Seabreeze 35, with her long overhangs and handsome sheerline, delivers that in spades. Thanks to MacLear and Harris' design artistry, the 35, like many other older boats, will stand out like Cinderella at a family picnic whenever she sails in company with a fleet of today's rocket-ship-styled freaks.

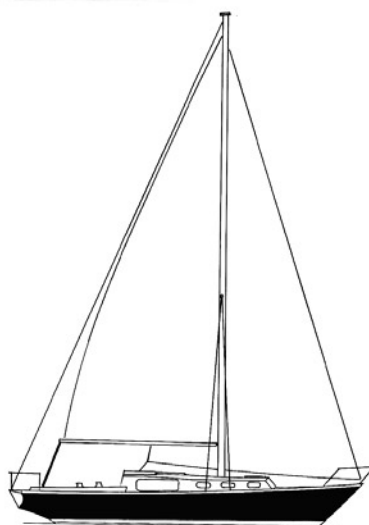
Ted is well known as a naval architect and the creator of many good old boats sailing today.



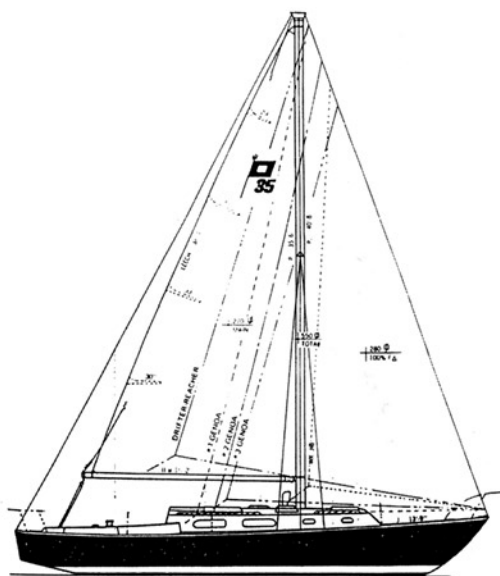
Secret Water sails at some unknown degree of heel, above. Ted notes that some heeling allows CCA-style boats to pick up waterline length but, the editors who sailed with Art ask, must they show the entire bottom to do so?



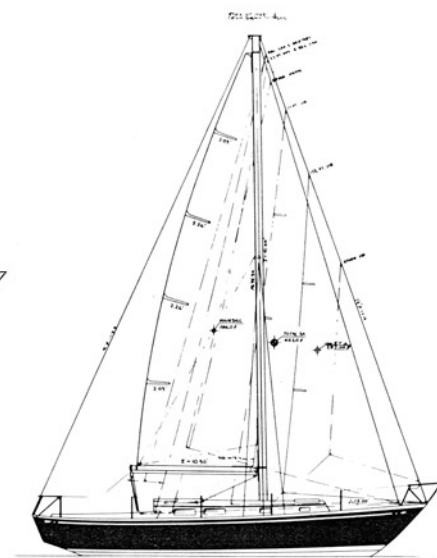
Seabreeze, at left and above



Morgan 34



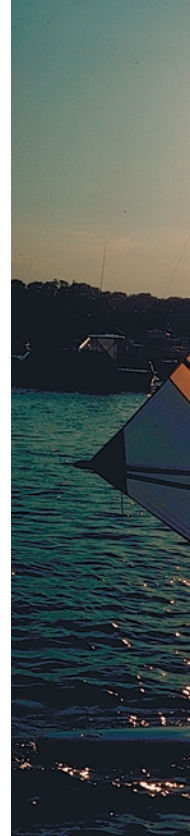
Pearson 35



Tartan 34

	Seabreeze 35	Pearson 35	Morgan 34	Tartan 34
LOA	34.5'	35.0'	34.0'	34.4'
LWL	24.0'	25.0'	24.75'	25.0'
Beam	10.25'	10.0'	10.0'	10.2'
Draft				
board up	3.83'	3.75'	3.25'	3.92'
board down	7.75'	7.5'	7.75'	8.3'
Displacement (lbs)	13,400	13,000	12,500	11,600
Ballast	4,400	5,400	5,000	5,000
Sail area (sq ft)	550	549	550	527
Displ/length ratio	432.7	371.4	368	331.4
Ballast/displ ratio	32.8%	41.5%	40%	43%
SA/displ ratio	15.6	15.9	16.3	16.5
Comfort ratio	34.1	33.2	32.4	29.1
Capsizing screening #	1.73	1.7	1.72	1.8

Speaking of pictures



I love the sight of a sailboat romping by itself in a brisk breeze on an otherwise empty bay. I love still waters, endearing children and their patient parents enjoying the myriad aspects of aquatics, and “old salts” with their weather-beaten visages and mischievous grins. Dogs of every description aboard any kind of vessel are a continual visual feast. So are dinghies, tethered willy-nilly at docks; the doughty forms of tugs and other workboats; sea conditions and the seasons and luminous dawns and limpid dusks and on and on it goes . . . the sea heaving up an endless procession of memorable and fascinating images to admire and record.

How to harvest this parade?

I start by having my camera always at the ready. I get up in the morning with the camera slung around my neck. It is always within close reach when I’m in the cabin — on a shelf or on a seat right by the door of our boat. (After a dozen years of sailing in a variety of vessels, we now cruise in a 36-foot Grand Banks trawler yacht.) When I go up on our flybridge, my Nikon 8008 goes up with me, and it comes back down except for the briefest of trips below. As we sojourn on the sea, my camera is beside me on the seat or if it’s so rough that spray is being hurled over our flybridge, I keep it in a locker

near my legs where I can whip it out and return it quickly.

A word about photography in foul weather conditions. You have to ask yourself: “Am I there for the camera? Or is the camera there for me?” You only go around this way once, and so I choose to use my camera and occasionally risk exposing it to salt spray. When this happens to the lens or body of the camera, I sponge them off as soon as possible with clear water.

Waves flatten out

I’ve learned that even large waves flatten out in your pictures, but something of the malevolent can always be captured. Even an out-of-focus image caused by the rudeness of the motion can be evocative of nasty conditions. I take pictures through the windows if

necessary, figuring that something on film is better than nothing. I welcome fog and mist (pictorially, that is) where nature does most of the work for you. A boat coming toward you, or passing, or being swallowed by mire; a buoy looming suddenly like a supernatural apparition; craft anchored or moored with their masts seemingly vanished have a ghostly quality all their own. I never dismiss a gray day as being without interest. Some of them are akin to silver, and the effects you achieve are as exquisite as etchings. I even visit locales after storms. Damaged boats and coasts are part of the panoply of

A marine photograph that once-in-a-

life afloat. (I speak as one whose own sloop was once grounded in a gale.)

I never leave my camera in the sun, and often shift its position when underway. It’s in the sun many times when you shoot, of course, but as soon as the shot is taken, I make sure it rests in the shade. Nor do I leave it in the car to heat up as the car does when parked, particularly in summer.

Right at hand with the camera is a small canvas bag in which I keep extra film (I always have six extra rolls with me), lens tissues, and spare batteries. Most situations can’t be caught twice, so I try to ensure that I have the means to record them the first time.

I keep photography simple. My camera is almost always on automatic setting. I use only two lenses: a 70-210 zoom and a 28-85 wide-angle.

Slide film

I use slide film almost exclusively, because of my work as a photo-journalist, since slide film is required by most magazines. (*Many magazines will tell you to use 64 ASA or slower film. Getting a sharp focus is difficult with the motion on boats — those you’re shooting and those you’re shooting from. A better bet is 100 ASA film such*

*by Mary Jane
Hayes*



pher tells how to get a-lifetime shot

as Fujichrome's Provia. -Ed.) I use no filters except for a skylight filter to protect the lens. This is personal preference. I revere the sight of the world exactly as it is and choose to capture it that way. But I can understand completely the lure of different kinds of filters for those who like to play around with or enhance reality. (Think what Van Gogh did in the realm of painting!) One lens is on the camera and the other in a bag right beside my extra-film bag. Depending on the visuals presented, I'll change the lens several times during a passage.

On any leg, I frequently glance 360 degrees around, alert to picture opportunities, either sail or power. If you're open to beauty, you find it in all kinds of craft. A common image en route to the Cape Cod Canal is a motor vessel charging toward you from astern, heaving white wings of water as it hastens rather imperially on its way. If I see a boat coming toward us that seems special enough to photograph, I shoot it as it approaches, when it's abeam, and falling astern.

I also look up. Sometimes the sky is the picture. Sunrises, you discover, diffuse swiftly into day (shoot them quickly!), but sundowns are leisurely. I attend each of their gradations as they deepen into dark, sometimes shooting 10

or 12 slides, each of which will prove to be different, but all equally stunning. Old Sol himself can be used to dramatic effect, just emerging from the top of a sail, or the edge of a cloud, or crowning a mast or some other part of a vessel. Clouds, too, array themselves in marvelous formations, from the ominous to the awesome.

A cruise chronicle

I chronicle every cruise in pictures. I photograph the marks we pass, the bridges we go under, any landmark or other important structure ashore, all the traffic that catches my interest and every harbor in which we berth.

A host of shots are of the seize-the-minute variety. One of my favorites occurred on one of our recent cruises to Block Island, Rhode Island. I was washing the dishes at sundown, and a seagull lighted on the top of a post on our dock. I pulled off the rubber gloves I was wearing as quickly as I could, grabbed my handy camera and shot a blink-of-an-eye before the bird took off. I wasn't so lucky up on Maine this past summer, and my loss of a photo was my own fault. Just this once I hadn't taken my camera with me as I strolled a pier. When I dashed back to the boat to get my Nikon, ripples had ruined the absolute stillness of what had been a basin reflected to perfection.

More on marine photography
in the November issue
of *Good Old Boat*.

Colorful spinnakers on boats well sailed, silhouettes, reflections, and mood shots at sunset . . . these are subjects for Mary Jane Hayes' artistic eye.

Seize-the-minute shots are instinctive and/or happy accidents. But scores of good pictures are the result of deliberate planning.

I try to decide in advance what lens to use. Underway, I usually have my 70-210 on the camera in order to pull in the coastlines we're skirting or any boat in the vicinity. But when we head up the East River in New York Harbor, for example, I put on the wide-angle. In this waterway there are bridges and currents and much other traffic and buildings and helos and other images that succeed each other with such rapidity (all pretty close aboard) that

that lens best captures the vista and its spirit. I also use the wide-angle when shooting windjammers and large ships, and it's the lens I take ashore. (Often I

bring just one lens, not caring to lug both.) You can climb a hill and capture an entire anchorage. You can photograph local points of interest (including historic sites and statues, Victorian and other edifices, whole marinas and so forth) wonderfully well with a wide-angle.



Every angle

I take both a vertical and horizontal shot of a subject, if possible. One is usually stronger than the other when processed. And I shoot an up-close and a distant shot. When a sailboat is the subject, I shoot it from every angle. (Completely circling a boat underway is easy when you're shooting from a 12-knot yacht, I admit!)

We position ourselves to shoot races, keeping well out of the way and the wind of the contestants and a good distance off the buoys they round. (Here the zoom is the most helpful.)

From left: pets aboard add interest, two views of stormy weather, children wrapped up in their boating experiences (Mary Jane points out, however, that these are missing their life jackets.)

For added interest to an image, I try to wait until a boat is in front of or near a landmark such as a lighthouse or the United Nations Building before clicking the shutter.

As can anyone, I try to get in a bit of our boat in any shot underway that seeks to convey our passage and the surrounding scene — a burgee, the bow pulpit, part of the stern. If we row in our dinghy — to a secluded cove like Roque Island, Maine, for instance — I shoot the beached dinghy with the whole basin behind, combining foreground and background and setting a mood with the photo.

There is a treasure trove of “mood” shots to be had: a boat pointing seaward in a yachtyard in spring; a tender overturned in cordgrass in the fall; a snow-mantled sloop sporting the name of *Sunburst*. But no source of mood shots thrills me more deeply than twilight. I call it the “golden hour,” and to me it repays every bit of patient watchfulness required. You have to catch its magic. For just a

minute or two (or five or ten), the setting sun will gild an entire harbor, turning the masts and hulls to gold, sprinkling the water with sparkling reflections. Spread before you in that interlude will be a scene of such serenity and order you will feel transfigured by its glory.

Arrested motion

Something of the sublime is also achieved when you truly arrest motion. A sailboat in a high wind with a decided heel, masterfully helmed, is a wonder and never fails to transport this photographer. Here I never stint on film, taking multiple shots, willing to use up a whole roll, if need be.

If my husband refers to my camera as “the third person” (so everpresent is it on our boat) he sometimes calls me “the spider.” That is in reference to my ensconcing myself on our flybridge for hours once we have arrived at our destination, to see what I can catch in my pictorial “web” — usually an ample





From left:
moody fog, a
silver-gray day
which appears
to be in black
and white (and
really isn't), a
boat (Fisher
30) in arrested
motion, the
"golden hour"
at twilight.

sampling of the life of the harbor in all its comings and goings and changes of light.

Angles . . . planes . . . perspectives . . . patterns produce fascinating pictures: the curve of a beach or the long encircling arm of a jetty embracing an anchorage; Flemished lines; rigging; a headsail billowing out as shot from the cockpit; a varnished deck, or door, or brightwork and other parts of ships and boats. Groupings and contrasts also provide interest — tenders in clusters; rows of cradled boats; rafted vessels; a little boy looking way, way up at a big, big boat in a travel lift; a sailboat tiny against the loom of a mountainous shore; power and sail mingled.

