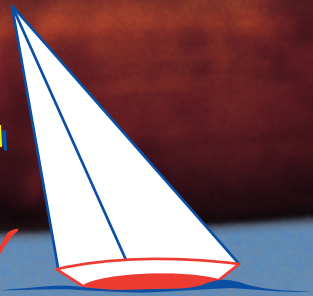


GOOD OLD BOAT

Still sailing after all these years!



JANUARY/FEBRUARY 2001

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About the cover...



The Chesapeake Bay skipjacks are a legend in their own time. Writer and photographer Pat Vojtech immortalizes these beautiful workboats in her coffee-table book, *Chesapeake Bay Skipjacks*, and in these pages (see Page 40).

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The view from here



Photo by Roy Kiesling

Salute to an old friend

I recently wrote a short biography in which I mentioned that I had sailed halfway around the world twice. In all fairness, in the context of this sailing magazine, this does not give me the right to claim even one circumnavigation. The route both times was not a circle, but two half circles. More importantly, the vessel was a fire-breathing dragon of a powerboat boasting 120,000 shaft horsepower, driving four screws.

by Jerry Powlas

She had what we called masts but no sails at all.


She was a respectable lady when her paint was kept up and was called by various names. On her shield she was called *Regina Maris*, which translates from Latin as *Queen of the Seas*. The press occasionally called her the *Grey Ghost from the East Coast*, and my roommate and lifelong friend, George, called her the *Great Grey &*&@%*. She was also called the *Fastest Gun in the West*, and her radio call-sign was *Thunder*. She earned and deserved all those names and a few more I will not recount here in polite company.

For prolonged periods of time, she was the complete floating world for about 1,000 sailors who came to understand that if she was to take care of them, they must take care of her. This stemmed from pride as well as need. An unkind reference to her in a waterfront bar could quickly bring the

need for dental repair. It is possible to have a lot of emotion tied up in 22,000 tons of gray-painted steel. That is an odd thing that I know but may never fully understand.

Pleasure yachts have it all over warships. They are smaller, cheaper and, in almost every way, more fun. Their mission is smiles. Still, the lessons I learned in that first ship have served me well in the several boats that have brightened my life since:

- Take care of your boat, and she will take care of you.
- There is weather out there that can humble any vessel, regardless of her size.
- When there is harmony among the crew of a vessel, life is good.
- After a short time aboard any vessel she will seem to have a personality and be alive. I don't know why this is so, perhaps it is just easier to understand a ship or a boat in this way. Perhaps it is something about the nature of boats and the way people experience them. Whatever the reason, it is so, and it is one of the great joys of ships and boats.

She's probably gone for razor blades by now, but I offer here a salute to an old friend, the *USS Newport News* CA 148 for the lessons she taught me. 

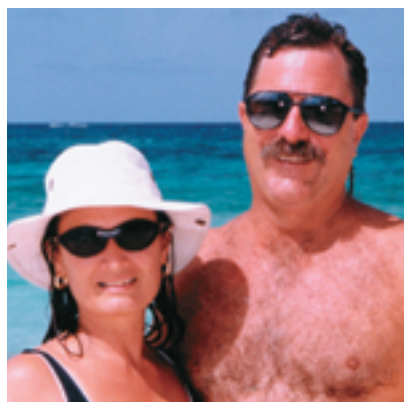
Kudos for Matella

I am currently in the multi-year rebuild/restoration of a custom One-Ton sloop built in 1968. She is *The Hawk* and is 36 feet and of wood. As we go along we are looking for replacement hardware and are always on the lookout for special and unique things. Well, what did I find in your mag? Stanchions by Matella. So I bought one. I did not know after I got it whether to put it on display or mount it on the boat. Then I reflected on the price: too low to be real. So now I am outfitting my boat entirely with these stanchions. I don't know if you ever plan to do an old boat new/rebuilding gear page but these merit a look; they're special.

Kevin Varga
Warren, Maine

Mast raising

I very much liked your article by Ron Chappell, "My Way is the Highway," Nov. 2000, as I am a trailersailor as well. What I liked particularly was Ron and Terrel's mast-raising system. I have a Seaward 25 and love to sail it on different lakes. Raising the mast is a major effort each time. I usually sail by myself. I need to hire people wherever I go to help raise the mast for sometimes as much as \$100. And yes, I have had the gamut of problems with people I have hired to help me. Most recently I went to the Annapolis boat show and hired a man from the marina, where I was to stay for the week, to help me step the mast. The man wasn't paying attention to my vocal commands and unfortunately the sad ending was a broken mast at the spreaders. I had to go back home without sailing the bay, and I now have the privilege of buying a \$3,000 mast from Seaward Company.



Meet Angel and Alan Hauch, the owners of Sky Lark, the Ericson 36C featured in the November 2000 issue. We inadvertently omitted printing their photo. Sorry.

Lloyd Akins
Meadville, Pa.

Bayfield 23 or 25?

Bob Brodsky of Rowley, Mass., shares this correspondence from 1995 between Ted Gozzard and himself (portions cut to save space):

Dear Ted:

In June 1989 Dutch Hall-Holland shipped me a beautiful, robust set of

cruising sails for our Bayfield 25. The main is much larger than our old one, but if we lowered the boom it might fit (and the boom clobber my head). We have used it only a few times in the intervening years. This summer my wife, Toni, in a spirit of keen inquiry, discovered why: we don't own a Bayfield 25 but a Bayfield 23 (Hull 230520574).

The confusion happened this way: when we found our Bayfield, it was listed as a Bayfield 25. All sales descriptions and transactions recorded it as a Bayfield 25. We measured (difficult over the taffrail, cabin, and to a mysterious point on the molded bowsprit). We never saw any builder's literature. Bayfields

are rare in our area. Besides, ours was as big a boat as I could ever hope to enjoy, a great cruising yacht for two and a domineering Maine coon cat. We gladly paid taxes on a 25-foot boat.

The main was emblazoned with a 23 on the center of the red pennant. Toni put it all together.

Dear Bob:

Congratulations. You now own two boats. You not only own a Bayfield 23, but you also own a

Bayfield 25. It is not a long story but one I feel you will find amusing.

In the beginning God made man, and man made a boat. Just for himself. A boat that would please the eye and quiet the soul. Other men coveted that little boat and persuaded man to build more of them. Which he reluctantly did. His wife wanted a better roof over her head, and his children needed shoes. So man started building more of his pretty little boat. But he decided that he would give the people who bought his boat more than they expected. He called his 25-foot boat a 23. He sold short.

Other men from a foreign country coveted his little boat. But for them to sell short was against their God-given right. They even tried to persuade man to call it a 26 (it is a tad over 25 feet), but he settled for 25.

They are both the same boat... 54 23s were built before the crushing influence of the U.S. dealers caused it to be called a 25. You own a rare bird. I suggest you lower the boom.

P.S. I will not let the U.S. dealers talk me into changing the length of my new boats. Our (Gozzard) 36 is 42 feet long, and our 44 is over 50. I will sell short.

Ted Gozzard
Goderich, Ontario

Alberg contacts

A few updates to the Alberg 30 contacts printed in the November 2000 issue: the Alberg Class Association, headed by Ken Stephenson, now has a Web site: <<http://grasp.ca/alberg/>>. George Dinwiddie of the Alberg 30 Class Association has a new email address: gdinwiddie@min.net.

Subscription pays off

Our boat is a Grampian 26 built in Canada and sailed on Lake Ontario. In some way or another most of your articles apply to our old boat and give us moral support to conquer the various problems that we good old boaters encounter. For instance, in the September 2000 issue there is an article by Chuck Fort about dragging your boat to your back yard. Buried in that good story was a reference to a source of screw jacks for cradles... something I desperately need. A year's

Continued on 70



Beefy and fit for sea

By John Vigor

THE ALLIED SEAWIND II IS THE SORT of world cruiser that will appeal to those who can't stand crawl-only headroom. She's one of the roomiest 32-footers around, one of the heaviest, and one of the fittest for sea work. She's ready for the ocean without any beefing up or modification.

This also makes her comparatively expensive to buy and maintain, but if you have \$35,000 to \$45,000 to spend on a 10- or 12-year-old model, she offers very good value for the money. Furthermore, her fine reputation makes it likely that you'll recover all or most of your investment when you're through cruising.

The Seawind II's slightly smaller sister, the original 30-foot 6-inch Seawind ketch built by Allied Yachts, was the first fiberglass sailboat to circumnavigate the world.

In 1975 the company started production of the Seawind II, designed by Annapolis-based Tom Gillmer, a naval architect with a talent for designing salty-looking, seaworthy cruising yachts. Gillmer added about 18 inches to the old Seawind's waterline length and made her a little fatter, which added more than a ton to her displacement.

She came in several versions: the ketch was standard, but you could also order a cutter or a sloop. To some critical eyes, the ketch rig looked cluttered on a boat with a 25-foot waterline. The mizzen got in the way in the cockpit and added little to performance. The simpler cutter rig better complemented the cocky sheerline and the handsome proportions of topsides and coachroof. It also made her handier on the wind. (*Dick Manual, contact for the Allied Seawind II Owners'*

Association, tells us: "One hundred twenty-nine vessels in total were made; we have been tracking 90 on our roster and, of those, 11 are cutters and five are sloops. At least one of the ketches is rigged with a removable inner forestay to yield what you might call a cutter-headed ketch. I have running backstays on my mizzen mast and a halyard to hoist a mizzen staysail. We have owned our boat for 14 years, which tells you what we think of our Mermaid." -Ed.)

The Seawind II was designed for low maintenance on deck. There are a few teak trimmings, such as the toerail capping and the handrails on the cabin-top, but no acres of leak-prone deck planking, for which buyers of older boats may be truly grateful. If you're one of those owners who actually enjoys sanding and varnishing and who derives pleasure from the deep honey-gleam of brightwork, there are plenty of places on deck where you can add teak or mahogany trim. Most owners will surely opt to retain the Seawind's rather bland, sterile look, however, and thereby convert varnishing hours into sailing hours.

Basic design

With a sheerline that rises attractively to a buoyant bow and a stubby sprit, this boat exudes an air of power and purpose. Gillmer got the proportions of freeboard and coachroof sides just right, providing good headroom below without resorting to slab-sided or boxy construction.

Her underwater profile is conventional for a cruiser: a full-length keel with the greatest depth right aft and a long, sloping cutaway forward. There's plenty of lateral surface to dampen rolling and provide inertia, which will



Fred and Victoria Meade's Catskill Maid, sails Lake Champlain.

help prevent capsize when she's lying ahull in heavy weather. There is also a long straight section at the bottom of the keel, which will settle her comfortably when she dries out against harbor walls or jetties in foreign ports or rides up one of those rickety foreign marine railways for hull maintenance.

Both hull and deck are fiberglass, the hull being a solid hand layup and the deck a sandwich of two layers of fiberglass with a core of balsa wood, except in a few areas where it, too, is solid for compression strength.

The ballast keel, a hefty 5,800 pounds, is cast lead, encapsulated in the fiberglass hull, and the rudder is a large barn-door affair that swings from the aft end of the keel and is controlled by a wheel.

Her aft end is cut off short in a transom, a feature that contrasts strongly with the moderate overhang in the bows, but which somehow blends better with the cutter rig than the ketch rig.

The hull-to-deck joint consists of outward-turning flanges, through-bolted and covered with a hefty aluminum rub-rail that adds greatly to the boat's salty appearance. On the interior of the boat, the joint is glassed over for its whole length. There should be no chance of leaks from this very substantial joint.

The watertight cockpit is quite large but its sole is high enough above the waterline to ensure rapid draining in the event of a pooping. A good bridge-deck at the forward end of the cockpit prevents water from flooding into the cabin in the event of a wave coming over the stern, and lockers under the seats on either side will hold all kinds of gear needed at sea. And — just to prove this boat is a little more luxurious than the rest, despite its sterile look on deck — there is a freshwater shower housed in a recess in the cockpit well, an indulgence that seems almost decadent in a 32-footer, but one that will be very welcome in tropic climes as long as the water supply lasts.

The standard engine is a Westerbeke diesel delivering 27 horsepower, which works out at about 4 hp for every ton of displacement — a comforting amount of power on a boat of this type. Like most long-distance cruising boats, the Seawind II uses a standard three-bladed bronze propeller. Any drag it causes is more than compensated for by simplicity and reliability.

Accommodations

As noted, this is a big 32-footer and it certainly shows down below. Up forward there are the usual V-berths, but placed in the same cabin with them is a wash basin to starboard and a hanging locker to port.

The head and shower compartment (another decadent shower, this time with both hot and cold water) lies aft of the main bulkhead and, oddly, has two doors, one leading directly forward into the forward cabin and the other leading at a right-angle into the main saloon.

On the starboard side of the main cabin, the head compartment and the starboard transom berth extend back



John and Ellen VanDerburgh sail hull #98, van der Ellen, out of Tolchester, Maryland.

to the companionway steps. To port, however, the transom berth starts at the main bulkhead and the L-shaped galley occupies the space between it and the companionway.

Practically everywhere you look there is stowage space — behind and under berths and in drawers, cabinets, lockers, and cubbyholes. There is never enough, of course, because the more stuff you can stow away, the more stuff you acquire; but compared with most other boats of her length, the Seawind II is cavernous.

The rig

The standard masthead ketch rig enables the Seawind II to set a lot of sail off the wind, including a mizzen staysail. And since world cruisers mainly do go downwind (at least, they do if they have any sense), then perhaps the ketch rig is more logical.

The problem with it is that this boat

isn't quite big enough for two masts and their associated standing rigging and cordage. It makes for a lot of clutter, particularly in the cockpit, and the windage on two sets of masts, shrouds, stays, halyards, and sheets is detrimental to windward performance.

The ability to sail to windward in really heavy weather is a cruiser's ace in the hole. No matter how much effort and thought is put into preventing it, there comes a day in the life of most cruisers when it becomes necessary to beat off a lee shore in storm-force winds. Ketches can do it. Colin Archer's famed rescue lifeboats could tow two embayed fishing boats to windward in atrocious weather, very slowly but surely. But on a smaller boat, a sloop or cutter rig will do it better.

The cutter rig was optional for the Seawind II, but it is the more practical, particularly if the jib is set on a roller furler.

Performance

She's no round-the-buoys racer, but there's no reason why the Seawind shouldn't turn in a respectable 150 miles a day in the trade winds.

With her hefty beam, she's not particularly close-winded, but her ability to stand up to her canvas will get her there in the end. The ketch's sail area, at 555 square feet, is enough to provide plenty of drive, even in fairly light conditions, and while the cutter loses area (512 square feet), the gain in efficiency makes up for it.

In the trade winds, the cutter can run dead downwind behind twin foresails, with or without part of the mainsail set, but the ketch would probably do better, be more comfortable, and make better use of the mizzen staysail by tacking downwind 20 degrees either side of the

At left, Martin and Georgea Culpepper's hull #2, Galatea, crosses the finish line as the winner of the Fairfield Harbour Yacht Club race. The Meade's Catskill Maid shows her underwater profile, below, and Howard Hering's Scooter II exhibits the Seawind II's three-bladed bronze prop, at right.



Good Old Boat





The head is a two-part affair, as the Meades' shot above shows. The wash basin is in the V-berth area. The head is in a separate space.



Howard Hering's photo, at center, illustrates the unusual door arrangement. The Meades' nav station, above.

rhumb line.

Under power, that Westerbeke should allow her to cruise at 6 and peak at around 7 knots.

Known Weaknesses

It seems almost unfair to list minor complaints as weaknesses, but as the Seawind II has no known major weaknesses, we are forced to fall back on petty nitpicking:

- The side decks are too narrow. It's not easy to make your way forward dragging a sailbag. The shrouds get in the way. In fact, most people hop up and over the coachroof when they want to go forward.
- It's hard to get to the engine. That's not an uncommon fault, but in a boat this deep and beamy, one might have expected a little better. It's a major hassle even to check the oil level.
- There have been complaints that the anchor rode chafes against the forward pulpit stanchion when the bow rollers are used. For the same reason, you can't store your anchor on the roller because the stanchion gets in the way. Either the stanchion or the rollers should be modified.



The interior of Howard Hering's Scooter II demonstrates the ultimate "Transformer-toy boat:" table up at left, bed extended in center, table down at right.

Owner's Opinion

Robert and Sharon Cuzner keep their Seawind II ketch, *Silver Spray*, in Anacortes, Wash. They picked her up in Marblehead, Mass., in 1980 and sailed on her for two years, first heading north to Maine and Nova Scotia, then south to Florida, the Keys and the Bahamas.

After sailing out to sea from the Bras D'Or Lakes in Nova Scotia, they hit an extended gale. "The forecast was benign," says Sharon, "but after we'd been out about 20 hours the weather deteriorated. It blew hard for three days. We pulled down the mainsail, then the mizzen. We left the foresail up until last because she wants a headsail always. Then we wondered if we should take it down, but neither of us wanted to go out there. Robert said: 'If God wants it in, he'll take it in.' So we continued broad-reaching under that 100-percent jib and did 125 miles in one day with the Aries [wind vane] steering."

Between Marblehead and Maine, *Silver Spray* hit a whale. "We rode up on the back of it," Sharon says. "The boat

sort of went sideways. We smelled it and felt it, but it was the middle of the night, so we couldn't identify it, but we think it was a humpback."

In Port Charlotte, Fla., *Silver Spray* ran aground on sand. "It took us an hour to get off," Sharon remembers. "A powerboat took a line from the mast and laid her over on her side, and we eventually slid off."

But the biggest beating *Silver Spray* ever took was back in Marblehead. The Cuzners were worried about whether there was enough water over the ledge there. They were right to worry. Their ketch ran onto the ledge at 8 knots.

"We bounced off a rock that took a chunk out of the leading edge of the keel," Sharon says. "It measured about 3 inches by half an inch, but the damage was confined to the fiberglass, and it was easily repaired. There was no structural damage."

After their trip, they trucked *Silver Spray* back to Washington state, full of admiration for her toughness.

Sharon's tips

- A laminated oak beam under the mast is backed up by an oak compression post. Keep the foot of

In Short

Allied Seawind II

Designer: Tom Gillmer (1975)

LOA: 31 feet 7 inches

LWL: 25 feet 6 inches

Beam: 10 feet 5 inches

Draft: 4 feet 6 inches

Displacement: 14,900 pounds

Sail area: 555 square feet (ketch), 512 square feet (cutter)

Ballast: 5,800 pounds

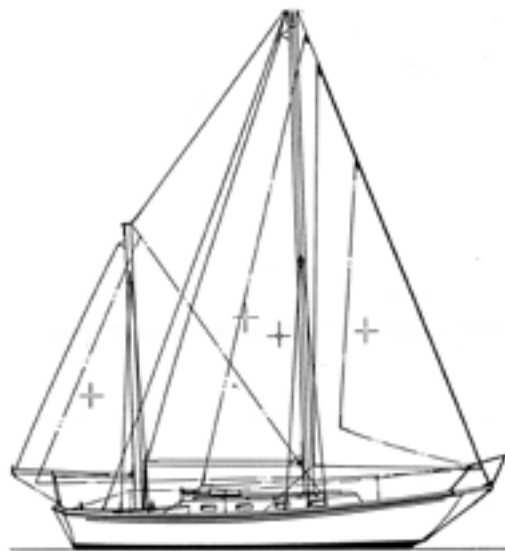
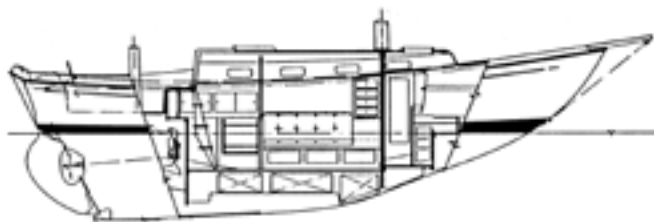
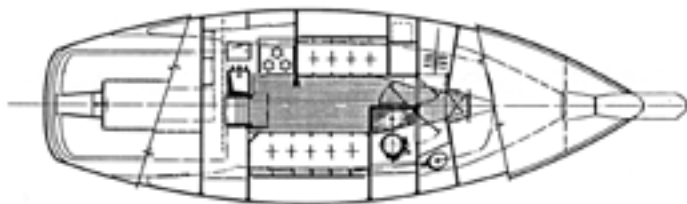
Spars: Aluminum

Auxiliary: Diesel with fixed three-bladed propeller

Designed as: Sturdily-built, well-equipped world cruiser.

In Comparison

- **Safety-at-sea factor:** 8 (Rated out of 10, with 10 being the safest.)
- **Speed rating:** Reasonably fast off the wind and capable of good daily averages on an ocean passage.
- **Ocean comfort level:** Plenty of room, stowage, and amenities for one or two adults; still reasonably comfortable with two adults and two kids. Will handle four compact adults for trips of a few days.



the post dry. "We found water there, because there is no easy access to the forward bilge. The anchor locker drains through there, and when we checked with other owners there was always water there, which will rot the post."

- The accommodation is fine for offshore work. "It's not very pretty, but it's strong. We put a crashbar in front of the stove to keep the cook from being thrown into the stove."
- The Cuzners replaced the original alcohol stove with a Taylor kerosene stove. But wasn't it a hassle to have to prime a kerosene stove all the time? "I like priming it better than I'd like propane in the bilge," Sharon says.
- The standard galley sink fills with water on one tack and overflows into the ice box. To halt the flow, the Cuzners fitted a seacock on the sink drainpipe.

- They made no structural modifications whatsoever for deepsea work. "She didn't need any."
- The Seawind II was easily handled under all conditions. "I handled her alone," Sharon says. "No problem."

John Vigor has sailed for more than 40 years 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 65 for more information).

Allied Seawind II Resources

Owners' Association

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<<http://www.geocities.com/TheTropics/paradise/1131/>>

Catalina Yachts: One big

Call the Woodland Hills headquarters of Catalina Yachts in California, and one thing strikes you right away about the choices the telephone answering system offers you. One option is for Frank Butler. That's rare access in today's hectic business world, but it shows what makes Catalina unique — the constant guiding hand of Frank Butler, who founded the company in 1970.

The stories are legendary among Catalina owners. Call the factory about a warranty item, and chances are you'll end up speaking with Frank himself. Why such access? "I've always been that accessible," he says. "It's the only way to be in this business." Catalina is the largest sailboat manufacturer in the United States. That means Frank Butler

Founding father Frank Butler sets the example and the pace

has a lot of customers to keep happy, something he obviously relishes.

Born in California in 1928, Frank joined the Navy and attended college before beginning his working life in the engineering field. "I was hired as an engineer in a government facility, and they found out I had lied about having five years' experience. They called me in several months later when they found out, and I admitted it was true. I then told them either they could fire me or give me a raise. I got the raise."

He continues, "I've always had a love for engineering, and drawing came very easily to me. Working with my hands always came more easily to me than schoolwork." Frank went on to start Wesco Tool, his own machine shop, and became a supplier of component parts for the aircraft industry. "I did a lot of work with that industry," he says. "I'd often go to plants and work with the engineers, help them with designs, or help with engineering problems when they asked me to."

Late start

By the late 1950s Frank was sailing

dinghies for relaxation. "I was 30 before I really took up sailing," he says. While it was a late start in life compared to most boatbuilders, it opened up a chapter in what was to become Frank Butler's life's work.

Eventually, he wanted something larger than a dinghy so his growing family could enjoy sailing together. Says Frank, "The first boat I bought [for the family] was a Victory 21." But his first boatbuying experience wasn't a good one. The builder was strapped for cash, and when Frank arrived to pick up his boat on the appointed day, neither the boat nor the owner was to be found. He quickly assessed the situation and basically began to build the boat himself with help from some of the builder's employees, all but commandeering the plant until he finished it.

What made him think he could build a boat? "I never even thought about it," he responds. "It was either that or lose my money."

Despite that initial experience, Frank made a loan to the builder. When the builder couldn't pay back the loan, he offered Frank some tooling and materials to build other boats, which Frank accepted. He had the boatbuilding bug and couldn't resist the challenge. He founded a company he called Wesco Marine in 1961 and began building small sailboats. He later changed the name to Coronado Yachts. He still owned Wesco Tool as well.

One of the first people he hired in 1962 for his fledgling boatbuilding company was an Irishman named Beattie Purcell. "I met Beattie through a mutual friend," Frank says. "He had the



Catalina 22, hull #1, sails in the One of a Kind Regatta on Lake Michigan in 1970. The crew, from left: Rod Mortenson, Beattie Purcell, Lee Buffum, and Herbie Mortenson.

family

sailing experience, and I had the manufacturing experience. He and I worked well together. But in those days we all did everything — manufacturing, sales, marketing. It didn't matter."

Tremendous growth

"I happened to be in Canada at the time. I came down and started working for Frank at Wesco Marine long before there even was a Catalina Yachts," Beattie recalls. "I started off building small boats with the fiberglass, and then I got into rigging. We were building a 14-footer and a 21-footer. We started off pretty small but grew tremendously. Fiberglass was in its infancy and just took off. We definitely started at the right time. I also started sailing in different regattas for Frank to promote the boats, which worked out well." In line with the notion that everyone did everything, Beattie also designed the letterhead for the stationery and the exterior sign on the building.

"Frank also had Wesco Tool at the same time," Beattie continues. "We started in Burbank, but we got bigger and had to move to another location. Frank was a busy man running both businesses. But he has great insight, and he listens to people."

The first notable boat design was the Coronado 25 in 1964. States Frank, "I designed it, and a fellow helped me with the tooling for it. The Coronado 25 was the first boat to have a full pan liner in the hull. Before that, manufacturers built components and dropped them into the hull, like a wood-shop approach. It was expensive and more time-consuming.

"I got the idea for the pan liner from Lockheed and how they built planes. I saw lead molds at Lockheed for airplane parts and thought, Why not apply that to building boats?" Frank remembers.

Tom Violand



Catalina's Three Musketeers: Sharon Day, Gerry Douglas, and Frank Butler.

They fired him

In a move typical of other early sailboat manufacturers, Frank sold Coronado to the Whittaker Corporation in 1968. The business relationship lasted one year. He says, "I didn't agree with the corporate strategy of running a boat manufacturing facility. I wrote them a letter about some things I didn't agree with, and they called me in and fired me. But that was all over long ago. I was right, as it turns out. We're all good friends now."

As part of the separation agreement with Whittaker, Frank had a non-competition contract for two years and couldn't build boats,

except for the smaller ones for which Whittaker hadn't bought the rights. He took a trip to Europe and also built a marina in Oxnard, Calif., that Beattie ran for him for a while. They continued to build the smaller boats, such as the Coronado 15, the Omega, the Super Satellite, and the Drifter. "We wanted to change the name of [the Coronado 15] to make it obvious the boat wasn't built by Coronado Yachts," says Beattie, "but couldn't because the class association wouldn't let us. Frank always liked the names of islands — Catalina, Coronado, Capri. We had thought of the name Catalina and liked it. That sort of clicked."

Beattie moved back home to Ireland for a while, but his boatbuilding days

weren't over. He remembers, "I was in Ireland, and Frank called me to say that he was forming Catalina Yachts." That one phone call is all it took for Beattie to return to work for Frank. "One of my first jobs for Catalina was to fly to Hawaii. Some people there were having trouble with the rigging for their Coronado 15s, and I was able to help them out."

Most popular

"I had started building boats in 1961," Frank says of founding a new company, "so I had eight or nine years of experience at it by then. Things were much easier than in 1961."

His first design in 1970 was the Catalina 22, the boat he had wanted Whittaker to build. The C-22 turned out to be one of the most popular sailboats of all time, with 15,500 built. He also came out right away with the Catalina 27, another popular cruiser. The Catalina 30 followed in 1976.

According to Beattie, "The C-22 just took off. We couldn't build them fast enough." Beattie has the distinction of being the first person to sail both the C-22 and the C-27.

In the early boats, Frank used what is called the shoebox design to join the hull and deck. In this construction technique, the outer lip of the deck fits over the lip of the hull like the top fits on a shoebox. "I felt the shoebox design was more rigid, and it's basically leak-

by Steve Mitchell

proof. It's a very good way to build boats. We might have a problem in one out of a thousand boats with a hull leak, and even then it's usually something else leaking."

With such a high demand for his boats, Frank had to expand his manufacturing capability. An East Coast plant made sense because of the high cost of shipping boats to the East Coast from California.

States Beattie, "Frank sent me east to look for another plant. The shipping costs were killing us. I found a small fiberglass plant in South Carolina that had closed, so we bought it and started building C-22s there. Then we began building C-27s there as well." The year was 1973.

Almost threw him out

Beattie credits a fellow named Wilbur Pokras with much of Catalina's marketing success in the east. "Wilbur was our representative for setting up dealers on the East Coast," he says. "He did a great job for us."

Wayne Miskiewicz, now general manager of Maryland Marina, in Baltimore, remembers Wilbur very well. "Wilbur was the East Coast rep for Catalina and set us up as a dealer in 1970 or so. He showed up trailering a C-22 he had put in the Annapolis show, and he wanted us to buy it. We almost didn't become a dealer. I almost threw him out of the office at first. But we wound up buying the show model and becoming a dealer. Selling the C-22 was amazing. They all but flew out the door."

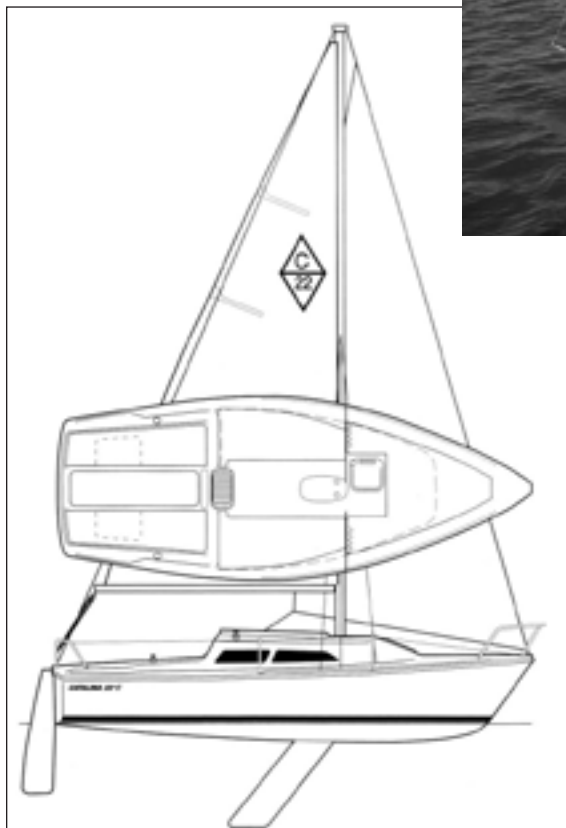
He continues, "Frank Butler is the Henry Ford of the boating industry in a sense. He's very serious about offering a good boat at a good price. Since he was the warranty coordinator, he could spot trends with problems and fix them right away. He's very hands-on, maybe too much so at times. Frank took [the warranty coordinator role] on as a method of quality control, and was effective in that way. Frank is quite an interesting guy. He had no one to answer to but himself."

By 1977 even the South Carolina plant was too small to handle the East

Coast demand for Catalina Sailboats. "One day Frank called me," says Beattie, "to go to Fort Walton Beach, Florida, to look at property for a larger plant. It all worked out, so we moved the plant from South Carolina to Florida, where we could build even bigger boats."

Unprecedented demand

Wayne says about those days in the sailboat market, "Catalina had trouble meeting production demands, and the dealers were put on a quota system. People were so happy with their boats that they came



back and bought their second, third, and even fourth boats from us. The company just grew so rapidly it was amazing in those days. Until we had the huge downturn in the market, used boats often cost more than new ones. Used boats were appreciating throughout the entire product line because demand was so high for new ones."