And who can forget all the symbols of the sea you can shoot ashore? Figureheads among them, as well as anchors, nautical windvanes and signs; lobsterpots and buoys, nets and sundry other artifacts, and tools-of-the-trade.

All is grist

Almost anything can be grist to the mill for the marine photographer. Colored spinnakers. Whipping flags. Titans being overhauled in a shipyard. Cormorants (or seagulls or terns) caucusing on buoys; the ducks and geese that besiege your boat and the swans gliding regally by. (Not to mention seals and porpoises and whales and many another waterfowl or fish.) There is every kind and size of boat to be photographed, and fishers of the sea at work, and the people you couldn't boat without (like those willing to be hoisted in a bosun's chair), and messing-about-the-boat shots, and commissioning and de-commissioning, and mishaps, and the humorous human comedy afloat.

I find keeping the horizon level the biggest challenge in nautical photography. You're rolling or pitching and tossing or merely being jostled by the normal motion of a boat; and if you're shooting another vessel the same elements apply to that craft! I have to

discard many a shot because of its "tilt." You have to brace yourself as well as you can and shoot and shoot and some — but not all — of those shots will be successful.

For all your experience, and expertise, and vigilance, and thought, and patience, and practice, you are repeatedly humbled by your knowledge that often the last shot you had left on a roll that you took simply to use up the film — will turn out to be the best of the lot!

Mary Jane and her husband, Warren, have been boating for more than 25 years. She is the author of *Eye on the Sea: Reflections on the Boating Life*, which won first prize in a Boating Writers International competition. It's available from Breakaway Books, call 800-548-4348.



Thunderbirds bring class to Port Townsend



What can you say about a 40-year-old one-design keelboat that has fleets in places like Fiji, the Philippines, Australia, Canada, and Europe? “Legendary” seems to fit the Thunderbird. At 26 feet overall, displacing about 4,000 pounds, and with accommodations for four, you might not think this is the stuff of legends. The T-bird’s reputation is built upon its ability to sail well in a variety of conditions and what the sailors, who have often built their own boats, have done with them. One story is told about an early Around-Vashon-Island race in which the fleet of local sailboats was struck by 60-mile-an-hour gusts in the middle of the night, forcing some larger boats to retire and even dumping a few rigs. The legend goes that a Thunderbird in this race blazed through it all, main up and spinnaker flying as she boiled off at 12 knots or so. The T-bird won, and the skipper claimed it wasn’t bravado that made him push on, but rather a jammed halyard the crew could not free.

This year’s Northwest Regional Championship Thunderbird Regatta

was held in Port Townsend, Wash. Puget Sound is the birthplace of the T-bird so, as one might imagine, local fleet activity is well organized and followed with interest. In the local racing reports the Thunderbirders are always well represented. Thunderbird sailors have created

a sustained reputation since the late 1950s as a one-design class stocked with above-average sailors.

Canadian T-bird sailors seem to be particularly adept at

spotting and encouraging young talent. The current international champion team of Bob Britten and Hughe Owens aboard *Hocus* is a good example. By keeping their young talent in Thunderbirds, instead of watching as they are lured away by Js or Melges, says as much for the T-bird

as a great sailboat as it does about the well-organized Canadian efforts.

In this year’s regionals, the Canadians’ approach paid off as the shimmering red-hulled *Owl*, owned by Vitas Stukas, won an overall first and the events trophy. This win added a wonderful detail to T-Bird history: *Owl* won this event 31 years earlier in 1969.

Owl has a wooden hull with a fiberglass deck and house. Vitas attributed his boat’s speed off the wind to a thinner keel profile and his having moved the keel as far aft as the class would permit. This keel placement helped bring the center of lateral resistance more in line with the fractional rig’s center of effort.

It probably didn’t hurt that Vitas has a Ph.D. in chemistry, has sailed most of his life, and studies foil sections as a hobby, or that his daughter works in one of Canada’s leading hydrodynamic testing facilities. It says a lot about this class that after I sailed against Vitas all weekend long aboard *Hocus*, he was happy nevertheless to share his proprietary knowledge with me so I might make the boat I am putting together as competitive as possible.

The symmetry of one-design racing places emphasis on the ability of the sailors in the particular conditions of the day. One-design racing in

Thunderbirds is no different in this regard than Etchels, Lidos, or Lazars. It is, however, the adjustability of these boats that sets them apart. Running rigging is, in general, left up to the individual. Keel profiles, rig tuning, and bottom fairing are the kind of sailorly details that can give one boat the

by **Tony Polizzi**
photos by
Elizabeth Becker

Thunderbird Web site

[<http://www.thunderbirdsailing.org/index.html>](http://www.thunderbirdsailing.org/index.html)

advantage over another in a race in which three quarters of the boats arrive at the windward mark within 10 seconds of each other. This creates some very exciting starts and mark roundings. Sailors hike out as they beat to windward. The spinnaker hoists and dousings can be fast and furious. The level of athleticism and the caliber of the competition give this event a feel that encourages participants to sail hard.

Most of these boats are sailed with crews of four. The range of ages and gender add to the fun-charged atmosphere surrounding the races, especially the Saturday night post-race party.

Eighteen-year-olds and 75-year-olds were united in a spirit of sailing that some may think had seen its last days fade away in the early 1950s. What could do a sailor's heart more good than a day of close races, a shared meal and engaged discussion, while sipping good beer and watching the sun set on a vibrant fleet of great boats? If ever I am asked what makes for a successful regatta, I will be spared from explanation. I can simply extend an invitation to next year's race.

Thunderbirds are very accessible to most sailors. Besides being great raceboats, they are perfect for piling in the kids and gear for a week or two of camp cruising in moderate comfort. A beater T-bird can be had for as little as \$1,000, and a race-ready competitive boat without sails, for as little as \$8,000. If your pockets are really thin, remember these boats race with four crewmembers. I will warn you, though, to be ready to make friends and meet great people wherever you go.

Tony grew up as a liveaboard in California. He discovered the Northwest School of Wooden Boat Building in Port

Townsend and fell in love with carpentry and other traditional crafts. He is restoring a Thunderbird for racing.



On the facing page and at right, Owl leads the pack of Thunderbirds in the International Thunderbird Northwest Regional Championship races in Port Townsend, Wash., June 17 and 18. Owl won the same event in 1969.



Snow-covered Mount Baker makes a stunning backdrop, above, as overall winner Owl, in foreground, and Honeysuckle Rose slug it out; the fleet makes a good start, at left; and runs the downwind leg flying spinners, below. Thunderbirds, 26 feet overall, make great one-design racers and family cruisers.



Wooden boat construction

People have built, paddled, and sailed boats for tens of thousands of years. Throughout that time, almost all watercraft have been built of wood. Although today wooden boats are seen by many as old-fashioned and undesirable, there are still loads of good reasons to own a wooden boat (see *Good Old Boat*, May 2000 issue). But what kind of wooden boat? Not surprisingly, there are a number of different construction techniques, each with distinct advantages.

Dugouts to racers

Our distant ancestors built watercraft by shaping and hollowing logs with the aid of fire and simple stone tools. Over time, those boats were improved with planks added to increase the boats' capacity and seaworthiness. From such simple beginnings a fascinating variety of craft evolved,

*How they're built and repaired —
and the many good reasons
for owning one*

but all shared several features: planks were edge-fastened (typically with pegs or splines), and each was unique in shape, with the boat's form determined during construction through a combination of tradition, the builder's skill, and the nature of the wood available. Prior to the widespread use of fiberglass, such edge-fastened craft accounted for most of the world's small, locally built fishing and trading craft. The technique is still in use today in some remote areas, with boatbuilders who have never set eyes on a designer's drawings producing lovely, seaworthy boats.

Today's yachts are almost universally built to carefully drawn plans, but the tradition of smooth hulls with edge-fastened planks lives on. Strip planking, where nails and glue join the planks and a keel replaces the original log, is the modern equivalent.

Boatbuilders in northern Europe developed the edge-fastened vessel to the utmost, using thinner planks and lapping them to provide extra strength. The Norse longboats proved themselves over the centuries on the rough North Sea, and the building technique has stood the test of time as well, remaining essentially unchanged as today's lapstrake planking.

Wynfall, a 26-foot cutter designed by the author. At right, the stem, keel, and deadwood have been erected atop the ballast keel, and some molds are in place. Below, ready for planking with frames and ribbands delineating the hull and with some planks in place.



As capable and beautiful as they are, however, lapstrake boats do have some limitations, among them constraints in the boat's shape and the difficulty of building really large boats.

Bigger vessels

As European trade and military forces expanded some 500 to 600 years ago, so did the demand for larger and more burdensome vessels. It led European builders to develop a construction technique in which each plank was independent of the next, being supported by an internal skeleton rather than by the adjacent planks. This revolutionary technique was adopted for use in smaller craft and came to be known as carvel planking. Among other advantages, it allowed the builder to maintain precise control over the shape of a boat during construction. The majority of wooden yachts afloat today are carvel-planked.

Modern adhesives such as resorcinol and epoxy have led to new construction methods, including the use of plywood for planking, and cold-molding, where thin veneers are glued together to form the boat's skin. These, together with strip, lapstrake, and carvel planking, form the five most common wooden boatbuilding methods and, more than likely, any boat you encounter was built using one of them.

One of the most important distinctions between wooden boats is the way in which the planking is fastened. Is it fastened only to the framework (as in carvel planking), fastened to the framework and its neighboring planks (lapstrake and strip planking), or glued up from thin veneers, creating an almost one-piece hull (as in cold-molded and some modern plywood hulls)? This is important not just from the standpoint of building a boat; it also largely determines how repairs should be carried out and suggests what you should look for when evaluating the condition of an older boat.



Dugout in Papua New Guinea, above, and traditional fishing craft in Indonesia, at left.

Is there a best building technique? Are all carvel or strip-planked boats created equal? And is there a reason to consider anything other than the latest epoxy-glued, cold-molded hull?

Carvel planking

The structure of a carvel-planked hull is easily understood if you imagine yourself building such a boat. In the past, the keel, stem, and stern post were usually sawn to shape from large timbers that were then bolted together. With large timber becoming scarce, they are more often laminated up from thinner stock. Although many small dinghies and open boats are built upside down, almost all larger carvel-planked vessels are built upright. When braced upright, the backbone mimics a child's

drawing of a boat, outlining the shape from the bow, down along the keel, and up to the stern. To define the shape of the hull, a ribcage is added to the backbone. This is done first with molds, which can be thought of as temporary bulkheads spaced every few feet for the entire length of the boat. Ribbands, or longitudinal stringers, are then fastened over the molds, spaced every 6 to 12 inches. The molds and ribbands together form a rigid framework over which a carvel hull is built.

Although sawn frames are sometimes used, most small- to medium-sized yachts employ steam-bent or laminated frames. Frames can be installed either inside or

outside the ribbands; the former method is most common on the East Coast, and the latter on the West Coast. Floors, which serve to connect frames to keel, are also fitted at this time. (*Floor has a special definition here, which is not common or intuitive. It is not what the crew walks on. -Ed.*) Floors can be of wood, plywood, steel, or bronze. Frame and floor spacing varies with each design and with the size of the boat, but a spacing of 8 to 12 inches is typical.

Planking is applied over the frames, using nails, screws, or rivets to hold each plank in place. Planks are fastened wherever they touch on the hull's framework — at the stem, along the

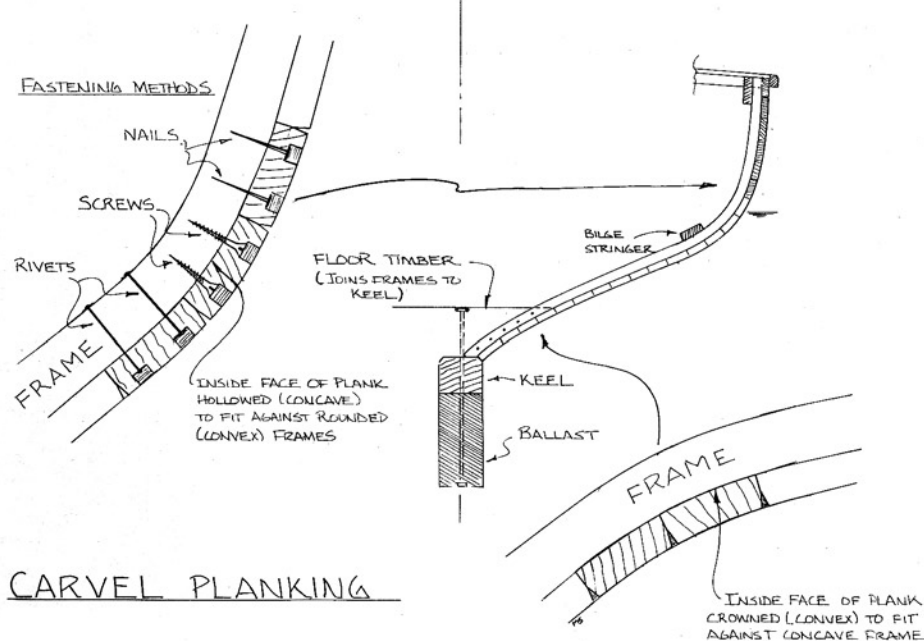
keel, at the stern, and to each frame — but not to each other. Instead,

when planking is complete, the hull is caulked, usually with cotton, which will act to seal the seams, as the planks swell after the boat is launched. By forcing each plank against its neighbor, caulking also helps makes a boat's structure more rigid.