He continues, "One good thing about Catalina is that it doesn't change designs every year. They would come out with a good design and hold onto it. Hunter



The Catalina 22, the first boat introduced by the company, in 1970.

was our biggest competitor in those days, but it changed models every couple of years. Catalina had a chance to work out production problems with a long run, but not Hunter."

Seven years later, the company needed an even larger plant on the East Coast. In 1984, Frank purchased Morgan Yachts, based in Largo, Florida. Beattie helped move the Florida plant to Largo. "We were growing so fast," Beattie remembers, "and Morgan Yachts was all but down the tubes. It was a great chance to buy a bigger plant at a good price and to get the Morgan name." Among other large boats, the Largo plant turned out 50-footers for the Moorings charter group. Today it produces C-47s in shifts that run six days a week.

Beattie retired from Catalina Yachts in 1994 after spending more than 30 years working for Frank Butler. "I enjoyed it. Frank was a good guy to work for. We used to race against one another in Satellites and had a great time doing it. It was good fun starting up a company like that, it's interesting all the things you have to do. Frank knows the way to go. He always has. He has great instincts."

Advertising change

For many years, Catalina was the largest sailboat manufacturer that did no national advertising, a terrific economic advantage compared to its competitors in an industry where spending 6 to 10 percent of the retail price of a new boat on advertising and marketing is not uncommon. Given a changing and much tighter market, Frank had to change to keep Catalina's name in the forefront of the industry. "When we went from medium-sized boats to larger ones, I thought I needed to advertise. It was better for the product and better for the consumer to know more about our products. It was something I felt I had to do."

The late 1980s saw a tremendous depression in the boat market caused by an economic recession and by the 10-percent luxury tax the federal government placed on new boats costing more than \$100,000. Because few of its models exceeded that cost, Catalina was not affected that much by the luxury tax. But the economic recession that saw so many boatbuilders go out of business made for hard times at Catalina as well. How did the company survive when so many others didn't?

"I'm somewhat conservative," Frank says. "I knew that what goes up must come down. I tried to be prepared as best I could. It was tough, no doubt about it. We just got through it."

At Maryland Marina, Wayne Miskiewicz saw the downturn coming. "We stopped selling new boats in 1988," he says. "It was just a business decision we made. We still sell used boats today, but not new ones. But if we were to decide to sell new boats again, it would be Catalinas. They're the best product for the money today."

Weathered recession

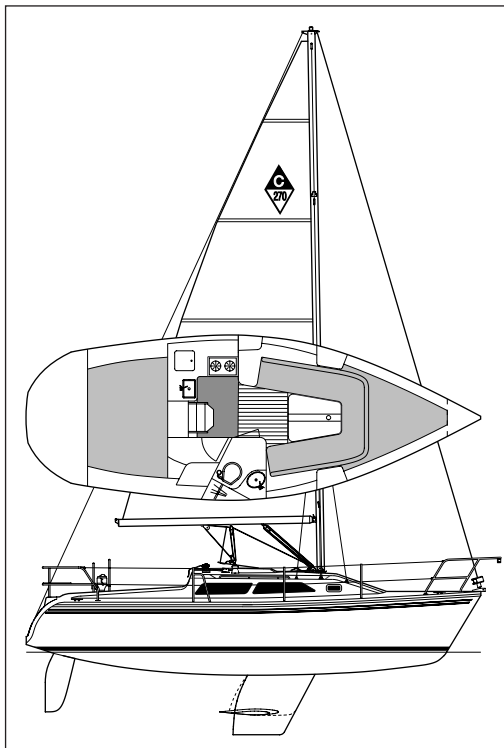
One can make the argument that Catalina's product line, and philosophy of providing "the most value for the dollar in the industry," as Frank puts it, made the difference in weathering the recession that drove other sailboat manufacturers out of business. Many manufacturers had the bottom drop out of their sales volume; but Catalina's business, while also falling off, didn't drop precipitously. The factories stayed busy, and Catalina did not lay off one worker during that time.

According to Sharon Day, Catalina's national and international sales manager, "We had to tighten our belts, but when we were making money we were able to put some of it away for times like that. With the slow market we were able to

increase our inventories of boats so we were ready when the market rebounded."

Will Keene, president of Edson International, seconds the notion about Butler's instincts. Says Keene, "He has the uncanny ability to know the real value of something. He's as honest as the day is long, a guy who speaks his mind. You know where you stand with him every minute of every day. But he also has quite a sense of humor. He's a great kidder, and you don't always know when he's joking. For example, one time he said to me that he was going to put all my competitors' gear on his boats. I nearly had a heart attack before he told me he was joking."

One of Will's first sales trips for Edson around 1980 was to visit Frank in California. "I was scared, absolutely petrified of meeting him. He's a big, gruff guy on the outside, especially



if you're a vendor. I was this kid taking over the business from my father and had a lot to prove. Frank suggested a change in a piece of gear, and I took the suggestion back to my boss, who also doubled as my father. He said, 'We just invested a lot of money in that design. Make him like it.' Well, I lost Frank's business on that one."

Team approach

Will continues, "We ended up building a mock-up of the C-30 cockpit and shipping it to California so Frank and Gerry Douglas could see how it all would work together. Our competitor also had trouble delivering on time, so we soon had their account back. It took us 18 months and a lot of hard work, but we did it."

Will enjoys working with Catalina because of the team approach Frank uses. "He will call me up and say, 'We have a problem,' and ask, 'How can we solve it?'" Will says. "He works with you. He's always very even, whether it's our problem or his, or a combination. We're small potatoes compared to the size of Catalina Yachts, and Frank knows we have limitations, but he expects us to deliver, too. Even if we make some dumb mistakes, which we have, Frank and I will talk about it, and then he'll say, 'OK, let's get going here.' He's great to work with."

Will considers Frank to be a mentor, in addition to being a customer. "Frank told me once that when sons got into the family

The Catalina 27, the second boat, introduced in 1971.



business, the business usually failed.” Will took the words of advice to heart, as something to work on. “I’m still in the process of proving him wrong on that one,” he says. “But I probably won’t be able to do that until the day I retire.”

To what does Will attribute the success of Catalina Yachts, besides the obvious presence of Frank Butler? He responds, “The boats are a reflection of the people behind them. Frank’s employees are the best and are very loyal to him and the company. They make good, honest, affordable boats — good sailers with smart layouts. Just look at the number of people who got into this sport because of Frank’s affordable boats.”

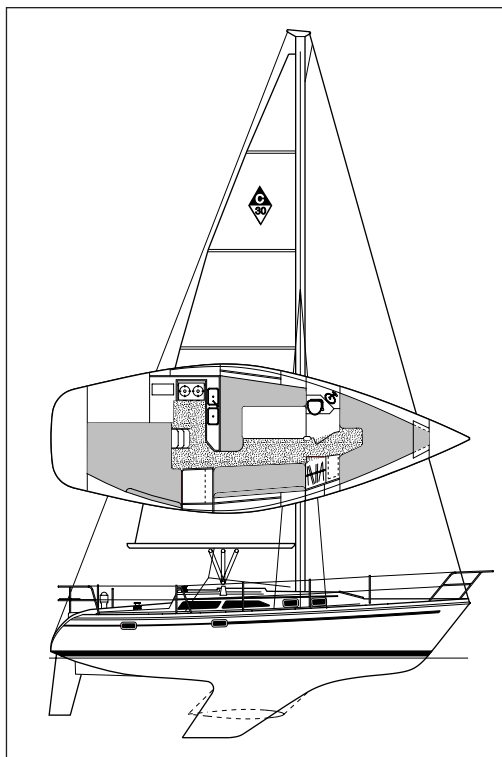
Largest manufacturer

Frank is quick to point out that sales manager Sharon Day and Gerry Douglas, head of engineering and design, are a big part of the success of Catalina Yachts. They really have had more to do with the success we’ve had than anyone else.” Both Day and Douglas now are corporate officers and part owners of the company.

Sharon has been with Catalina for 26 years. “We’re the largest sailboat manufacturer in the United States, but we aren’t run by a large corporation. So we can keep closer tabs on our customers, to make sure they like our products. I think the boat owners like sharing the company’s success because they like being part of the Catalina family. And family is the backbone of our company. Everyone who buys a boat is a part of our family. We especially treat our dealers that way. Lots of them have been with us since Day One, and we appreciate that. They are our front line with our customers, after all.”

Sharon continues, “Going to a boat show, we not only sell boats, but we also get to see and talk to our customers. Many of them we see at the shows every year.” The face-to-face meetings with customers provide valuable feedback for their likes and dislikes, which leads directly to improvements in the product line.

What’s it like working for Frank Butler? “He sets the pace for us,” she says, “and that’s non-stop. Frank keeps things moving. He’s perpetual motion, and has a tremendous amount of energy. It’s an entirely different feel in the office when he’s there compared to when he’s not. He’s a fantastic man to work for. His heart is in the right place.”



The Catalina 30, the third boat, introduced in 1976.

Lots of overlap

Sharon describes Frank, Gerry Douglas, and herself as the Three Musketeers. “We have tremendous rapport together. It’s a good mixture. Even though we all have our own roles, there’s lots of overlap in what we do, and lots of lunchtime meetings. Sometimes things may get heated, but by the end of lunch we’re all back on good terms, and all three of us are heading down the same path.”

From his perspective, Gerry sees two big advantages of Catalina’s boats: they can be fixed, and parts are readily available. “Our boats are 100 percent rebuildable, depending upon severe damage, of course,” he states. “And parts are available from the factory for all our boats no matter how old. This makes older Catalinas excellent project boats for people looking for a good boat to rebuild.”

He points out that “we put the decks on much earlier in the manufacturing

process than other builders. This is a big advantage to our customers because it means everything inside the boat came through the main hatch. There are no captive tanks or bulkheads. The customer can take out everything in the boat with hand tools. Catalina is unique in that respect. Most builders put the deck on much later in the process.”

He continues, “Our hull liners are designed to distribute loads. Bulkheads don’t bear chainplate loads, for example. Those loads pass on to the liner. That’s important to know because so many of our owners have modified their boats extensively. Our owners



tend to be hands-on people. It’s easy to replace things, and you seldom have to cut anything to get a part out.”

Rare features

According to Gerry, another Catalina strong point is its customer-service department. “We have good people

owners can talk to about technical issues. That, combined with the availability of parts, is rare in this industry. It makes buying older Catalinas easier. Our boats are good for extended cruising because they have a solid foundation of good, laminated parts.

"Our boats are excellent choices for rebuilding because they are relatively heavy for their length. We still use heavy, hand-laminated, solid glass hulls. We're probably the only builder who fibs on displacement on the light side. This philosophy of durable, rebuildable boats is designed in. It's not by accident," he says.

Loyal owners

Should Catalina owners want resources for projects, all they have to do is turn to *Mainsheet*, a quarterly magazine published by Jim Holder in Midlothian, Virginia. "Frank and I have been good friends since 1970," Jim says. "He asked me to put this magazine together 17 years ago to pull all the newsletters of the various associations into one magazine. I'm the editor and publisher, and Frank is listed as the managing editor. We receive quite a bit of technical assistance from the factory, primarily from Gerry Douglas, who reviews all the material for technical accuracy. Frank is the only manufacturer who does this sort of thing. It's a unique magazine in more ways than one."

Continues Jim, "The magazine is basically written by the owners. They send in all the articles for their projects and such to editors for each association. Those editors send the articles to us to help keep things organized. So it's really written by the owners for the owners. It glues all the association members together. The magazine helps people improve and enjoy their boats — to have fun. That's the object of the magazine, and of Catalina Yachts as well."

He concludes, "Frank has always pushed Catalina Yachts as a family. *Mainsheet* is one vehicle to keep the family together through communication. People who own Catalinas are very loyal, and most of them move up to another Catalina. They also know that Frank is really good about warranty work and that he doesn't want anything happening to his boats he doesn't know about. It's Frank's one-on-one attitude that makes the family aspect happen."

What is Frank Butler's favorite design, of the many he has built? "I have seven children. That question is

like asking me which is my favorite child. I can't say. Anyone who ever asks me that question never gets an answer from me. My boats are like my children. One might be for the ocean, another one for near shore or for racing. I love them all.

"The C-22 and C-30 were both extremely well received. We also have sold a lot of 27s. The 36 just passed 2,000 built earlier this year. We're selling a lot of 42s and larger boats. For example, right now we're building 47s at the rate of three a month."

There's no doubt that, as Beattie Purcell puts it, "The C-22 was the boat that really put us in the market in a big way. We were building five of them a day in California in the early days. Used ones were going for more than a new one because people couldn't get new ones fast enough." Concludes Beattie, "The 22 is a good sailing boat, stable, family oriented."

Frank continues, "You should always try to upgrade your product line. You always need to have something more to offer in a new boat. Otherwise people will just buy used ones."

Good relations

When asked if he sees Hunter and Beneteau as his biggest competitors, Frank responds, "Yes they are, but really I think all [sailboat manufacturers] are my competitors. I love competition, I really do. You've got to know your competition. I check them out all the time, not just at boat shows. I have good relations with our competitors. We all get along fine."

To this day, Catalina designs all of its boats in-house and has its own engineering department. Two notable exceptions are the C-27 and C-30. "An outside person designed the hulls for those, and I did the interiors and the decks," says Frank. "I try to do what our customers need or want. We try to work around that concept. There's no one better than your customers to help you constantly change and improve. Our dealers also are very important to us. We get lots of input from them. And we are always working on new designs."

Today Catalina Yachts employs more than 700 people building boats in three locations, two in California and one in Florida. It has about 500,000 square feet of manufacturing space. The line includes Catalina, Capri, and Morgan sailboats, Nacra and Prindle catamarans, and a 34-foot powerboat sold as the

Islander 34. "We purchased that mold when Pearson went out of business," says Frank. "It's the only powerboat Catalina currently makes."

Capri sailboats are the performance-oriented daysailers developed in the Capri Sailboat Division. Current models range from 8 feet to 25 feet. "Capri is our small-boat division under Catalina as the main structure," Frank says. He notes that several Capri models have very active class associations around the country.

Bright future

What does the future hold for Frank Butler and Catalina Yachts? When asked how long he expects to run the company, he says, "I enjoy it so much. It's really in the hands of the good Lord. That's one question I can't give you an honest answer on."

According to Frank, Gerry Douglas and Sharon Day most likely would supply the continuity to keep Catalina Yachts going as it always has, providing "a lot of boat for the money," as most sailors put it.

Certainly Catalina Yachts has a bright future given the thousands of loyal customers sailing its products around the world. The international class associations for the C-22, C-25, C-27 and C-30 are among the largest sailboat groups in the world. Log on to the Internet, and Catalina sites are among the most numerous and busiest to be found. As Max Unger, the treasurer of the International Catalina 30 Association, puts it, "The success of these independent associations emphasizes not only the great number of boats built, but also the family atmosphere created by the owners that keeps us sailing together."

The word family probably best describes Catalina Yachts these days. It's a family comprised of many loyal employees and thousands of loyal customers. And the undeniable head is Frank Butler. He wouldn't have it any other way.



When not working at his job for the federal government or singlehandedly his 1989 Pearson 27 in the Annapolis, Md., area, Steve is a part-time freelance writer. He writes for a variety of business and boating publications.



Relief is spelled E-P-I-R-B

It was 3 a.m. Everything bad at sea happens at this hour. Minutes later, when we seemed to have no recourse, I pushed the EPIRB switch to the “on” position, then sat back and waited for the U.S. Coast Guard. What followed was both expected and surprising.

This happened on our sail from Monterey, Calif., to Honolulu, Hawaii, which was not quite typical — but in more than 160,000 miles of sailing together, Carolyn and I do not recall too many typical conditions for ocean crossings. The winds were light for the first 1,000 miles. For the second 1,000 miles, winter storms battering the California coast wrapped their tails around us, pulsing large seas south and southwestward. Winds were a tolerable 35 to 45 knots. Following breaking waves piling up higher than 30 feet started our problem.

The ride was surprisingly comfortable, even sledding down waves at 12 to 13 knots with the autopilot doing the dirty work. The two of us were crewing a nearly new Tayana 52 on a delivery to Honolulu. For reasons I could not understand, the windvane steering lost the ability to turn the rudder enough to meet the existing conditions, so we engaged the autopilot. I was puzzled. These were the conditions where the windvane should work best. I pointed out later to Carolyn that the autopilot was driving the steering wheel excessively, but this I attributed to the effects of two towering wave systems colliding, causing a confusing sea surface. Further, the rudder angle indicator gave strange positions for the rudder that I did not understand. I rationalized this as a faulty instrument reading. Occasionally the autopilot would kick off with a “rudder” warning. I kept tuning down the sense setting, and the resetting always got it back.

Channel fever

Our destination was less than 500 miles away. Channel fever crept into our attitude. Liberty in Honolulu was not quite three days away. Suddenly and

Using an EPIRB, they initiate a costly communication but avoid an even more costly search later

unexpectedly the boat slewed around and jibed. The alarm sounded on the autopilot; it tripped off the line again. I rushed to the cockpit to regain control of the boat and head it back down swells and downwind. We lay beam-on to wind and sea — a vulnerable position for rollover. I spun the wheel to starboard. The bow remained pointing in the same direction. No steering. We rapidly reefed sails to slow the boat and settled down to a comfortable 3 knots

on a heading toward Tahiti, the only way it would point.

Lack of sleep muddled our minds.

was only usable through a few degrees. It took both of us pushing and pulling on the tiller bar to move the rudder back to the centerline from where we discovered it jammed hard over — well beyond its normal 35-degree maximum deflection. This confirmed we still had the rudder, and its shaft was not broken. This action eased the heading off a little. However the emergency tiller was not usable in these conditions. Next I rigged the Monitor wind steering vane to act as an emergency rudder. Our heading was about 150 degrees. Honolulu bore 260. The Monitor's small water blade steered the 20-ton boat around only 20 degrees to a heading of 170. Not enough. On this course, we would still miss the island chain at the south end of Hawaii by at least 200 miles.

Float plan

We always travel under a float plan filed with our daughter, Pam. We provide her with the vessel's information plus the planned navigation route with arrival times. She calls the Coast Guard if we are overdue. At our present rate we were going to be very overdue, anywhere. We usually travel with a single-sideband transceiver. This boat had none. I did, however, slip aboard our Alden Satfind II 406 MHz EPIRB. The weather, after we'd lost steering, was forecast to remain the same except with winds increasing to 50 to 60 knots along the windward coasts as we approached the Hawaiian Islands. We had more than a

month's food and water aboard without rationing. We could expect winds from the east-northeast to prevail, leading us to nowhere in the north central Pacific unless we could rig some sort of steering.

It was time to let someone know of our plight while we worked out the problem.

by Tom Beard



“We rapidly reefed sails to slow the boat and settled down to a comfortable 3 knots on a heading to Tahiti, the only way it would point.”

Obviously the rudder was not working. Broken shaft? Cable? A quick inspection showed the cables to be tight and connected. It was not possible to view the rudder — but it had to be there. We set up the emergency tiller. Because of obstructions to the tiller bar's path, it

If we missed our ETA with no word to anyone, the Coast Guard would be saddled with an improbable search area, extending from Monterey to Honolulu. Since we were south of the shipping lanes, we could not expect any VHF contacts. Only the EPIRB remained.

I turned on the switch and set the EPIRB on the cockpit sole. It lay there sliding around, antenna canted at an angle of about 30 degrees to the horizon, strobe light flashing, my only assurance that it was working. I went below to wait for whatever this mysterious yellow plastic package did and took a nap. I'd had three hours of sleep in the past 30 hours.

Tied vertically

Four hours later: nothing. Maybe, I worried, lying as it was at an angle in the cockpit did not allow the antenna to broadcast its twin signals in the right direction. So, I tied the EPIRB to the dodger stanchion in a vertical position. The strobe still flashed as my only assurance that the transmitters were broadcasting — the continuous 121.5 MHz to alert overflying aircraft and the coded microburst signals every 50 seconds on 406.025 MHz to the COSPAS-SARSAT search and rescue and GEOS weather satellite systems.

Clouds obscured sunrise, but with the early light came a report from the long silent speaker on our VHF radio: “Moonshadow Three, this is Coast Guard Rescue One Seven One Four, over.”

An HC-130 Hercules from Coast Guard Air Station, Barber's Point, reported it was about 20 minutes out heading for our position. This first contact with the Coast Guard occurred four and a half hours from the time I hit the switch on the EPIRB. It worked!

However, the aircraft did not receive the VHF 121.5 signal from the EPIRB to home in to our position, hampering their ability to fly directly to us. (This transmitter was later found to be defective when returned to the manufacturer. Only the 406 transmitter was working. The aircraft crew verified the 406 transmission from the flight deck but this signal cannot be homed in on — a justification for the different category dual transmitters on the EPIRB.) The HC-130's crew located us by homing in on transmissions from our onboard and handheld VHF's. The sea state and visibility at the time prevented the crewmembers from seeing our white 52-



“Lack of sleep muddled our minds. Obviously the rudder was not working.”

foot sailboat among the rushing mares until it was less than a mile away. We were able to see the airplane at five miles out.

Daughter alerted

We briefed the Coast Guard crew of our situation and needs. The Coast Guard informed our daughter that we were OK. She had been awake much of the night, alerted by a telephone call 10 minutes after I turned on the switch. The Coast Guard's Rescue Control Center (RCC) in Seattle called her and reported that a beacon with our registration was picked up and reported as an “unlocated alert.” All the information the Coast Guard had at the initial call was that our beacon was transmitting from an unknown position.

I switched the EPIRB on at approximately 12:32 UCT (all times here are Coordinated Universal Time). A receiver in the geostationary GEOS weather satellite, G10, detected our 406 signal at 12:33. It, being stationary in space, cannot determine position using Doppler-shift processing, since it has no motion relative to the earth. The United States Mission Control Center (USMCC) in Suitland, Md., one of 15 around the world, received the signal information because in the transmission from our EPIRB was a code indicating it was U.S.-registered. At 12:37, USMCC established a “site,” passing the EPIRB personal registration data information from their files on to the Thirteenth U.S. Coast Guard District, the RCC located nearest our address.

Five minutes had elapsed.

Position undetermined

Up to this point, the system was working perfectly. The satellite system was not

yet able to determine our position, but controllers knew who we were and that we were likely seeking help. (However, NOAA reports approximately nine false alarms on the 406 frequency for every actual emergency and more than 1,000 erroneous signals on 121.5 for each legitimate call for aid.)

Serendipity moved events forward despite a failure on my part. Seattle Coast Guard RCC called our telephone number at 12:39, the one listed on the registered form (the one I filled out when I purchased the unit nearly two years before). This call was to verify the signal and eliminate the possibility of a false alarm. No answer. We were 2,500 miles away from our

home telephone. They next tried our fax number. At the time of registering the EPIRB, our daughter — the “emergency contact ashore for information on vessel itinerary” — lived in our home. She moved later. I did not change the form. I had, however, left a message on our answering machine announcing her new phone number. The RCC controller picked up on this and two minutes later was informing her of our EPIRB signal and asking for float plan data.

I was bewildered at the first contact by the overflying Coast Guard HC-130 that they had all the information they needed, including the names and number of people on board, not aware that our daughter was already a significant element in the rescue effort.

Two positions

The first pass over our position of the polar-orbiting COSPAS-SARSAT satellite number S6 at 12:45 — 13 minutes after my turning on the switch — determined two possible “solutions” for the location of our boat using Doppler effect. There are seven satellites, three Russian (C4, C6, C8) and four U.S. (S3, S4, S6, S7), flying 620 miles above the Earth in a polar orbit with at least six actively scanning a circle of Earth about 2,500 miles in diameter. The average waiting time for a pass at mid-latitudes is 30 to 45 minutes — longer at the equator. This data from us to S6 was stored aboard then dumped to the nearest ground receiver station (called Local User Terminals, LUTs) it passed. This happened, in our case, to be located at Wahiawa, Hawaii, which forwarded it to the Suitland, Md., USMCC. There are 30 LUTs worldwide, seven serving the U.S. from Guam and Alaska to Maryland.

This data was forwarded by USMCC to CCGD14 RCC Honolulu and CCGD 13 Seattle at 12:50.

Satellite S6 passed two possible locations for our 406 signal 915 miles apart. In this instance, Solution B was exactly on our position reported by NOAA at 21.795 degrees north latitude and 150.874 degrees west longitude, while Solution A was 18.164 degrees north latitude and 135.084 west longitude. It was the Coast Guard Rescue Center controller's task to determine which was our most probable location. Here is where our float plan paid off. Pam provided the controller with our preplanned navigation data. This vital clue ruled out our being at the satellite's Solution A.

Correct position

A pass by the next satellite would determine the correct position, but that could be as much as 50 minutes later. With the information they now had, controllers could concentrate mustering search and rescue forces on Solution B still yet not knowing the extent of our distress and what might be required.

Nearly 30 minutes had passed from the time I turned on the switch.

The Honolulu RCC controllers went to the computed Automated Mutual Assistance Vessel Rescue system (AMVER) determining the locations of all registered vessels within our vicinity. One Japanese freighter was located nearby and directed to proceed to our position for possible assistance. The Coast Guard Air Station at Barber's Point, Hawaii, was alerted to prepare to launch an HC-130 to fly directly to the fix given by the satellite. The EPIRB did its job.

The potential failures to the system were of my making. I registered the EPIRB but failed to make changes as my contact situation changed. The message on our answering machine bailed us out. Alert RCC watchers in Seattle picked up on it and covered my oversight.

Two years too long

Approximately every two years, NOAA, seeking updating information, sends out a 406 EPIRB registration form to registered owners. I learned two years is too long to wait to notify NOAA if the important contacts have changed. Our EPIRB is now registered with home and work numbers for more than one contact. On future trips, as practiced in the past,



“Relieved of a ton of anxieties . . . we could now attack the problem and figure out how to sail on safely.”

all contacts will continue to have our float plans.

Recent improvements designed to accelerate information on the location of the signaling EPIRBs are now in service. Called location protocol by NOAA, new model EPIRBs available on the market today can transmit GPS, Loran, or Russian GLOSNOS fixes. Had we had this, our first contact by the GEOS satellite would have targeted our position. Theoretically, the moment the EPIRB sends its first clear burst to either a GEOS or COSPAS-SARSAT satellite, a fixed site is generated by USMCC. Immediately the data on location for a rescue response is passed to Coast Guard RCCs. In critical situations, this can save several minutes to nearly an hour or more.

Register your EPIRB

NOAA/NESDIS, E/SP3

Room 3320, FB4

5200 Auth Rd.

Suitland, MD 20797-4613

Phone: 888-212-SAVE

Web: <<http://www.sarsat.noaa.gov>>

To test a 406 MHz EPIRB

The Coast Guard is offering signal checks for 406 MHz units at a few facilities around the country. Call headquarters, 202-267-1586, for the location nearest you. This is not a walk-in program. Sailors wanting a beacon test need to make an appointment with their facility.


After passing our information to the HC-130, and relieved of a ton of anxieties for the distress we were putting others through, we could now attack

the problem and figure out how to sail on safely. Somehow, we had to get the boat over to the other tack. A few hours later, after some rest, I sat at the wheel thinking, rocking the dead wheel back and forth. Then I spun the wheel all the way over in frustration. Very slowly, the bow started around. I allowed it to jibe over onto a heading for the islands and it held. Somehow, we had some steering.

Missing key

I squeezed into the lazarette and watched as Carolyn turned the wheel. The quadrant moved with the wheel, but the rudder shaft did not, except for a slight amount as the quadrant neared the stops. A quick inspection revealed that the key was missing from the slot bonding the two together. It had never been installed at the factory. We had sailed this boat for 13,000 miles and a sistership on a 2,000-mile delivery from the Philippines to Singapore, also with the essential key missing. The action of the heavy seas finally overcame the friction bond, and we lost steering.

The autopilot actuating ram was connected to the quadrant, not to a separate tiller. This is why I saw “stop to stop” wheel movement for what should have been small changes of rudder. The rudder indicator was correct; it showed the position of the quadrant, not the rudder. It was also why the windvane could not control the boat through the steering wheel. Out came the tools. Temporary repairs got our steering back. Hilo, Hawaii, was our nearest port, so we headed there as fast as possible to beat the forecast winds.

Using the remarkable COSPAS-SARSAT search and rescue satellite system solved the biggest part of our problem: communication. We could tackle the emergency at hand with the assurance that someone knew where we were and what our situation was. But it is still only a tool. It took the intelligent action by alert Coast Guard personnel to overcome human flaws in the system, demonstrated by this case. Through its use, we were able to overcome our difficulties and sail comfortably into a safe harbor. 

Tom and Carolyn Beard have been boating together as a team for more than 40 years, sailing more than 160,000 miles. Tom writes in his spare time and has published a book: Wonderful Flying Machines, Naval Institute Press. They sail a Baba 30.

From *Loon* to *London*

She slipped into the sea after 11 years spent sailing only through backyards and boatyards. As the sea caressed her hull, I was apprehensive. Will she stay afloat? Will she leak? How will she sail? I had never done anything like this before. Had I tightened all those clamps enough? Used enough bedding compound? Had I made a huge mistake? Whatever had led me to believe I could buy a neglected boat and make her whole again?

She was launched in Quincy, Mass., a historic New England town on the southern side of the broad sweep of Boston Harbor, and it was in Quincy that I first saw her in the early summer of 1998. She had sat 10 years uncovered under an oak tree. Her mast lay on top. Stains streaked her sides. Mice lived in the mast. The halyards, strewn every which way, were green and rotting. The cockpit was full of leaves and stained with their rot. The teak was many colors of black, gray, and green. Peeling duct tape covered the holes where her instruments had been. There were lots of bugs and spiders. *Loon* was a 1977 Cape Dory 27 with an 8-hp, single-cylinder diesel engine, hull #35.

The broker was dumping leaves out of the cockpit when I arrived. He apologized for the condition of the boat. He said he had not seen her in years. I said nothing. She was everything I wanted! Standing room, inboard diesel, full keel, and (probably) cheap. It took all summer to negotiate the price down to what I thought she was worth and all winter to get her ready for a spring launch.

We live northwest of Boston, 20 miles from the ocean. Before *Loon* arrived on Columbus Day, I got the chain saw out and removed a few trees behind the garage. It was a good spot, the one favored by my wife, Nancy, because she would not be able to see the boat from the house. With a shovel and a rake, I smoothed and packed the ground to make a large flat surface. There was a shed along that side of the garage for gear storage. It had a huge workbench. I organized my tools. Power and water

A neglected 1977 Cape Dory 27 is returned to the sea. First of a two-part series

were close by. I was ready to begin. When the tractor-trailer arrived, the driver exclaimed, "What a great spot for a boat!" and backed her in. After he'd left, I stood in the street for a long time motionless, just taking her in.

Everything off

I started by taking everything off the boat, from the boom to the anchors,

found my 13-year-old daughter. We each grabbed a set of lines and hoisted the mast into the air, pulled it out parallel to the boat, and lowered it to the ground. As my daughter ran back to the house, I began to clean, first with a broom and a Shop Vac and then with a hose and scrub brush. This went on all that day and the next. And the weekend after that.

The weather stayed mild through

November, and I worked on her whenever I could. During this period I slept well and awoke stiff but purposeful. There are few tasks more satisfying than scrubbing dirty and stained fiberglass; you can really see progress. My dog lay near the

by Peter Baumgartner



flares to cushions, life jackets to silverware. It all landed on the ground and was either cleaned and stored in the shed or put in a pile for a final trip to the town dump. I picked up two docklines and climbed up into the trees near the boat and tightly strung one above her deck across her bow and another equally as high across her stern. I strung some additional lines between these lines running overhead and to the head and base of her mast.

Then I went into the house and

*A neglected Loon becomes
a well-loved London.*



boat, chewing sticks and watching.