Simple repairs

Repairing a carvel-planked boat is simple in some respects because planks are fastened only to the framework, and not to each other. Once the fasteners are removed (this is easiest with planks that are screw-fastened) a damaged plank or two can be removed, replacements made and then fastened in place, all with a minimum of fuss.

by Mark Smaalders



CARVEL PLANKING

Old planks can be used as patterns, though the technique of spiling, used to determine the shape of a plank when no pattern exists, is not difficult to learn. But the quality of the wood and the work must be good. Vertical grain timber should be used for planking stock, and fits must be precise.

Major structural repairs on carvel hulls can be difficult, as the interior of the boat must often be dismantled in order to reach and replace damaged frames or floors. And while a few cracked frames on a strip-planked hull can often be ignored, cracked frames on a carvel hull should be repaired, as they provide the planking with its only support. On the other hand, major repairs to stem and stern are eased by the fact that planks can be removed quite easily, giving access to the damaged backbone.

Generally speaking, the independence of the various parts of a carvel hull must be maintained: planks swell and shrink and the entire structure moves, and repairs must take this into account. The exception to this rule is the rather radical fix that is sometimes done to older hulls, and which involves cold molding several layers of veneer over a conventionally planked hull. The laminated outer "skin" has sufficient strength to resist the movement of the original planking, and the result can be a new lease on life for a tired old boat.

Lapstrake planking

Lapstrake hulls generally use a backbone similar to that of a carvel-planked boat, but from there the

construction differs. Planks are lapped over each other and fastened at each lap, giving even an unfinished hull considerable strength. This allows lapstrake hulls to be framed after they have been planked, rather than before, meaning that ribbands can be dispensed with when setting up. Molds are erected on the backbone as with carvel planking, but these are usually more widely spaced; small boats may even be built using only one midships mold. The fewer the molds, the more the shape of the boat will be determined by the bending characteristics of the wood.

Once the molds have been trued and faired, planking can begin, starting with the garboard plank, which is secured to keel and stem. Subsequent planks are fastened at the stem or transom and where they lap over their neighbors; rivets or clench nails are commonly used, and the laps are often glued as well. Frames may be sawn, steam-bent or laminated, and these and any floors are usually installed after planking is complete.

Repairs are largely similar to those on carvel hulls, except that there are also fastenings between planks to worry about, and the fit of the planks is even more critical. Plywood can be used as planking stock, and if the original construction featured glued plank laps, new planks could be epoxied in place, easing the boatwright's task somewhat.

Strip planking

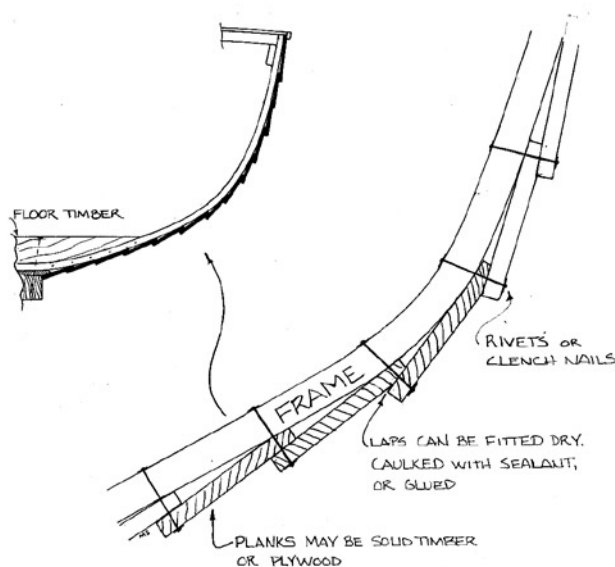
Strip planking bridges modern and traditional building techniques. In its traditional form it might be thought of as a modified type of carvel planking, where the frames are a bit more widely spaced, and additional fastenings (usually nails) join each plank to its neighbor. The backbone, setup, and construction technique would otherwise mirror that used with carvel planking, and the planking would be fastened to the backbone and the frames in much the same way. My own strip-planked boat, *Nomad*, built in 1964, even features a caulking seam along

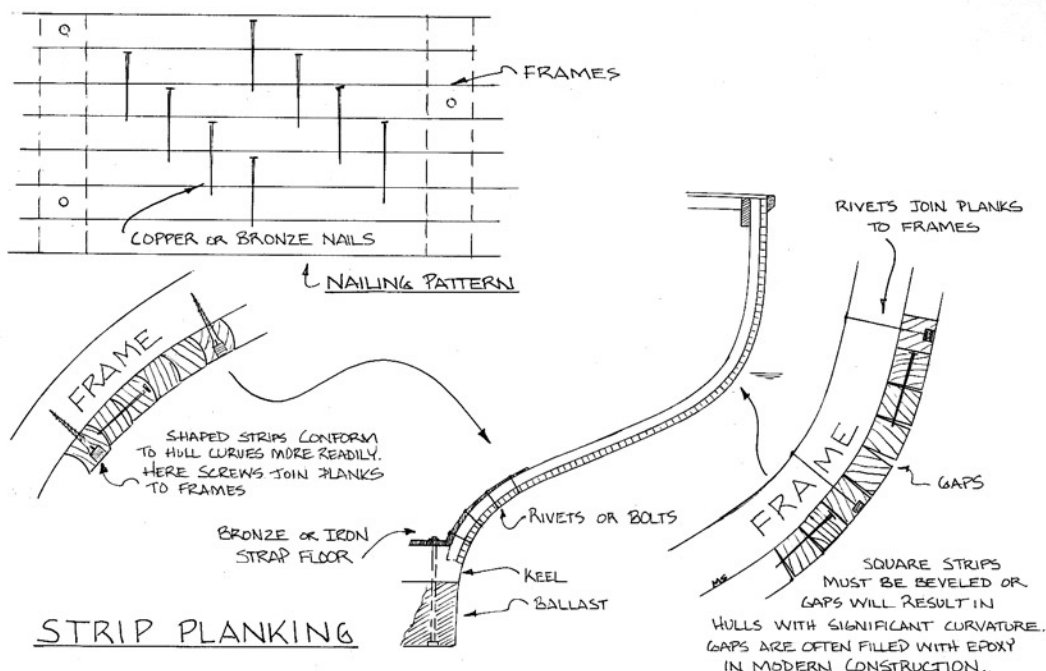
stem and garboard.

In its modern form, strip planking has more in common with cold-molding. Today, strip-planked hulls are typically glued up with epoxy, and may be built without frames, with glass cloth or other reinforcing (set in epoxy) providing the necessary athwartship strength. Backbones are almost always laminated, using an inner and outer stem that simplifies setting up and planking.

The strips themselves are often specially shaped, concave on the top and convex on the bottom; strips are also available that incorporate a tongue and groove. Most builders fasten the strips with glue and nails, and the best builders use square copper or ringed bronze boat nails.

LAPSTRAKE PLANKING





Plywood construction

Plywood does not enjoy a good reputation as a boat-building material, and its use is generally limited to decks, joinery, and small craft. But fine boats can be built with plywood, provided the material is of good quality (marine grade is best) and it is properly protected. Older boats — usually V-bottomed — were often planked with plywood over a substantial framework of sawn frames and longitudinal stringers. They were usually sheathed with fiberglass

Strip-planked hulls move very little, due to the multitude of fastenings and glue joining the planks. This makes it possible to glue replacement plank sections directly in place. But the fastenings between planks must all be cut when removing damaged or rotten planking, and this can be a frustrating job. In addition, it is impossible to back the planks off the stem, stern, or keel as one can do with carvel and lapstrake hulls. As a result, backbone repairs on strip-built boats must be managed with planking in place. Typically, new wood must be scarfed or laminated onto the existing structure, a procedure that can be very difficult if the repair is extensive.

Laminated construction

Although the technique of cold-molding far predates the epoxy era, it's with the advent of epoxy that laminated hulls, constructed of thin strakes or veneers, have become commonplace. Epoxy is a high-strength adhesive that bonds well to most woods; what's more, it can provide an excellent moisture barrier when used to coat or sheathe timbers. These properties have made it possible to build lightweight laminated boat hulls that absorb a minimum of moisture as they age.

Cold-molded hulls are set up in much the same way as their carvel cousins (although almost always inverted), with molds and ribbands defining the hull's shape. On some hulls the ribbands may become part of the final hull, serving as stringers. Thin veneers are laid over this framework, usually starting at 45 degrees to the keel, with each subsequent layer

set at 90 degrees to the former. Framing usually consists of bulkheads and stringers, though it is increasingly common to build frameless hulls.

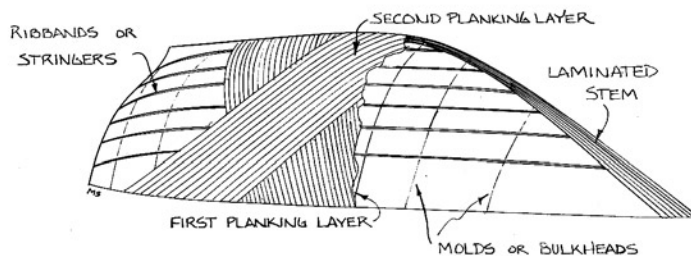
An excellent way of doing this is to combine strip planking with cold-molding. Molds are set up, the hull is planked with a layer of thin strips, and then several layers of veneer are laid over the strip planking. This eliminates the need for ribbands or stringers, and the resulting hull is very strong.

Repairs to cold-molded hull planking are carried out by laminating new wood directly in place, having beveled or stepped back the edges of the damaged area. If the damage is extensive, temporary internal framing may be required to help define the shape of the hull, and to support the new planking as it is being glued and fastened in place.

If a cold-molded hull has many internal stringers and these are damaged, they must also be repaired. As with the repair of frames on a carvel planked hull, gaining access is often the most difficult task. With cold-molded hulls, damaged frames and longitudinal stringers can be cut back and new wood laminated directly in place. Backbone repairs on these hulls generally have the same complications as do those on strip-planked hulls.

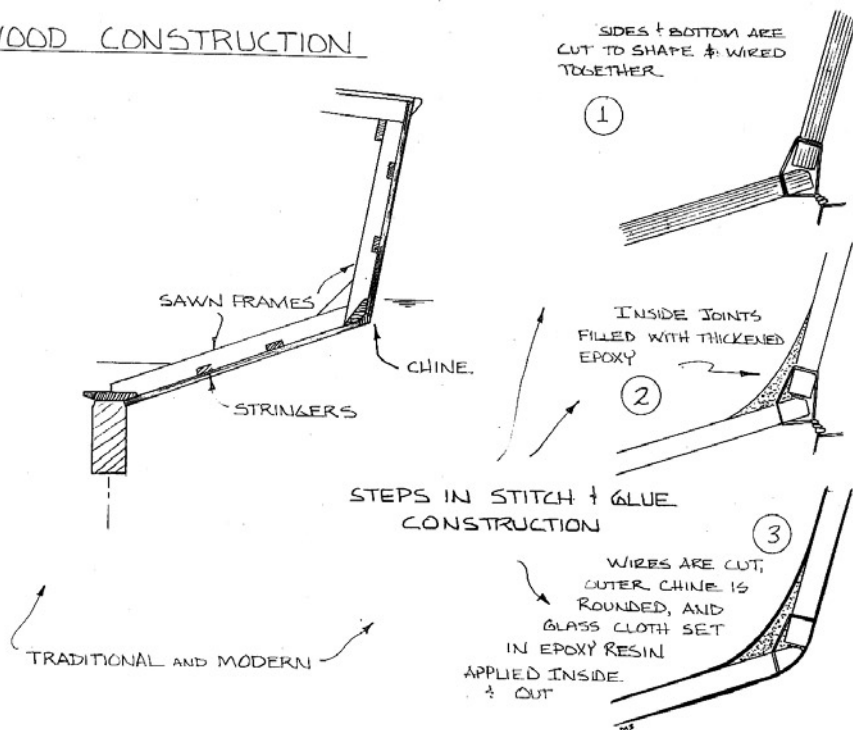
cloth set in polyester resin. Boats built in this way **may** still be sound after 25 or 30 years, but polyester resin's poor adhesion to wood, and plywood's tendency to rot when saturated with moisture, makes this far from certain. Ensure that you have an especially thorough survey done if you are contemplating the purchase of an older plywood boat.

Modern plywood construction almost always incorporates epoxy. If hull planking is laminated from two or more layers of thinner plywood, the result virtually mirrors cold-molded construction. Plywood's primary limitation is its inability to bend in two directions at once, and some designers have adopted a radiused chine to overcome the disadvantages of a chine hull form. Designs for stitch-and-glue construction are also becoming increasingly common. These generally require no lofting or setting up, and need little interior framing, making them much faster to build. Plywood is also finding increasing use as a planking material for lapstrake hulls, usually with the laps bonded with



LAMINATED CONSTRUCTION

PLYWOOD CONSTRUCTION



epoxy. It's an excellent construction method that can produce a beautiful, strong, low-maintenance boat.

Repairs to plywood planking are relatively easy and involve beveling or stepping back the plywood at the edge of the damaged area, and scarfing in a new section. On older hulls, where the plywood has not been epoxied to the backbone, backbone repairs can be tackled fairly easily after removing any necessary hull sheathing. On newer hulls constructed with epoxy, the usual complications arise.

Older wooden boat faults

Well-built wooden boats can last for decades, but all boats can and will develop problems over time. How sound any older wooden boat will be depends on many factors, including the design, the type and quality of the original timber and workmanship, and the maintenance they've received over the years. Regrettably, even the use of modern "miracle" materials doesn't guarantee a trouble-free boat. Remember that fiberglass was once thought to be maintenance-free, and no thoughts were given to the need for painting or blister repair.

Similarly, although much hype has attended the development of boatbuilding epoxies in the past 20 years, we're now learning that building a wooden boat with epoxy doesn't mean

that problems can't develop. Epoxies weaken dramatically as temperature increases, and this may be a contributor to the glue failures that have been experienced with some cold-molded hulls in recent years. The answer lies not in avoiding epoxies at all cost, but in being aware of the potential for trouble, and possibly using alternatives (such as resorcinol) for some applications.

Is there a "best" construction technique? Not to my mind. If I were contemplating the purchase or construction of a wooden boat, I'd consider boats constructed using any of the techniques I've described. The type of boat would narrow the options somewhat: plywood is not suitable for round-bilge hulls, and lapstrake planking is best used on boats of about 25 feet and less in length. But in many ways, the choice comes down to one of personal preference and circumstance. To my mind, nothing beats a well-finished, carvel-planked hull for its feel and ambience. And there are more carvel boats to choose from than any others. On the other hand, a properly built, cold-molded boat will almost certainly require less regular maintenance.

The unknowns

Knowing the origins of a boat — who designed and built her — can be valuable, in part because one of the biggest unknowns facing the buyer of an older

boat is the quality of the wood that has gone into the boat. Knowing the species of wood used is important — a boat planked with teak is less likely to develop rot than one planked with pine or mahogany — but an inexperienced or unscrupulous builder may use an inferior grade of an otherwise excellent timber species, resulting in future problems. Buying a boat constructed by a reputable builder can help avoid such difficulties.

Keep in mind, however, that many fine wooden boats have been built by unknown craftsmen working in tiny shops and backyards. What's more, wooden boats are individual creations, and even the best set of plans is not always followed by a builder. Besides, even the best built boat may be in sad condition if it hasn't been properly cared for.

The best way to evaluate a wooden boat's condition is through a thorough survey. Unless you're an expert, you'll want any boat checked out by a professional who specializes in wood, but if you look carefully, there's a lot that most boats can tell you about their condition. In addition, some features are especially desirable, while others should definitely be avoided.

Mark started sailing at 10 on an 8-ball dinghy his dad built. He studied boat design with the Yacht Design Institute and says any number of "next boats" sail across the drawing board. Since buying Nomad in 1993, he and Kim des Rochers have been alternately sailing and repairing her in various parts of the South Pacific. They're currently in New Zealand. Mark has a Web site which shows his recent designs and cruising philosophy: http://smaalders.net/yacht_design/.



Keeping the water outside, where it belongs, calls for the best in materials and design

I'm sure most older boats at one time or another have had a seacock that's corroded to the point of being inoperable. Perhaps they even have a hose clamp that is waiting to fail or a hose ready to rupture.

When a hose fails or a clamp breaks and the hose is pushed off the seacock by water pressure, the boat will quickly fill with water and sink. An automatic bilge pump may not be enough to save the boat. It will run until the battery is discharged. It may or may not keep up with the leak. Failures of this sort come at the most perverse times, when the boat is unattended, in the middle of a rainstorm, or in the middle of the night.

A boat doesn't have to be completely full to sink. As it floods, it will lose stability much faster than it will lose buoyancy. This is exacerbated by something called free-surface effect. To get a better understanding of free-surface effect, fill a shallow baking pan about half full of water and try walking around with it (best done outdoors). Note the wave that forms in the pan and how the water sloshes back and forth,

changing the balance of the

pan. Then stand inside your boat on the centerline and just shift your weight from side to side in time with the roll you cause. You will be amazed at how much roll you can induce in your boat just by shifting your weight a foot off center if you time the weight shift right. Now in your mind combine the two effects. The water inside your flooded hull will shift back and forth just like the water in the baking pan. As the hull floods, the wave inside the hull will represent a considerable weight, shifting in time with the roll. The wave will weigh more than you do, and it will move farther off center. It will

by Bill Sandifer



Badly corroded seacocks which Bill removed from his "new" Eastward Ho 31.

accentuate any pitch or roll motion and can roll the boat into a knock down or pitch pole long before the hull completely loses buoyancy.

Water can enter a boat very quickly. The failure of a 3/4-inch fitting two feet below the water's surface will allow water to enter a boat at roughly 16 gallons per minute. If the fitting is less than 2 feet below the water, the water will enter more slowly. If the fitting is deeper than 2 feet below the waterline, the water will enter more quickly, due to the increased pressure. When a boat is flooding at a gallon every four seconds, time is critical. The crew must find the leak and stop it or at least reduce the flow rate very quickly. A proper seacock is the best defense in this situation.

Check fittings

The magnitude of the problem caused by the failure of one little fitting can send us scurrying into the bilge to check the fittings on which our flotation depends. It is advisable to make a list of all the points that water could enter the hull. This list would include all the seacocks, all the through-hulls that don't have seacocks, the stuffing box for the propeller shaft, the rudder shaft seal, the exhaust system, and possibly the keel bolts. Keep the list where you or your crew can refer to it when confronted with flooding from an unknown source.

Bilge pumps have limits

Bilge pump ratings are not calculated at a head pressure of 6 feet above the pump, with an internal hose-friction factor included. No, they are calculated at the

Stemming the flow

pump discharge point, with no hose to impede the water flow.

A bilge pump rated at 2,000 gallons per hour may only deliver half that and even as little as one third under adverse conditions. Let's use the example of a 2,000-gallon-per-hour pump and assume it can deliver 1,000 gallons per hour to the boat's overboard discharge. That is a rate of 16.7 gallons per minute, just about the flow rate of a 3/4 inch hole two feet below the water line.

To quote *Practical Sailor's* Nick Nicholson (October, 1997), "Submersible centrifugal bilge pumps dominate the electric bilge pump market and with good reason. They are simple, reliable, easy to install, and cheap. The gap between real-world performance and the nominal output of these pumps, however, is so great that, in our opinion, it borders on the irresponsible."

Siphon back

When I bought my current boat, it not only had a corrugated hose on the bilge pump discharge (creating severe internal friction on the discharge side of the pump) but it also led directly to an open through-hull fitting, about halfway up the boat's topsides. When the boat heeled under sail, this fitting was under water, and if the bilge pump primed the siphon at that moment, water would flow backward into the boat when the pump stopped. This problem is fairly common. It is desirable to mount pump discharge through-hulls as high up on the hull side as possible to prevent them from being submerged when heeled.

Through-hull fittings are bronze, Marelon, or plastic fittings that permit you to fit valves (seacocks) or hoses to the inside of the hull. A through-hull fitting will rarely leak. The valves attached to it are another matter, however. The fiberglass boat business has, at times, been only marginally profitable, and builders have always been on the lookout for cost savings. One of the popular methods they used was to substitute bronze, or even brass, gate valves for real seacocks. This was true particularly, but not exclusively, for boats built in the Far East. There is a material used in Asia called "red brass." This is not bronze, but a poor relation. This material is soft and corrodes easily. Many valves were, and continue to be, made of this material.



A hose clamp and fitting "with bad attitudes" from Bill's boat.

Fell apart

The head seawater intake of a Cheoy Lee Offshore 26 I had in Singapore was made of this red brass. I was ignorant of the problem until the valve fell apart as I was attempting to close it. We were several miles offshore at the time, and the instant panic this created had to be experienced to be believed. My wife was at the helm, and I was playing "Dutch boy at the dike" with my finger in the hole. I could not leave the location, and she could not help. After the panic subsided, I stuffed a towel in the hole to stem the flow and reached for the duct tape. I taped over, around, and over the valve again and again until the flow was down to a small trickle the bilge pump could keep up with. We doused sail and headed for our anchorage under power. The problem was fixed by replacing the valve with a bronze ball valve and through-hull. I put the boat on a tidal grid and changed it all out at low tide. A faulty valve came close to costing us our boat and maybe our lives. There was no rescue service in Singapore at the time, and we were very much on our own.

Seacocks have changed over the years, and sailors have a greater selection of types to choose from. The traditional seacock is a tapered barrel plug with a hole through it, mounted in a bronze housing. These seacocks are fairly heavy and expensive but can be completely disassembled and rebuilt when necessary.

Lighter than bronze

In recent years, Forespar has introduced a glass fiber-reinforced nylon ball valve designed as a seacock. These valves work well, but they have some negative aspects. They are physically larger than the traditional ones and extend out from the hull farther. I installed Forespar

valves in my Pearson Ariel as well as the newly acquired boat. They have the advantage of being corrosion-free, so they require less maintenance. A cup of vegetable oil poured into the closed valve once a year will lubricate the balls and keep them free to turn. These Marlon valves are the only plastic valves that should be considered for service as seacocks. The cheap plastic ball valves intended for domestic plumbing applications are definitely not acceptable for use as seacocks.

Another option for today's sailors are bronze ball valve seacocks. These are similar to the valves manufactured for industry in massive quantities, so the price is right and the quality high. Apollo is the name of one brand of valve carried by chandlers and catalogs. These valves are as sturdy as the traditional valves and have the advantage of Teflon seats that close easily. They require little maintenance other than some grease on the ball once in a while.

Bronze ball valves are sometimes also used as seacocks, but they do not have the cast base that is required for bolting to the hull, and they have tapered pipe threads on both ends, while a true seacock has a straight thread on one end for accepting the through-hull. This allows for proper clamping of the through-hull and seacock to the hull and backing block. When ball valves are used as seacocks, they depend on the strength of the through-hull (and a mounting nut) to support them, and are thus less resistant to a side load or side impact. While the use of ball valves was common at one time, it is better to use a real flanged seacock.

None working

When I purchased my current boat, not one seacock was operable. All had broken handles or torn-up threaded parts. Some had been leaking for a long time, and were covered in green corrosion. The first project for the new boat was to replace these fittings.

The major question was whether they could be removed. I made up a stainless steel bar that fit inside the through-hull that engaged the protrusions on the inside diameter. I rotated the bar with a Stillson wrench from outside the hull while my wife held on to the valve with another Stillson on the inside. This approach worked for all but one valve. No matter how hard we tried, this through-hull would not release its grip on

the valve. It was only a 3/4-inch valve, and the protrusions in the through-hull rounded off before we could break it loose. What to do? Most through-hulls have a mushroom-like flange on the outside of the hull and a threaded stem penetrating the hull. I decided the only way to remove the through-hull and its attached valve was to remove the mushroom flange on the outside. I used a high-speed grinder to take the flange off, being careful not to grind into the fiberglass of the hull. I then pushed the assembly up into the hull for easy removal. I have since heard of a person who used a Dremel tool to carefully cut V-shaped pieces out of the mushroom flange with the point of the V pointing inward at the edge of the through-hull. He then put the Dremel tool inside the through-hull and finished the cut from the inside. He achieved the same result as I did but was perhaps a little neater. The only fault I see with this method is the danger of cutting into the laminate when cutting the pipe from the inside. One would have to be careful or use a gauge of some sort.

Backing blocks

All holes though the hull, especially those below the waterline, need to be reinforced on the inside of the hull to distribute stresses over a wider area. This requires backing blocks of wood or fiberglass sheet to transfer the load. I reused several of the old backing blocks and made new 1-inch-thick pads for those locations that did not have any. I cut a hole of the right size in the center of the pad and made sure the edges did not interfere with existing hull structure and bulkheads. A good rule of thumb for the size of a backing pad is that the overall pad diameter should be three times the size of the fitting. Thus, a 1-inch through-hull would have a 3-inch diameter reinforcing pad or block. This size can be modified to allow for location and structural interference.

The inside and outside surfaces of the hull were sanded clean and smooth. I dry-fitted the new through-hulls and made sure the length of the through-hull thread was just long enough to allow maximum threads to screw into the seacock without having the through-hull bottom out in the seacock. I was careful to shorten the threaded sections where needed and to file the threads smooth.

Once all was satisfactory, I used 5200 sealant on both sides of the hull as the caulking. These will never come out again in my lifetime. (*Consider a removable sealant for this -Ed.*) My wife was inside the hull, and I was on the outside. Working together as a team, we assembled the through-hull/seacock/pad combination. I tightened the through-hull from the outside, and she held the seacock on the inside.

Partial clogging

When I removed the old seacocks, I also threw away all of the old hoses. A piece of hose may look OK on the outside but be damaged on the inside. Sometimes the reinforcing wire of engine-cooling water hoses will come loose on the inside and partially clog the passage, but the obstruction may be totally undetectable from the outside. Quality hose is not cheap, but in the overall cost of things, it is a wise investment. Do not wait until it fails or until you change a seacock. A good rule of thumb is to change hoses every 10 years, regardless of condition. Hoses harden in time, show external cracks, and are damaged around the hose clamps by engine vibration.

On the subject of hoses, there are recommended hoses for specific purposes. My bilge-pump hose was ribbed internally, when it should have been smooth-bore to reduce friction. Is this being too picky? Not at all.