Up on deck with a hose and scrub brush, I would sometimes stop and sit on the cabintop in the warm afternoon sun and gaze over the garage roof to the wet meadow beyond, where tall grass waved in a westerly breeze. I imagined myself at sea. I was very happy. It was ridiculous. So far all the work had been cosmetic, I had not even started on the boat's systems.

I found that for cleaning the fiberglass above the waterline it was best to wash the gross dirt off by scrubbing with a solution made up of a cup of bleach and some trisodium phosphate (TSP) in a bucket of water. I used a scrub brush and a Scotch-Brite pad and wore rubber gloves. I then hosed the surface off and applied On & Off, a powerful acidic fiberglass cleaner, according to the manufacturer's directions. You use a natural bristle brush to apply On & Off, as it will soften and dissolve the artificial bristles of a paintbrush. You must wear gloves and eye protection and avoid breathing the fumes. It's a good idea to keep a hose nearby to flush your skin of any splashes.

Not recommended

I would sometimes help the cleaning process along by rubbing the surface with On & Off and a wet Scotch-Brite pad. The manufacturer does not recommend this, but I found it to be very effective. I would finish up with a good water flush of the area and a further polish of any remaining stains with the bleach and TSP solution. A little Ajax Cleanser on a Scotch-Brite pad can really help as well. No stains stood up to this treatment. The fiberglass gleamed.

There is a lot of teak on a Cape Dory. I began by removing all the hardware — cleats, snaps for the dodger, plates, and so on — and put each set with its screws into a separate plastic bag and stored them in the shed. I scrubbed the teak, with that solution of bleach and TSP, using what was becoming my favorite Scotch-Brite pad. After the wood dried, I sanded it down with my orbital finishing sander. A number of teak plugs along the toerails

were extruded or broken. I removed these and replaced them with new ones, set them in place with two-part marine glue, and sanded them flush. I hand-sanded all the teak with fine sandpaper, vacuumed, and wiped the dust away. By the time the weather turned colder, I had a couple of coats of semi-gloss Cetol on all the teak, and the exterior fiberglass was clean. I had also removed the name *Loon* from the stern.

The plumbing would take most of my time for the rest of the winter. I had to learn as I went. Although I had been sailing for years, I had never replaced entire systems. Fortunately, there are a number of excellent books, and I had the good fortune to have chosen a boat with an active Web site newsgroup to which I could turn in times of crisis or doubt, <<http://www.toolworks.com/capedory/>>. Often I would receive a number of responses to my message-board queries, sometimes with pictures, by the very next day. Even with the manufacturer



The Cape Dory shows signs of 10 years spent beneath an oak tree, above, as she takes up residence, at right, in the Baumgartners' backyard.



out of business, Cape Dorys command a lot of loyalty and pride.

Removing hoses

I started my plumbing project by pulling out all the freshwater, cockpit-drain, and head hoses. I used my Dremel fiberglass cutting tool to cut the wire strands and carefully slice the hose around the pipe it was attached to without cutting into the underlying fitting. Leather gloves and eye protection are a good idea during this process.

Then I looked at the seacocks. Cape Dorys are fitted with bronze, tapered-plug-style seacocks. They are large, heavy, and impressive. There is one that sits in the back of my head compartment that looks like it belongs on a North Sea oil rig. Wilcox-

Crittenden made my seacocks. In later boats, I understand, they were made by Spartan Marine. Every single one of the seacocks was frozen in the open position.

I consulted my source books on boat repair and then my new friends on the Cape Dory Web site. Dealing with frozen seacocks is a popular topic on the site, and there are a number of methods

Books I used:

- *This Old Boat*, by Don Casey
- *Boatowner's Mechanical & Electrical Manual*, by Nigel Calder
- *Upgrading the Cruising Sailboat*, by Daniel Spurr
- *Sea Sense*, by Richard Henderson
- *Surveying Fiberglass Sailboats*, by Henry C. Mustin
- *Sailboat Maintenance*, by Eric Jorgensen

described there for getting the tapered plug out of the cylinder it has been embracing for years. The application of WD-40, backing the nut out to the end of the threaded stem (to avoid damaging the thread with the hammer) and then tapping the nut is probably the most popular. A heavy hammer helps. I used a brake puller on several where I had room. This allowed me to apply pressure without impact and pop the tapered plugs out.

From the Web site bulletin board, I also learned how to get an \$11 radiator spud wrench (#8618) at Home Depot and use it to unscrew the through-hulls from the boat. I soon had all but two of the seacocks out of the boat, polished, and regreased. I had broken the tabs in both of these remaining seacocks' through-hulls with the radiator spud wrench so they would not unscrew. These last two were both under the cockpit. Water running through the cockpit drains of the uncovered boat for the last 10 years had left them badly corroded. The seacock on the port side finally yielded its plug (with a pop) to WD-40 and a sledgehammer.

Finally gave up
The starboard cockpit drain seacock would not yield. Finally I gave up and cut it

out of the boat. I used my Dremel tool with a cutter bit to remove the outside flanged portion of the through-hull and then knocked the remainder up into the boat. I cleaned up the hole, made a new tapered backing plate, coated this with epoxy, and then installed a new through-hull and seacock, well seated with bedding compound. I reinstalled the rebuilt seacocks and through-hulls I had removed from the boat.

To redo the freshwater system, I removed the plastic tank from the boat and cleaned it, first with a bleach mixture, then a flush, then a baking-soda mixture, and a flush. The tank had no

deck fill, so I added one, running the fill hose into an opening I cut into the tank and fitted with a barbed through-tank fitting. I removed the old hand-pump faucet and replaced it with a simple Fynspray spout. A new Whale foot pump was installed near the sink to pump the fresh water through an Aqua City 1-micron filter and out of the spout.

On a cold day, when there was a strong breeze blowing, I removed the existing holding tank, which I regret to say was not empty. I then washed the whole area with the TSP and bleach solution. Then I took a shower.

I wanted to make the waste system compliant, so everything from the head is routed into the holding tank. An exit hose runs from the holding tank to a Y-valve, which allows the waste to be pumped overboard or pumped up through a deck port. It took some time to find a holding tank small enough to fit with all its plumbing under the port forward berth. I eventually bought one of those polyethylene tanks on which you install the fittings and seal with a powerful adhesive. This worked well. I removed the manual Whale waste pump, cleaned and rebuilt it, and reinstalled it in the boat.



Even though much is cosmetic, the cockpit's before and after shots (on facing page and below) tell the story. Scrubbing, sanding, and Cetol bring the teak back, above. The fiberglass is cleaned with bleach and TSP followed by On & Off, below. Sledgehammer for seacocks shown in cabin looking aft, at right.



Best investment

Before buying this boat I had it inspected. I think this is essential and the best money I spent. For the most part, because of the survey I knew where my problems and strengths lay. On dark days when things were not going so well, I could comfort myself with the knowledge of a sturdy hull or an intact crisp mainsail. The surveyor had made a number of recommendations, and I went through them one by one. Fortunately,

the Yanmar diesel engine was in excellent condition. It had been completely rebuilt before the boat had been laid up. I had only to replace some of the worn-out hoses and filters. I became somewhat complacent about this part of the overhaul. I would pay for this later.

I replaced all the Yanmar's cooling hoses and added a new seawater filter. All the rubber fuel lines were also replaced and a new Racor fuel filter with a water separator was installed. I had been told to drain the old fuel out of the tank.

After I did this I noticed that the inside of the tank looked like the bottom of a dark primeval tidepool. There was no access port, so it was not economical to get it steam-cleaned as the surveyor had suggested. I found a new one almost the same size and spent a pleasant weekend hanging upside down in the cockpit, a power jigsaw in hand, enlarging the fuel tank enclosure and mounts, and installing the new tank.

Once that was all done, there were only four more things left to do in the bilge. Then I could stand up again.

The old grounding plate had been painted over, so when Colin, my teenage nephew, was visiting, we replaced it and reattached the ground and lightning wires. I also got him to climb down

into the cockpit locker and remove and replace two clamps around the stuffing box hose. This was an awkward position, even for him, but a handheld power driver made the job go quickly. The little paddle wheel for the knotlog was thick with years of paint. I took this out of the boat, disassembled it, cleaned and greased it, and put it back. I added an automatic electric bilge pump and ran a new bilge hose to a through-hull above the waterline in the stern.

Launch deadline set

Spring was coming. My friend Rich asked when I was going to launch my

boat. I had no idea but by the time we were done talking, it was to be in May. He cleared the day to give me a hand. Having a launch date caused me to focus on getting the job done.

During the winter, I had measured the three old rotting rope-and-wire halyards and ordered New England Rope Sta-Set 3/8-inch line to replace them. I spliced thimble eyes into these using the Unifed rope-splicing kit. Since I had never done this before and did not trust my splices, I took one of the new halyards outside and wrapped one end around a tree and hooked the other end to a come-along-style winch fastened to another tree and gave it a good tug. Then I knew they would hold. Now I rove the three of them through the mast.

Although we had not been able to get any electricity flowing during the

the mast to it. I stocked up on fuses. My sister and her daughter, Hannah, helped polish the mast. We were ready to go.

Before I could call the truck to take us to the water, I had to get the mast off the ground and up 10 feet in the air on to the top of the boat. The mast is surprisingly heavy. My daughter and I might have been able to get it down, but there was no way we could get it back up by ourselves. One evening after work my friends Bruce and Mary, and her husband Josiah, came by to help. My



There's nothing quite like having a launch date set to move a project toward completion.

daughter and wife also came out to help. I had the head of the mast rigged up with a couple of blocks to the lines overhead but did not have enough blocks for the deck end as well. At that end I took a few loops around the overhead line and then the base of the mast for extra purchase. As you might

imagine, the head went up onto the boat easily, but the foot of the mast we only got back on deck with determination, many hands, and a few lucky heaves. We were ready for launch.

Part 2 of this story (launch day and the "rest of the story" concerning first-season blues) will appear in the March 2000 issue.



Peter says he goes sailing – a lot – to avoid technology overload. A sailor most of his life, he was converted to cruising just 12 years ago. He sails London in the Buzzard's Bay area.

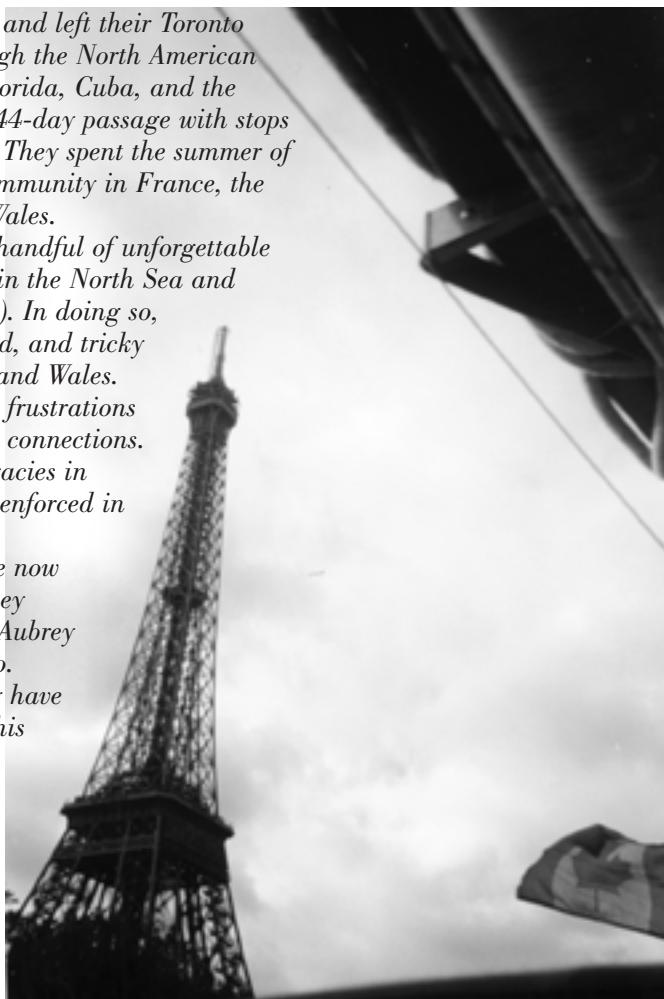
Aubrey and Judy Millard took a good old boat, a 1978 Ontario 32, and left their Toronto home in July 1998. They traveled the Great Lakes and passed through the North American continent using the Tennessee-Tombigbee Waterway. They cruised Florida, Cuba, and the Bahamas and then headed across the Atlantic in spring of 1999, a 44-day passage with stops in Bermuda and the Azores, for Great Britain, wintering in London. They spent the summer of 2000 in Northern Europe, sight-seeing and enjoying the cruising community in France, the Netherlands, Germany, Sweden, Denmark, Norway, Scotland, and Wales.

Aubrey's logs speak of many grand and glorious moments and a handful of unforgettable "character-building events," primarily of the heavy-weather variety in the North Sea and the Irish Sea (worse than anything the Atlantic crossing handed out). In doing so, they earned the chance to explore some of the most beautiful, isolated, and tricky anchorages in Northern Europe, particularly the coasts of Scotland and Wales.

As they've moved from country to country, they have had ongoing frustrations about the compatibility of email systems and about propane canister connections. And they've experienced the usual cross-cultural issues and bureaucracies in which rules and regulations are proudly promulgated and expressly enforced in languages that were not their own.

Having spent a cold and wet North Sea summer in 2000, they are now soaking up the sun and slowing their pace in the Mediterranean. They arrived there mast down through the French canal system. All told, Aubrey and Judy have logged more than 15,000 miles since leaving Toronto.

Aubrey summarizes, "It must sound exotic . . . It is! We frequently have to pinch ourselves to establish that this is our good fortune to have this lifestyle and our fantastic opportunity to see the world. However, one of the reasons I am writing these logs . . . is to encourage people to dream and to work toward making their dreams come true. We are not rich in terms of financial wealth, but we have accepted what life has given us, both the good and the not so good, and have made the necessary adjustments and decisions to realize a dream we have both had for some time. My theme is, 'You can do it! You are only in this life once. Go for it!'"



Take a good old boat and just go

In this account, I have given close estimations of costs incurred, not to show how shrewd or economical we are (which we are not), but to give others a frame of reference for expenses and to illustrate that a couple does not have to be rich to set off on a world voyage in a seaworthy, comfortable sailboat. But they do have to be prepared to pay the price, financially and emotionally.

We bought *Veleda* for \$28,000 (\$42,000 Canadian) in May of 1996 from her third owner. We had heard the Ontario 32 praised as a solid sailboat, and we loved *Veleda* from the first time we saw her in midwinter in Brockville, Ontario. During the summer of 1996

*"You can do it, go for it!"
is this couple's advice to others*

by Aubrey Millard

we sailed from Toronto to Thunder Bay on Lake Superior. The second summer (1997) we sailed Lake Erie. We departed on our world cruise the third summer (1998). We did not do any upgrades until the winter before our departure, with the exception of installing a Dinghy Tow system. Those first two summers gave us the experience with the boat and her systems to show us what changes we would like to have for liveaboard comfort and safety.

We had *Veleda* surveyed before

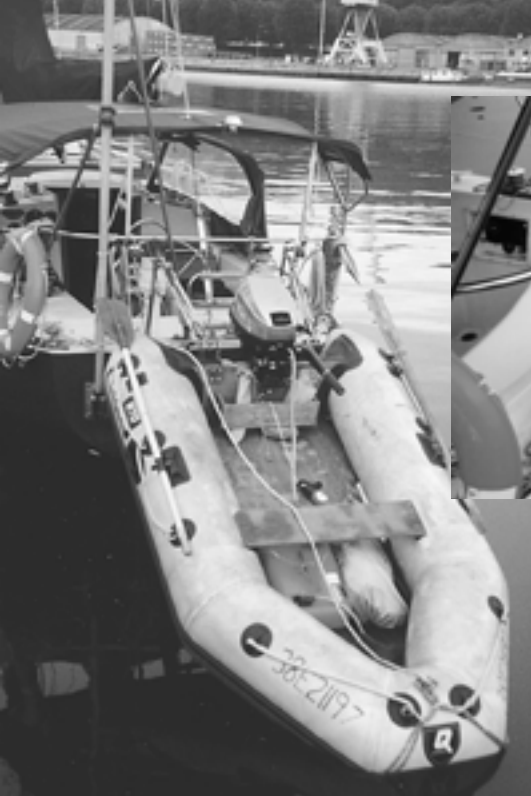
we bought her and again in the fall, at a cost of \$290 (\$435 Cdn.), before our departure to outfit her for ocean cruising.

We were cautioned

by the second marine surveyor that we could expect to put 50 percent of her value into the necessary upgrades for bluewater sailing in safety. This we did.

These are the major upgrades we undertook. (Prices in parentheses are Canadian dollars.)

A new engine – The original 20-year-old, 15-hp 2QM Yanmar seemed powerful enough but had impeller problems, was raw-water cooled, and had already been in salt water for one or two seasons. The engine was our major concern. Did we have the right boat for what we wanted to do? Was it



The Dinghy Tow system allows the Millards to launch the dinghy quickly. They removed this apparatus only for their Atlantic crossing.

worth a new engine and all the expenses to upgrade her? We did a considerable amount of soul searching about our plans and the boat. However, she had a solid hull and rigging, we liked her sailing characteristics, and we were impressed with her below-decks space and layout. To buy a larger, more expensive boat would still mean expending money to upgrade, and we could not afford boats in the \$50,000 to \$65,000 (\$80,000 to \$100,000) range.

Our dream was in danger of fading or being postponed for a couple of years. So we decided to go for it with *Veleda*. We had E&C Marine, in Toronto, install a new 3GM 30-hp Yanmar with a heat-exchanger cooling system for \$10,000 (\$15,000), less the \$1,000 (\$1,500) they got for selling the old motor. They gave *Veleda* a backhanded compliment when they complained that her hull was too thick when they were drilling a through-hull for the water system. We also had a Vetus anti-siphon system installed and a larger exhaust opening made. We are quite happy with their service and with the engine.

A new dodger/Bimini – At the Toronto Boat Show we were impressed with the dodger/Bimini system we saw at the Genco stand. As I'd had a cancerous growth removed from my arm that fall, we knew we would need good sun protection. We initially were going to have just the dodger/Bimini made, but then went for full vinyl-and-screen side curtains (see photo on Page 23), and even new cockpit cushions. The

Bimini had a new design whereby it was secured to the toerails rather than to the outside of the cockpit coaming.

This design gave a more spacious cockpit enclosure, and has proven to be quite stable. We have standing headroom beneath the dodger and 6-foot headroom under the Bimini. We also had a clear vinyl window with a Velcro flap made in the aft third of the Bimini to permit a view of the set of the mainsail. Pockets sewn into the dodger give a handy place to store a sound horn, sailing gloves, navigation instruments, and light lines. Straps sewn on the port and starboard top of the dodger give useful handholds when getting into or out of the cockpit. We spent another \$2,000 (\$3,000) but feel it was well worth it for an "Add-a-room." We have had the system up all the way across the Atlantic with no problems, even through 55-knot winds. We rarely use our foul weather gear now as, with the full enclosure even in rainstorms, we are dry and warm. The structure makes our boat look bigger, but does not detract from her lines.

As much as we like this system, had our budget permitted, we would probably have gone with a rigid dodger and

Bimini with appropriate canvas/vinyl side curtains.

Electrical systems – We wanted alternate rapid and reliable sources of charging our batteries, so went with an Air Marine wind generator for \$1,000 (\$1,500), a 30-amp marine battery charger for \$350 (\$525), and a 100-amp heavy-duty alternator for \$330 (\$500). We replaced the standard, heavy-duty automotive-type 12-volt batteries with four 6-volt, golf-cart batteries for \$300 (\$440). The advantages are that they are lighter-to-handle, sturdy, deep-cycle batteries that we were able to fit beneath the cabin sole, lashed down on a platform built on top of the keel bolts. Two are

hooked up in series (for the equivalent of one 12-volt battery), and then two pairs are hooked up in parallel, making a single house bank of two 12-volt batteries. We kept one 12-volt, automotive-type battery separate, lashed in a battery box in a cockpit locker, for engine starting only.

We also installed an Alpha regulator for \$150 (\$225) for controlling the charge rates from the alternator, allowing a higher charge rate for a longer period before dropping to an intermediate rate, then to a trickle charge. An Echo charger

ensures separation of the starting and golf-cart batteries, so that the house bank cannot drain the starting battery but allows both starting and house banks to be charged.

My favorite toy is the E-Meter installed above our electrical panels. I was always frustrated by the question of how much charge we had left in the batteries? As far as I'm concerned, simple ammeters and volt meters

are not as dependable. My E-Meter monitors the house bank and tells me the voltage, the current draw in amps, the number of amp-hours used, and the number of amp-hours remaining at the present rate of consumption to lower the bank to its 50-percent level.

Major suppliers:

- **E & C Marine**, 31a Parliament St., Toronto, Ontario, M5A 2Y2; 416-363-7770.
- **Genco**, 544 King St. West, Toronto, Ontario, M5V 1M3; 416-504-2891.
- **Holland Marine Products**, 3008 Dundas St. West, Toronto, Ontario, M6P 1Z3; 416-762-3821.
- **Nautical Mind Bookstore**, Queens Key West, Toronto, Ontario; 416-203-1163.
- **Ocean Marine**, Railside Rd., Toronto, Ontario, M3A 1B2; 416-444-0105.
- **Davron Marine Products Inc.**, 33 Cedar Ridge Rd., Gormley, Ontario, L0H 1G0; 888-DINGHYTOW (346-4498).

The household wiring was replaced with marine-grade wiring throughout the boat. We replaced the domestic AC switch box with a marine-grade AC panel for \$115 (\$170) with a master breaker and reverse-polarity warning light as well as four breaker switches separating the battery charger, water heater, and port and starboard AC outlets. The old six-switch DC fuse panel was replaced by four panels, giving us 22 fused switches.

Dinghy Tow – One of the first upgrades we got for *Veleda* was the Dinghy Tow system. We actually got it the first year we had our boat. At the Toronto Boat Show in 1996 we saw the system on their video and it appealed to us as the ideal solution for towing an inflatable dinghy. We had the usual problems of towing a dinghy behind the boat. We wanted a more powerful motor, one we did not have to “man-handle” off the dinghy each time we left an anchorage. In addition, we always had to watch that the dinghy line did not get fouled in our prop when coming alongside or anchoring. As we enjoy anchoring, a reliable, powerful dinghy was a high priority.

We purchased this system (see photo on Page 22) for about \$650 (\$1,000). It is one of the best purchases we have made. It came as a do-it-yourself kit, which took about two hours to install on our transom. It consists of two rigid arms attached to plates secured to the transom. The arms are controlled by pulleys attached to the stern rails, allowing them to be raised from the water level up to about 120 degrees. At the end of each arm is a quick-release hook; these clips fit onto brackets attached to the transom of the dinghy. Thus the dinghy is towed with the transom raised out of the water, with only the bow dragging in the water behind *Veleda*. This allows us to leave a 9.9-hp engine on the dinghy, with the gas tank, life jackets, bailer, anchor, and line secured in the dinghy while towing it. When we come to anchor, we lower the dinghy into the water, slip the quick-release mechanism, releasing the arms from the transom of the dinghy, and pull it alongside for immediate use. Very handy.

On a few occasions when we have grounded, we have lowered the dinghy into the water, but not detached it. I would then enter the dinghy, start the

engine, and with Judy at the wheel of *Veleda* in full astern, and me in the rigidly attached dinghy, full ahead on the 9.9-hp outboard, *Veleda* has always come back off any grounding so far. The only time we removed this system was when we crossed the Atlantic. Otherwise, we have had it on all through the Great Lakes, down the Mississippi, around the Florida Keys and the Bahamas, and ever since our landfall at Falmouth in July of 1999, including through a Force 9 gale the following summer in the North Sea.

Sails – *Veleda* came with an inventory of an 18-year-old full-battened main, jib, and 150-percent furling genoa with luff pads, and a spinnaker. We got a storm jib (never used), and purchased a used, but good, mainsail for \$800 (\$1,200) and a 120-percent genoa with luff pads for about \$900 (\$1,400). We never used the spinnaker before we left. We actually crossed the Atlantic with the original sails on the assumption that if they blew out, we had replacements. However, they are still flying, albeit with some new UV cloth, and some stitching and patch repairs.

Other upgrades:

New navigation light – The original port and starboard lights were mounted

on the hull. We installed bow-pulpit-mounted lights and repaired our trilight for \$200 (\$300). And we installed our sternlight on the wind generator tower.

GPS – We waited until just before departure to purchase a GPS to replace the Loran C that we had been using until then. We got an economical Garmin 128 for about \$330 (\$500) with a swivel mount for \$33 (\$50) so we can use it in our nav station, and swing it out into the cockpit for heads-up navigation. The antenna was mounted on the stern Bimini frame. It has proved quite satisfactory.

Jordan series drogue – Judy made this drogue system for “Perfect Storm” conditions. It consists of 100 drogues on 150 feet of line, to be streamed aft as a last-resort maneuver in horrendous storm conditions. We purchased the kit from Genco for about \$130 (\$200). We have not yet deployed this system, although we have to several times in heavy conditions.

Jack lines – We replaced the rope jack lines with flat nylon braid lines, so they would not roll underfoot.

Antifouling paint – We soda-blasted the hull for \$560 (\$850) to clean it off, then applied epoxy putty to seal the few blisters we noted. We then put on two coats of epoxy paint, plus one coat of red, and two coats of blue Woolsey bottom paint to seal the hull — Holland Marine products, \$230 (\$350).

Radio/tape/CD player – We purchased a good used car radio/tape/CD system with a cartridge for 10 CDs for about \$210 (\$320) that was connected to our two main cabin speakers.

Aubrey and Judy aboard *Veleda*, at left, and the full cockpit enclosure they have appreciated so much, below.



Mast steps – Triangular fixed mast steps from Holland Marine for \$240 (\$360) were installed to facilitate climbing the mast under all conditions. We have used them alongside a dock as well as in mid-ocean.

Refrigerator insulation – As we were heading toward warm climates, we increased the insulation around the Adler Barbour Cold Machine refrigerator with sheet (where possible) and spray can expanding foam. We unwound a wire coat hanger and used it as the support to direct the expanding foam insulation through tubing, behind and around the fridge.

Sewing – Judy did a good job of sewing fitted sheets, blankets, and quilts for our V-berth cushions. In addition she made a bag with zipper top to hold our towels and washcloths, and another bag for spare sheets. She also made curtains and a mast cover for the main cabin, as well as throw-pillow covers.

Spice rack – A spice rack was constructed above the stove area for a dozen spice jars.

Flag halyards – Port and starboard flag halyards were installed on the spreaders, and a main flag halyard was fixed two-thirds the way up the aft stay.

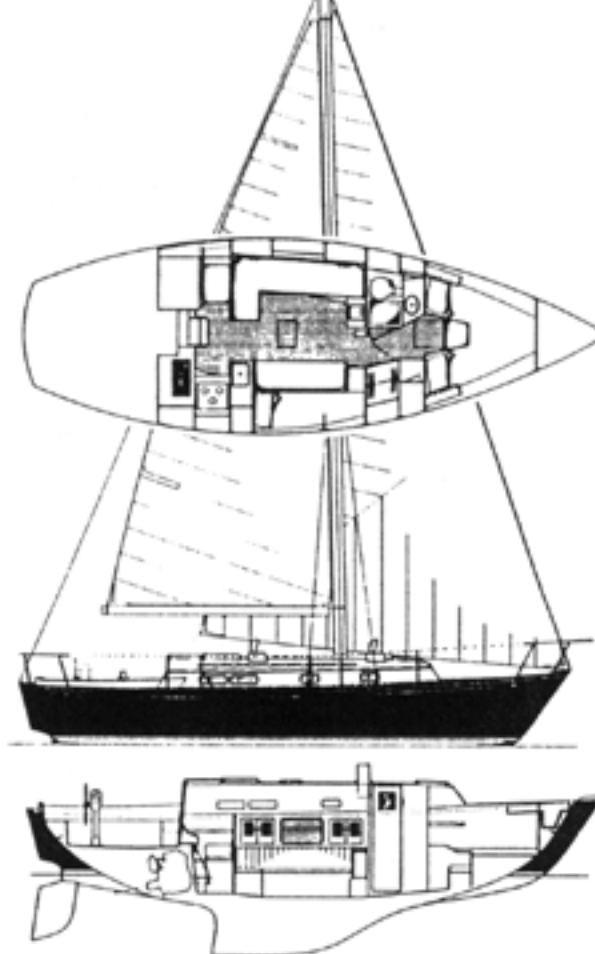
Stanchion bases – The bow and stern pulpit bases were replaced as cracks were noted in them — Holland Marine \$53 (\$80).

Barbecue – A Force Ten barbecue, a gift from my son, was mounted and connected up with propane on the stern rail.

Laptop computer – A friend gave us an old Macintosh Powerbook 170 laptop computer that we connected up to an AOL 2.7 email system that we've been using for communications via email from Toronto to England. I initially wanted a more up-to-date computer for chart plotting and electronic navigation but soon realized it was too expensive and impractical for our budget. We have been generally happy with the AOL local access numbers we have been able to use throughout the States, Bahamas, Bermuda, Azores, and England. It has limited capacity and cannot download sophisticated attachments and graphics but can email logs of our voyage to more than 75 addresses: clubs, magazines, and friends.

After writing this article and summarizing our expenses, I can readily see why people refer to a boat as a hole in the water into which you keep throwing money. We will never recover the money we have put into *Veleda*, but she is our home and our way of life. Without a doubt, it was worth it!

Veleda was named when the Millards bought her. The name is that of a Germanic priestess in the 1st century AD. Aubrey started sailing dinghies in the late 1950s as an officer cadet in the Canadian Navy. He has continued sailing recreationally and has earned a number of sailboat handling and navigation qualifications. He and Judy invite email correspondence: VeledaIV@aol.com.



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Major costs:

These are minimum estimates, as there were many additional miscellaneous costs.

	\$U.S.	\$Canadian
Dodger/Bimini enclosures	\$1,980	\$3,000
Garmin GPS	\$330	\$500
Binoculars	\$208	\$315
Charts, pilots, and guides	\$330	\$500
Charger and heavy-duty alternator	\$890	\$1,350
Batteries	\$290	\$440
Alpha regulator	\$148	\$225
Echo charger	\$132	\$200
30-hp Yanmar diesel, installed	\$9,900	\$15,000
Sails: genoa and mainsail, used	\$1,700	\$2,600
CD player, tape deck, and AM/FM radio	\$208	\$315
Soda blasting and bottom paint	\$780	\$1,180
Medical kit and supplies	\$528	\$800
Navigation lights and repairs	\$132	\$200
Electrical panels and wiring	\$330	\$500
Propane switch and hoses	\$265	\$400
Capstan cleaning and repair	\$200	\$300
Wind generator and supports	\$900	\$1,500
Flares	\$66	\$100
Total	\$19,420	\$29,425

This represents a minimum expenditure, not including taxes which would come to another \$2,650 (\$4,000). It is quite economical in U.S. terms, but moderate to expensive in Canadian terms, depending on your budget. We did all installations ourselves, with the exception of the new engine and the heavy-duty alternator.



A faux-teak deck for *All Ways*

by Mark Parker

A Triton owner tackles the problem of ailing decks with creativity

A word of caution: This article is about an innovative technique for applying an unusual deck veneer as a substitute for a laid-teak deck. The author did extensive evaluation and sample testing before he committed his time, resources, and boat to this process. We asked that he evaluate his finished deck for one season before we printed his article. He did and is satisfied with his work.