As a general statement, hoses should be smooth inside and suited for a specific use. Engine exhaust hose is usually wire-reinforced and specially made to resist exhaust gases. Water hose for the engine's cooling-water system can be fabric-reinforced as long as it does not have to make any sharp turns where it might kink or collapse. In this case, use wire-reinforced, non-collapsing hose. Hoses attached to through-hull fittings should be of premium quality and resistant to chemicals and fuels that may be in the sea water.

Recommended uses

Drinking-water hose should be FDA-approved. Sanitation hose should be strong and resist odor permeation. FDA-approved vinyl hose is a good selection for non-pressurized lines, bait wells, shower drain sumps, and holding-tank vents. Most marine stores and catalogs have lists of recommended uses for their hoses. Make a list of your specific needs

and special situations such as bulkhead penetrations, sharp bends, or high pressure, and be guided by the descriptions in the catalogs. Cheap hose is just that, false economy that could sink your boat or cause you a nasty day cleaning up a holding tank leak.

A final consideration should be given to hose clamps. We all know that hoses below the waterline need to be double-clamped for safety, but the type of clamp makes a difference.

Most of us use stainless-steel hose clamps, and the suppliers will assure us that their particular clamps are stainless steel, but there are differences in clamp design and materials. Most hose clamps sold as stainless steel are grade 304 stainless, which is strong but prone to corrosion. It is better in a marine environment than plain steel, but it's not as good as 316-grade all-stainless-steel hose clamps. The 316 clamps cost three times as much, but are worth it. The 304 clamp has a screw mechanism that penetrates the band and chews into the hose itself. The 316 clamp has a smooth, unperforated band surface and rolled edges that will not cut into the hose. Screw and band threads are pitched to stay tight and not loosen, even with continued exposure to vibration. All we are likely to find in a hardware store is the 304 version. I've bought so-called "all stainless steel" clamps only to find the band was stainless but the screw was plated steel and quickly rusted. Test for non-stainless screws with a magnet; 304 and 316 alloys are non-magnetic. For the number of clamps we need on our boats, the extra money spent on genuine 316 clamps is really insignificant compared to the trouble failed clamps can cause.

There is no question we get what we pay for in the marketplace, so a boat is no place to scrimp on quality. You can't walk home when the boat sinks. Buy quality, inspect often, change before failure. Be smart and sail safely.

Bill is a marine surveyor/boatbuilder who's been living, eating, and sleeping boats since he assisted at Pete Layton's Boat Shop in the '50s. He's worked for Charlie Morgan (Heritage) and Don Arnow (Cigarette). And he's owned a commercial fiberglass boatbuilding company.



Compact *and* comfortable

A Com-Pac 23 owner improves livability in a tight space

by **Ron Chappell**

Posing during the day as airline pilots, cowboys, librarians, and the guy next door, a diverse group of worshipers gathers during the wee hours at a pre-determined Web site. Veneration runs rampant as they spur one another to new heights of fealty. Virtues are extolled, shortcomings made light of, and newcomers ensnared in their cunning web. A religious sect you ask? Well, yes, in a quaint way. They are Com-Pac Yacht owners, and I defy you to find a more devout following of a sailboat marque.

Hutchins Yachts, in Clearwater, Fla., knew exactly what they were doing when they first built Clarkie Mills' little 16-foot traditional cruiser. Designed for retired Florida sailors, it was meant to be a safe, easily handled coastal cruiser that almost anyone could afford. It succeeded beyond anyone's expectations, becoming popular among young families also. Here is the diabolical part: Hutchins intentionally built

Home on the range. The Com-Pac 23 lives on their sheep ranch when the Chappells are not cruising.

excellent little boats, then proceeded to lavish service on their customers, going well out of their way to keep buyers happy . . . unheard-of business tactics at the time. This allowed Hutchins to weather the lean years when many others failed and, at the same time, to build a customer base of near cult status.

The 16 would soon be outgrown. So Hutchins built a 23-footer, also designed by Mills. Larger boats would follow, all the way up to a 37. Com-Pac owners never had to leave the fold; when they got two-footitis there was a brand-new Com-Pac that looked exactly like their previous model (which they loved) yet was bigger and better and more yachtlike.

But why, you ask, would anyone buy a boat that looks like a Josh Slocum weekender? It even has old-fashioned bronze portlights, a shippy little

sheerline, a transom-hung rudder, a spoon bow, and (Lord help us!) a teak bowsprit . . . not to mention rumors that concrete makes up part of its ballast (as it did in Slocum's *Spray*).

No Mas! (Spanish for That's enough! or No more!) came to us from the Great Lakes in excellent freshwater condition. A 1990 23D, her interior was a major selling point. However, there were things inherent in the design that spoke to me of madness and chaos. Slide-out galleys? No manual bilge pump? A sink that drains to the bilge? What was the Master thinking? In the end, anarchy ruled and, under cover of darkness with nary a word to other owners, an extensive renovation ensued, covering a span of six months — putting things “right” as it were, and letting the chips fall where they may.

First to go were the slide-out galley units, one in each quarter berth. This bit of blasphemy opened up these areas to a usable size and got rid of the mess of water hoses and fittings coiled in the starboard side and the ubiquitous loose cannon of a camp stove on the port side.



Now we'll need a proper built-in galley, we reasoned, to prepare the day's catch, if nothing else.

After much pondering, we came up with a plan for a built-in teak unit featuring a Princess propane, single-burner stove. I thought of going with the two-burner model until I learned the cost rivaled the new GE gas range in our home. One burner is plenty, we agreed. The boat already had a propane barbecue that could handle most of our cooking. And it came replete with a 2 1/2-gallon tank that was readily adaptable as a further fuel source for the galley stove. I found the price of the optional sea-rail for this stove somewhat amusing and decided to build my own from 1/4-inch brass rod, hand formed, silver soldered, and polished to a high luster.

We decided to recycle the original stainless-steel sink, as it was still like new (not surprising, as it's only big enough to wash one hand at a time). We installed a brass hand pump coupled to a new bladder-type 26-gallon Plastimo water tank located in the previously unusable section of the aft port settee locker. Not only did this double the capacity of our old 11-gallon tank, but it also counter-balanced the twin battery set-up on the starboard side. The sink had drained into the bilge under the diesel engine. Our new installation was high enough to allow a short through-hull drain above the waterline.

A cutting-board sink cover and a small fold-down side table completed our new galley. We made up and installed sliding Lexan doors on the cubby above the cabinet. The entire unit takes up 27 inches of settee space, leaving a usable sitting area for one or a 5 foot 1 inch quarterberth suitable for a child or tons of additional storage. We used the original rattan locker door on the front of the cabinet that tied it in to the rest of the interior, helping make it look "factory." Our teak trim pieces were pre-milled standard stock and required only cutting to fit, final sanding, and finishing.

The other thing we insist on, even in a small boat, is a dedicated nav station



The nav station slides out from the quarterberth area when needed. It occasionally doubles as a table for indoor dining.

with all electronics concentrated in one area and no wires strung about the cabin, please. A full-size chart table goes without saying. Back to the drawing board. After much gnashing of teeth and pulling of hair, we found room for a small electronics cabinet aft of the galley, above the port settee, where it provided additional structural integrity as well. An excellent little Apelco Ioran (which I refuse to give up until these new-fangled GPS units prove themselves) lives there alongside a Standard VHF and the upstart GPS, which is hooked into the 12-volt system.

The remote control/warning panel for the propane system is mounted close at hand on the aft bulkhead below the binocular rack. The heavy teak and Formica chart table, a slide-out, is positioned against the top of the quarterberth and takes up only 2 inches. The table

features five locking positions and a built-in instrument case. A fold-up seat is hinged to the companionway step and provides a comfortable place to sit while doing ... whatever it is one does at the nav station these days. Holes left in settee backs, from moving the electronics, were filled with small teak drawers that were time and labor intensive but have proven to be as handy as the pocket on a shirt.

The V-berth cushions were like new. The saloon cushions, however, were beginning to show some wear, not to mention being created of a color scheme that did nothing for my stomach at sea. Since the first mate was familiar with sewing, we decided to try our hand at doing our own upholstery. One thing we did want was divided cushions that would allow easier access to the settee lockers. Also, we felt the original foam to be a bit thin. The solution was a one-inch, high-

density foam overlay for the now shorter cushions and a bolt of upholstery material from the mill-end bin at the fabric store. The interior decorator who waited on us danced us through the entire process. He insisted time and again that we keep everything tight, tight, tight. This is not a project for the fainthearted, as I nearly fainted several times trying to get the foam back into the new covers. While the project turned out quite well in my estimation, I would think twice about doing it again. One good tip is to buy "body pillows" at Wal-Mart for about eight bucks each and cover them in your chosen material for really comfortable backrests and bolsters. They also make good pillows for the V-berth.



The galley with its custom breadboard sink cover and stovetop fiddles, at top; the head cabinet in the V-berth above and at top right, and the pull-down seat at the companionway, at right.

Hutchins Company, Inc.

<<http://www.Com-PacYachts.com>>
727-443-4408

The 23D features a Yanmar 1GM10 and a marine head system with a three-way-diverter valve controlling the holding tank, deck outlet, and through-hull outlet.

Com-Pac did not spend a lot of time on the head compartment, which is basically formed of exterior-grade plywood with several coats of battleship-gray paint. Rough in finish, it was nearly impossible to clean. We lined this compartment, including the base, with sheets of white polyplastic panel cut to fit and applied with adhesive and stainless screws. This is much brighter and easier to keep up with. We also installed a pump in the waste line in order to send everything to its chosen destination with a little more authority than the head alone could muster.

All outboard 23s come with a manual bilge pump in the cockpit. I'm not sure what Hutchins' thinking was, but on the 23D they factory-install only an electric pump. No boat this size, in my opinion, should be without a manual pump in the cockpit, and I prefer to have one in the cabin as well. There is no such thing as too many bilge pumps. We now have a pump in the cockpit, giving the boat three pumps on board, two of which are dedicated to the bilge, and a third that could be in short order. Overkill? Only if you never need them.

We felt the factory dining table was way more trouble than it was worth. We opted for a cockpit table, as the boat has a Bimini, side curtains, and a forward rain fly. In truly inclement weather, the chart table and fold-out galley sidebar do nicely.

We have divided the chain locker into two compartments and installed an additional hawse pipe on the foredeck,

allowing instant access to two separate anchor rodes, each consisting of 40 feet of chain and 200 feet of line. The 16-pound CQR resides on the bow roller when at sea, and there is a Danforth in the aft locker if needed, though I would much prefer a Bruce for the waters we sail.

How does she sail? While she is no dog, she is not particularly quick either. But, if I had wanted quick I would have bought a used Porsche. Her PHRF rating is about 260, making her about 10 seconds a mile faster than a Catalina 22 and about 20 seconds faster than an O'Day 22. At 3,300 pounds dry, she outweighs most in her class. What she does do is instill a great confidence, giving the impression of a much larger boat. I have found her capable of handling conditions beyond most her size. Bottom line: she's fun to sail!

For those looking for something to weenie around in for a weekend, the 23D is a great little boat right out of the box. If, however, you tend to sail in remote waters such as Baja California and British Columbia, as we do, and for extended periods of time (three weeks to several months), then some upgrading may be in order, though, I admit, in our case we may have gone overboard. Sailboats, after all, are dream machines, escape pods, if you will, each cut to its master's fancy. For my part, whether she's sitting here in the front yard on her trailer, or rail-under in the Straits of Juan de Fuca, my CP23 blows me away.

Ron and Terrel are rancher/sailors landlocked in Colorado where they raise Suffolk sheep and border collies. They sail their Com-Pac 23 in the northwest in the summer and the Sea of Cortez in winter.



Quick and easy

Made for the shade

Brian's Columbia 34 with the awning he made.

No matter where you sail, one of the things that zaps the energy out of you is the sun. There are many ways to beat the heat. A simple, cost-effective homebuilt cockpit awning that rests on the boom and ties down in the corners could be just what the doctor and pocketbook ordered.

Here's the plan for one made from old tarp material. It will have three PVC support tubes and be 7 feet long and 6 feet wide. You can decide if you want one longer or shorter and with more or fewer support tubes. You can make this from a myriad of materials: old fabric from a tarp or tent, a bed sheet, or fabric from the store.

by Brian Engelke

Start by orienting yourself with your material. Ours will start out being 6 feet 1 inch across and 7 feet 7 inches long. The extra 1 and 7 inches of cloth will be used to make pockets for the tubing and to provide for hems.

Fold each edge over 1/4 inch — twice — and sew a zigzag stitch down the entire length. If you are using a cloth that might unravel, the zig-zag stitching will prevent that and reinforce the edge.

Go to one of the 6-foot ends and make a 1 1/2-inch wide fold along the

edge. After you have that creased it, sew a simple straight stitch down the edge of the fold, making a pocket for a PVC tube. Repeat that step at the opposite end, giving you a second PVC tube pocket at the other end.

Now fold your awning in half so both of your PVC pockets are lined up. Go to the center, crease it, and draw a parallel line 1 1/2 inches from the crease.

Leaving the awning neatly folded, sew a simple straight-line stitch, through both halves, down the line you just drew. This makes your middle PVC pocket.

Cut three pieces of 3/4-inch outside diameter PVC 6 feet 2 inches long, and insert them into the pockets you've

created. There should be an extra inch of tubing sticking out of each end.