A process such as this will be controversial. It closely follows a process published by Gougeon for laying teak. System Three does not recommend using a thickened graphite/epoxy mixture to fill the expansion joints between the teak strips. They recommend using their epoxy for gluing teak down and polysulfide compound for filling the gaps between the planks. Their concern is with the expansion properties of teak, which is not sealed with epoxy on top. The issue is that epoxy between the planks will not be flexible enough to allow for expanding and contracting. The partners at MAS Epoxies, like Gougeon and System Three, have experience gluing teak, but have concerns about using Trex because they are unfamiliar with it and because they know epoxy will not bond to the polyethylene in the Trex without very

specialized pretreatment. They recognize that epoxy will bond to the wood in the Trex. The folks at Westcoast Teak Products Ltd., who lay teak decks do not use epoxy. They prefer two polysulfide compounds, one for gluing the strips down and one for filling the gaps between them. All of these people are being cautious, as they rightly should be. They have experience with teak but not with Trex.

The deck described here is not teak, and as careful as Mark Parker has been in developing this process, it is a new process with only one satisfactory season of proven use. Mark is betting on a satisfactory outcome. Sailors familiar with traditional teak over fiberglass decks with screws and plugs realize that method of construction can have serious problems when the wood wears, the plugs fall out, and leaks through the screw holes start.

We are offering this article to you the way Mark offered it to us. It looks like an interesting alternative way to lay a "wood" deck. If you consider doing this, you will certainly want to make a thorough and independent evaluation of the method and perhaps follow up with Mark to see how his deck is doing. Either way, our hats are off to Mark for taking the process this far. We needed a better way. Maybe this is it. **-Ed.**

something like 15 percent of the initial asking price.

From the start, I was determined to make *All Ways* look the classic she was. To me, that meant, among other things, a laid-teak deck. Hey, I had to rebuild the deck anyway, so why not make it yare? Thus began my research into ways to rebuild a fiberglass deck with a rotten core and how to construct a laid-teak deck.

First came the unglamorous task of repairing the rotten core. After reading everything I could on the subject, I decided to combine several approaches. For the deck, I elected to use the doughnut approach. The first step was to tap out the entire deck with a plastic hammer, marking the areas that would need repair. That was both sidedecks and a goodly section of the foredeck. Then I began cutting circles out of the marked areas. In all, I cut more than 200 circles, each 3 inches in diameter and each



carefully numbered to allow replacing in the original location. The holes were placed on an approximate 6-inch grid so nearly 50 percent of the deck surface was removed.

Gave up on them

The smaller holes were cut with a spade bit used to get close to the toerail. I quickly gave up on it and used the 3-inch hole saw. By adjusting the center drill bit, I was able to cut only through the top skin and the core, leaving the bottom skin intact (except for a few misses). Next I took a spare Allen wrench, ground the short end to a point, chucked it into an electric drill, and removed the core from the holes, undercutting them by nearly an inch around the full circumference. Any additional loose core was vacuumed out at this time as well.

While the remaining exposed core dried out, I cut 200-plus circles of new core from sheets of Airex foam using the same hole saw. Note that although the old core was ½-inch thick, I used ¾-inch Airex to allow for the thickness of the epoxy used to glue them in place on top and bottom. After flooding the remaining core with acetone and allowing it to evaporate overnight, I was ready to reassemble the deck. I used West epoxy mixed to a peanut-butter consistency with 404 filler for strength and microballoons for volume and weight reduction. Using a 1-inch-wide spatula, I forced this goop into the recess cut around the perimeter of each hole. I then buttered each foam circle, pushed it in place, buttered the previously removed circle of top skin (from which all core had been removed), and set it in place weighing down the whole mess with plastic grocery bags filled with sand.

Epoxy doughnuts

This process creates a doughnut of epoxy around each foam circle, effectively isolating it from any remaining core and creating hundreds of columns gluing the top and bottom skins together and supporting the deck. I used epoxy rather than polyester for this process because it is a much better and more flexible glue, allowing it to remain glued to both surfaces even if there is some flex to the finished deck. (See *Good Old Boat*, Nov., 1999, for a discussion of virtues and risks of epoxy vs. polyester).

After the epoxy kicked, I sanded the decks with 30-grit in a belt sander, removing all paint and gelcoat. I faired any major voids — where a disk was cockeyed, and so on — with a commer-

cial polyester-based fairing compound. (Note that polyester does not stick well to epoxy, but I was just applying it to the original fiberglass. Since I intended to apply additional layers of fiberglass using polyester resin, it was the proper choice here.)

I then built up the original deck with one layer of bi-ply and two layers of mat to create a smoother, waterproof base for my laid deck. This was laid up with isophthalic polyester resin with the top coat cured by covering with plastic. (Polyester is an air-inhibited resin that never fully cures if exposed to air. This is great for building up layers as all bonds are primary (chemical), not secondary (mechanical), but you must exclude air from the final layer either by using a finishing resin which has wax added or by covering with plastic while it cures.) The deck at this point was very solid with minimal flex and no voids. After thorough drying, the smooth finish was sanded with 30-grit in a belt sander to create a good tooth for the epoxy that would hold the laid deck on.

Hesitant about teak

Now I was ready for my laid deck! The Gougeon Brothers have a great description of using epoxy to create a laid deck without all the traditional screws and bungs that are prone to leakage. It also uses very thin teak (⅛ inch), which saves cost and weight. My only hesitation was all the articles I was reading about folks tearing off teak decks due to the deterioration from smog and pollution and the resultant constant cleaning and upkeep of what was supposed to be a care-free deck. I decided to research other options. I considered and rejected Treadmaster pads and painting the deck with non-skid like I used for the cabintop. I like the sweeping curves of a laid deck! I looked at some commercial composite products (one is cork) that come already assembled as a laid deck in sections, but the prices were outrageous. At about this time I discovered a product called Trex.



Approximately 50 percent of the deck is removed, and rotten core is scraped out, at top. Once the deck has dried, foam is substituted for the core and the deck circles are replaced, center. The deck is faired, at bottom.

This is a manufactured wood substitute that is 50 percent wood and 50 percent polyethylene, both recycled (plastic bags and sawdust). It's produced by Mobile Corp. and used primarily in 2-x 6s for outdoor decks around pools and such. It has a 25-year guarantee against deterioration and meets the Americans with Disabilities Act rating for non-skid with no treatment — even when wet. (*This act specifies everything from how steep an access ramp can be to how non-skid is measured for public areas like swimming pool decks.* -Ed.)

It weathers to a natural silver-gray that is very similar to untreated teak. There is also a brown version, but the color is not very stable from batch to batch and fades unevenly, so I would not recommend it. Trex can be cut, drilled, and sanded with regular woodworking tools, and although most things won't stick to it, epoxy glues it well. In the last few years, since I chose Trex for my deck, several similar products have come on the market, one of which uses cedar for the wood. I do not have any experience with these and so cannot recommend them, but you might want to research the expanded possibilities if you choose to follow this path.

Testing Trex

Could Trex be what I was looking for? I wanted to see before making a commitment, so I talked my local lumberyard out of an odd piece of 2 x 4 Trex and cut it into 1/8 x 1 1/2-inch slabs. I cut a piece of 1/2-inch plywood to match the curve of my sidedeck and made up a test bed using all the techniques I would use on the final project. I left the piece outdoors through

our New Hampshire winter, exposing it to sun, rain, ice, snow, and even driving over it with the car. In spring, it still looked as good as new. I tried prying layers apart but split the plywood before I could break the glue bond. I put one end on a block and drove the car over it, severely bending the piece. I soaked it under water and poured boiling water on it. Nothing seemed to harm it. It was time to put it on the boat.

Several elements enter into the design of a laid deck. (See Chapelle's, *Boat-building*, for a discussion of traditional laid-deck planking.) Features may include a wide cover board at the sheer, a king plank at the centerline, and nibbing pieces wherever planks will run into another structure at an acute angle. The planks themselves may be laid straight (parallel to the centerline) or sprung to the sheer. Rectangular structures, like cockpit seat hatches, can just be laid with straight planks or have edge boards that meet at a 45-degree angle, or are butted, and these edge boards may be the same width or slightly wider than the planks. Likewise, the edges of cabinsides and cockpit coamings can have a nibbed margin, or a wide plank can be cut to the curve. Each boat will require different options, depending on how it looks to the owner.

Wide cover board

I wanted maximum yare and chose a wide cover board at the sheer, nibbed

king plank on the centerline fore and aft, and margin boards for cabinside butt joints for the front of the cabin and the coamings. All rectangular elements in the cockpit were treated to edge boards meeting at 45 degrees, and, using the fact that I was cutting these elements from 2-inch stock, I chose to cut the edge pieces in an L shape where there was an exposed outside corner to cover (see picture of the cockpit seats below). The material for the deck was cut from 2-inch stock (2 x 6, 2 x 8, and so on). While the exact thickness is not important (sanding will remove any variation), the width must be uniform for it to look right. This is accomplished by using a table saw or a bandsaw to rip a 2-inch board into 1/8-inch strips, all of which will be a very uniform 1 1/2 inches wide.

Wider strips for cover boards, the king plank, and so forth, can be cut on a bandsaw with the 2-inch board on edge. After the design is complete and strips cut, the next step is to dry-fit the entire deck. I wanted wide cover boards at the sheer, but my testbed experience convinced me that also making the outer board thicker, as is traditionally done, was not practical as there was no way to sand the joint between the cover board and the first plank. Thus, I cut all pieces to the same thickness. The cover boards were cut from a 2 x 4 on edge, resulting in 3 1/2-inch strips. These proved too wide and were narrowed to 3 inches.

Weights hold outer planks in the cockpit, left, and at the bow, center. Squeezing the goop between the planks, center, is a messy business. The reward is at the sanding stage, at right.



More supports

Trex is rather floppy. When used in construction, it must be supported much more closely than same-sized fir or pine. Despite this, bending 3 x 1/8-inch planks to the sweep of the sheer was a daunting task. It never would have happened with teak. (The alternative is to cut the outer plank from wider pieces, which are then scribed, cut to the curve, and joined with scarf joints, thus eliminating the bending.) As I bent each piece into place, it buckled and refused to lie flat. Several 20-pound weights and several days' time encouraged them to take the curve more gracefully.

The inner edge was screwed down with sheet-metal screws, and washers placed in the joint line and spaced every 6 inches or closer, if necessary. This is a tedious process, as you must force the board into the curve, drill a pilot hole, and then hold it in place while screwing in the screw. Two drills are essential — one to drill and one to screw. Extra hands are helpful, but not necessary — I did most of it alone.

The screws are initially left loose so the outer edge of the next board can be slipped under them. Once the inner edge of that board is secured loosely, the screws along its outer edge are tightened down. This is repeated, ad nauseam, for each plank. The midline end of each plank must initially be cut square and carefully positioned along a line parallel to the centerline and spaced out several inches to create the appropriately shaped king plank. A screw placed at the end will aid in repositioning the plank later.

For reasons that will be obvious after the nibs are cut, this screw should be placed about 1/4 inch in from the outer edge. Once all of the planks are laid for one side of the deck, the ends must be nibbed for the king plank and margin boards, which are fitted later. (See sidebar on designing and setting a king plank, Page 29.) Alternatively, the planks can be butted port and starboard, creating a herringbone pattern, but I don't think it is as attractive, and it requires working on both sides of the deck at once.

Doesn't like screws

A word about screws: you will need several thousand. In my opinion, a

square drive is a must as are correctly sized pilot holes. Fiberglass does not like taking screws. So-called sheet-metal screws have a straight shank, whereas wood screws are tapered. Once you cut the initial thread in the hole, a sheet-metal screw screws down smoothly, but a wood screw is a struggle all the way. Also, since you will be removing and replacing all of these screws after applying the glue, a wood screw would not grip as securely, since it could not be driven in to the same depth as it had been originally due to the thickness of the glue.

This is not a problem with sheet-metal screws. The screws should penetrate the outer skin but stop within the core. I used #8 3/8-inch screws, which create the correct 1/8-inch seam. If the screws are too long, double washers may be used when dry fitting. It is important to set the torque on your screwdriver so it can start the threads but will not crush the Trex or squeeze out all of the glue. Once half the deck is dry-fit, and screwed down, it's

three or four courses to be about right, depending on the length of the run. Use the slow hardener or you will go crazy. I used 9 ounces of unthickened epoxy for four strips and the same area of deck. Once the epoxy reaches the green stage, mix another batch, this time adding carbon and 404 to create a mayonnaise-consistency mixture. My formula for four strips was: 12 pumps each of resin and hardener (5:1 from the way the pumps are set up, for a total of about 16 ounces), 2 cups of 404, and 1 1/2 tablespoons of carbon. Mix very well. Spread this on the deck with a 1/8-inch notched trowel. The screw holes are an excellent guide as to where to spread the goop.

As you position each board, use an awl to locate the screw holes and re-insert the screws. If you use the awl to locate and mark one hole and then locate the next hole, you can insert the awl in the second hole to force and hold the plank into place while you insert the screw in the first hole. Once again, you insert the screws loosely until the

next plank is slipped under and secured and then go back and tighten them down. This time, however, you must spray the screws and washers with non-stick kitchen spray (Pam, or something similar) to prevent their being glued in by the epoxy. I put them in a shallow container and sprayed away while shaking them about, to be sure they were well coated.

Messy process

If you use the right amount of goop, and apply the right amount of torque to the screws, the seam between the planks should just be filled with squeeze-out. This is a messy process and while epoxy vapors are of little concern, skin contact is, so long sleeves and gloves are

mandatory, as is frequent cleaning of your tools with vinegar or acetone. The screws should create an even spacing of the seam, but if one spot wants to close up (near the end of a plank usually), either use more screws or insert a short piece of 1/8-inch Plexiglas sprayed with non-stick. After the last plank in this batch is laid, it is important to scrape up all the oozed-out epoxy on the deck surface so it does not interfere with laying the next course. You can then proceed with wetout of the next course,

Wetting out

I read and re-read *The Gougeon Brothers on Boat Construction* and ordered a 5-gallon kit, along with the recommended 404 filler and 423 carbon. I could not understand the reason for wetting out the deck which, being fiberglass, was not absorbent and could not be wet, so I called the West technical support line.

The technician there was extremely knowledgeable and helpful. Here is the explanation: on the Trex (or wood) the unthickened epoxy does soak into the pores to wet the piece. Although fiberglass is nonabsorbent, the unthickened epoxy is better able to penetrate the scratches left by the 30-grit sanding than would thickened epoxy, thus creating a better mechanical bond. The wet-out epoxy is allowed to kick just to the green stage (no longer liquid, but still sticky) and then the thickened epoxy is spread over it and the assembly completed. This allows a primary (chemical) bond between the wetout coat and the thickened coat, creating a very strong overall joint. I was glad I asked.

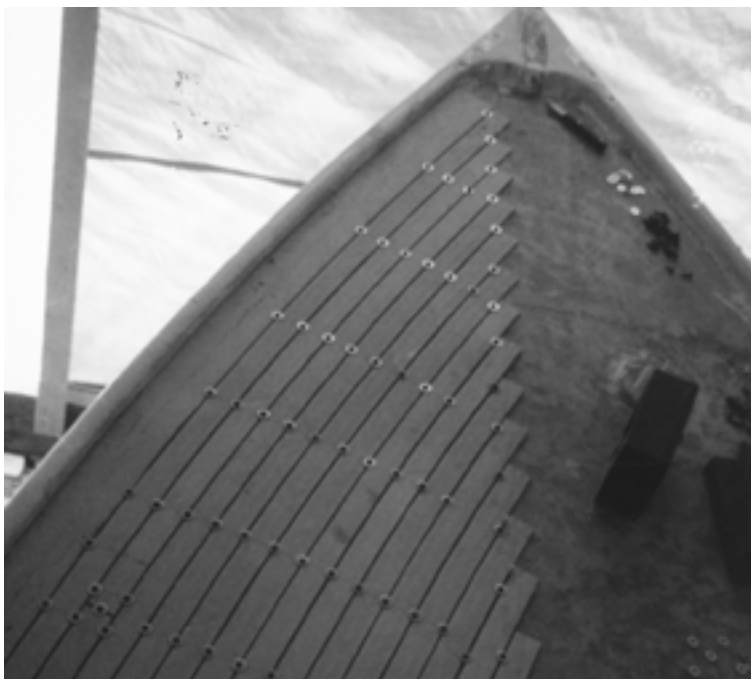
time to take everything back up.

First number each board so you can put it back in the same place. Also, mark the location of each screw on both sides of each board. Sand the deck surface with 30- or 40-grit to create a tooth for the epoxy to grip. Decide how many courses you can lay at a time and mix up enough epoxy to wet out both the fiberglass and the Trex.

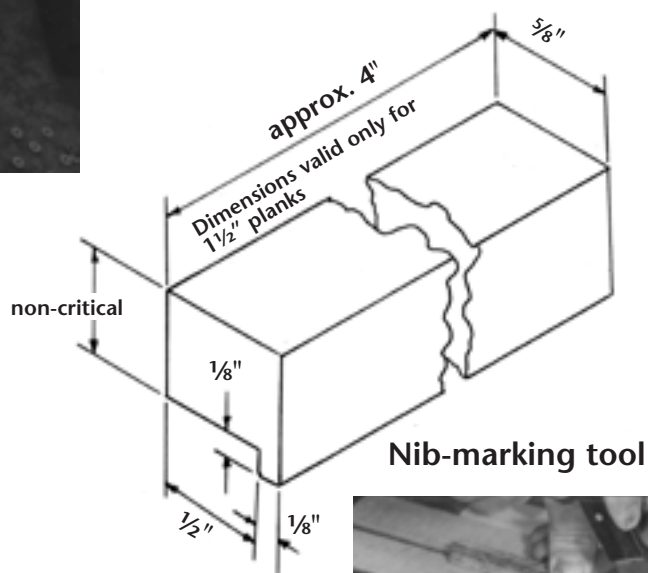
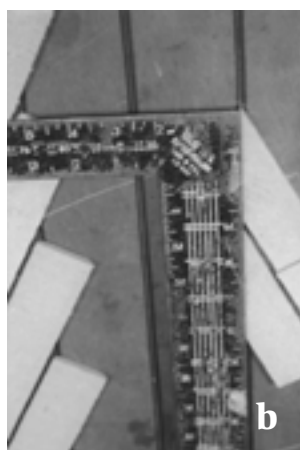
Three or four courses

Be sure to wet out the bottom side of the boards, both to preserve your markings and because of the nibbed ends and the set curve they will have taken. I found

Continued on Page 30



Designing and setting the king plank



Decide on the width of the king plank. This will be dictated by the width of available stock and your eye. My king plank is 5 inches wide, which allows a little error when cutting from 5½-inch (2 x 6) stock. (If in doubt about what looks right, mark out various options on the deck with a marker.) Establish your centerline and mark parallel lines spaced half of the king plank width to each side (a). These lines need to be thin for accurate placement and cutting. One option to achieve this is to make a thick line with a marker and then score a thin line through the marker with an awl or knife. The top photo provides an overview of the process.

Cut all planks square, and lay them so that the foremost outboard corner lands exactly on the scribed line (b). Be sure spacing is exactly ⅛ inch. The planks will run parallel to the sheer. A straight edge across the corresponding plank corners should be perpendicular to the centerline of the king plank.

Make a nib-marking tool from scrap wood (illustration above right and in use in photos c-e). It should be about 4-inches long (exact

length not critical). Assuming you are using 1½-inch planks, make the piece ⅝-inch wide, then cut away ⅛ x ½ inch along one edge, leaving a ⅛ x ⅛-inch edge. The critical thing is that you have a ⅛-inch ridge for the seam, and that the shelf that remains is ⅓ of the width of the plank. The thickness is not critical, but ½ inch works well. I made mine from a scrap of teak because I like nice tools, but any close-grained wood will do.

Starting at the aft end, place the marking tool in the seam between the innermost plank and the next, flush with the end of the first plank. The ⅛-inch ridge fits in the seam. Make a mark along the edge of the tool that will be ½ inch from the outer edge of the plank (c). Fine lines are again important. Use a very sharp pencil or marking knife.

Before moving the tool, also mark the inner edge of the next plank (d). This line will be a projection of the outer end of the first plank. Move forward to the seam between the second and third plank and repeat.

Continued on Page 31

Continued from Page 28

and so on. At the end of the day, you will probably not be finished. Wipe up any oozed-out epoxy on the remaining uncovered surface with acetone. Even so, I chose to re-sand that area the next day to remove all traces of black, and ensure a good bond.

It is important to remove all the screws the next morning as the epoxy will not have reached maximum strength yet, and you will be more successful with any screws that were not adequately coated with non-stick. This is where the square drive is a real must. It allows you to walk the screws right out. If one gives you a hard time, try tightening slightly first. If that doesn't work, try hitting it with a hammer while twisting. Heat will release the epoxy, but it will also burn or even melt the Trex, so I do not recommend it except as a last resort. If you do use heat, be careful, and be prepared for repairs.

Make mounds

When all the deck has been laid, and all screws removed, it is time to fill in the screw holes and any voids in the squeeze-out. I tried several ways of doing this. If you mix the epoxy a little thinner (say half as much 404), you can use a syringe to fill the holes. This works reasonably well, but be sure to mound up some excess or you will have to refill


them as the goop flows into the hole. If you have lots of the seam to fill, in addition to the holes, just trowel epoxy goop over the whole deck, scraping as much off the Trex as possible. In fact, in areas where the epoxy oozed out almost, but not quite, up to the level of the Trex, I was concerned that the next, very thin layer would not bond well, so I routed out the seam with a 1/8-inch bit in a small trim router. I modified the base with a vertical fin to serve as a guide and make following the flowing curve of the seams easier. This will also smooth out any seams that were not quite uniform.

Repairing Trex

One of the advantages of Trex is that it can be repaired almost invisibly, since it has no grain to match. To affect a repair, first rout out the damaged area down to the level of the deck. Next, use your sander and some scrap Trex to create sawdust. Mix this with epoxy to create a thick, peanut-butter paste, and trowel it into the defect. Sand smooth for a barely detectable repair.

After all seams are filled, don your mask and begin sanding. Epoxy dust is extremely toxic and a particulate face mask is mandatory whenever sanding epoxy. Use 80-grit in a belt sander, and sand everything flush. If the epoxy seams are quite proud of the Trex, or if the Trex is uneven, you can sand at right angles to the planks for the initial leveling, but final sanding should be parallel to the

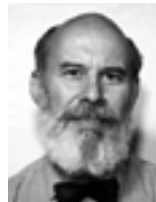
planks. You will undoubtedly find a few areas in the seam that remain shiny, indicating that the epoxy is below the level of the surface you sanded. As long as there are no holes through to the core, you can either re-rout, refill, and resand, or tolerate the shininess; it will fade with time. Another option for small areas is to hand sand, with a folded piece of sandpaper to dull the surface. At this point you are either done or almost done. The scratches left from the 80-grit leave a grain pattern in the Trex that can please the eye and increase the non-skid value. Alternatively, the deck can now be sanded with a random-orbit sander and

80-grit to create a smoother surface, which still has good non-skid properties. The rougher surface will catch more dust and dirt and require more frequent hosing off. 

Mark Parker, M.D., is director of the Emergency Care Center at The Cheshire Medical Center in Keene,

N.H. He's been sailing since college — Sunfishes, Lasers, Hobie Cats. His work

on a 16-foot trimaran, a "work in progress," was temporarily sidelined when the Pearson Triton, All Ways, received a higher priority rating. Mark sails with his family on Narragansett Bay.



Resources

Boatbuilding, Howard Chapelle (W.W. Norton, New York, N.Y., 1941.) The classic text on the subject. Details on layout and design.

Sailboat Hull & Deck Repair, Don Casey (International Marine, Camden, Maine, 1996.) Lots of information on delaminated decks and fiberglass repair.

The Fiberglass Boat Repair Manual, Allan H. Vaitses (International Marine, Camden, Maine, 1988.) Best description of the options and engineering behind choices.

The Gougeon Brothers On Boat Construction, New Revised Edition (Gougeon Brothers, Bay City, Mich., 1985.) The book on epoxy construction, with chapter on teak decks using the technique described in article.

This Old Boat, Don Casey (International Marine, Camden, Maine, 1991.) Elaborates on the West System technique for laying teak decks and lots more.

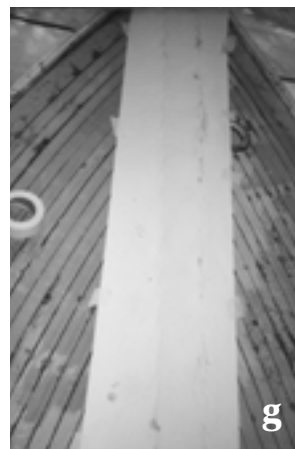
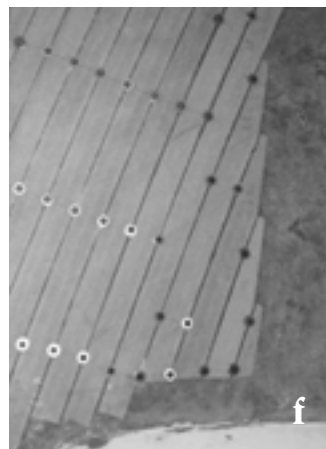
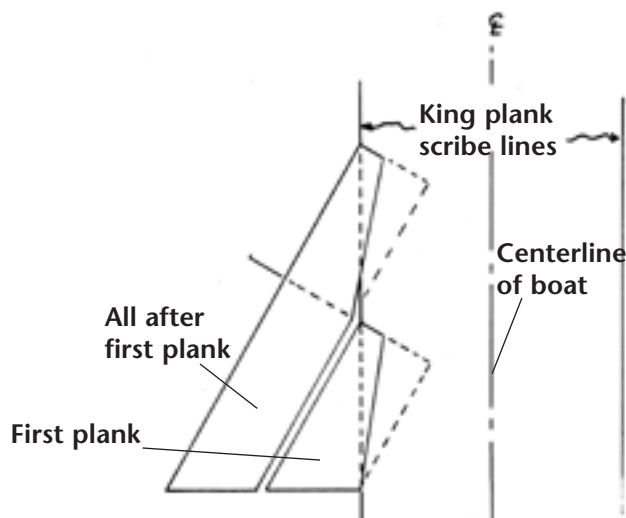
Upgrading and Refurbishing the Older Fiberglass Sailboat, W.-D. Booth (Cornell Maritime Press, Centerville, Md., 1985.) Deck repair and delamination, and lots more.

"Decks over Decks," Ian Bruce (*WoodenBoat*, No. 147, March/April, 1999.) Article on using West System technique, describes "dirty finger" technique.

Technical Manual, West System (Gougeon Brothers, Bay City, Mich.) Gives proportions on mixing epoxy and fillers for various purposes.

The Epoxy Book (System Three Resins, Seattle, Wash., 1998.) Similar to above, for their products.

Trex on the Internet: <<http://www.trex.com>>



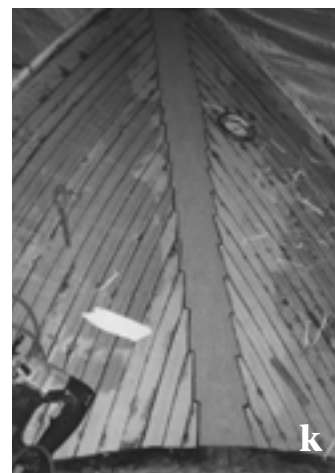
Continued from Page 29

Use the edge of your tool, or a straightedge, to connect the second mark (at ½ inch) with the first mark you made on the second plank (e). (On the first plank only, the inner mark will be where the inner aft edge of the plank intersects the guideline (f). For all others, the point will be the projection of the previous plank's edge, which is actually slightly outboard of the line. See illustration above.) This is the line you cut for the nib. Repeat for each plank as you move forward. Cut all planks and glue down.

Lay a piece of paper over the entire length of the space where the king plank will be (g). I used a roll of butcher's paper, which is excellent for making patterns. Be sure the shiny side is down and secure in place with tape to prevent movement. Rub all the edges of the planks through the paper with your thumb (h). This is known as the dirty finger technique. A little of the carbon powder works well also. You don't want to press down into the void under the paper, just pick up the sharp edge of the planks.

Remove the paper and carefully cut along the marks (i). Test fit the pattern in place and trim or shim as necessary. Transfer the pattern to your king plank. An easy way to do this is to tape the pattern in place and then use a fat-tip marker to straddle the edge of the paper, marking on both the pattern and the board (j). When the pattern is removed, you will have a nice sharp line. (Photo shows paper slightly moved aside.)

Cut the king plank to fit. If you are confident in your markings and the width of your blade, you can cut inside the lines, as you eventually want the king plank to have a ⅛-inch seam all around it. On the other hand, it is far easier to cut it twice than it is to stretch it, so if the first cut is without seam allowances, you can use your marking tool to mark the ⅛-inch seam allowance during the test fit. Remember to leave this line when you make the final cut. Finally, glue the king plank down, holding it in place with the screws at the end of each plank and weights along the center (k).



Vendors of teak products

These vendors also offer other teak items.

East Teak Trading Company Group
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Seven Bells

In our November 2000 issue, Ike Harter described his family's long association with Seven Bells, a ketch 57 feet long on deck. She was the "kid sister" of the famous Nova Scotia racing/fishing schooner, Bluenose. Seven Bells was launched in 1926, and her story resumes in 1954, when the Harter family, headed by Ike's father, was using her for a vacation charter.

Hurricane Carol began as a very slow-moving storm in the Caribbean Sea and would become a Category 3 hurricane that would do significant damage to the East Coast and New England.

At noon, Wednesday, August 25, 1954, the storm was 200 miles east of Nassau, the Bahamas.

It had been a delightful two weeks cruising the Maine coast. Once again, my father had chartered *Seven Bells* from the owner, Mrs. Cooke, and my girlfriend had joined us for the last week. The charter would expire Sept.-1 at Stratford, Connecticut.

Thursday, August 26, noon. The storm was located 300 miles east of Ft. Lauderdale, Fla.

We first heard of the storm while buying dinner from a lobsterman at sea. He only could say that a hurricane was brewing "somewhere down south." *Seven Bells* was equipped with an old Bendix ship-to-shore radio that had marginal ability to contact the Boston or the New York marine operator. There were no crystals or coils for ship-to-ship channels or to receive notices to mariners. The other radio was a small RCA, a battery-operated AM personal radio about the size of a carton of cigarettes, belonging to my mother. There was no radar.

A Raytheon depthfinder had been fitted the previous winter and was one of those devices with a whirling indicator that produced two orange neon blips over two ranges from 0 to 60 feet and 0 to 240 feet. The first blip was calibrated at 7 feet 6 inches, and the second blip indicated the depth of water below the keel. Throughout the

cruise, it had proven very reliable. The depthfinder was installed in the galley overhead where it would stay dry but easily visible from the cockpit through the large glass port in the galley trunk.

Friday, August 27, noon. The storm was located 260 miles east of Daytona Beach, Fla.

It was in York Harbor, Maine, that we first heard details of the storm. It was reported to have weakened and had slowed forward progress.

Light winds

Saturday, August 28, noon. The storm was located 280 miles east of Jacksonville, Fla.

My father wanted to return to Stratford as soon as possible. We had a passenger to deliver to Newport, R.I., and the winds were light. Each day, we were obliged to motor most of the way in order to arrive in time for our passenger to make connections.

Sunday, August 29, noon. The storm was located 300 miles east of Brunswick, Ga.

It was necessary to refuel at Newport. Father was anxious to leave Newport as soon as possible, but there was little or no wind. We planned to be under way before dawn and try to make Stratford late Monday night.

The next morning was clear with a light southeast wind. We were able to sail without the engine, and by noon we were off New London. The wind had increased. My father pointed out the telltale clouds that he called "feeders" — the first signs of an approaching hurricane.

Monday, August 30, noon. The storm was located 100 miles east of Wilmington, N.C. It had suddenly covered 200 miles, instead of 75 to 80 miles as on the previous two days.

We arrived at New Haven, Conn.,



by Isaac Harter III

about 8 p.m. and anchored on the east side of the harbor just off the Coast Guard station at Morris Cove, inside the lighthouse point. Stratford was only another two hours' cruise down Long Island Sound, but the skipper thought it was too much of a risk to attempt to enter and moor in the narrow Housatonic River if the storm should pass close by. The local radio had just given a hurricane "advisory" as we entered the harbor.

Monday, August 30, 8 p.m. The storm was located over Cape Hatteras, N.C.

I had completed a freshman year at Yale University earlier that spring and was somewhat familiar with the area around New Haven, including the harbor, which is divided into three parts. The shallow outer harbor is semi-circular and is guarded from Long Island Sound by two long stone breakwaters. There are navigable channels between the breakwaters and between the ends of the breakwaters and the beaches. The outer harbor is separated from the shallower inner harbor by two opposing sandy points.

A narrow, dredged, ship navigation channel through the outer harbor passes between the sandy points into the inner harbor. The inner harbor is surrounded by waterfront housing and marinas. The ship navigation channel leads through

Memories of a very special old boat

Second of a two-part series

the inner harbor into the commercial harbor formed by the Quinnipiac River. The New Haven Railway and the Post Road, U.S. 1, cross the entrance to this small commercial harbor on two bascule bridges. The commercial harbor is heavily congested with piers for ocean-going ships and several marinas.

Light chop

Seven Bells was anchored in five fathoms with 150 feet of nylon cable attached to a 40-pound Danforth anchor. The wind raised a light chop on the harbor surface. Over at the Coast Guard station, an 83-foot cutter and a 42-foot utility launch were tied up at a long pier.

Beside the Coast Guard station was a lifesaving shed with two big motor surfboats on carriages, ready to launch down two sets of rails. Small homes and cottages dotted the beachfront.

Monday, August 30, 10 p.m.
The storm was located 50 miles off Virginia Beach, Va.

The harbor chop had increased significantly since 8 p.m. and a steady swell was coming in through the breakwater. *Seven Bells* began to lurch back and forth on the elastic nylon cable.

My father and I put the 150-pound stock anchor over on 200 feet of chain and stowed the nylon cable and the Danforth. After checking all rigging and gear, father and mother turned in for the night in their fo'c's'le cabin. My brother, sister, girlfriend, and I sat up late in the main cabin, playing cards and drinking more than a few in celebration of the end of the cruise.

Tuesday, August 31, midnight.
The storm was located 50 miles off Ocean City, Md.

About midnight, we were alerted by the sound of vibrations from heavy diesel engines followed by an indecipherable squawk from a hailing speaker. I went on deck to

find the 83-foot cutter alongside. The officer informed me that the hurricane was moving rapidly up the coast and was expected to pass close by in the morning. He suggested that we move *Seven Bells* up into the commercial harbor and tie up alongside a pier. I went to the fo'c's'le, and woke up the skipper who gave me a message for the officer thanking him for his trouble, but if the hurricane was to arrive, he did not think he wanted to be in a small harbor with a lot of other boats. Furthermore, he did not think any drawbridge captain would open the bridge if anyone wanted to get out in the middle of a hurricane. We would go to sea if the storm approached. The Coast Guard officer said that we were "at our own risk" and departed into the night. The wind was still less than 15 mph. Our card game was over, the anchor was secure, and we four turned in for the night.

Carol arrives

The next thing I knew my father was shaking me. "Rise and shine, sleepy-head. We have company, and her name is Carol." This was not going to be a good day. I might rise, but I did not feel like shining. I had more than just a slight hangover.

Tuesday, August 31, 8 a.m.
The storm was located just off the New Jersey coast.

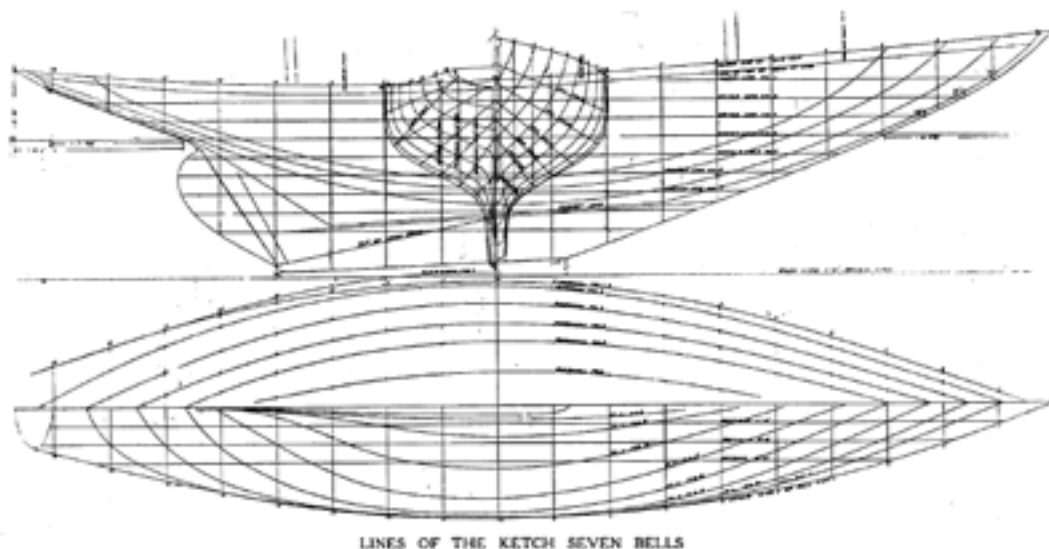
Mother had thrown a fast breakfast

together, and I ate something with coffee as I got dressed and went on deck. There was nearly a full gale blowing. The skipper already had the engine running. He and my brother were busy with the mizzen, which was spilled all over the cockpit while they made up reefing points. We hoisted the mizzen with three reefs in it and stowed the mizzen boom down tight in the gallows frame. I took the stops from the mizzen and double-stopped the mainsail. The main boom was hauled down and stowed securely in its crutch and lashed port and starboard. The main preventers were set up snug. Later, as the manila tackles became wet, they would need to be slackened several times.

I went forward and put three reefs into the boom staysail, partially hoisted the staysail to the reefs and secured the sheet. My next task was to haul in the 200 feet of chain with the "horrible Hyde" windlass. Each stroke of the long iron handle hauled the chain only three inches. The job would take about 800 strokes. Father engaged the engine dead slow ahead and eased the task somewhat, but as the chain slackened, the ship began to pitch, and green water poured over me.

At one point, I stopped for a breather. The pawls on the windlass ratchet were not quite set and slipped a cog. The iron handle whipped back and clipped me on the side of the head. I saw stars. A few moments later, I was back in action, clickety-clank, until the chain was "straight up," and I signaled aft to break the anchor out under power. It came free,

By C. S. and T. F. COOKE



and I ratcheted as fast as I could. My brother came forward and assisted in getting the monster on board and secured. We hoisted the boom staysail and close-hauled the sheet on the traveler.

We were still headed dead to windward and underway for the eastern channel between the breakwater and the beach. Over at the Coast Guard station, the hurricane warning flags and lights were set. The 83-footer and utility boat were bouncing alongside their pier. It had started to rain. Soon the whole scene faded from view.

Making secure

Father had the helm, and Mike and I went below to assist in securing everything that might come adrift from shelves and lockers. My mother, sister, and girlfriend sat down in the main cabin and attempted to get some hurricane news on the small portable radio. I turned on the depthfinder, and Mike put the harbor chart in a new transparent plastic waterproof folder, and grabbed a wax crayon slate and a hand bearing compass. We went back on deck.

Once clear of the breakwaters, father put me at the helm, sitting on the box behind the wheel. He tied two bowlines around me and lashed me down to deck eyes, port and starboard.

With tethers tied around each of them, father and Mike huddled down in the cockpit recess where they could use the chart and see the depthfinder.

Tuesday, August 31, 10 a.m. The storm center had made landfall over Long Island.

There was no doubt about it. We were in a big hurricane. Our plan was to cruise slowly back and forth outside the breakwaters. The wind was blowing south of east and nearly parallel to one of the breakwaters, and we stayed clear of this potential lee shore, but kept it in sight when we could.

Most of the time, the visibility was nearly zero, and I could not see the bow. Father and Mike navigated by compass and depth finder and took visual bearings when they had the opportunity. On the chart, the depth contours were very clear, and there was deep water right up to the

breakwaters. They wrote the compass course on the slate where I could see it, and that is what I steered.

Outside the breakwaters, the broad entrance to New Haven is embraced by Morgan Point to the east and Oyster River Point, about four miles to the west. We sailed a course between these two points, back and forth in Long Island Sound, following the bottom contours and making occasional sightings of recognizable landmarks. We saw no other vessels.

Going to windward, the mizzen and staysail remained hauled tight, and the engine ran enough to maintain a slow headway relative to the ground. Running downwind or to leeward, we idled the engine and slacked the staysail sheet so we could sail the return course. The reefed sails provided more stability than motor propulsion under bare spars.



“Once clear of the breakwaters, father put me at the helm, sitting on the box behind the wheel. He tied two bowlines around me and lashed me to deck eyes, port and starboard.”

Flying objects

All that morning, the wind was blowing toward New Haven, but at one point, I saw several objects (including a door from a house) sailing high overhead, apparently against the wind. There must have been some tornado effect mixed in with the normal counter-clockwise hurricane-force winds, which were later said to have been Category 3, between 120 and 130 miles per hour.

The wave heights were 10 to 12 feet, and as waves approached, the wind tore the tops off and flung them at me — solid green water. Try as I might to keep my mouth weather-tight, the salt water was rammed in, and about every 15 or 20 minutes I turned to leeward

and vomited clear seawater. Several attempts to drink a cup of hot tea failed as the wind siphoned the tea out of the mug before I could drink. Occasionally, a hand opened the window in the galley port and passed through a bottle of good Myers’ rum. The deck crew would each take a pull on the bottle and go back to work. The ordeal lasted more than three hours.

Tuesday, August 31, noon. The storm was located directly over New Haven, Conn.

It was amazing how quickly the rain and wind eased and then stopped. To the southwest, we saw light, then clearing, and then actual blue sky. We were in the eye of the storm. The breakwaters and shoreline appeared, and we were exactly where the navigators expected us to be.

The surface of the water was almost calm. All around us were the inner cloud

formations of the immense storm, rising like canyon walls. Overhead was blue sky and sunshine. It was time for a break, it was time for a head call, it was time for lunch. I got out of my rope harness.

Mother opened the scuttle hatch and peered out, looking very pale. It had been very close down there, with engine fumes and the unpleasant effects of seasickness. She said there had been a problem. I went below and found six inches of water over the cabin deck with strange shapes rolling back and forth in the somewhat oily mess that had floated up from the bilge.

The “problem” was tied down in one of the berths, and she had just regained consciousness.

Right at the very beginning of the storm, as the ship came about at the end of a course, one of the trays full of tools stowed between the overhead deck beams had broken its lanyards and had slid out and struck my girlfriend in the back of the head. The poor lady went out like a light. My mother and sister were able to lift her into the berth where she had slept through it all. She had a headache and a small knot on her head but no sign of concussion, and she was hungry like the rest of us.

Leaky hawse pipes

The water had come in through the hawse pipes in the foredeck where the chain and nylon cable ran down to

the chain locker. They had not been booted and gasketed during our hurried departure, and we had not been able to risk sending anyone forward during the storm. This was quickly attended to while we had a break. Everything else topside was in good order. The fuel tank was free of water and had plenty of fuel. The engine oil and temperature were normal.

The engine had been fitted with a small bilge pump that ran continuously, and the impeller was known to be badly worn. The suction strainer was clogged with a mysterious gurry. This problem was quickly remedied, and the water was soon pumped out with the portable pumps. The shapes rolling on the deck were food and paint cans that had lost their labels.

All hands came on deck for some fresh air, lunch, and a well-earned drink before the clouds began to gather overhead and the wind began again, this time from the northwest as the hurricane moved on past New Haven. I got back into my harness and resumed my station at the wheel. By 2 p.m. we were back in the storm, cruising back and forth outside the breakwaters. The visibility was better this time, since the wind was from the land, and there were many sightings of pieces and parts of things flying overhead. I do not recall having problems with swallowing and pumping seawater during the afternoon, and my lunch stayed down. I don't think it did with the poor ladies confined below.

Tuesday, August 31, 4 p.m. The storm was moving rapidly east, off the coast of Maine.

The storm was over, and the sky was clearing quickly. We returned to New Haven through the eastern channel. Someone had apparently taken their big powerboat outside the harbor and run her on the sandy beach at full throttle. There she was, high, dry, and safe. I am sure the insurance company was more than happy to buy some new screws and shafting for the owner and to pay to have her refloated.

Inside the outer harbor, at our anchorage, it was another matter. The Coast Guard station and the pier were gone. The lifesaving station was gone. Most of the little houses around the shore were gone. The harbor was smooth and calm, filled with bits and pieces of floating debris. Only the bow of the 83-foot cutter poked above the surface about a half mile from shore, and the 42-footer was nowhere in sight. A search of the harbor with binoculars showed damage

and wrecked boats everywhere. We anchored in about the same spot as the night before and checked out our own ship. We had lost a boathook and a mop that had not been secured on deck.



“By 2 p.m. we were back in the storm . . . The visibility was better this time, since the wind was from the land, and there were many sightings of pieces and parts of things flying overhead.”

Radio call

Knowing how my grandmother would be worried, my mother called her on the radio via the New York marine operator and let her know everyone was safe and well and that *Seven Bells* and her captain had brought us through the storm. It took some while to make contact, but the radiotelephone network was functioning. From my grandmother and the reports on the portable radio, we understood that the damage was severe in New York and New England.

About 6 p.m., a small rowboat with three men appeared from shore where the Coast Guard station had been. They were the station commander, a petty officer, and the officer on the 83-footer to whom I had spoken the night before. They wanted to know if we had a radio transmitter and if they could use it to call their district command in New York, because their telephone service in New

Haven was gone. We were told that in the inner harbor and up in the New Haven commercial harbor, there were hundreds of boats, yachts, fishermen, and ocean-going ships all crushed up together, sunk, or washed up on shore. We were the only ship in the harbor.

The three visitors were all very wet, cold, and hungry. We took them aboard, and they joined us for dinner. Once the commander had made his radio call, he determined that he and his friends were no longer on duty and were therefore eligible for several rounds of drinks. They had been certain that we had been lost in the storm and were amazed that *Seven Bells* had proven so seaworthy. They complimented my father on his seamanship and decision to put to sea.

Tuesday, August 31, 8 p.m. The storm was over the Atlantic, east of Canada. It had traveled 600 miles from New Haven since noon.

The next morning, the Coast Guard commander and his petty officer came aboard once more to use the radio and share some hot coffee. We got under way and arrived before noon at the boatyard in Stratford, Conn., before the charter expired. We were obliged to anchor in the stream, because the piers were gone, and the shore was littered with wrecked boats. We had to ferry our gear ashore in a launch. It was an inconvenient, but happy, ending to a memorable experience. From the shore, *Seven Bells* looked proud of herself out there amid the wreckage.

Bought her

“*Seven Bells* IS OURS – Pop.” That’s what the telegram said. I was in Arizona on active duty with the Army. The details were filled in later by several letters and phone calls.

My father had called Mrs. Cooke about chartering *Seven Bells* again in 1955 and was told that she no longer planned to offer the boat for charter. She had decided that she was no longer interested in maintaining the boat, and she had received an offer from the shipbreakers. My father had immediately made her a better offer and closed the deal by telephone. A month later, he took possession of the boat at the Long Island yard. After a brief refit, he and some friends set out for a two-week cruise in Maine. *Seven Bells* would be homeported at Southwest Harbor, on Mt. Desert Island, Maine. *Seven Bells* would need

to help support herself, so she went out on charter several times that year and was soon booked up for the next year.

In 1956, three male charterers and their three female companions were returning to Southwest Harbor from Nova Scotia. They were crossing the Bay of Fundy at night, in the fog, under full working sail and the auxiliary engine. They had not streamed the log. They had only a vague idea of where they were and how far they had traveled by very rough dead reckoning. There was no GPS in those days. Still they pressed on.

Egg Rock lies about 30 miles east of Mt. Desert. It is a small reef about four feet below mean low water. *Seven Bells* drew seven-and-one-half feet. She was making seven, maybe eight, knots when they struck the reef. She climbed up on the rock a bit and stopped abruptly. Both masts went over the side and remained attached by the shrouds. The mizzenmast, awash in the waves, went to work beating a hole in the hull.

Only one man had been on deck. He was at the wheel and had been thrown into the cockpit. The other three were below and had all been thrown off their feet. The three ladies were not experienced in boats and certainly not in marine emergencies. They reacted with panic, as the cabin began to flood from severe hull damage. The water stopped rising in the cabin only because the ship was aground and could not sink further. The engine had quit, but the batteries were still able to support the radio and lighting. A mayday call was answered by the Coast Guard at Southwest Harbor, and help soon arrived.

Kept afloat

The Coast Guard was able to pull *Seven Bells* off the reef. She was sinking, but they lashed her alongside the cutter and put big suction hoses aboard. The pumps managed to keep ahead of the flooding, and the wreck was taken into Southwest Harbor. The yard had a cradle waiting, and they hauled *Seven Bells* out on the marine railway.

Her back was broken. The keel was broken across in two places and



*“The Coast Guard station
and the pier were gone.
The lifesaving station was gone.
Most of the little houses around
the shore were gone.”*

split longitudinally the full 22-foot length along the row of keel bolts. Every hull and deck seam had been started, fittings ripped out, and there was massive damage to the hull planking and frames. Nearly every fastening had been started or broken. The engine was completely ruined. The insurance company was ready to declare her a total loss, pending a final assessment and bid by the Southwest Boat Corp. The shipwrights agreed that they would try to save the old ship.

They blocked her up and cut off her lower hull above the keel with a two-man saw. The keel bolts were found to be perfectly sound after 30 years. The “Swedish iron” had not corroded, but had only a black oxide coating. It was almost like new. All the other hull fastenings were the same. A major problem was that the hull planks and frames had been fastened with cut boat nails, which had been clinched over after having been driven through the frames. There was no way to tighten them without removing all of the ceiling and cabin outfitting. It was decided to leave the boat nails in place and refasten with lag screws.

My father was a metallurgical engineer and had contacts through his company with access to many sources of material. Pure, ferritic (Swedish) iron was available only through the Krupp organization in Germany and Sweden. The fastenings were manufactured in Poland, shipped back out from behind the Iron Curtain to Sweden, then to Germany for finishing and galvanizing. It was a long way about, but still better

than any local prices, including shipping and handling.

While the fastenings were on order, a large piece of white oak was found in a barn in Ohio. It was shipped to Maine, and Mr. Somes spent a large part of the winter fashioning it into a new keel. Exact measurements were taken off the hull and compared with the original drawings.

Builders ad-libbing

It was found that in spite of her injuries, the old lady had not developed the middle-age spread common to older wooden hulls. It was also discovered that in spite of the designer’s best intentions, the builders at Shelbourne had incorporated a few of their own touches. This sort of ad-libbing has been happening in shipyards since the Ark.

New frame extensions and “sister” frames had been fitted where the broken ends had been cut off, and in the spring the shipwrights carried the new keel out to the railway and lifted it up into place. It fit perfectly. Every mortise and rabbet pre-cut in the shop lined up with its corresponding frame or floor. Most of the shipwrights had only minimal formal education, but they had years of experience.

My military service ended and, by the time I arrived at the boatyard in the spring of 1957, the hull repairs were complete. *Seven Bells* was afloat again at the pier. My assignment as “owner’s representative” did not conflict with my job as a worker on the payroll at Southwest Boat. I had already decided on a career in naval architecture and marine engineering and was scheduled to resume college at the University of Michigan in the fall. Work at the yard would be a good start in the business. I would also be fortunate to work part time for Henry Hinckley, across the harbor, in the evenings. Henry taught me the finer points of wooden hull design and how to fair lines drawings.

A new Daimler-Benz OM-636 diesel engine had been installed and the fuel system converted from the original gasoline. The engine room was equipped with a powerful, new exhaust blower. Twin alternators and a duplex battery complemented new rewiring. A new Raytheon multipurpose radiotelephone had replaced the old Bendix. A new



engine-driven bilge pump was backed up by two automatic electric units. The galley was being refurbished and the propane equipment had been replaced by a Primus kerosene/alcohol stove.

Brightwork renewed

All weather decks had been refastened and covered with a new Silastic fabric system. The brightwork was being reconditioned, and I took over this task. New lower ends had been scarfed to both masts, and I was on hand for the resteping and the setting up of the standing rigging. The ship had been built with the stainless-steel chainplates secured to the frames inboard of the hull planking. It was probably done for cosmetic reasons, but when the shrouds were under heavy loads, the chainplates tended to pull inboard, away from the toerails and open up leaks where they penetrated the deck. The hull had been rebuilt with the chainplates outside the hull in the manner of a fisherman. Not very yacht-like, but painted black with the rest of the hull, they were barely visible at close range.

I did most of the interior cleanup and painting, and by the end of July *Seven Bells* was ready for sea again in better shape than she had been in many years. Thirty years before, her designer and builders had put the craftsmanship into *Seven Bells* that would allow her to survive the wreck and leave enough ship still together so that the shipwrights of Southwest Boat could rebuild her, when most yards and underwriters would have given her up for lost.

My father arrived in August, and

we enjoyed a week's shakedown cruise, before we both returned to our jobs. I would become absorbed at college and with beginning a shipbuilding career at Newport News, Va., using much of what I had learned in Maine.

When my father retired, he and mother moved from western Pennsylvania to Nantucket. *Seven Bells* also moved her homeport

large wooden boat.

We considered moving *Seven Bells* to Virginia, where the winters were short, and I could be nearby to keep the boat up. I lived on Hampton Roads, off Chesapeake Bay, but most of the water there was too shallow for *Seven Bells* unless she stayed in the shipping channels. My father did not want her to "go south" to be eaten alive by the marine borers that she had eluded all of her life, and Virginia was too close to frequent hurricanes.

My father finally made the decision and found *Seven Bells* a new owner, not far from Nantucket. He thought the new owner would have the time, interest, and funds to take care of the 55-year-old lady. He was to be sadly disappointed.

On Dec. 13, 1984, at 11:30 p.m., *Seven Bells* exploded and sank while entering harbor at Scituate, Mass. According to witnesses, she was showing no lights. Members of the crew were rescued, but nothing was reported publicly as to the cause of the explosion and intense fire below. No explanation was ever reported as to why the ship was even at sea at a time of the year when most self-respecting yachts are laid up in yards for the season. My father purchased the mainmast and a quantity of fittings salvaged from the wreck.

The mainmast was erected as a flagpole at his home on Nantucket. My father, Isaac Harter, Jr. passed away August 14, 1986.



Issac Harter III (Ike) spent nearly 40 years in engineering at Newport News Shipbuilding in Virginia. He is pictured above in 1957 with his father on Seven Bells. Ike's career involved the design, construction, and testing of naval and commercial ships, including nuclear submarines and aircraft carriers. He designed several small craft and marine machinery systems for friends and private customers. He also designed and built a 28-foot ocean-going steam yacht for himself and wrote numerous articles on small marine steam systems.



"On Dec. 13, 1984, at 11:30 p.m., Seven Bells exploded and sank while entering harbor at Scituate, Mass."

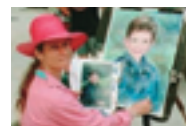
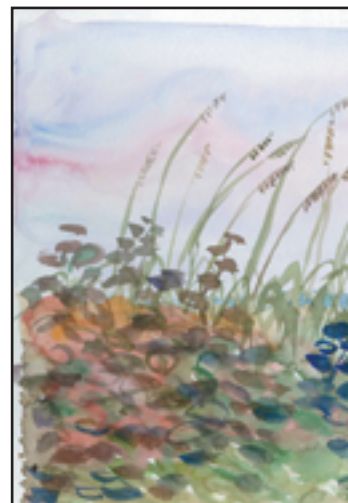
to Nantucket, but my father still preferred to cruise in Maine. My brother and I joined him when we could, but by then we had wives and children and full-time jobs with little vacation time. I saw *Seven Bells* only during short visits to Nantucket or during an occasional Maine cruise.

Medicare Mariners

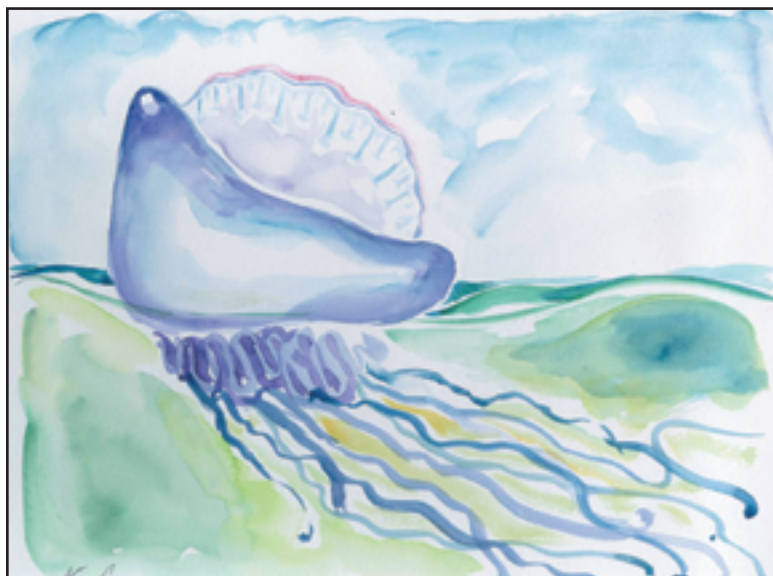
Over the next 15 years, old age and wear and tear slowly caught up with *Seven Bells* and her skipper. Her cruises were limited to daysails in and around Nantucket Sound with her crew of "Medicare Mariners," as my father and his friends were known. In an age of fiberglass and plastic, it was becoming hard to find people in Nantucket with the skills or interest in maintaining a



Season



Nancy Christensen (aka NanC) c...
When not sailing, she creates port...
the United States. More on Nancy



scapes



...cruises with her husband on a 1964 Columbia Defender.
 ...raits at renaissance festivals and art shows throughout
 ...y at her Web site: <<http://www.visi.com/~portrait>>.

Back to work



*The oldest skipjack
rejoins the
Chesapeake Bay fleet*

WHEN THE WARM, HAZY DAYS OF summer give way to cold, crisp autumn mornings, the Chesapeake Bay undergoes a quiet transition. Hordes of pleasure cruisers disappear, replaced by a fleet of long, lean workboats on which solitary watermen can be seen dipping into the creeks and coves with hand tongs in a ritual as old as the nation itself. And out on the rivers and bay the last remains of the Chesapeake's once mighty sailing fleet heads to the oyster bars as November 1 marks the start of another dredging season. Against great odds, the oldest boat in the fleet will join the handful of skipjacks that make up the last remaining working sail in the United States.

This season, the 114-year-old *Rebecca T. Ruark* should have been another dead hull littering the murky waters of the Choptank River, creating a haven for fish, a bonanza for fishermen, and a navigational nightmare for pleasure cruisers. Instead, she's sailing again, stronger than ever. Unlike the ghosts of thousands of dredgeboats that have rotted away in watery graves all around the Chesapeake Bay, she had what they didn't: a captain who cared.

But on November 2, 1999, it looked like the end of the graceful *Rebecca T. Ruark* and her crew of five. The day started as a typical cool, breezy autumn day, perfect for sailing. There was nothing in the forecast that hinted at what was to come. Captain Wade Murphy, Jr., whose love of telling a good story had gained him a certain

notoriety among watermen and tourists, stood at the helm, gripping a spoke of the huge wood and metal wheel. He gave it a swing. Then he spun it again. For several seconds the wooden dredge boat did not respond. Then slowly, *Rebecca T. Ruark* started to come about.

Power days

Had this been a sail day, her broad Dacron sails would have fluttered in the stiff breeze as she made the graceful turn over the oyster bar. But it was Tuesday, one of only two days a week when skipjacks are allowed to dredge oysters under power on the Chesapeake Bay. So Murphy had his pushboat in the water — an 8-foot skiff that held an automobile engine, the only source of power for the skipjack. The little boat was snug in its

chock against the stern of *Rebecca* doing its job: pushing the

52-foot skipjack.

It could have been a scene right out of the 1930s, which is what has drawn so many tourists to Dogwood Harbor on Tilghman Island, where *Rebecca* ties up. In recent years, Capt. Murphy had taken advantage of the growing public fascination with the Chesapeake's lively past. All summer long, *Rebecca* carried tourists out on the bay so men and women could roll back the clocks of time to an earlier era, hauling up the hefty sails by hand, throwing out the dredges, and culling through the harvest that clattered back on board. *Rebecca's* picturesque, nostalgic lines, and Wade Murphy's

gift for storytelling made them a hit among tourists. Even when dredging season began, the captain often opted to take out tourists, who yearned to set aside their desk jobs for a day and play the role of rugged watermen.

History buffs and tourists can thank an antiquated law on Maryland's books for the continued existence of working sailboats on the Chesapeake Bay. Before 1865, dredging in Maryland was outlawed because state legislators knew that everywhere the dredge had gone, from the English Channel to Narragansett Bay in New England, oyster bars had been depleted to exhaustion. The dredge, a scooping device that is dragged along the bottom until it fills with oysters, was just too efficient.

Fearing for the future of its oysters, Maryland outlawed the dredge for 30 years. But after several decades of fighting illegal dredging, state lawmakers finally buckled under pressure from watermen and businessmen looking to make a fast buck and passed a law in 1865 permitting dredging, but only under sail. Whether they foresaw the day when power would dominate the seas or not, that extra little clause saved the dredgeboat and the Maryland oyster from extinction.

Oyster navy

Rebecca was built in 1886 when the oyster industry was still in its heyday, and it took an oyster navy to maintain law and order among unruly watermen who often turned to shotguns to end feuds over harvest grounds. Having survived the worst of the 19th century bay oyster wars, and over a century's worth of unpredictable Chesapeake winters, she now enjoyed a relatively leisurely pace.

But on this day in November there were no tourists on board. In the 1960s, the state had agreed to give dredgers two days to power dredge, guaranteeing them an income despite what Mother Nature chose to do. Dredgers, whose numbers had dwindled from several thousand skipjacks, bugeyes, schooners, and sloops in 1900 to about 40 vessels in the 1960s, hoped the law would curb their extinction. But while it did slow the loss of skipjacks on the Chesapeake Bay, the fleet continued to dwindle, down to 32 by the 1980s (despite the construction of two new vessels), further down to 22 in 1990,

by Pat Vojtech





until finally, in recent years, the fleet fluctuates between six and 12 vessels, depending on the availability of oysters and men to work the boats.

Power days were too lucrative to chance dealing with amateurs, even paying amateurs, so Wade Murphy employed real watermen to haul in the catch on Mondays and Tuesdays. Now, just two days into the dredging season, he felt more optimistic about the oyster season than he had for almost a decade. On deck were about 90 bushels of the succulent bivalves, which he and his crew had dredged from their home waters in the Choptank River.

With two diseases devastating the oyster population of the Chesapeake in the 1990s, it was a rare season when he enjoyed dredging upriver from his home on Tilghman Island. Usually he and the other skipjack captains, most of whom lived and worked out of Tilghman or Deal islands on the Eastern Shore of Maryland, were forced to move their wooden vessels north to Tolchester, across from Baltimore, where fresher waters stymied the parasites that caused massive oyster die-offs farther south.