Drill a small hole through each end of the tubing and attach 36 to 48 inches of inexpensive line to each end. Center your awning over your boom so that the PVC pieces are at right angles to the boom.

Tie down the corners so the awning is somewhat bowed and under a little tension. This will see to it that it stays put. Relax. Now's the time to appreciate your work and to enjoy the shade.

Helpful hints— You can add holes in the center of the end pieces of PVC and tie them off to either end of the boom to help stretch the awning out more, and you can put a hole in the center PVC piece and use the main halyard to elevate it for better rain drainage or to provide more headroom under your new creation. I added a piece of cloth with grommets in it along the aft edge of our cockpit awning and made a separate piece that can be draped off the end of the boom and awning to keep the setting sun from blinding us. This made evening dining a more pleasant experience. Use your imagination, and you will come up with a custom-made awning perfect for your boat and your needs and worthy of pride. Happy sails!



Brian and his wife, Kelly, own Sails and Sew On, a sail loft and canvas house in Perry, Kansas. Of course there's

water there, Dorothy (Lake Perry), but their business comes from all over via the Net: <<http://www.sailsandsewon.com>>.

The case of the rusty anchor

The 35-pound CQR anchor that was with my boat when I purchased her was a mass of rust. Large sections of rust were easily chipped off. In some places rust had eaten through the anchor flukes. I was loath to throw the anchor out, as a new 35-pound CQR is not cheap. I went so far as to ship the anchor to Simpson-Lawrence, since they advertise a lifetime warranty. A representative

at Simpson-Lawrence explained the warranty was against breakage, not deterioration.

What to do? Being persistent (my wife says cheap), I decided to save the anchor and recondition it to serve another day. I tried chipping the rust off followed by several coats of Naval Jelly. This was of limited success and did not give me any

confidence in the surfaces so treated. Cost \$8.

The next step was to take the anchor to a local shop that specialized in sandblasting for industry and home. They sandblasted the fluke part of the anchor, top and bottom, for \$20. The shank was in good condition.

These CQR anchors are galvanized, so I did not want to destroy any of the still

good galvanizing if I could avoid it. The anchor came back with a silver sandblasted surface. I put it in our air-conditioned living room (I have a very understanding wife) until the weekend. I knew I would have a light coating of rust on it if I kept it out in the shop. We basically live in a swamp in Coastal Mississippi and Louisiana.

When the weekend arrived, I purchased a 14-oz can of Marine-Tex in gray. Cost: \$20.

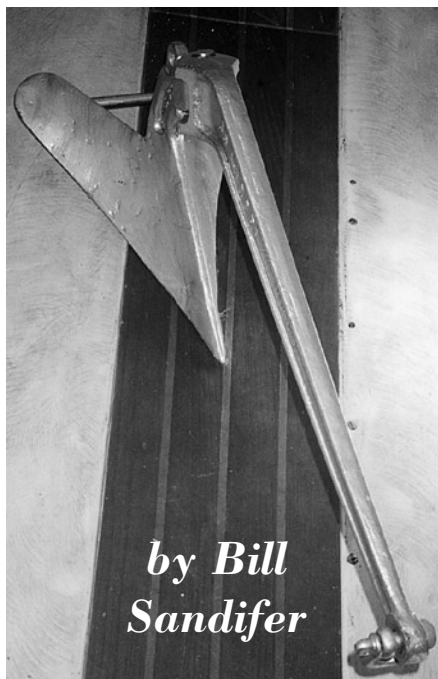
The gray is stronger than the white. Marine-Tex bonds to all metals, handles like putty and hardens like steel. It is unaffected by temperatures from -60°F to +300°F, oils, gasoline, and other chemicals. It's a really good product.

As an aside, some years ago my small outboard engine for the dinghy threw a rod through the cylinder sidewall. I rebuilt the sidewall using Marine-Tex to "glue" the pieces together, bought new parts, reassembled the engine, and ran it for another year prior to selling it. It's still running, I believe. Marine-Tex is amazing stuff.

I coated the anchor with the Marine-Tex, building up the really thin areas. As it was setting, I covered the coated surfaces with clear plastic wrap and massaged the anchor with my hands through the plastic wrap to get the correct shape. I let it set up for two days. The plastic wrap peels off epoxy easily and leaves a relatively smooth surface. A surface sanding followed by Rust-O-Leum steel primer and two coats of aluminum-colored Rust-O-Leum paint completed the job.

For the princely sum of \$48 plus some sweat labor, I have a working CQR anchor that looks better than new and would cost \$449 to replace. It was definitely worth saving.

Bill's formal bio is on Page 51. Besides all that, Bill has become a friend and earned the "title" of contributing editor early in the history of this magazine. Over the years he and his wife have learned about sailing all over the world and in all kinds of boats. They currently sail and fix up (or is it fix up and sail?) a Westward Ho 31.



The disappearing

We've gone aboard large sailboats and drooled at the sight of a dining table that was permanently attached to the cabin sole. Owners of small sailboats with narrow cabin soles have no such luxury. A well-designed table for a small boat should be sturdy and capable of being stowed in such a way that it doesn't rob the cabin of valuable space. The table and stowage partition shown here were installed in our Alberg 30, *Quest*, but can be adapted for most boats.

The table and partition were made of 3/4-inch maple with cherry trim. These can be built of a good grade of 3/4-inch plywood. Do not use particle board since this stuff weighs a ton, is not very strong, and will absorb water and swell up like a pregnant guppy. Screws don't hold so well in it, either.

You could paint the plywood or use contact cement to attach a plastic laminate to both faces. If you use solid wood, sand the edges with a disk sander. If no disc sander is available to you, make a sanding jig as illustrated, lower far right. This will ensure that the table edges have no "wiggles," and the corner is a perfect 90-degree angle. The exposed edges of the plywood partition and the table can be banded with brass or aluminum flat stock, attached by drilling holes and countersinking the screws. Some wood-working catalogs sell a 3/4-inch wide T-shaped plastic molding that can be hammered into a groove. If you go this route consider using 3/4-inch stock for the partition and 1-inch stock for the table, which will give the table a 1/4-inch lip which could help keep your wine glasses and poker cards from sliding off. Holes can be drilled and the screws countersunk into the metal 3/8 inch from the edge and about



We've been hoping for an invitation to this kind of a feast. Taffy, the boxer, has similar ambitions. Table partition is shown in photo at right.

Tell yours

If you've got any "quick and easy projects" (if there is such a thing), let us know. *Good Old Boat* is looking for short descriptions and photos or sketches which help explain the project at a glance. There's fame and a couple of "boat bucks" in it for you.

dinette table

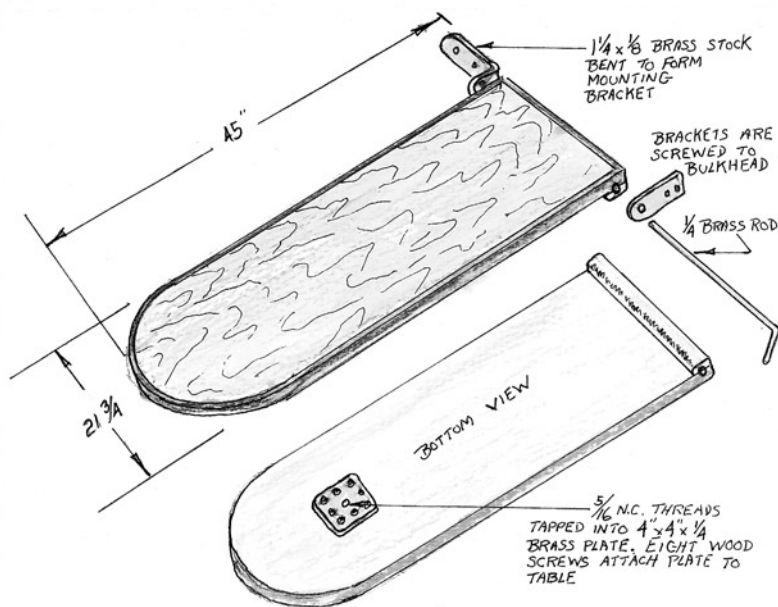
4 inches apart. Start putting screws into the straight section and, as you approach the round part of the table, use a rubber mallet to force the metal around the curve.

The table leg shown was turned on a wood lathe, but you could substitute a large hardwood dowel, a square leg, or a leg made from solid aluminum round stock.

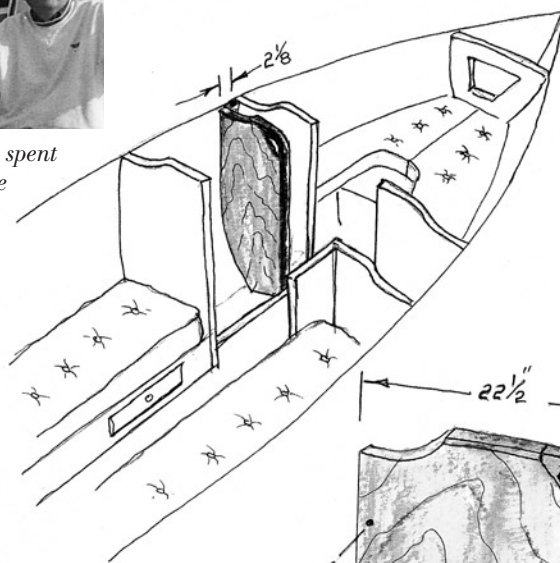
Stowage— If a couple of inches of space can be located in the head or hanging locker, there is a chance that it will serve nicely to stow the table. To assure yourself that the table can be stowed where you intend, start with large cardboard patterns both for the table and for the partition to hold it. Plan ahead and prepaint or prevarnish the back side of the partition, otherwise you will need an arm the dimensions of a popsicle stick to do the job. Use screws and fiberglass to attach the partition to the boat.

Apply at least four coats of finish to all wood surfaces. Then attach hooks to secure the partition to the bulkhead. The hooks also keep the table from falling out. Happy dining. May your drinks not spill.

Armand Stephens and his wife, Mary, are retired school teachers. Armand taught high school wood-working. Immediately after retiring two years ago, they bought a 1965 Alberg 30 and spent 10 months renovating it. They have sailed on San Francisco Bay for more than 30 years.



THIS TABLE CAN BE STOWED BEHIND PARTITION IN HEAD AREA. BRASS HOOKS CONNECTING THE PARTITION TO THE BULKHEAD PREVENT THE TABLE FROM FALLING OUT ON A PORT TACK

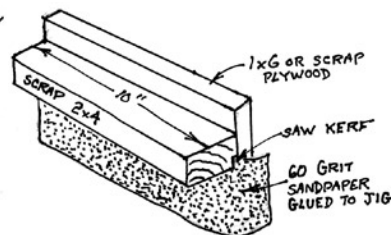


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These books teach first,

Red sky at night, sailors' delight

Marine Weather Forecasting, by Frank Brumbaugh (Bristol Fashion Publications; 2000)

Review by Larry Rudnick, Yorktown Heights, N.Y.

Red sky at night, sailors' delight. Red sky in the morning, sailors take warning. This little ditty is pretty useful, and the author of *Marine Weather Forecasting* knows it also; it's short and easy to remember. This small book is designed to let you forecast the weather and is intended for the sailor who wants to spend his time sailing but who wants to know what is going to happen today and tomorrow.

This is not a handbook on meteorology nor a guide on weatherfax and satellite imagery. The premise is that with basic tools, the average sailor can predict local weather over the next 24 to 48 hours.

Tools of the trade are the barometer, the thermometer, and the psychrometer. The what? The psychrometer is a tool to measure the dewpoint, which is needed to forecast fog and rain. Other tools

are pilot charts to get the average conditions and your own two eyes and brain.

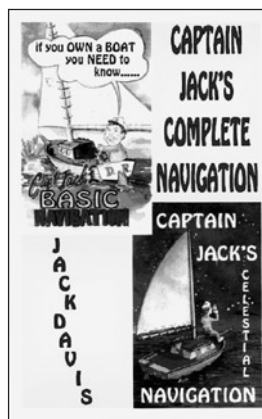
I'm no weather expert, but I do live in the year 2000. The author writes, "Since there are no weather maps at sea and few weather observations available, the yachtsman must depend upon his own abilities to make short-term forecasts for his local area." Obviously, this skill is desirable and is the reason for the book, but weatherfax is available and weather broadcast sources seem to be ignored. There are charts and diagrams converting inches to millibars, the Beaufort Scale, dewpoint temperature determinations, and others. Basic cloud-

shape pictures are shown, although in black-and-white.

In one section, a forecast method is presented using the barometer and current wind conditions. This is useful, but the style is very dry, and following the technique is difficult. In another section, we are treated to a rough drawing of the world's wind patterns and a description of the monsoons in the China Sea. Interesting, but I doubt if most readers will ever be in the China Sea.

My biggest disagreement is with some of the storm tactics. Oil is recommended to calm stormy seas, although it does say that this may be illegal. Will I ever try this? No, because of the environmental hazard and because many cruising writers say this is ineffective and a waste of time. The assertion is also made that it is the wind, not the waves that present the greatest danger to a small boat. Perhaps you feel differently, but I grew up with the opposite idea.

Marine Weather Forecasting has a good premise and some interesting tidbits. Unfortunately, it wasn't right for me.



the problem and the means to solve it. Typical navigation books go into a lot of math, but Davis tries to present it painlessly using real examples. He provides practice questions to get you to remember how to work the problem when you need to at 2 a.m. going down the coast coming up to a new harbor.

Interspersed with double-the-angle-on-the-bow and can-dead-men-vote-twice rules are sea stories and sound advice based on the author's thousands of sea

miles. The title says "Complete Navigation." We get "complete" by the inclusion of basic celestial techniques in the book's second part. The author admits to having relearned celestial navigation six times with each time being as difficult as the first. It wasn't until he started teaching it that the material got organized in his head so he could remember it. The geometry of celestial navigation is

presented in a simplified way with diagrams. The *Nautical Almanac* is also explained, although these tables are confusing even for someone who has been through a class. You do "get it" eventually, but it takes some concentrated staring before your aha-so-that's-how-it-works experience.

The last section relates some of the author's sea stories. Some deal with navigation, but all address problems at sea. These range from rigging to weather to recalcitrant crew and are entertaining and instructive. They also illustrate some of the advice sprinkled throughout the book, such as when to heave to. They are worthwhile and sometimes very funny.

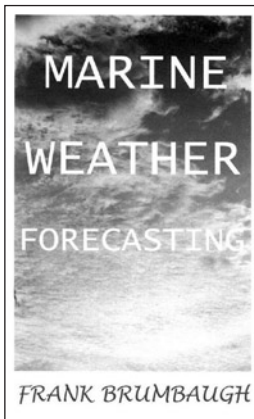
I liked this book. As a navigation primer, there are enough practical examples and work problems to suit a beginner. The topics covered could be explored in greater depth, but there are other texts for that. It isn't Bowditch and doesn't try to be. A good thing; I never read Bowditch with as much enjoyment as Captain Jack.

Sextants, parallel rules, and dividers

Captain Jack's Complete Navigation, by Jack I. Davis (Bristol Fashion Publications, 1999; 235 pages; \$34.95)

Reviewed by: Larry Rudnick, Yorktown Heights, N.Y.

Time, speed and distance. Much of navigation starts with these basics, and Captain Jack starts with them, too. This book (really two, or maybe three, books in one) presents navigation in an easy-to-read format grounded (forgive the pun) in the essential basics. He gives us



entertain second

Talking the talk when way down south

Spanish for Cruisers: Boat Repairs and Maintenance Phrase Book, by

Kathy Parsons, (Adventuras Publishing; 1999; \$24.95).

Review by James Baldwin, Fraser, Mich.

Cruising is often defined as “doing boat maintenance in exotic places.” If you’re planning to sail to Spanish-speaking countries in South America and the Caribbean, there is a new book out by author and cruiser Kathy Parsons that will make the inevitable boat maintenance part of your cruise much less frustrating.

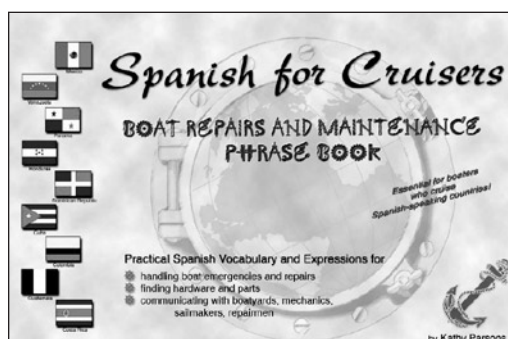
Kathy, who has had years of experience teaching Spanish, compiled this book during a recent cruise of Central and South America. Kathy says, “I’ve seen how frustrating it is for most cruisers to communicate in Spanish-speaking countries. Dictionaries and travel phrase books don’t have the specific boating and mechanical vocabulary and phrases we need. Ideally, you want to feel comfortable maintaining and repairing your boat with the help of the local economy. You want to be able to take advantage of the inexpensive skilled labor and often excellent local materials available in these countries.

The vocabulary in this book has been extensively tested by cruisers and reviewed by Spanish-speaking mechanics, boatyard owners, canvas workers, and shopkeepers. *Spanish for Cruisers* provides the essential boating, hardware, and mechanical vocabulary and phrases that are impossible to find in any other single source.

The book is divided into 25 sections, such as Materials, Hardware, Electrical, Talking to Mechanics, Refrigeration,

Sails, and Tools. There are also sections on basic conversation, pronunciation, and asking for directions. The format is well laid out with many diagrams, a complete index, an extended back reference cover that can be used as a bookmark, and a

soft plastic spiral binding that allows the book to lie flat.



Forgetful? Check these lists

Boater's Checklist, by Clay Kelley, edited by Carol-Faye Ashcraft (Bristol Fashion Publications; 1999; 140 pages; \$21.95). Review by Ted Duke, Fairfield, Va.

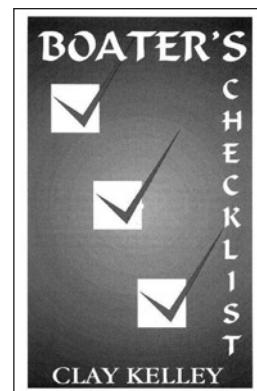
Ever reach for a chart only to realize you left it at the pier? Had to go back to get it, which made you late and ruined your whole day? Captain Clay Kelley has checklists to keep that kind of thing from happening. If you use a checklist, there are things you probably never thought of including. If you don't use a checklist, perhaps this book will help you start. It could lead to less stressful boating.

Captain Kelley has experience on sailing and power vessels and holds a U.S. Coast Guard 100-Ton Master's License. Among the checklists is Getting Underway, which includes last-minute things you should check. The Monthly Maintenance Checklist helps you remember things that you never get around to doing. Guest Briefing covers what you should tell your passengers. Leaving the Boat provides reminders of what you need to do to leave your vessel safe and ready for the next trip. Did you ever forget to turn off the VHF? Engines,

batteries, ground tackle, VHF usage, and safety issues are covered. One interesting chapter is Fall Lay-up because in any marina or storage yard you see many boats that obviously weren't properly prepared for winter storage. Most folks are in a hurry to get the boat put away and there are many who don't realize there are things they need to do to prepare for exposure to the rougher elements. A simple checklist, properly followed, would add years of life to their equipment.

Captain Kelley offers a chapter on items unique to sailboats. Of course, many of the other checklists have items unique to sailboats or apply equally to sailboats and powerboats. In all, 25 checklists are presented. Also included is an appendix listing suppliers' and manufacturers' addresses and phone numbers (Web site URLs and e-mail addresses would have been helpful). Another appendix lists recommended tools and supplies to be carried on board small cruisers, mid-sized cruisers, long-term cruisers, and boats being lived aboard. An excellent glossary rounds out the book.

These checklists are very inclusive and, therefore, are best for a larger, more complex yacht. However, although not all items are applicable to your boat, there is something here for even those trailering a daysailer. The best idea for many boaters may be to prepare their own checklists using this excellent resource as a starting point. I have started to update my checklists already. *Boater's Checklist* is required for those who are collecting a complete library of books applicable to their boat and their boating venue.



This Old Boat's Don Casey

Don abandoned a career in banking in 1983 to devote more time to cruising, writing, and messing about in boats. Starting with his first book, *Sensible Cruising: The Thoreau Approach*, his work combining these passions has appeared in many popular sailing and boating magazines. He became the authority on boat fix-it projects with his book *This Old Boat*. Don is the author of six books in the International Marine *Sailboat Library Series*. He and his wife, Olga, cruise aboard their 31-year-old Allied Seawind. They like to point out that they've done all the work themselves with no adult supervision.



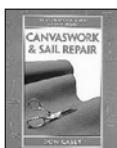
This Old Boat – Don assumes you know nothing – not even how to use tools – and leads you methodically and good-naturedly through every step of turning a cast-off fiberglass boat into a real showstopper – \$34.95.

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Sensible Cruising: The Thoreau Approach – Co-authored with Lew Hackler, this is a practical and philosophical guide to common-sense cruising – \$19.95.

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Dragged Aboard: A Cruising Guide for the Reluctant Mate – Don carefully and cheerfully explains what life aboard is all about and lays to rest the questions and fears of the reluctant – \$27.50.

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Continued from Page 3

Pearson. We had purchased a few "bronze" (really brass) items from marine stores and were confounded by how they could rust and weaken! After reading our *Good Old Boat* from cover to cover, we gave Roger Winiarski a call. He was extremely helpful and outfitted us with a number of fittings for our mothership, and our sprit-rigged sailing dinghy looks lovely in bronze. Elegant, strong, and no rust, the southern sailors' dream! Now that we have a few bronze fittings, we'd like to read about their care and cleaning.

Jay and Lisa White
Mechanicsville, Va.

P.S. Unfortunately, it was such a popular article it was passed around our dock, and the magazine is currently

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missing or lurking in another rust-battler's cabin.
Of course we replaced that traveling issue! -Ed.

Reefing points for jibs

This beautiful bab . . . sorry . . . boat of mine (a Gulf 42) has a reefable 130% genoa. I have tried a few methods of reefing this and, although the boat sails very well with the reef in, it is too complex to reef and shake out when under sail in a strong wind. Are there any tried and tested methods for this? The sail has the usual line of reefing eyes along it as well as larger ones for hanking on the tack and the sheet.

Mike Randall
Victoria, British Columbia

Mike, We have a foot-reefed 110% jib on our boat. We got one with the boat, but the shape was so bad we replaced it. We liked the reef though, so we had the new one made that way, too. There are some things you can do to make foot reefing easier.

First, don't remove any hanks from the headstay when you reef. Just pull the sail down the headstay and connect a short line between the upper tack and the point on deck where the lower tack normally goes. We use a low-stretch line for this. The sail just bunches up below the cringle as it would if it were struck.

We marked the luff of the sail with red and green tick marks so we know how to guide it. It piles up fairly neatly. While the sail was still new and still crisp, we put these marks all the way up the sail luff with matching ones on the leech. By doing that, the sail is easily tidied up for stowing.

Back to the reef. Go to close-hauled. Run a small 3:1 portable tackle from the rail to the lower clew and take tension

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off the jib sheets. Lower the halyard enough to get the upper tack within reach and connect the short line from the upper tack to the bow as mentioned above. Move the jib sheets to the upper clew and retension the halyard. The sail is now fully functional, but the skirt is not bloused up yet. If the sail is too far outboard, take tension on the windward sheet and bring the sail in a little until it is over the deck so you can work on it. Let the windward sheet off when the reef is tied in, of course.

Here is the trick for taking care of the excess sail at the foot: pull the old clew down to the nearest reef cringle that will tension it loosely along the new foot of the sail and tie it off. Then roll the rest of the reef up and put it under a couple more reef ties. You won't even need to do them

all, and they should not even be all that tight. Just like those on the mainsail, the reef ties should be loose and never highly loaded. They're for neatness only. We use a modified knot like a shoelace knot with only one loop. That allows us to pull out reef ties quickly when we're shaking out the reef.

Shaking out a reef is the reverse of the above and, naturally, the sheet leads will probably need to move between the reef and full sail modes.

Foot reefing is not as fast as roller furling, but the sail shape is outstanding. We put up with the hassle to have good

control to weather. In fact, I got bold last week and added foot reefing to our old 150% jib. It was getting old and due for replacement. I figured we could experiment with foot reefing with that sail before having a new one built.

In a world of useless items

Love the magazine. Very useful in a world full of useless items. (What can I say, I work in the tech field.) Don't change a thing.

John Hayden
Rock Island, Ill.

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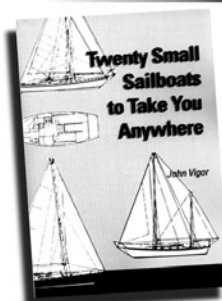
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John Ely
St. Louis Park, Minn.

Very refreshing!

This is the first time we've received a letter from a magazine which doesn't keep repeating, "We need your money." Very refreshing.

We enjoy the longer articles about the various boats and how to repair items. I particularly enjoyed the one about wiring your boat (*March 1999*). I would feel confident that I could at least run the wire and have the proper size. I would have someone else hook it up the first time for me. I have felt that several – make that most – articles give me the confidence to try to do things for our S2 9.2A.

I believe you have reached a format that works between the longer articles and the one- or two-page ones. I really dislike articles that tease us with a little information. We have used information

from some of the information services and the boat owners' associations listed. We have also recommended them to friends who were trying to find information on a particular boat. Thank you for gathering the tools we need to keep our boats in peak condition. I singlehand our boat once in awhile, and it is as big as I need to go by myself.

Jeanne White
Gates, Ore.

No way!

Are you kidding? Cancel my subscription to *Good Old Boat*? Never! A simple oversight. You guys have the best boating mag. around as far as I'm concerned.

Fred Michelman
Bayport, N.Y.