Perfect turn

Having made a perfect U-turn over the oyster bar, *Rebecca* leapt ahead, gaining momentum as the pushboat did its job until suddenly Wade yelled, "Hey." Four crewmen threw out the two dredges on either side of the boat. As the iron teeth dug into the river bottom, *Rebecca's* speed slowed and she bore down into the water, feeling the strain. Then she pulled ahead,

powered by the little yawl.

The pushboat was a throwback to the early days of engine power when Model T Ford engines were fitted into the yawl boats that were towed behind big vessels and used to carry crew back and forth from their anchorage in a harbor. Despite the presence of Loran and radar on board, the antiquated pushboat remains the only source of power on a skipjack because, as even the captains acknowledged, they would forever be power dredging if the engine were hidden down in the hold, away from the ever-watchful eyes of the law. With the engine in a pushboat, marine police hardly had to raise their binoculars to spot a skipjack captain illegally power dredging on sail days.

Weathermen had forecast a beautiful day, but like all watermen, Wade was wary of the unexpected squalls that periodically lashed out at the Chesapeake and its tributaries, and threatened the lives of the men who worked the wintertime bay. Now as the sky darkened and the wind picked up, Capt. Murphy gave his crew the signal to haul in the dredges for the last time. Then he headed his boat west toward Tilghman Island, which was several hours away by boat, even with the yawl pushing.

Worsening conditions

As they headed home, the heavy winds quickly picked up and conditions deteriorated rapidly. Momentarily, Wade considered turning east and running to Cambridge, which was much closer, but that would have meant problems for him and his crew since they had no transportation home.

Had he had his old *Sigsbee* underfoot, he probably would have turned, but *Rebecca's* age gave her a unique advantage over other skipjacks.

Rebecca, as Wade affectionately called her, was not your average skipjack. In fact, she was built in the pre-skipjack era when boatbuilders didn't cut corners, and vessels were constructed to the highest standards. Originally a sloop, she was planked fore-and-aft, typical of the sailing vessels of the 1800s. Her construction gave her a strong, rounded hull that could take more pounding than a hard-chined skipjack. Consequently, her age, rather than hurting her, made her more seaworthy than other skipjacks.

Skipjacks arrived on the Chesapeake scene in the late 1890s as the Chesapeake oyster industry suffered through an economic slump, brought on by overharvesting and a scarcity of oysters. The big boats were too expensive to maintain and crew. The skipjack emerged as a cheap, oversized skiff with a hard chine, a nearly flat V-bottom, a long bowsprit, and a short, raked mast with an oversized boom.

The construction plan was so simple, it was passed around by word of mouth: the beam or greatest width equaled one-third the length of the boat on deck; the mast was the length of the boat on deck plus the boat's beam; the boom was the length of the



boat on deck; the bowsprit equaled the beam; and the width of the transom equaled three-fourths the beam. The length of the centerboard equaled one-third the length on deck, and the mast was raked about 75 degrees to the load waterline so that the top of the mast was directly over the point of the boat with the greatest beam. That's where the hatch was generally located, which allowed watermen to use a halyard attached to the mast to lift oysters and other cargo out of the hold.

Shallow draft

The skipjack was a no-frills, practical boat that also had such shallow draft — usually as little as 3 to 3½ feet — that dredgers could now work waters that had been inaccessible to the deep-draft dredge boats of the past era. Two types of skipjacks were made: a 20-foot, open boat that carried a tiny hand-drawn dredge called a “scrape.” This boat was probably built by the thousands, but today is found only at a few museums. However, it was the larger vessel, usually 38 to 45 feet on deck, with a cabin that accommodated crew for weeks or months at a time, that is known as a skipjack. Only about 600 large skipjacks were built, most of them between 1896 and 1915.

The construction plan for a skipjack was so simple that watermen handy with tools could, and often did, build them in their backyards at the



turn of the century. Even when they hired a boatbuilder, the skipjack cost only \$600, half the price of a sloop the same size.

The sail plan also was simple. The skipjack carried a self-tending jib on a short spar. The jib sheet tied off in front of the mast, which allowed the sail to shift back and forth on its own as the boat tacked, freeing the crew to tend to the dredges. Likewise, the mainsail was designed for economy of effort. The sheet hooked to a simple bar behind the helm, which served as a traveler. Since dredge boats always work on a broad reach, which allows the crew a steady, flat platform from which to work the dredges and cull oysters, the captain never had to tend the mainsheet.

The sail rode up and down the raked mast on hoops so it could be dropped quickly in an approaching squall. And when the mainsail was dropped, it folded neatly into lazy-jacks, so there was little chance of its getting caught up in the equipment on board. Some time after she was built, *Rebecca* shed the multiple sailplan of the working sloop, which included a topsail over a gaff-rigged mainsail, in favor of the simple skipjack sailplan.

Pure drudgery

Watermen called the job “drudgin’” because it could be pure drudgery down on your knees on deck, separating small oysters from legal three-inch oysters that could be sold, and sending them back overboard. Also, oysters were harvested in the worst weather: from November through March.

On this day, there had been no hint of a squall on the marine radio, but now the wind had picked up so quickly that Wade feared the choppy seas would swamp his pushboat. That was the biggest fear of dredgers, that a swamped pushboat would drag down the bigger skipjack. When seas threatened to break over the pushboat, it was far less dangerous to haul the little boat out of the water onto its davits and go with sail power alone. As the weather developed into a full-blown squall, Capt. Murphy gave the order to haul up the main and winch in the yawl boat. Now he was under sail power alone.

Usually a river affords some protection from bad weather, but the Choptank is so wide that big seas develop quickly. In fact, the Choptank had a reputation as the scene of the worst catastrophe in dredging history. Back in the 1930s, a dry squall, which may well have been a twister, came out of the fog and capsized three vessels, drowning nine dredgers.

Seas began breaking over *Rebecca*'s bow, and so much seawater ran through the hatches into the hold that it appeared she had sprung a leak. Wade yelled for his crew to keep the bilge pumps free of debris as loose items and equipment sloshed around in the deepening cold water inside the boat. Meanwhile, hurricane-force winds were shredding the sails.

Rescue boats

Having run out of options to limp the boat home, Wade got on the marine radio to his wife, Jackie, at home. She quickly called her neighbor, Robbie



Wilson, a former skipjack captain who had given up dredging when the oysters died off in the early 1990s. Robbie called his son, and the two of them took their workboats out in the squall to rescue Wade and his crew. At one point, the seas were so big that they rolled over the bow of one of the workboats and smashed the cabin window. By the time the two men reached *Rebecca*, she was half full of sea water. They managed to secure a line to the vessel and began a slow, treacherous tow back to shore.

Wade could see his life-long home, Tilghman Island, a swampy watermen's enclave barely above sea level, stretched out before them. Another mile or two, and they would be in the calm waters of Knapp's Narrows. Then a wave hit them broadside, and suddenly the men were in the water as *Rebecca* literally sunk out from under their feet.

The history of skipjacks and dredging is riddled with drownings. Sometimes entire crews were lost when a boat went down in a storm. The last time that happened was in the mid-1970s when the crew of the *Claud W. Somers* was caught in a squall off Deal Island. The crew members were all family and relatives of Captain Thompson Wallace.

While modern communications have reduced deaths on the Chesapeake, drowning was still a much more serious threat for watermen than for pleasure cruisers. Even if a man could swim, he had to first get out of his heavy boots and work clothes, which had carried many a dredger right to the bottom and a watery grave. Then he had to deal with the chilly water temperature, which could bring about hypothermia within minutes. *Rebecca* had lost at least two of her crew before Wade purchased her in

*"Unlike the ghosts
of thousands of dredgeboats
that have rotted away
in watery graves
all around
the Chesapeake Bay,
she had what they didn't:
a captain who cared."*

the 1980s. Wade, who had come to the rescue of his nephew who fell off another nearby skipjack in 1990, had been in the water a few times himself, but never had he had a skipjack capsize or sink beneath him.

Men saved

Fortunately, Robbie Wilson and his son were able to release the tow line, or they might have been swimming, too. The crew of the *Rebecca T. Ruark* had shed their heavy boots and were bobbing in the water. One of the men clutched *Rebecca's* mast, the only part of the boat still visible. For a few moments, Robbie feared he'd have to knock the man out to get him to release his death grip on the wooden spar. Finally, they dragged him aboard, too.

Capt. Murphy and his crew had narrowly escaped becoming another statistic in a history littered with tragedy. He was lucky that no one had been killed, or even seriously injured. But even as they plowed home through the swollen river, Wade wanted one more thing: he wanted to save *Rebecca*.

Wade came from a long line of dredgers, and he knew what it was like to struggle to own a decent boat. Unlike some captains, who got into dredging when the money was good and got out when it was tough, Wade's life was dredging; he had started on the middle deck of his father's boat, culling oysters, when he was 16.

"It blew a gale, nor'west and rain, solid rain, for three days. I thought, 'God almighty, I'll go back to school and to hell with this,' " he remembers. Then, the skies finally cleared, the weather moderated, and

Wade decided to stay aboard after all. That was in 1957.


It was no surprise to anyone that, despite the high price tag, \$50,000 just for repairs, Wade was determined to raise *Rebecca*. As one dredger observed, "Wadie, he loves that boat."

Ballast shifted

It seemed like an impossible task. She was lying on her side with just the mast sticking out of the water. Inside, a layer of loose bricks placed in her hold as ballast had shifted sideways when she capsized, helping to pin the boat to the bottom.

A few days later, as soon as weather permitted, a crew was at work, trying to lift the boat with a crane. The first efforts failed, but Wade persevered. Finally she was pulled out of the water before a crowd of friends and press and towed the last mile to Tilghman Island.

For the first time in 43 years, Capt. Murphy spent the dredging season on land, looking after repairs to his beloved boat. While he wanted to have her dredging again in the fall, he was trying to meet an even tighter deadline: the summer tourist season. With the decline in the seafood market, the tourist trade was now his biggest moneymaker. The tragedy finally had a silver lining when, in May, 2000, *Rebecca* was launched again and certified by the Coast Guard to be a stronger vessel, able to carry more tourists than before.

The skipjacks that have survived 40, 50, or 100 years aren't always the best or the biggest, noted Captain Russell Dize, who captains the *Kathryn*, one of only four skipjacks that still work out of Tilghman Island. But they do have one common thread, he said: "They happened to get a captain who cared for them." 

Pat Vojtech spent one winter dredging with several captains to gather



information and photographs for her book, Chesapeake Bay Skipjacks, a complete history, in the words of the captains who lived it, of the colorful world of dredging on the Chesapeake. This book is available from the Good Old Bookshelf, Page 65. Pat is an avid sailor who spends many summer weekends with her husband and son on their 1984 34-foot Hunter, Athena.



O, how she scoons!



Don Launer's Lazy Jack 32 designed by Ted Brewer, above, and flying its fisherman staysail, at left. This sail is hoisted by halyards on the foremast and mainmast. The sheets are led to aft turning blocks and forward to cleats. It is tended like a jib when tacking.

The rig Americans made their own is still “scooning” after 300 years

It's not discreet to say this, but I've been having an affair, and I'm not ashamed to admit it. It's been a life-time love affair with schooners. There are still some, and I suspect many, of us who believe that no sailboat ever built can compare in beauty with the schooner. But why are people still drawn to this rig when the schooner as a recreational boat has all but faded into oblivion? I think it's because the schooner rig has a symmetrical rightness about it. With a gollywobbler, fore gaff topsail, spinnoa, flying jib, forestaysail, fisherman — what other rig can carry such a mixed bag of sails and (instead of looking ridiculous) become breathtaking?

From the deck, as you look above, a cloud of white is overhead — but aesthetics aside, no other cruising rig has more flexibility than the schooner. It can be adjusted to suit almost any condition of wind or sea. OK, so it doesn't go to windward quite as well as that high-aspect-ratio racing sloop, a characteristic common to all split rigs,

but if you're searching for a love affair — if, as you sail by, you appreciate it when people turn to look and take pictures — then maybe, just maybe, you too are a schooner nut. If you are, you're in good company, since to judge by their designs and writings, John Alden, Uffa Fox, and Joseph Conrad were also schooner enthusiasts. In *Mirror of the Sea*, Conrad rhapsodized: “They are birds of the sea, whose swimming is like flying ... the manifestation of a living creature's quick wit and graceful precision.”

From Holland

Although most people consider the schooner to be as American as apple pie, the popular idea that it originated in New England is probably incorrect. It seems likely that they were developed in Holland in the early part of the 17th century as they are depicted in paintings of that period. There's no doubt, how-

ever, that Americans adopted the schooner as their own. The American coastal schooners were not deliberately designed to look beautiful, they were designed as vehicles of commerce with good carrying capacity, able to haul lumber, fish, coal, ice, stone, bricks, fertilizer, and the like, in all possible weather and at good speed. Thus a perfection of hull form was developed, and something

completely functional as well as aesthetically beautiful was the result.

They were as vital to American commerce as are the highways, railroads, and airlines of today. In those days before railroads, when overland routes were not much more than muddy paths in the warm months and snow-covered ruts during the winter, schooners moved people and supplies between the coastal cities.

Waterborne commerce along the

by Donald Launer



On the interior, Don fibreglassed vertical furring strips 16 inches apart. He glued foil-covered polyurethane insulation between the furring strips and placed mahogany planks on top. This insulation sandwich prevents hull sweating, makes the cabin easier to heat and cool, and acts as a radar reflector.



East Coast of the United States was a natural result of its topography. Our eastern shoreline is replete with estuaries, rivers, bays, and sounds, which allowed the windward ability of the schooner to carry them far inland where square-riggers dared not venture. By the late 18th century, the schooner had become the national sailboat of the United States and replaced the square-rigger as the ship of choice for coastal commerce.

Camden's schooners

During the schooners' heyday, boat-builders all up and down the coast were trying to keep up with the demand and turning out large coastal schooners in record numbers. The small town of Camden, Maine, alone

sent more than 200 down the ways, and schooners can still be seen in Camden's harbor.

Even though the coastal schooner was a boon to commerce, by today's standards, travel in those days was still primitive. A trip from New York to Philadelphia, which now takes about two hours by car, would take two days by coastal schooner if the wind was exactly right, or it could take two weeks under adverse conditions. And there was always the possibility of never arriving at all if a nor'easter reared up offshore.

But what constitutes this rig that transformed the early days of our nation?

The schooner is characterized by fore-and-aft sails, set on two or more masts, the foremast(s) being equal in height to, or shorter than, the mainmast, which is the farthest aft. Some early schooners were rigged with square topsails on the forward mast and were known as top-sail schooners.

The schooner rig has three basic types of sailplans: The old-time gaff main and gaff foresail, the Marconi main

and gaff foresail (which allows a permanent backstay on the mainmast, by use of a boomkin), and the Marconi main with a staysail in place of the foresail. The fishing schooners of the 19th and early 20th centuries usually carried three headsails: jib, jib staysail, and jib topsail, but most small schooners of today opt for a single headsail for ease in handling. When this headsail is on a boom it doesn't even have to be tended when coming about. (See the club-footed jib article in the November 2000 issue of *Good Old Boat*).

Seldom seen today

The gollywobbler is the schooner's version of a spinnaker. It's a huge staysail, usually bigger than the mainsail and foresail combined, and is set in place

of them for downwind running. It does, however, require a large crew to handle it and is seldom seen today. The fisherman staysail, still frequently used on even the smallest of schooners, is a trapezoidal sail, hoisted by halyards to the tops of the mainmast and foremast. Although seemingly archaic, it's even more efficient than a genoa when going to windward, according to designer Ted Brewer (see photo on Page 45).

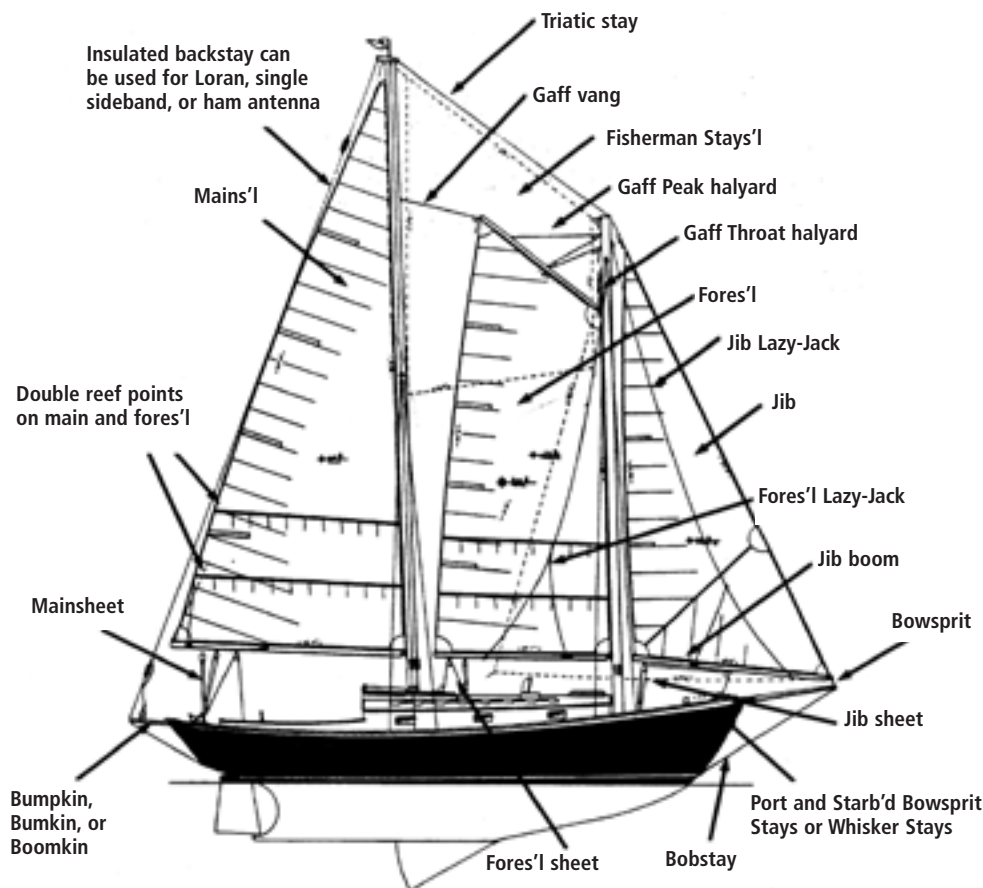
The flexibility of the schooner rig to meet a variety of conditions is its greatest asset. When the wind starts to blow a gale, the schooner can begin by dropping one of its auxiliary sails, such as the fisherman. This can be followed by putting in reefs in the mainsail and/or foresail. Higher winds can be countered by dropping the foresail and maintaining a balance under jib and mainsail alone. Under really severe conditions, the schooner can continue under double-reefed foresail alone, or heave to under foresail. The feeling of proceeding under reefed foresail or heaving to under reefed foresail was so confidence-inspiring that when weathering a storm out on the Grand Banks under reefed foresail the Gloucester fishermen called it being "in foresail harbor."

When a modern-day sailor first goes aboard a schooner, it is daunting to say the least — there seem to be lines everywhere. On our modest-sized schooner, the running rigging, proceeding from bow to stern, consists of: jib halyard, jib downhaul, jib sheet, jib-boom lazyjacks, fisherman-staysail halyard (and, when hoisted, the fisherman staysail tack downhaul), gaff foresail throat halyard, gaff foresail peak halyard, foresail boom vang, foresail gaff vang, foresail lazyjacks, fisherman staysail peak halyard (and, when hoisted, the fisherman port and starboard sheets), main boom topping lift, main halyard, main-boom vang, mast-top flag halyard, spreader flag halyard, main lazyjacks and mainsheet.

Easier than a sloop

This is an intimidating array for the newcomer on board, but those lines are there to make the job easier, and once you "learn the ropes" sailing a schooner short-handed or single-handed can be easier than sailing a sloop of comparable sail area, since, with this split rig, each of the sails is smaller and easier to manage. I singlehand my schooner most of the time, even when there are guests aboard and find it easier to sail than a sloop of comparable size.

Unfortunately, anyone looking for a



schooner today has limited choices. In the used-boat market there are always some wooden hulls available, and occasionally ones of steel or aluminum, but fiberglass-hulled schooners are harder to come by. For about 25 years, the Lazy Jack 32 was available to the small-boat sailor. This schooner, designed by Ted Brewer and made in fiberglass by Ted Hermann Boats, of Southold, N.Y., is 32 feet on deck and 39 feet overall, including the bowsprit and boomkin. It was available as either a bare hull, kit, or completed boat, but in 1987, with Ted Hermann's retirement, production ceased.

One of the few fiberglass schooners now being produced is the Cherubini 48. Cherubini has been building its semi-custom 48-foot schooner for decades in a plant in New Jersey. This is a gorgeous boat, built with Cherubini's renowned craftsmanship. It has traditional lines, a saucy sheer, tumblehome, and varnished teak, along with the beautiful schooner sailplan. The company is now known as the Independence Cherubini Co. They manufacture both trawlers and sailboats.

This is the only company I know of now building fiberglass schooners.

Bare fiberglass hull

A little more than 20 years ago, the lodestone force of the schooner finally became irresistible, and we bought one of Ted Hermann's 32-foot fiberglass bare hulls right out of the mold, doing the building and fitting-out ourselves on a spare-time basis. This consisted of fastening the deck mold to the hull

mold, installing the engine, fuel system, exhaust system, and installing the masts, standing and running rigging, water system, head, electric wiring

and electronics, stove, cabin heat, cabin insulation, and interior woodwork. Our schooner, *Delphinus*, is still our pride and joy. It turned out just as we hoped and has been a family member for two decades now.

I don't advocate the schooner design for everyone, but for us it has been perfect. Since we are now in our 70s, ease of single-handing our boat is a prime requisite. Except for when the fisherman-staysail is flying, tacking requires no more work than turning the

wheel and watching, as first the club-footed jib, then the foresail, and finally the main, move over to the new tack.

Another peripheral advantage of our schooner rig is evident when anchoring under sail. We can approach a crowded anchorage with everything up, select our spot, come up into the wind and sheet the mainsail in tight amidships. Since the mainsail is so far aft, this keeps us neatly weather-vaned into the wind while we leisurely drop the jib and lower the anchor as we begin to fall back. Then the fisherman, foresail, and finally the mainsail can be dropped in a relaxed manner while at anchor.

Traditional lines

We feel quite content with our cruising schooner. We have an able, comfortable and manageable boat with the beautiful and traditional lines of the schooner era, but our boat is ours in more than the ordinary sense of owner-

ship. It is ours because built into it are small parts of ourselves; the planning, work, sweat, skinned knuckles, and bruised knees, along with our love of the schooner rig. All are hidden in the dark crevices of the hull, as much a part of our schooner as the bowsprit and boomkin. Possession like that is hard to come by; it can't be bought, it must be earned.

In choosing a sailboat, its ultimate windward ability is not the only thing to consider. The owners must also take pride in their craft. Beauty and practicality can coexist. In our advanced years, it's satisfying to know that there are some things that do improve with age: old wine to drink, old friends to talk to, old authors to read, and old sailboat designs to admire and enjoy.

Don's been sailing more than 65 years and has held a USCG captain's license for more than 20 years.

He is author of the book, A Cruising Guide to New Jersey Waters. Delphinus is kept at the dock next to his home on a waterway off Barnegat Bay, N.J.



More on schooners

[<http://www.schoonerman.com>](http://www.schoonerman.com)

[<http://www.seadragon.com>](http://www.seadragon.com)

New race for old boats

While many thousands of fiberglass production sailboats have been built and sold over the past 40 years, only a handful of designs are actively raced on the Chesapeake Bay. That's because yacht clubs and sailing associations decide what boats they want on their starting lines. Inevitably, as hot new sailboats are introduced, older classes are abandoned. What to do?

The most direct solution is to organize your own grassroots organization and schedule your own races. This is exactly what Don Frye, Charlie Husar, and many others did. The first such race on the Chesapeake was hosted Oct. 7, 2000, by the Rhode River Boat Club and Shearwater Sailing Club.

The race committee advertised their brand-new regatta as being for "Cruising One-Design fleets of *some maturity*," and offered starts to classes of boats first produced before 1975 and having a minimum of three boats on the starting line. One-design fleets in the first race totaled 19 boats: six Pearson Tritons, eight Cal 25s, four Catalina 27s, and one Pearson Renegade which was allowed

Older boats left out of Chesapeake racing start their own race series and have more fun, too

to race with the Catalinas when other members of that fleet canceled at the last minute. We later learned that three more boats showed up for the race, but unfortunately at the wrong rendezvous mark. (We hope they raced anyway.)

Future races are likely to include Alberg 30s, Bristols, Tartans, C&Cs, Ericsons, and S2s, all of which have active fleets in the Chesapeake area. Other fleets may also participate in the regatta, which is expected to expand to two races next fall.

The Chesapeake Bay, which had produced relatively light air during most of the summer season, came through for the race with an October northeasterly. The wind built from 12 knots to 15 to 18 knots, gusting to 25. Real racers don't reef, of course, they just climb to the high side and hang on. The waves

increased proportionately. It was an exhilarating contest for all involved.

The high level of electricity of the event at the start and finish and the high-quality teamwork of the race committee guaranteed that this event will attract additional fleets and larger numbers of participating boats in these fleets. An event that started out strong, this one is destined to grow stronger. Watch for more on the *Good Old Boat* Regatta in years to come.

And one thing more: The good old boaters posted more starters in this brand-new race than the Mumm 30 class could muster for the nearby Annapolis Yacht Club fall series. Five Mums turned out to compete in the AYC series on a near-perfect fall day. Perhaps the yacht clubs and associations excluded the wrong group of sailboats.



We're making an exception . . .

We all know *Good Old Boat* is about cruising sailboats of a certain vintage (10 years old and older). It is **not** about sailboat racing. Period.

Except when good old cruising boats go racing. *Then* we might make an exception. Especially if organizers name the race a Good Ole Boat Regatta. What are we gonna' do? (Even if they can't spell?)

Then we might cover the event. Sponsor it, too. (As a result they later changed the spelling to Good Old Boat Regatta.) Not long ago, we noticed in the Chesapeake Bay area sailing magazine, *SpinSheet*, an article about a race to be held for the first time on the Chesapeake Bay. It was to be called the Good Ole Boat Regatta. We figured if they're playing your song, you probably should dance. We followed up by offering free subscriptions to winners.

The first regatta occurred at the



Harry Shaefer

time of the Annapolis Boat Show, so we were in town to attend. Nineteen boats and crewmembers showed up for a blustery day to duel for top honors (and subscriptions, of course). Photos and more information are posted on the *SpinSheet* Web site at: <<http://www.spinsheet.com>>.



The committee boat at right shows the course in "alphabet code," as the racers mill about at the start. Who can resist the electric atmosphere at a time like this?



For more race photos, see the
SpinSheet Web site: <<http://www.spinsheet.com>>.

An exciting start above, as the Triton fleet takes off. At right, another look at the Tritons as they prepare for the gun: Don Frye's Luff Affair, Jim Schwartz's Pylasteki, Phil Rost and Eleanor Holmes' Sea Deuce.



Chicken Little, a Cal 25, owned by Charlie Husar screams by at the finish at left. Below, two Cals, Leo Suria's Harlequin, on the left, and Mike O'Toole's Alice May, on the right, at a close start.

Who won?

Well actually everyone was a winner, but top-placing Tritons included: Eleanor Holmes and Phil Rost's *Sea Deuce*, Steve Sinson's *Free Fall*, and Don Frye's *Luff Affair*. Top Cal 25s were: Tim Bloomfield's *White Cap*, Mike O'Toole's *Alice May*, and John Woldridge and Peter Shiels' *Ronin*. The Catalina 27s include: John Ebell's *Hi Tide*, Tom Walsh's *Four Little Ducks*, and Dan Thomas' *Alley Cat*. Mike Lehmkuhl's *Athene* took special honors as the only Pearson Renegade.



The poor sailor's diesel

My boat, *Seaker*, a 1971 Ranger 29, had been donated to the Boy Scouts. From what little I learned about her history, she had been raced hard in open-ocean events until it was felt she could no longer compete. She carried large two-speed winches. An unending array of blocks and lines led to the cockpit. Her deck-to-hull joint not only had rivets but also screws as well as nuts and bolts. Extra layers of fiberglass beefed up the main bulkheads. Her light racing sails (main and 130 genoa) were shot. Before the donation, prior owners removed the engine and sold it. When the boat came into my hands, she had a 4-hp Suzuki outboard dangling from a rickety bracket on the transom. That setup had to go.

My racing days are far behind me, but many tired racing vessels can be refurbished to make excellent cruisers. I don't mean open-transom, over-canvassed, flat-bottom machines with skinny keels so long they drag the ocean bottom. I mean elderly boats that were designated racer/cruisers and were used mostly for racing.

A poor sailor is an individual, who, when it comes to sailing and boats and big-ticket equipment, just can't afford New Stuff. It might be other priorities that eat up funds: clothing, housing, food, vehicles, or keeping a spouse happy. Or perhaps there isn't much money to begin with. A brand-new, shiny, fiberglass sailboat doesn't exist in the solar system of a poor sailor. Nor does most of the equipment on that shiny new boat, including the brand-new gleaming diesel engine.

I'm a poor sailor. I could no more afford a new diesel engine than I could a date with Madonna. But I found my diesel engine, and I installed it. The total cost was about \$3,500.

Difficult to clean

I specifically did not want through-the-hull drive. The material for those drive units is aluminum, very similar to the bottom end of outboard engines. Divers report that there are so many appendages, it's difficult to clean them. And the drive unit eats up zincs like a handful of M&Ms. Besides, *Seaker* already had a short bronze shaft with a folding prop. I intended to use everything I could that came with the boat.

Along a backwater side street sat a small building with a large chained yard patrolled by a man-killing dog. They advertised Volvo parts. Inside, the place smelled of diesel fuel and engine oil. The sounds were of hammer blows and drill motors. Two big forest-green four-cylinder engines sat resplendent on the floor in front of the counter. Both were much too large for my little boat.

I was led to a shop where nailed-together shelves were stacked, bending and lumpy with engine parts. A two-cylinder engine block, stripped of all paint, was pointed out to me. It looked clean, no scoring of cylinder walls, nor any sign of dents, welds, cracks, or saltwater crystal buildup. The block felt slick without barbs or lumps. A box next to it held most of the parts.

The owner, the counter man, the mechanic, the teenage porcupine-head gopher, and I talked. We agreed they would build the engine, an MD-6B 10 hp, using only factory-spec parts, which

Seaker's ready to celebrate Buccaneer Days on Catalina Island.

I would inspect. The engine would be started and run on the day I picked it up. I asked about a heat exchanger to flow fresh water through the water jackets. I was told that those particular blocks had so much nickel in the castings that a heat exchanger was neither necessary nor recommended. It was good for 20 years, or longer, depending on my care.

Twenty years. Would I have the boat for 20 years? Would I even be *alive* in 20 years? If it gave me good service for 10 or 15 years, I'd be a happy sailor. They needed 30 days to build the engine. The price was \$2,500, including engine mounts. I left with my checking account lightened and a Volvo factory manual in my hands.

Added more wood

Back aboard *Seaker* I applied measurements taken from the block to the empty cavity under the companionway steps. My main concerns were engine bearers and

shaft alignment. The bearers were made up of fiberglassed 2 x 6 planks. They didn't quite line up. I added more wood and lots of fiberglass centered where the engine mounts would go. The height of the transmission looked like it might match up with the shaft. One problem with exact measurements was that the coupler looked like a softball of rust. I used a grinder-cutter mounted on my drill motor. It was slow, tedious work, but I managed to get a slice from front to back. Hammer and chisel widened the crack enough to drive the old coupler off. I didn't score the shaft as badly as I thought I would. The new coupler fit the shaft just fine.