A different way of doing business

Encountered your Web site. With fixing up older distressed fiberglass sailboats as an avocation, I am always looking for good sources of information and techniques. I have an interest in subscribing. However, I wanted to find out if the sample copy issue offer is indeed a

Continued on Page 72

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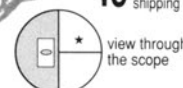


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deardorff@west.net

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Kirk McAnsh

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krmcansh@freeway.net

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617-628-9740
djfoley@ix.netcom.com

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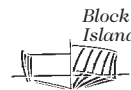
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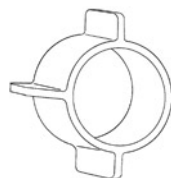
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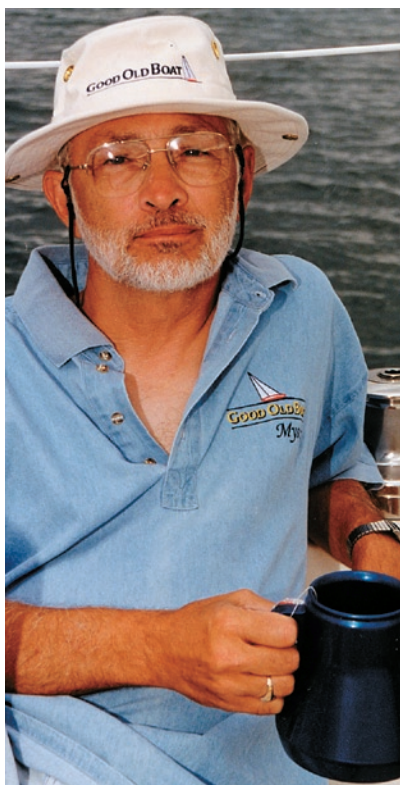
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are going like hotcakes!

Those new warm-weather T-shirts have been a hit! We'll soon offer a long-sleeved version for fall. Both shirts are on off-white, natural fabric and of high-quality 7-oz. cloth. Now, at the request of our technical editor, who likes a bigger ball cap, we're introducing a fuller ball cap, pictured at right. We're calling it the medium blue ball cap (to differentiate it from the denim ball cap). It costs a bit less and looks nice, too. Here's what else we've got:



Mark Busta, at right, is *Good Old Boat's* director of circulation and merchandising. He's modeling the newest ball cap.



Jerry Powlas, *Good Old Boat* technical editor, above, wears the Tilley hat and the short-sleeved denim shirt. This shirt's a favorite with us. At right, **Karen Larson**, *Good Old Boat* editor, shows off the long-sleeved denim shirt and the denim ball cap. It was while modeling these items that she first realized the joy of having bags on deck (see Page 74).



John Boll, left, shows off the front of the new T-shirt. **Dave Whittier**, right, is wearing the "Will work for boat parts" shirt.



Terry Chism, above, contemplates the lines of the new boat in the marina while wearing *Good Old Boat's* new museum T-shirt. This art was on the cover of *Good Old Boat's* November 1999 issue. Terry sails a Pacific Seacraft 34 in the Apostle Islands of Bayfield, Wis., and beyond.

Continued from Page 67

sample, or is it just the first issue of the regular subscription (if that is the case, then it is not really a sample issue, but rather just an ordinary subscription, with the ability to cancel; which means it becomes a sample only if I cancel).

The reason I am going through this inquiry is that I have encountered several magazines that offer, in some form, a "free" or "sample" issue, but then I find out that it is merely a ploy to get subscriptions and in reality it becomes "without obligation" only in the event I cancel; otherwise, it was made to sound better than it was. In this day and age of scams, cons, and deceptive enticements, I'm very careful to whom I give my patronage (and money), even if it is just a

magazine subscription. Where I feel that marketing technique has over-ridden ethics, I explicitly don't subscribe, regardless of how good the magazine is.

Richard Gillingham
Seattle, Wash.

Matter of fact, all new Good Old Boat subscribers get 7 issues (rather than the normal 6 per year). That way the first one really was free no matter what. We started out as readers and only recently became publishers, so we're still offended by many of the games that are played out there. We don't invoice for resubscriptions until you're down to 2 issues to go. No matter what. That game's another pet peeve of ours.

Richard replied:

Thanks for the nice and informative response. I'm very



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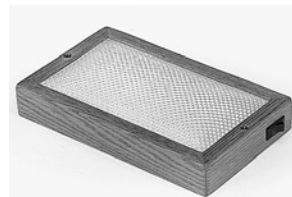
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appreciative of your method of conducting business, especially in bypassing those irritating marketing razzle-dazzles. Am now going back to your site to subscribe.

A bit steep, but we'll try it

I am a writer and teacher with six kids, my lovely Nancy and now my second C&C Redwing (*featured in January 2000 issue*). I never should have sold the first one, nor should I have bought the Southern Cross 31 (*featured July 2000*), but it seems reasonableness has settled into our neighborhood once again, thank God.

Forty dollars is a huge amount for an annual magazine subscription. But the articles have depth and pace, the editing's adroit, the advertising seemingly well selected and helpful, so we'll try it for a year.

Joel Gordon
Rensselaer, N.Y.

Ad worked!

My (free) ad with you got the instruments sold the day the magazine hit customers' mailboxes. Thanks again.

Larry Govoni
Boston, Mass.

Niche that was ignored

I enjoy your magazine. It is one of the few that I read cover to cover. You are meeting my needs. I look forward to every issue. Thanks for filling a niche that was ignored by others.

Robert Nichols
Richfield, Wis.

Rob, curiously we're beginning to see that this little niche is beginning to get some attention from the big players. We don't

think it's where their hearts lie, but we find it amusing to believe that, in our small way, we've had some impact on sailing publishing.

Plastic boats have soul, too

Many thanks for producing an excellent magazine that really provides information that probably fits most of the sailing community. For most of us, cost is an extremely important consideration, but beyond that I find that while working on the boat you become part of it. Being a lover of wooden ships, I never thought a "plastic" boat could have a soul, but I believe they do. It doesn't come from the factory, it comes from your sweat and efforts to produce something you are proud to sail in.

The only complaint I would voice is that *Good Old Boat* is only every other month. Thanks again!

Herb Landes
Sigel, Pa.

Makes me look good

Looks as though y'all have made a solid hit with *Good Old Boat* and are we ever glad! I feel really honored to be one of the early subscribers – makes me look good.

Gilded Lily continues to be the apple of our eye and the bane of our checkbook. She gets the best of everything – remind me to be jealous sometime. Have had a few surprises along the way, but she rewards all the effort with performance and comfort – what more could a sailor want?

Janet Perkins
Stone Mountain, Ga.

Send questions and comments to Good Old Boat, 7340 Niagara Lane North, Maple Grove, MN 55311-2655, or by e-mail to jerry@goodoldboat.com. Please limit messages to 150 or fewer words. We reserve the right to edit.

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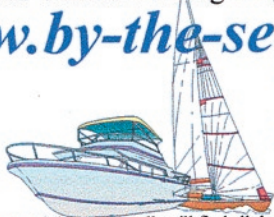
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*The joy of bags on deck**

Sail shape isn't as important to me as it is to my sailing partner, technical editor, co-conspirator, and husband. He's a consummate sailor, one who honed his skills in the one-design fleets where a tug on this or a loosening of that made all the difference in a fraction of a knot and the results of a race.

I'm happy just to get from point to point . . . under sail . . . quietly . . . safely . . . comfortably. Sometimes we get there too slowly for my tastes. Sometimes we get there a bit too fast and with a tad too much incline as indicated by occasional crashing noises below in the cabin. I prefer flatter and more serene and am often (but not always) the first to advocate reefs or smaller headsails.

But the careful sail tweaking that Jerry does? Or that last wrenching yank on the halyard, the Cunningham, or the sheet to get things as perfect as possible? I appreciate these efforts, but I am a bit too lax to keep after the trim with such vigilance, or the tension with such force.

Why then would I be in favor of hanked-on headsails? They demand a lot of work. Where we sail, in and among islands, the winds are never steady enough to allow us to have the same sail up for long.

by Karen Larson

They take up an inordinate amount of room whether they're stored on deck, in the V-berth, or in a cockpit lazarette. We've tried all these storage "solutions" and are currently in the "bags-on-deck mode." They create more windage on deck. They cost more. They

must be more expensive, if only by virtue of their numbers. We have three "everyday sails," all of which replace one roller furling sail. And we have two storm jibs. We don't own a spinnaker. We played with those much too often in high-pressure situations in the one-design fleets.

Wouldn't it be easier, faster, cheaper, and more convenient to have a roller furler, especially since proper sail shape is a bit too esoteric a science for me? Not at all. The beauty of bags on deck is clear in the photo here. You can't lounge in comfort on your roller-furling jib, now can you?



** Er, no, I wasn't referring to the editor as the "bag on deck."*

Some readers have noted that our boat never makes it to the pages of *Good Old Boat*. In this issue, *Mystic*, our C&C 30, does make a debut of sorts. She's on the Reflections page as the backdrop for Nelson Stone's story, Page 77.

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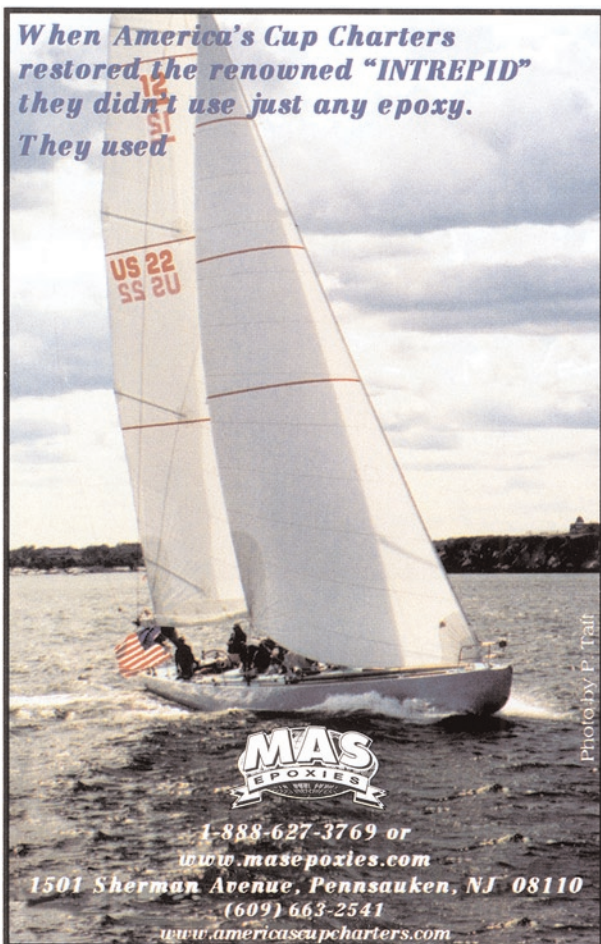
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Reflections

by Nelson Stone

Windflower, one of Alan Payne's Columbia 8.7s, was doing well in the following seas being pushed up by 25-knot winds on Lake Superior. Our annual fall cruise was in its fourth day, and the north shore of Isle Royale was rolling by to port. The boat surfed off the top of one wave and onto the next with a roll, a twist, and a snap; Old Gitchigumee was doing her September dance again, and we were being challenged. The quiet night and solitude of McCargoe Cove were miles astern, but our thoughts had turned to shelter again. Thunder Bay radio had gotten the forecast all-too right: gale warning for the western half of Lake Superior, beginning 1100. Hearing that, we turned west, cutting 170 miles off our planned circumnavigation of the island and leaving time for a safe passage to Grand Marais, Minn., our home port. It doesn't take many years to learn not to mess with Superior late in the season. Laying over during the coming gale was the prudent choice.

Jerry was tending sails, Bill was on the wheel, and I navigated down the rocky coast. After a run of seven hours in short choppy seas of six feet and better, we were all looking forward to a quiet night in Washington Harbor. We slipped through North Gap and past the resting place of *America*, one of many ships that Isle Royale has claimed. Tacking up the narrow fiord-like channel is always special; this evening, though, it was pure relief. There was no chop, the wind was steady, and *Windflower* charged along, as eager as we were to rest. We tied off on the lee side of the dock and settled in for the night.

The morning came with flashing gray clouds and whitecaps, even in this protected harbor. By 1300, the winds were reported at 45 knots with gusts into the 50s. In the gusts, the boat shuddered and heeled 15 degrees.

Jerry is our ambassador and went "neighboring" (it's hard to get the North Dakota farm boy out of him, thank God). Bill and I did some reading and boat chores before putting a big dinner in the oven. After dinner, we settled in to the warm glow of the Force 10 heater. Jerry went to check the dock lines and came back with company. Our guests joined us

in the light of the oil lamp and the conversation turned to the storm and the wonder of being here on this island. One of our guests then asked if this was the boat with the bagpiper. "Yes, it is," I confessed.

"Well then, why didn't you pipe the sun down, like you did last evening?"

"The wind," I explained. "It's hard to play and stand up there on the dock at the same time."

"We missed it yesterday. I have some of my father's ashes with me," she said. "He loved this lake, and I thought that I would like to leave a little of him here. So could you . . . would you . . . pipe him off the pier?"

I dug out the pipes while she got a small bag. We all gathered at the foot of the dock. I played *Amazing Grace* as we walked out onto that dark dock with the wind whipping the world. She reached the head of the dock and opened the bag. What little she had brought whipped down the wind and into the dark. I don't think her dad touched the water for half a mile. We all stood for a time with the wind pulling at us, and then I struck up *Mary's Wedding*, a lively little dance tune, and we retired to the warm yellow glow of *Windflower's* cabin.

After all eight of us had settled in, our good lady's husband reached into his slicker and brought out a bottle of single malt. "The piper must be paid," he declared.

"And stories told," I said.

So we did. A gathering of strangers brought together by a storm, an island, and a love of sailing. We talked the storm out. By midnight the wind had dropped to less than 15 knots, and although the seas were running more than 12 feet out on the lake, our little harbor settled down, and so did we.

The next morning it was not strangers who departed on three boats but rather a group of new friends. I know we all carried one more crew member as well; he had signed on board in the wind and would sail with us each time we sought the safety of Washington Harbor.

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