The wiring around the engine compartment looked like the mutilated wire-harness of a crashed 747. I had no idea how I'd find what wires went where. Some of the wire looked fairly new, and I'd use as much of it as I could. The rest I'd yank out and replace. Wire is cheap. What's expensive is hose. But wire-supported hose is much cheaper at Home Depot and Pep Boys than at marine outlets. Other expensive items I decided to buy used were throttle and transmission cables. I found them by pawing through a waist-high stack of push-pull



installation

A poor sailor is someone who just can't afford New Stuff. Here's one man's \$3,500 solution

cables at a used-supply marine store. Forks and eyes I had to buy new.

I'd heard several horror stories about seawater backing into exhaust hoses to mutilate valves. Two such incidents happened to people I knew. Since I'd already installed anti-siphon vents on inlet and outlet hoses in the head, I intended to do the same with the engine. I glassed a square of plywood to the floor aft of the engine bed, then screwed a water-trap muffler to the plywood. I installed the vent on the inlet water hose at the engine.

Throw them out

I also sprang for a raw-water inlet strainer. A three-way valve allowed me to run a hose from the bilge to the strainer so I could use the engine as an emergency bilge pump. It would be one of three bilge pumps, hand, electric automatic, and engine. Hose inlet strainers are too expensive. I've always had good service from bronze or stainless scrub pads wired to the end of the hose. Works well for shower drains, too. When they clog up, throw them out and drop in new ones.

Finally, the fuel tank still looked OK. I drained and cleaned it and replaced all fuel hoses, installing the fittings myself. I filled up with clean diesel from a truck station, using portable containers. The tank took about 20 gallons.

The day arrived to pick up my new engine. At the time I worked as an outside hydraulic repair salesman. Since my territory covered all the Los Angeles basin out to Riverside, the company handed me a Dodge Dakota truck and a Shell credit card. I used the Dakota to haul the engine. When I backed into the fenced yard, the owner chained the killer dog so he wouldn't go for my throat. The engine sat on a rolling cart with a chain come-along beside it. A battery was wired to the starter and the

fuel sloshed in a one-gallon paint thinner can. A long, curled hose was used for exhaust.

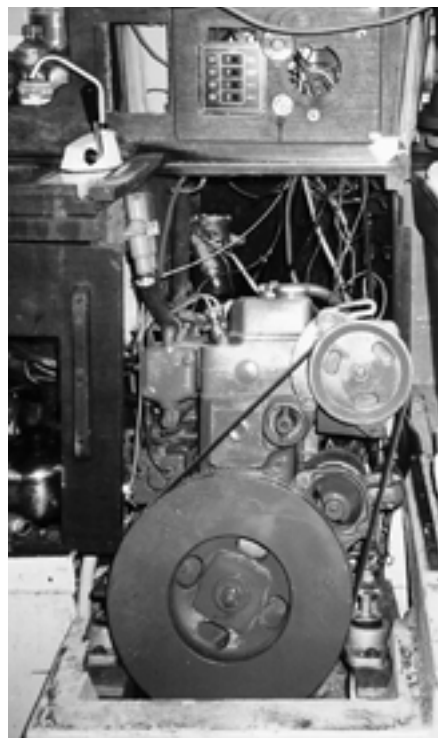
The engine looked beautiful, shiny in that special green paint. The owner and I exchanged pleasantries about everything except the engine. Then the time came. He hit the starter, and the little diesel chugged to life. I leaned in close, listening for thuds or knocks. I fiddled with the throttle, revving and backing down. I shifted to forward and reverse, listening for grinds and clunks. The diesel chugged along without complaint. It seemed like the perfect engine for my boat.

Easier said than done

Using the come-along on the overhead arch of the cart, the owner and I hoisted the engine into the bed of the Dakota. He told me he figured the weight to be about 300 pounds. We shook hands and said goodbye. I drove to the marina.

My son and I slid the engine to the back of the pickup then hosed it onto a three-wheel wooden dock cart. That task sounds a lot easier than it was. It took a total effort from both of us to control the cart as we rolled it across the parking lot, through the dock gate, and down the dock to *Seaker*. Using the boom on *Seaker*, with the mainsheet working through one of those two-speed winches, we huffed and grunted until the engine was lifted then lowered into the cabin and rested on the bearers. It fit perfectly.

The next task became alignment. The face of the coupler had to match the transmission within 0.002 inch, otherwise the shaft would wobble like the end of a garden hose with full pressure on. And that would tear up the Cutless bearing, and water would pour in, and



on and on. After a week of pushing and pulling and sliding and loosening and tightening, the closest I could get was .004 inch. I was over my head. I needed professional help (something my ex-wife has always maintained).

Expert #1, at \$30-plus per hour, spent more time than I felt necessary and

came no closer than I did. He called in two buddies (Experts #2 and #3) who, he said, were the sharpest in the business. Watching those two attack the problem made a believer out of me. They were a couple of men in their early twenties, and they worked together as a team, one at the coupler calling directions while the other, at the engine mounts, adjusted. Four hours later, with everything cinched tight, the coupler mated to the transmission within 0.001 inch. I was impressed. I'd always thought that to get to the mature and wise stage of life I now enjoyed, you had to first go through a young and stupid phase. Those youngsters apparently skipped that part.

Dreaded part

Plumbing for the water intake and exhaust was straightforward, but tedious. Hose fits were tight, and I had to be careful of hose bends. The water hoses were the worst. Several had to be end-soaked in boiling water, then rubbed with soap to get them to fit. But eventually everything was hose-clamped and tight, and my new engine was in, lined up to the shaft, and plumbed. Next came the most dreaded part for me, the electrical system.

I understand the principles of water, hydraulic, and fuel systems, but electric and electronic stuff flattens me. Some of it has to do with my mental makeup. I can change batteries in a flashlight without cartoon instructions. But I'm still amazed when, after I fix something,

it works. In my youth, when I installed plugs and points in a car, it was with much anxiety that I turned the key and hit the starter. When the thing actually started, I sat in wonder, trying to think what I did right and how I might repeat that accomplishment.

I had spent hours studying the wiring diagram of my Volvo shop manual. I knew my little diesel did not need electricity to run. It needed electricity to start and to charge the battery while it ran. But I had instruments, too: a tachometer, a temperature gauge, ammeter and oil-pressure gauges. These all, somehow, had to be connected by wire and made to work.

This was the most difficult part of the installation. I began by yanking and throwing out the rats' nest of wiring in the boat. The best of the wire I kept, the rest went in the marina dumpster.

Island party

I began to feel pressure from my son to finish. He had just sold his boat. The Buccaneer Days Festival was coming on Catalina Island, 25 miles from the mainland and the only real weekend island available to Los Angeles County sailors. An annual event, Buccaneer is the wildest, raunchiest, most fun-filled, dancing, island party of the year. It is not a family event. People dress like pirates and act accordingly. It is decadent and awful. I can usually be talked into attending. My son told me we were going aboard *Seaker* if we had to tie the dinghy alongside and use its outboard.

With that kind of pressure, I managed somehow (using three wiring books plus the manual) to get the wiring in and tightened. With the throttle and transmission shift cables connected, that was it. But would it all work?

The big day came to actually start the engine. Since my son had been so much help, it was fitting that he should be there. I felt the tiny hand pump on the engine to be anemic so I had installed a bulb-pump, generally used in outboard gas lines, to the fuel line at the tank. While my son cracked the injectors, I pumped until we saw a trickle of airless fuel. We tightened everything down, and I hit the starter. Almost immediately one cylinder lit, and the thing chugged like a power lawnmower. Then cylinder two came in, and the little engine purred. I leaned over the stern to make sure water flowed from the exhaust. We ran it in reverse and forward against the dock-lines. Everything worked perfectly.

On the open sea

The big test, of course, would be the trip to Catalina Island. I knew that with a folding prop, the torque in reverse would range from little to none. In fact, at the dock, with the engine at half-throttle in reverse, I could stand at the bow pulpit and pull the boat forward. But, to the amazement of my son, on a Thursday morning, I backed *Seaker* out of the slip, shifted to forward and — waving farewell to my dubious, harassing dock neighbors (who knew the boat would never leave the slip) — chugged toward the open sea.

Going to Catalina Island, a sailor can count on two conditions: no wind at all or wind directly on the bow. The sail home can be boisterous and exciting. The wind usually comes up about noon. Since my main purpose was to test the engine, we left at around 10 a.m. in windless conditions. Once clear of the harbor jetty, we found a smooth sea with long non-breaking swells.

At three-quarter throttle, *Seaker* slid through the swells at 5.5 knots. By moving the throttle forward just a little, I could get 6 knots. Good enough for me. Since I always raise the main when I motor, I figured when the wind did pipe up, I'd fall off a bit to give the little engine some help.

There are all sorts of graphs and charts by experts to tell the sailor what is the best size engine for the boat. They run from 1 horsepower per waterline foot, or so-many horses per ton of displacement, to everything anyone can think of. And, since the birth of internal combustion, we Americans have felt there is no substitute for cubic inches. I always figured up to around 30 feet, 9 or 10 horsepower is a good auxiliary engine for a sailing vessel. Since horsepower is rated at the rpm speed just before everything blows apart, the sailor will never see advertised horsepower. At three-quarter throttle, I probably had 5 or 6 horsepower spinning my folding prop.

Dragging laundry

Ah, the folding prop. What a robber of drive and torque, and what a grand invention for maximum sailing speed. My previous boat had a three-bladed prop that gave as much torque in reverse as in forward. But when sailing it I felt like I dragged 30 pounds of laundry behind me. What I really wanted was the Cruising Design Inc. (CDI) three-bladed feathering prop. But chugging across the open ocean toward Catalina, I was very

happy with my auxiliary drive system.

On the trip to the island, the Navico steered while my son and I lounged about as passengers. We sipped beer, snacked on cheese and crackers and hard-boiled eggs, discussed world and personal events, and checked the horizon. When we were about an hour from Bird Rock, the wind came up. I fell off a little and moved the mainsheet on the track as far to windward as it would go and cinched it down tight. Our speed picked up to 6.5 knots. When we reached Bird Rock, the island stole the wind, so we dropped the main and motored to my favorite anchoring spot. The engine had burned one gallon of fuel.

Our weekend was wild and crazy as expected. Also as expected, the sail home gave us 20- to 30-knot winds and mixed, breaking 6-foot seas, coming from the stern quarter. Our speed stayed at 6 knots plus, and at times we surfed to 7.5 knots. Even though we didn't feel quite as perky as we did on the trip over, due to so much cavorting, we had a grand time. The 130 and racing main had us over-canvassed, even with a reef in the main, but those were the only sails I had on board. I feathered them to slow us, but just before we made the jetty entrance, wind and seas increased to where the Navico couldn't handle it. I had to hand steer the last few miles. But we made the distance in less than three-and-a-half hours, which equaled any previous best time I, or my son, ever had.

Seaker still has much work to be done on her. Other than new rigging, most of it is cosmetic. It'll take time, but it will get done. I'm proud of my little boat and very satisfied with the \$3,500 engine installation.



George has been living aboard and sailing boats less than 30 feet in length for 20 years. Ten of those years were spent aboard Runaway, a Columbia 26 MkII.

He has singlehanded from Seattle to Juneau, Alaska, and cruised the Baja and the Sea of Cortez. He has also designed boats and built three. His present sailing home is a 1971 Ranger

29. When not sailing, George writes. He has 18 published books, the most recent of which is Baja Sailor Tales, available from Amazon.com for \$12.95.



Cyber saints build communities

Webster's dictionary offers "an interacting population" as one definition for the word "community," a description that aptly describes a number of sailing associations as well as the readership of *Good Old Boat* magazine. And within the world of sailing, the dynamic, lively, free-flowing Internet has proved to be an excellent community-building tool.

Thanks to the Internet, you can log on to find out how others have replaced the centerboard cable on their Morgan 22, or where to find a part for that obscure, now orphaned, foreign-built auxiliary engine residing in your 1960s-vintage sloop.

Three days after I became affiliated with my first fiberglass sailboat in 1996, I was on the Web seeking information and other owners of our newly acquired plastic classic. And I quickly found someone with the same vessel, despite the fact that only 40 had ever been built. He had dealt with many of the same maintenance issues we had identified, and a highly fruitful exchange took place between us.

The Internet has become invaluable to some, useful to others, and a source of enjoyment for almost every northern sailor beached for the winter. And there is a special place in the sainthood of cyberspace for those selfless individuals who bring their fellow boaters together to exchange sea stories, practical tips, or encouragement via Web sites.

Internet repository

One such forum that has been helpful to hundreds is the Bristol boats Web site created and maintained by Doug Axtell. It has proven its worth to many a boat-owner. Recently, a friend purchased a 1968 33-footer in need of an extensive overhaul. Within an hour of her delivery to his yard, he was logged onto Doug's Internet repository of information, seeking data on his new boat.

Like most amateur webmasters, Doug, who lives in the Rochester, N.Y., area, became a boat-community builder by way of the back door. He simply posted a note on the SailNet owners' exchange

Sailor webmasters are "Netizens" bringing far-flung sailors with mutual interests together

by Susan
Peterson Gateley

seeking information on his newly acquired Bristol 32 a few years ago. A couple of owners checked in, and comments and ideas began to flow. Before long, an informal forum for Bristol 32 owners evolved into a full-blown site with information on 18 models of Bristol-built boats ranging from the 19-foot Corinthian to the Bristol 51, designed by Dieter Empacher. Today, the site sees more than 15,000 hits a year and has a mailing list of more than 150 members.

One of the most visited areas of the Bristol boat site, used by owners of other types of production boats as well, is the extensive well-organized library of restoration project experiences and how-to's. Many of the problems, such as repainting a hull, replacing the Cutless bearing, or seeking out the correctly pitched prop for your auxiliary, are generic to a wide range of 25- to 30-year-old fiberglass boats, so non-Bristol owners find a wealth of valuable and helpful information there, as well.

Doug, an engineer by training and vocation, is no slouch when it comes to getting his hands dirty doing a boat fix. He explains that whether he's rebuilding a water tank or creating a Web site, "I grew up on a farm and on boats. If you don't know how to do something there, you figure it out." Doug sails *Glad Tidings* on Lake Ontario, usually with his wife, Wendy. He bought the 1969 yacht, hull #67, in 1995, recalling, "The price was right, and I made the owner an offer he couldn't refuse."

Howard Chapelle's boat

Sailing goes back to Doug's earliest days, and the pastime runs several generations back in his family. "My grandfather was a maritime attorney. He was involved with the *Titanic*, the *Morrow Castle*, the 1912 Seaman's Act, and other marine law affairs." On the other side of the family was a Naval Reserve officer who owned a pinky schooner originally designed and built for noted naval architect and marine historian, Howard Chapelle. Doug's grandfather purchased this yacht in the 1940s. When Doug was a boy, he watched the boat's owner pack chunks of rock salt behind the hull ceiling, up under the deck, to keep her "pickled" and thus prevent dry rot.

Doug's first real boat was a plywood Sunfish. "We bought it for \$50. We could sail it for about 45 minutes before it filled up with water. Then we'd haul it out and set it up to drain for two hours, then we'd go sailing again." A series of small racers used in dinghy competition gave way to a couple of keelboats on Lake Ontario, then to the Bristol 32 named after his grandfather's pinky



Doug Axtell is holding the silver, center, with friends Don Boesel, at left, and Kermit Sleggs, right.

schooner. The Axtells enjoy cruising and club racing with their Bristol out of the small south-shore port of Pultneyville.

Like many an intrepid Internet pioneer, Doug was self-taught, saying of the cyberspace network and computers, "I love the way they work, and I hate to program them." Nonetheless, he waded in, and his Web site is informative and straightforward to navigate. Like many a volunteer webmaster, he's found that his "virtual boatyard," where people gather to swap tips and fix-it stories, has taken on a life of its own. It also takes up many of Doug's winter evenings and weekends. Luckily, in upstate New York he has a goodly supply of those to while away.

When asked what motivates him to keep the site going, he answers, "knowing you're helping other people and answering other people's questions about their boats is very satisfying. I've even seen a couple of boats change hands, and I've then helped the new owners with the same boats."

He has also found new homes for a couple of worthy Bristols. And matching a good boat with a good crew is always gratifying. A testimonial posted on Doug's page aptly sums it up. "We looked at the boat (a Bristol 32). It looked right, but we wanted to research a bit further. Back to the Web, and I can't tell you how blown away we were when we did a search and found a beautiful photograph of the exact boat we were looking at buying, along with all the other terrific information and comments."

Self-taught techie

A considerably more diverse but no less enthusiastic crowd hangs out at another virtual boatyard: the trailer-sailor page. This site is maintained by another volunteer, Todd Johnson, also a self-taught "techie." Todd inherited the trailer-sailor site from its creator, Brad Bachelor, who set it up in 1996 as an online newsletter for fellow trailer-sailors.

Brad, a lifelong sailor, ended up in the lower latitudes of Alabama cruising a Hunter 19 overland behind a Chevy Cavalier to a series of southern lakes and bays. He, too, wanted to exchange information with others on maintenance and sailing, and his online newsletter soon grew to become a popular forum, with an extensive message board for posting trailer-sailor gear requests, com-

ments, rants, and tips. It became one of the most popular and lively sailing forums on the Web. But then, in 1998, Brad announced it was time to move on to other endeavors, so Todd volunteered to take over the extensive site and keep it going.

Todd explained that he was new to sailing and that he had "lurked" around the edges of the message board soaking up much useful advice and enjoying the free-flowing exchanges. A self-described thirty-something musician turned hardware engineer, turned programmer, turned entrepreneur, today he is CEO of a software company called American CyberNetics, which he founded in 1987. He is also an enthusiastic sailor aboard a Catalina 27 as well as a sport diver.

Arizona-based Todd has been drawn to the rich beauty of the Sea of Cortez, a place of abundant game fishes, reefs, whales, empty beaches, and wild rugged scenery. He explored it first as a diver, later as a sailor, and then developed an extensive



Todd Johnson and daughter, Alex

on-line cruising guide to the region at <<http://www.cruisecortez.com>> because, as he notes, much of what's been published is oriented toward large bluewater cruisers rather than smallboat sailors and beach cruisers on one-week holidays.

The trailer-sailor site also has a vast number of links to other Web pages as well as a large library of articles on cruising in small boats. There is immense appeal in browsing through these online journals and ship's logs, and many provide eloquent testimony to the pleasures of small simple cruisers. As Ernest Gann put it in his book, *Song of the Sirens*, "In large vessels there is travail and perplexity, in small vessels there is joy."

I have a special place in my heart

for dinghy cruisers, having put nearly 1,000 miles on my Lightning one summer traveling around the Chesapeake. I was somewhat younger (and more foolish) then, so it may well be that I enjoy reading about these excursions in open boats more than I would actually now like repeating them. But it is refreshing to read about people having fun and making honest and considerable voyages in a boat that cost them about half what most cruisers would pay for a new mainsail.

Gary Hansen, Todd's partner on the Trailer Sailor page, was killed in a boating accident in July. This defining moment caused a major life change for Todd, who writes, "I have purchased an older 41-foot ketch, a 1978 CT 41, and have moved aboard with my daughter."

Endless ingenuity

The trailer-sailor message board is also a tribute to the endless ingenuity of sailors. I was particularly intrigued by the description of a solo mast-stepping system for a 21-footer that involved using a jerry jug full of water and the trailer's spare tire as a counter weight. Sailors are nothing, if not endlessly creative.

When I asked Todd what kept him motivated to feed his "monster," as he describes the trailer-sailor Web site, he said, "I'm not quite sure what drives me to keep my site alive. It's certainly not money. The income barely covers expenses. But I do love it, and I don't see giving it up. I love the community and the constant flow of information that comes from these Web sites."

International site

Freewheeling, lively, uncensored, and unfettered, this is human communication in the Internet age, perhaps between an American, a Czech, and a South African sailor, all of whom share a common interest in a particular boat, whether sailed on the China Sea, the Baltic, or Lake Michigan.

For a truly international sailing Web site devoted to older boats, it would be difficult to surpass James McGarvey's Cheoy Lee Association site with visitors from more than 60 countries. James has even gone so far as to include a translator on his site that converts text to German, Spanish, French, Italian, and Portuguese.

The Cheoy Lee site was launched

after James and Cilla McGarvey purchased *Jamcill*, a 36-foot Cheoy Lee Clipper built in 1969, about three years ago. *Jamcill* is now beached in their backyard undergoing an extensive refit. Shortly after her purchase, James, who had never heard of Cheoy Lee yachts, logged onto the Internet in search of information. Like Doug Axtell, he then was drawn into the wild, wonderful, World Wide Web. "I'd spent a little time in the newsgroups trying to find out about these boats. I met a couple of owners in the newsgroups, and was playing around with a free personal Web program at the time. I decided to list the other Cheoy Lee owners I'd met there."

At about the same time, James discovered *Good Old Boat* magazine. He learned of the effort by its editors to list all the boat associations they could find, which encouraged him to go public with his effort. By then he had learned that the Cheoy Lee company had produced more than 50 models of boats, so he decided to start an "official" Web site to "sort out the different models" and to list other Cheoy Lee owners. "It took off with a bang, and in just over a year, we had more than 400 members from more than 40 countries," he notes. Soon he had to move and expand the site to accommodate the large volume of traffic it generated.

Like Doug, James was a self-taught webmaster, and he has found the task far more time-consuming than he ever anticipated. Today, he says, the Cheoy Lee Association gets more than 70,000 page views a month. "I am constantly amazed at the fact that we still get 20 or more new members finding us a month," he says.

Large library

Visitors to the McGarveys' site will find an extensive, well-laid-out library of information on the various Cheoy Lee models as well as information on maintenance issues. James says he has printed the site out and found its 1,100 files fill 350 pages of paper. This virtual boatyard and cruising club also carries accounts of voyages made with various Cheoy Lee Yachts. These husky bluewater boats experience adventures and get to places that are inspiring

indeed, especially to winter-bound sailors in northern latitudes. It may be no coincidence that the Axtells and the McGarveys live in upstate New York, a climate highly conducive to Internet surfing by beached boaters between November and April.

James and Cilla have sailed smaller boats in the past, and James is a refugee from Southern California's urban sprawl where, in high school, he spent as much time as possible surfing. He and Cilla, a former dairy farmer, ended up in a quiet



James and Cilla McGarvey

country setting in upstate New York. They brought *Jamcill* to their home from Lake Champlain where she had sailed for some years. The boat originally came to the East Coast on the deck of an aircraft carrier around 1970 after a Naval officer stationed off Vietnam purchased her, but she has been in fresh water for much of her life since then. Her previous

owner had done some chartering with her, and James was able to sail with him a couple of times before bringing the boat home.

Since then the McGarveys have begun stripping the boat down to do a complete refinish of topsides and


of the varnished Sitka spruce spars. James is also doing an overhaul of the wiring system, redoing some plumbing, and replacing the fuel tank. Refinishing the cast-iron ballast has sparked an exchange on the Web site, as have some of James's other undertakings. "Probably

my biggest hassle will be pulling the prop shaft and tackling the rudder and Cutless bearing replacement," he notes, adding that while he and Cilla have sailed for a number of years, they have never owned and maintained a yacht as large and complex as the clipper.

The big dream

When *Jamcill* is at last refitted, the McGarveys plan to shove off to do the inland waterway with her, heading to Florida. Then, if all goes well, they will sail to the Bahamas and perhaps continue on to the Caribbean. At that point, notes James, "If there is confidence in the boat and our abilities, then the big dream — the South Pacific." Will *Jamcill* ever go back to visit her birthplace in the Orient? Keep an eye on the Web site to find out.

James says of his Web site, "I guess the most satisfying part of building a community on the Net has been the hundreds of great email messages we get, thanking us for putting the information on Cheoy Lees in one place, plus making a place where people can get to know other owners of their models... We have made so many friends through the project, we hope to meet them in person some day on the water. It's been worth the effort, just to know that people from more than 60 countries use this site."

We, who sail for pleasure, often travel alone and find ourselves drawn to places of solitude and beauty in a crowded world. But we thrive, too, on exchanges with our peers and value the opportunity to share a good sea story or fix-it tip. The wonderful, and still largely unfettered, world of the Internet has been a boon to that exchange between sailors, thanks in considerable part to the work of self-taught html authors like Doug Axtell, Todd Johnson, and James McGarvey. 

Susan has written two books about boats she has known. Ariel's World and Sweet



Water both feature her good old 23-foot 1930s-vintage home-built sloop. She now sails Lake Ontario with her husband on Titania, a 32-foot Chris-Craft.

Doug Axtell's Bristol boats site:

<<http://hometown.aol.com/bristol32/bristolyachts.html>>

Todd Johnson's trailer-sailor site:

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

James McGarvey's Cheoy Lee Association site:

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

Other association pages:

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

<<http://sailboatowners.com>>

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

Dinghy storage solutions

I had always wanted a small rowing pram for a dinghy, so during our short cool winter, my daughter and I built one in the garage. Like many homemade boats, it ended up a little heavier and harder to pick up than I had planned.

Since we use the dinghy mainly for fishing and exploring the shoreline, we

don't tow it when we sail. It can fit on



deck at the bow, but I didn't like it there. I needed some creative ways to stow it when not in use.

My solution is primarily designed for a rigid dinghy, but with modifications it can be used on inflatables. The lower support that the dinghy rests on is about 8 inches long, but for the larger round tube of an inflatable, 16 inches is needed.

For boats with a slightly slanted transom and a swim ladder on the stern such as ours, this simple dinghy holder works great. The materials include 2 x 4 lumber, four flat L-shaped angle braces, two large screw hooks, and some carpet scraps.



This is an H-shaped frame with the hooks at the top of the H measured to hang on the swim ladder supports. At the bottom of the H are the two lower supports. These are reinforced with the L-shaped angle braces and covered with carpet to protect your hull and the dinghy. The entire length of the frame should be measured so the two lower supports are about 6 inches above the water. To help keep the dinghy in place, I attached a short piece of 1 x 1-inch wood strip on the top end of the lower support.

To raise the dinghy onto the frame, attach a Y-shaped rope bridle to one side of the dinghy, long enough to easily reach over the stern rail and into the cockpit. Center the dinghy against the lower supports of the frame and pull. The dinghy will pivot on the frame and rest against the stern rail, ready to be lashed down. This is a great way to keep the dinghy from filling with rain and to keep its bottom cleaner. We have sailed in light conditions with our dinghy lashed to our stern, but are careful to tow it or keep it on deck in rougher conditions.

For more permanent storage at our dock, I used similar materials and the same basic principle of the H-frame, except the top part of the frame is higher



(about 4 feet). This frame attaches to the dock with two 10-inch bolts that go around the rod frame of the dock and into a backing board. Tightening the bolts clamps it securely to the dock. This frame was designed to fit our dock. Your

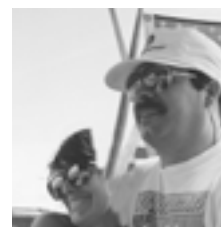
by Charles Duhon

dock might require some adaptations. At the dock, we raise and lower the dinghy the same way we do with the stern-mounted frame. Then we secure it to the top part of the frame.



Charles, here with wife, Lynn, has been an artist and sailor in the Dallas, Texas, area for more than 20 years. He dreams of retiring to paint and sail.

These days the Duhons are sailing a Hunter 34. See Reflections Page for more from Charles.



A more reliable seat in the head

There was very little wrong with our 1976 C&C 30, *Mystic*, when we bought her. The raw-water pump impeller was about to fail, the mast wiring needed to be replaced, and the hinges on the toilet seat were loose and about to break. The impeller and wiring are another story. The hinges on the toilet seat were obviously loose and distorted, and failed altogether soon after we took possession of the boat (or she took possession of us, depending on how you look at it).

I replaced the hinges with standard hardware-store parts that seemed equivalent. The new parts were not in service all that long before I replaced the head altogether, simply

because a new one, on sale, cost just \$30 more than the pump rebuild kit the old one needed.

In very little time the new hinges also failed, and I installed the hardware store ones again from the old head.

by Jerry Powlas

Right... I had not thrown it away yet. I was starting my own marine junkyard. By this time I was beginning to study why these hinges failed so quickly.

We've all seen toilet seat hinges that have failed on toilets that have never been to sea. This bit of hardware is not overdesigned, even for shore-bound use. In most cases, however, hinges will last many years in home use.

Shore-bound toilet seat loads are quite low and almost purely vertical, while toilets used at sea have very high loads that are often horizontal. Yes, I know that a well-designed head compartment would have handholds to help the seated person maintain position in a heavy sea, but this design feature is rare, especially in smaller boats. Staying in place in heavy weather in the head compartments of most boats involves using the seat as an anchor point, and this will quickly destroy the hinges.

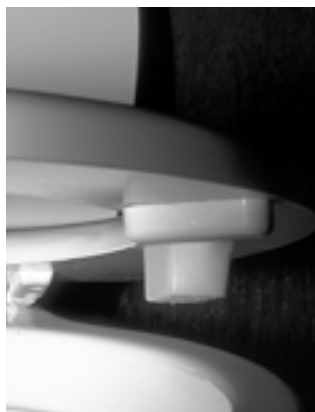
I reasoned that these hinges needed help with high horizontal loads. When replacement time came again, I added two pieces of high-density polyethylene to the bottom of the seat. I fitted them so they contacted the bowl near the widest point on both sides (see middle and bottom photos). When the seat was pushed to one side or the other, it immediately pressed the newly added stop against the bowl. These stops took most of the side loads imposed on the seat in heavy weather. The stops could have been made from hardwood instead of plastic. If made from wood, they should be painted to make them easy to clean. I was careful to measure the thickness of the seat and to use fasteners that would go almost all the way through the seat, but not quite come out the other side.

I used two #12 stainless sheet-metal screws per side and counter-bored the holes in the stops to adjust the maximum penetration into the seat. For a tap drill in the seat, I selected a drill that was roughly equal to the minor diameter of the screws. I put masking tape on the drill so I could gauge how far it penetrated into the seat. I used C-clamps to custom-fit the stops to the seat and then used the stops themselves as drill guides. This works best if the stops are initially drilled with the tap drill instead of the clearance drill. After the seat was drilled, I drilled the stops to the clearance drill size.

So, how does all this work? In heavy weather, the seat feels like it's screwed to the bowl. I did the modification four years ago, and the hinges are still very tight, and look as good as new. I still carry spares, of course, but I have not needed them.

Now, I wonder if I should do the seats at home ...

Jerry is Good Old Boat technical editor.



New oars for old

I purchased two sets of new oars more than 30 years ago for use with a beautiful 12-foot Whitehall-type rowing tender built by Jarvis Newman of Southwest Harbor, Maine. The tender and oars served for many years until, in a fit of lunacy, I sold the tender and one set of oars. The other set I kept. These oars had copper on the blades and leather for the rowlock and were varnished. Over the years, I continued using the remaining set with various

by Bill Sandifer

small boats until I built a 10-foot Nutshell pram from plans published in *WoodenBoat* magazine.

The oars are 7 feet 6 inches long and fit the pram very well. The increased use of the oars and the soft spruce wood combined to create a pulpy surface in spots on the oars. I tried sanding and re-varnishing, but the wood would never sand smooth.

I was afraid to remove too much wood, as I would weaken the oars. Determined to restore the oars, I sanded them of any remaining finish and coated them with epoxy. Once that had cured, I sanded the coating and applied a second coat of epoxy. The epoxy penetrated into the wood and stabilized it, allowing it to be sanded to a smooth surface. There were no more pulpy soft spots.

Epoxy does not like ultraviolet light and will degrade over time if exposed to it, so I used an epoxy primer and a white polyurethane top coat to protect the epoxy from damage. I sealed the blade ends with fiberglass cloth and epoxy and added leathers on the shaft to take the wear of the oarlocks.

The oars are five years beyond the day they were restored and look and work like new. The epoxy is flexible enough to allow for the bending of the oars. There has been no sign of surface crazing or cracking, and a little soap and water keeps them clean and bright.

Since then, I have used epoxy as a coating under varnish for interior wood doors and drawers on the boat, and it creates a new, deep-looking varnish finish. I am careful to use a top coat of varnish with UV inhibitors to protect the epoxy. The mast for the Nutshell was coated with epoxy and wrapped with fiberglass cloth. The epoxy turned the fiberglass cloth invisible and, with several coats of varnish, it looks just like a natural wood varnished mast but it is hard, strong and much tougher than if it were without the cloth and epoxy.

Have a problem with wood? Try epoxy to stabilize it prior to restoration.

Bill is a regular contributor to Good Old Boat.



Book reviews

Twenty-six years on a sailing sieve

The Boat That Wouldn't Sink, by Clinton Trowbridge. (Vineyard Press, 2000; 192 pages, \$19.95)

Review by Jay Burdick, Irvine, Calif.

“She was the sinking ship of all sinking ships: born sinking; the only sailing sieve on this or any other coast; a romantic but impossible craft.”

The Boat That Wouldn't Sink chronicles the love story of a sailor, his family, friends, and an old, leaky, attention-demanding, 34-foot wooden catboat called *Scatt II*. She was nearly a wreck when they found her, but in their youthful exuberance, they knew they'd be able to save her, replacing pieces one at a time.

The first time she was launched, she filled with water within two hours. They pulled her back out and patched, filled, and sealed every suspect spot. They found afterward that she leaked only moderately. “If you pumped her for 10 minutes or so every few hours, you could keep even with the flow.” The engine worked occasionally: “Hitting it with a hammer seemed to help.” The sail resembled “a great circus tent” with a 200-foot mainsheet.

What follows is a series of adventures and misadventures (mostly misadventures) and getting to be known by the local Coast Guard, who were called upon to rescue her way too many times. Their only piece of reliable equipment, it seems, was the much-used pump.

Disconcertingly for many sailors, a vivid description of the boat capsizing and the subsequent damage is followed by a section in which they took on paying passengers. They hired a youngster to hide from the passengers below deck, behind closed cabin doors, and continually pump out the water leaking in. Because of luck, and maybe Neptune's blessing, they never did sink with passengers aboard. The business was successful enough to finance further repairs to the *Scatt II* and to generally improve her condition.

Scatt II's crew, consisting of the author, his wife, Lucy, their four children, and miscellaneous friends and relatives grew to love her for all her idiosyncrasies. They sailed, bailed, and explored the eastern coastal areas from New Jersey to Maine for 26 years.

The book is pleasant and easy to read as it tells the story of the *Scatt II* and her family. Many sailors will identify with the mishaps and humor while the family learns about sailing and their boat. While this book is not Farley Mowat's classic, *The Boat Who Wouldn't Float*, it is enjoyable and just the thing for any wooden-boat owner to pick up after a few hours of bailing.



Making a major lifestyle adjustment? This may help

Changing Course, by Debra Ann Cantrell, (McGraw Hill/International Marine, 2001; 186 pages, \$21.95.)

Review by Barb Perry, Huron, Tenn.

I love skinny little books. They are usually thought-provoking and insightful, with the basic premise not lost and buried under a barge-load of non-informative words. Happily, this one is no exception. It's well written, concise, and informative.

Debra Ann Cantrell met a challenge for change in her life. In this work, she explains how she and others accepted and embraced major changes in their lifestyles, made successful transitions from “lubbers to cruisers,” and grew on many levels as a result. Because her partner wanted to change to a liveaboard cruising lifestyle (she was not interested, but wanted to see him fulfill his dream), she conducted a five-year study of women who followed the dream and became cruisers with their partners. Using her career talents, Debra has taken the information gleaned from her efforts and created a portable seminar about change — what it is, what it entails, how to face it and cope, and the reward of accepting the risk and making changes.

While the book is intended for women who have been asked to leave land for life on water, it would be appropriate for any person or couple contemplating a major lifestyle adjustment. It is infused with vitality, joy, realism, and a sense of “I-can-do-this” via the quotes, comments, and stories of 100 women.

She offers exercises to pin down what you want and how you feel. The vast array of subjects seems to cover most of the questions, concerns, and benefits that would be important to the average person. A few of the areas discussed are the process of change, steps to becoming an involved boat person, ideas to keep you busy while cruising, and how things will be different (and in some cases more difficult) on a boat. She tackles the multifaceted problem of fear — water, weather, heeling, and the “what-ifs” that go with it. She discusses other emotional issues of family, gain and loss, communication, partner compatibility, and conflict with candid openness but without bashing.

The book seems fresh and honest, and the author is warm, enthusiastic, and encouraging. Debra never tries to tell her reader what to do or how to do it. She offers information, options, choices, ideas, and ways for you to determine which is best for you. She says take your time, make your best choice, and risk the challenge. In her own words, “A life without change is void of vitality, passion, and joy . . . But in order to change we must take risks.” This is a safe risk — read it. Even if you believe nothing changes, everything does — and this svelte volume may help you through the chaos.



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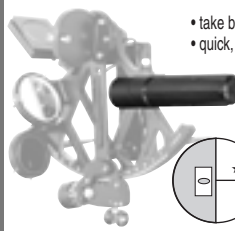
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More book reviews

All you ever wanted to know about knots

The Complete Book of Sailing Knots, by Geoffrey Budworth (The Lyons Press, 2000; 144 pages, \$18.95 in U.S.; \$28.95 in Canada.)

Review by Donna Palmer, Pleasant Lake, Mich.

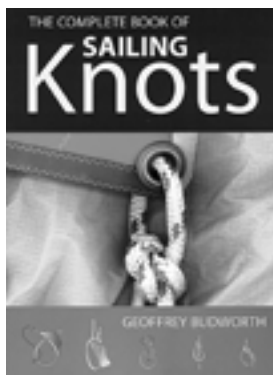
While you were standing on a dock or a pier, did anyone on a boat ever throw the end of a rope to you and expect you to know what to do with it? It is comforting to a singlehanded skipper to trust that the person receiving the line is knowledgeable enough to tie it off to a dock cleat or piling. This is one of many reasons why boaters of all levels of proficiency can make good use of the information within the covers of this book.

Along with being the author of this superbly written and beautifully illustrated, easy-to-follow, instruction guide for 69 of the most useful nautical knots, Geoffrey is the co-founder of the International Guild of Knot Tyers. As only an Englishman can do, he carries a great, but subtle, dry humor through his book.

The author not only leads you through each knot with easy-to-follow instructions and illustrations that include applicable uses for each knot; he then gives a comprehensive guide to the history and development of each knot. This is an enjoyable book about what can be a very boring, dull, and confusing subject.

He states: "It is true that the days are gone when dockyard riggers and sailormen devised and named new knots, bends, and hitches. Today it is the anglers and the climbers who are the innovative knot tyers." He adds: "Both groups require knots that are strong and secure — only the scale differs." The book covers numerous tips, terms, and techniques related to tying knots. It then breaks down the knots into five categories: stoppers, bindings, and shortenings; single, double and triple loops; bends; hitches; and other useful knots. The book concludes with the 10 golden rules for knot makers, a complete glossary, a thorough bibliography, and an extensive index. Geoffrey's ending comment is: "Some knots are thousands of years old and, during the millennium just completed, knotted ropes have facilitated the growth and development of nations in numerous ways."

As all sailors learn sometime during their boating days, equipment only fails when we are miles out on the water and far away from a repair yard or when the weather kicks up furiously enough to cause a life-threatening situation. In many of the situations we get ourselves into, the best knot — well tied — can come to the rescue. Therefore, I recommend this volume as a prime, essential reference for your boating library. You never know when your knot-tying expertise may be needed down the road or out across the waters of life.



Bob Bitchin's cruising: A non-Pardey approach

Letters from the Lost Soul: A Five Year Voyage of Discovery and Adventure, by Bob Bitchin (Sheridan House Publication; 2000; 288 pages, \$29.95.)

Review by Chuck O'Brien, Leonardtown, Md.

Attitude is the only difference between an ordeal and an adventure. That's the adage Bob Bitchin lives by as he ventures across the Pacific and Atlantic Oceans in his 1981 Formosa 56, the *Lost Soul*. Highlighting five years and 45,000 miles in a compact, analogy-laden book, Bob takes the reader from California to French Polynesia and back in a mere 83 pages; followed by another 51 pages of cruising down the West Coast and through the Caribbean on to the Azores; and then he squeezes in the Mediterranean and return passages, back to California, in the final 100 pages.

Not surprisingly, the reader will find this book a smorgasbord of all-too-brief summaries of passagemaking, boat maintenance, port descriptions, shoreside excursions, individual biographies, and thoughts on life in general. Other authors may write an entire book on a single topic or region. For sailors who have already followed the exploits/expetives of Bob Bitchin in his numerous *Latitudes & Attitudes* magazine articles, this book is redundant. This book is, in most cases, a word-for-word repetition of those articles that have appeared in the magazine since it was founded by the author in March of 1997.

What happens when a 350-pound tattooed biker-turned-sailor goes cruising? Bob, admittedly, trails the wake of an indulgent, decadent, cruising lifestyle. Misadventures range from being in a Costa Rican prison to reckless, near-catastrophic, passes through reefs. I can't help but believe that this is the image the black-clad biker wants to portray. I suspect Bob Bitchin is as much a savvy businessman as he is a competent cruiser. It takes seamanship and proficiency to salvage a large cruising boat that had been neglected for years, extensively modify and outfit it for extended bluewater passagemaking, then maintain it and cruise halfway around the world. After returning, Bob started a successful new cruising magazine, now in its fourth year. Both efforts take planning, discipline, and business focus.

Unsuccessful at selling the *Lost Soul* after his return in 1995, the author has recently completed an extensive overhaul of his boat and will, no doubt, be headed offshore again, seeking more of the "bluest, whitest, greenest" islands on earth to party on.

Like a controversial movie that some applaud and others scorn, *Letters from the Lost Soul* will not have ambivalent readers. If you like the magazine, I recommend the book.



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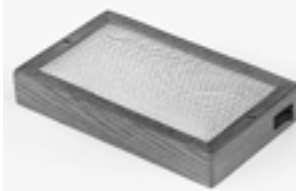
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Hints and tips for all liveaboards

The Best Tips from Women Aboard, edited by Maria Russell, (Seaworthy Publications, 2000; 179 pages, \$14.95.)

Review by Toi Mize, Arlington, Texas

Never spend more than 30 seconds fighting a fire. If the fire can't be extinguished, get everyone off the boat." This tip from the new book, *The Best Tips from Women Aboard*, hit me like a ton of bricks. After living on board four days a week for three years on our Islander 34, *Seafox*, I had never heard or read this vital information.



This 177-page tip-filled book covers many areas of boating from safety, storage, and supply lists to engine winterizing and "pooh boxes" on board for pets. I particularly enjoyed the sections on tried-and-true products, keeping fruits and vegetables fresh (I am having a real problem with lettuce), and cleaning tips. The use of specific product names and where to purchase them was an added bonus. I am eager to try the simple recipes for cleaning products made from basic ingredients such as baking soda, vinegar, Clorox, and salt. I have found double-duty supplies to be best on my limited-space boat. Sections on children and pets gave me enough information to make an informed decision about having them ... or not.

I bogged down in the Engine Room and Fuel chapters. These sections seemed too technical and wordy. I absorbed just enough information to be dangerous. In my opinion, this chapter should be a book of its own with lots of pictures. Although land-locked at this time, I found the tips on cruising south of the border along with communications while cruising most informative and a definite read before you go. I paid real attention to the section on what to expect during a Coast Guard boarding. I find detailed information such as this before the event makes for calm nerves and calm cruises.

This book covers a lot of topics. It gives basic information that would benefit anyone who finds himself or herself aboard. In every book I read I feel it is worth the time spent if I learn one thing I can use. In this quick, easy read I found lots of things.



Useful, but patchy, intro to astro-nav

Celestial Navigation in a Nutshell, by Hewitt Schlereth (Sheridan House, 2000; 144 pages; \$13.95.)

Review by Richard Emerson, Lansdale, Pa.

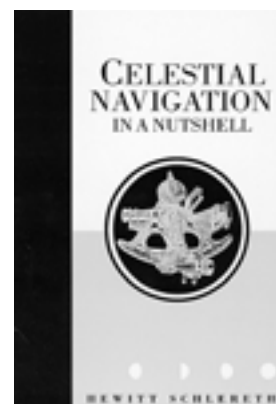
I was introduced to celestial navigation, in part, by Hewitt Schlereth's earlier book *Commonsense Celestial Navigation*, now out of print. I was, therefore, eager but somewhat intimidated by the prospect of reviewing a new work by Schlereth. Unfortunately, this book is a disappointment.

The book opens with an excellent summary of what navigation is all about: "Navigation ... has two steps: (1) Keeping the [dead reckoning position], and (2) Periodically checking it by other means. In reality, navigation is a process of the one checking the other."

In short, the job is about making an educated assumption about the boat's position and then checking the assumption with outside data. In the case of this book, that data comes from sextant work with the sun, moon, planets, and stars.

What follows is a lengthy (for a "nutshell book") discussion of why celestial navigation works.

The discussion brings in spherical trigonometry and presents specialized terms, for example, "great circle," without defining them. The steps through sight reduction using printed pre-computed tables are direct, if somewhat clouded by theoretical discussions. The table entries in the examples are highlighted in the illustrations by careful use of screening over the tables. Unfortunately, the line illustrations are no more than workmanlike. This book deserves better artwork.



After reading about the importance of keeping the dead-reckoning track, I found the plotting-sheet examples of this critical task received far less discussion than how positions are determined. With a number of lines of position, or LOPs, on a sheet, clarity and organization are vital if the plotting sheet's information is to be understood. Why Schlereth draws lines toward the sun's geographic position (the spot on earth where the sun is directly overhead) escapes me. It's enough to mark the LOP with the time of the shot that produced it and the appropriate symbol for the sun. The process of constructing the LOP is enough to reconstruct a line to the geographic position — something that is rarely needed anyway.

I've skipped over the particularly nice choice of using Venus as the introduction to shooting something other than the sun to get an LOP. The concluding discussion of accuracy in navigation is also well worth reading. As a whole, this is a book that tries hard to reach port but seems to be still at sea, foundering in complexities best left for extended discussions of celestial navigation.



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Several cruises and books followed (some of which unfortunately are out of print). While in his 50s and 60s, Hal wondered about single-handed sailing, and raced twice in the BOC Challenge Race on a Bill Lee-designed Santa Cruz 50 retold in two books, *Chasing the Long Rainbow* and *Chasing the Wind*.

Next the Roths bought a used Wauquiez Pretorian 35 in 1993. This boat is also named *Whisper*. As they closed in on their 70s, when many people retire from sailing, the Roths crossed the Atlantic to study Odysseus' epic voyage. These are marvelous people, and Hal tells their many stories well. Hal is working on another book which will be titled *After 200,000 Miles*.



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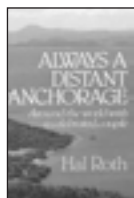
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(carry over to Page 65)

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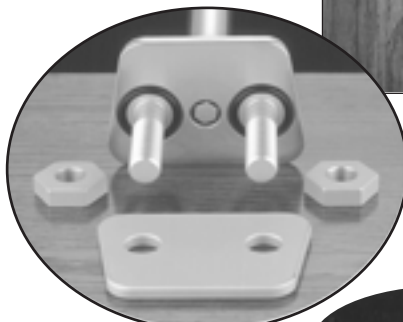
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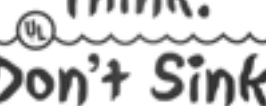
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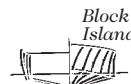
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William Triggs
Rochester, N.Y.

Keel modifications

Ted Brewer's article in the July 2000 issue was of great interest and, taken in conjunction with the chapter on keel design in Killian's recent book, is quite revealing. In the article there is discussion of the drag caused by vortex leaking from the high- to low-pressure side under the keel tip, and this seems of greatest relevance in fin keels.

I wonder if Ted could comment on full-keel designs. My own boat, an S&S custom CCA cruiser/racer design, had the full keel modified to a V shape from the normal U a year after launching. The lead that was removed was let in aft. Combined with a Constellation-type rudder, apparently this gave the boat a certain edge at the time.

Of course there was no end plate as discussed in your article. Bearing in mind that many older full-keel classic designs may have a pronounced toe and more or less drag to the keel profile, would you comment as to whether a retrofit to an older profile keel would enhance its dynamics and consequently generate more lift and speed? Surely if the keel has any drag, the end plate could not be fitted at the extreme tip of the keel (whether the bottom edge is U, V, or flat) but would have to be fitted parallel to the waterline at the highest forward edge. A small portion of the ballast keel would then be below the end plate. Would this negate any benefit or indeed cause additional drag and would the factor of earlier keels not having a full NACA section also come into the equation?

The question I am asking is: can we cheat and improve the performance of a vintage or classic full-keel shape by the use of an end (or nearly end) plate, or would this spoil the waterflow and create further drag?

Patrick Matthiesen
London, England
Sparkman & Stephens Association

Ted replies

It's difficult to say how much adding an end plate would help a full-keel vessel. Naturally the plate would have to be parallel to the LWL to prevent added resistance, and this means it would need to be fitted at the height of the toe and be partway up the keel if the keel was sloped down aft. The degree of slope would probably be the deciding factor as to whether a plate would be of use or

simply added wetted surface. I tend to believe that the plate would help reduce vortices and related resistance if the slope was not excessive, but each boat would have to be considered individually.

Ted Brewer
Gabriola Island, British Columbia

Disturbing discovery

During the last year, I've learned more about taking my engine out and putting it in than I wanted to learn. Between the flange plates that connect the engine to the propeller shaft, I am using a polyurethane disk as a shock absorber. When I took it out (after five years in service), I found that three of the four bolts securing the disk to the engine flange had lost their nuts, and the fourth nut was almost off. This was, of course, a very disturbing discovery.

When I put the engine back in, I put in a new poly disk (distributed by PYI) with new bolts and nuts. These new nuts were heavy hex with nylon inserts as a locker. You can bet that I made those nuts very, very tight. Unresolved engine problems made me remove the engine again after 40 hours of service. The bolts/nuts were secure, but somewhat looser. They had loosened from very, very tight to pretty tight, easily loosened with wrenches.

My question is: what kind of nut will be most secure in this very stressful, high-vibration application? I want nuts that will not loosen, but which will be removable in the future when necessary. Needless to say, these bolts are in a very awkward place to reach.

In examining the McMaster Carr catalog, I see three choices that look good, but which is best?

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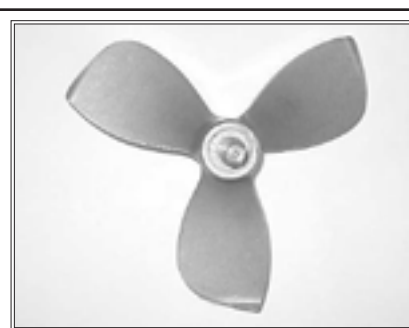
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3. heavy hex, cadmium plated steel no. 94827 A 031

Would it be a good or bad idea to use Loctite with any of these nuts? There are a few more choices (including fine thread) if I go with regular-size nuts instead of heavy hex, but I like these bigger nuts and maybe the poly disk is set up for the larger nuts. Many thanks for your suggestions.

Ben Stavits
Bala Cynwyd, Pa.

Ben, I don't know of a good resource for your question. I also will be checking my



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own coupling bolts for tightness now that you have raised the issue.

Are you using washers under the nuts? It would be nice to know if the bolts are elongating or if the nuts are truly backing off. A little marking on the bolt face and nut would tell you that. Any fix will need to know which is happening. If the nuts are walking, flat washers under them will help. If the bolts are elongating, a higher grade bolt with a higher tensile strength will be indicated.

I'm trying to remember what the bolts clamp up. Maybe you are getting some crush on the clamped parts (sleeves in the isolator?), in which case a few tightenings will generally get you to a stable situation.

The use of Loctite-type anaerobic thread lockers is a bit dangerous in any situation where there is plastic present. The strong anaerobic thread lockers will attack some plastics rather dramatically, causing failures as much as a half a foot from where they are first applied. If the nuts are truly nylocs, the insert is (naturally) nylon. If the nuts are a knock-off, the insert may be almost any plastic. The plate is urethane I think, but you really need to know the materials for certain and then find an anaerobic thread locker that is made to be used in contact with these plastics. Such thread lockers may exist. The electronics industry needs thread lockers to be used around plastics. The ones I have evaluated (in another life as an engineer) were not as effective at locking the threads.

As for materials, I think the bolts in my coupling were cad-plated, and I would not be afraid to use a cad- or even zinc-plated grade 7 bolt and nut if you can find these. I think the existing bolts are metric, and that means the clearance holes are too. Obviously, care is needed if substituting SAE for metric.

I think the folks at PYI might be the best resource for this problem, and I would also trust the folks who made your coupling (R&D?).

I'd also suggest that the alignment of the engine be evaluated, but I bet you did that already. If your engine is aligned with the engine mounting plates too high on the vibration isolators, the static alignment with the engine off and the running alignment may vary quite a bit. If the engine is too high on the isolators, the thrust from the prop will move it, and the alignment will be changed. Also, some boats must be aligned with the hull supported in the water. This was not the case with my own boat but may be with others. I have even heard that adjustments to the standing rigging can change the engine alignment. I suppose that is possible, but again, I doubt if it is true for all boats.

Please let us know the outcome.

Another question for Ted

Love your magazine, it's the most fun to read of all the magazines I get. I was wondering if you could pass on a question or two about rudder design to Ted Brewer. On my Ranger 37 (old IOR design, and I've read Ted's thought on IOR boats) the rudder is original and fairly small. When going downwind the boat is squirrely, and I have to apply quick, maximum rudder deflection to stay on course. In following seas the problem is magnified, and the boat is almost uncontrollable. I had a memorable five hours off the coast of Vancouver Island when I couldn't leave the helm and was ramming the tiller from one side of the cockpit to the other in a vain attempt to not broach in the 35 knots and 10-foot seas.

Continued on Page 74

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messing about in boats

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And we like the denim shirts, and we like the ball caps, and we like the Tilley hats. It's hard to make up our minds. *What do we like best? We like seeing these things on you!*



Ted and Betty Brewer, wore their long-sleeved denim shirts at the Antique and Classic Boat Show in Victoria, British Columbia. As the honorary commodore, Ted rode in on the Canadian Naval cadet training ship, *Oriole*, to open the show. Betty wrote about the show: "There were close to 100 classic and replica yachts of all sizes and types present, from a 96-foot tug to the 17-foot runabout Ted designed for the Silva Bay Boatyard School." John West was chairman. The Brewers are sitting on the stern of John's motor yacht, *Scaup*.

We like the way **Charlie Perry** looks in his new Tilley hat, below. And he didn't even have to wait until Christmas to get it.



Artist **Dave Chase** designed the "work for boat parts T-shirt." It depicts Old Sam Peabody (who bears a striking resemblance to Dave) sitting on the dock offering to work for a couple of boat bucks. While Dave's adept with a pen, he's obviously got his shirt on backward. **Susan Chase** knows how to put a T-shirt on correctly.



Jerry Stearns is the *Good Old Boat* webmaster. He's been working around the clock to revise the *Good Old Boat* Web site. If you haven't been there lately, you might want to take a look. Jerry's wearing the short-sleeved denim shirt. It was a condition of employment. He insisted on a weekend on our boat and a shirt ... or no deal. Now that the site's coming along so well, we wonder what he's going to ask for next.

Continued from Page 71

Other R37 owners I've talked with have increased the depth of the rudder, and report that the boat is much tamer going downwind, plus it seems to have less weather helm as well. I imagine this might be due to the CLR moving aft a touch. My questions to Ted would be: (1) would a deeper (in the vertical sense) elliptical rudder be helpful for this boat? and (2) if so, what approach should I take in either adding to the existing rudder or getting a new rudder built for the boat? I've heard that Foss

Foam in California (or Florida) has molds for many rudders and might be able to provide a new rudder for the boat, but I'd like one that would work, not just throw together something "bigger."

August Hahn
Seattle, Wash.

Ted's response

I'm sure a deeper and elliptically shaped rudder would ease your weather helm problem. However, such a change adds substantial loading to the rudder stock, and you need to consult a yacht designer who can inspect the boat and calculate

the effects of such a change. You may have to increase the diameter of the rudder stock and, of course, the rudder port and bearing if the effect of the change increases the load substantially.

A point to keep in mind when you are "applying quick, maximum rudder deflection to stay on course" is that a spade rudder tends to stall out at helm angles over 15 degrees. Once that happens you have, effectively, no rudder at all. Try to anticipate the required course change, seat-of-the-pants sailing, and then move the rudder slowly to correct, but not to over a 15-degree helm angle.

Similarly, when beating to weather, move the rudder slowly to where the boat begins to turn, not over 15 degrees, and then you can gradually increase the helm angle as the angle of the turn increases.

Ted Brewer
Gabriola Island, British Columbia

What a great article

What a(nother) great article by Ted Brewer ("A thing of beauty," Nov. 2000)! Just reading it helped me understand why I sketched boats on the back of my high school notebook, why my heart beats a little harder – and my eyes get teary – when I run my fingers along the

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Associations list a good discovery

I just discovered your great Web site and magazine. In particular, your associations page is awesome. I never knew the builder of our Cape George 38 had a Web site until I found it on your page. Thank you!

Tim Whelan
Sammamish, Wash.

Hip, hip, hooray!

A short line to applaud your renewal request policy. I've gotten so fed up with multiple, non-informative renewals that I've started a policy of simply putting in the round file any renewal request that doesn't include an expiration date. Your forthright approach is a breath of fresh air! And that goes for the magazine, too. Keep up the good work, and don't go big-time!

Peter McCorison
Eastsound, Wash.

If it works for you . . .

By the way, I found a great way to read your *Good Old Boat*. If you read only one or two paragraphs each time you pick it up, it will last you for a couple of weeks, and you won't have *Good Old Boat* withdrawal until the next issue comes in!

Chuck Jones
Trenton, Ontario

C&C Corvette Assn. <<http://www.reach.net/~cjones/>>

That was a close call!

The bosun's chair has been sold, thank you (for the classified listing). You might enjoy hearing about how the meeting went with the buyer. I received an email from Kevin. We agreed to meet in a Denny's Restaurant parking lot. I told him I would be driving a green 1997 Jaguar sedan. He responded that he would be driving a white 1999 Ford sedan with a blue stripe.

As we pulled into the Denny's parking lot we drove slowly, looking for a white Ford sedan with a blue stripe. We passed by a police car. His window was rolled down, and the officer looked as though he wanted to speak to me. But he didn't motion me over, and I couldn't think of any reason he might want to talk to me (I hadn't run a red light). So I drove by. Next thing I knew, he had turned around and with his red and blue lights on, had pulled up behind me. Panic!

As he got out of his car and approached me, I rolled my window down and began to explain that I hadn't realized he wanted to speak to me when I drove past him. But with a grin on his face, he asked me if I had a bosun's chair for sale. Then it hit me: he was driving a white Ford sedan that had a rather large blue stripe (not a pinstripe) down the side of his car (with POLICE superimposed on it). Kevin had neglected to tell me to look for a police car; he really had me going! We all had a good laugh, and the sale was concluded.

Roy Pringle
East Sound, Wash.

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

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In my own backyard

We try to refrain from using the words “sport” and “sailing” in the same sentence, preferring instead the softer concept of “recreational activity” to the hard-core idea of “sport.” But in this case, the training-cum-deck-shoe fits, so I’ll wear it.

In sports, as in all things, there are levels of achievement. A jogger might aspire to run marathons or to achieve Olympic-team status. Or she might be content to run around the neighborhood for the adrenaline rush, for the increased heart rate, for the joy of running, for the health of it. As a runner, she chooses her level.

Running’s not for me. I tried. But biking brings a smile to my face every time. As with running, I could train for long-distance rides or races, the Tour de France, Olympic team selection. Or I could jump on my bike a couple of times a week and ride to the post office or the library, rather than driving there. I could pedal joyfully around either of a couple of nearby lakes, with no destination at all, and arrive home once again elated. I could appreciate the occasional bald eagle or great blue heron sightings as I rode, enjoy the wind on my face, and arrive healthier and more alive than when I left.


How is sailing different? I could train and race and aspire. There are big leagues for those who enjoy racing sailboats: Around Alone, Olympics, America’s Cup, Whitbread, even world-record passages earned for speed, age, gender, or some other criterion. And there are many very pleasurable ways to race sailboats locally and have a lot more fun.

As cruisers, we have our own big league. We are compelled to circumnavigate. Or are we? Must we have completed a bluewater voyage to be accepted in the club of hale and hearty sailing voyagers? Must we be preparing for such a voyage, or say at least that we are, in order to save face?

My response is no. My cruising ground is a delight for me; I enjoy every moment I’m on board and each exploration we undertake. I love the scenery, the ambiance, the other sailors, the medley of life and wildlife we experience while sailing.

by Karen Larson



All this is possible right here in my own backyard (when it’s not frozen, of course). While I want to continually improve my skills, I feel it’s unnecessary to “train for a higher level of my sport” in order to impress others (both sailors and non-sailors). I’m having too much fun sailing every time I get the chance. 

Some people said that wasn’t much of a photo of Mystic in our September 2000 issue on the Reflections Page. Here’s another view of our good old C&C 30.

The last cruise

by Charles Duhon

I have always admired my best friend. We had been sailing together for many years, sharing careers, racing similar boats, and having boats in adjacent slips. We also spent countless windless evenings just talking and dreaming about messing about in boats for the rest of our lives and what course those dreams might take. Since sailing to us was in a large inland lake, we naturally were looking forward to feeling the ocean swell and experiencing some kind of cruising lifestyle. For me, this goal is reserved for near retirement. But for my friend, a career change to the coast gave him the opportunity to make his dream a reality earlier.

The coastal cruising club and community of local liveaboard sailors was the perfect place for my friend to gain valuable experience and knowledge as well as great relationships with some wonderful people. I was impressed and a bit humbled by all the important skills needed to sail and maintain a larger boat in coastal and offshore waters. Needless to say, this was the major motivation for me to purchase a larger boat and to begin learning the necessary skills for myself. But it was the people in these sailing communities who impressed me the most: a very friendly, helpful, almost family type of people you knew you could count on if the going got rough.

My friend met and married a wonderful woman who reveled in sailing. They fell in love with a classic boat, a 45-foot ketch, and in a few months were living aboard and planning for their retirement of cruising in less than 10 years. We were lucky to sail with them on several short cruises, and it was their accomplishments that got my wife interested in the cruising lifestyle.

Shock and disbelief overwhelmed us the day we learned that they had been returning in their dinghy and were run down by a large speeding powerboat in the protected waters near their marina. Due to the extreme noise of the engines, it is possible the operator of the powerboat never even heard the collision or, even worse, chose not to stop and render aid. Sadly, my friend lost his wife in the accident, and he was badly injured and spent a terrifying night clinging to the sinking inflatable as it drifted out into the bay. Almost the entire cruising club attended his wife's funeral, and a few days later a small flotilla followed my friend's boat on his dear wife's last cruise to scatter her ashes on the ocean. They did not have a legal will, so my friend lost his boat in court, and eventually he lost his desire to sail.

Everyone who was part of their lives and who knew of her love for her husband and for sailing would agree that his wife would not want him to give up his cruising dream. Grief can be a powerful, yet subtle, force to live with, and I cannot begin to understand how I would react if I were in his place.

A sailor's life can be exciting and dangerous; please be careful out there. Always count your blessings and remember your dreams.



Reflections



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

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

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

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

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