GOOD OLD BOAT™

Article eXtractions

Refit Boats 18 - 27 footers

Small boats for young families, new sailors, and downsizers

Some of these project boats are free to a good home.
Others, if they have a purchase price, won't break anyone's budget.
As projects go, their smaller size means the work goes faster
and doesn't cost as much as their bigger sisters.
Once restored, these classics are heart-breaking beauties
and the source of pride of many a sailor.

All articles were published in Good Old Boat magazine
between May 1999 and November 2015.

Refit Boats 18 - 27 footers

Thank you for purchasing the 18- to 27-foot edition of Refit Boats.

A common, but nonetheless incredible, dream comes true when a sailor buys a sailboat in need of work and has the vision and skills to make that sailboat seaworthy and beautiful once more. At *Good Old Boat*, we call it "the affordable dream."

Our magazine was founded on the premise that hundreds and hundreds of fiberglass sailboats of all sizes were just waiting for sailors who could see their potential and were willing to invest time and money on rescuing them from a slow decline. During our first year of publication, we began receiving stories about boats that today you might call "rescue boats." These were tales of the efforts sailors had made to clean and upgrade boats that were no longer loved. By the end of each article, however, these boats were sailing again and their rescuers knew every nut and bolt aboard . . . every through-hull . . . every tank . . . every wire.

Some of these rescuers have amazed us with the tales they have told about the "before" condition of their sailing gems. If words alone won't do it, photos of the lichen-covered decks and mossy teak trim have verified these tales. There are countless stories of the damage that has been done to a boat after it sat so long that the cockpit drains clogged and water ran below. Part of each story is the initial effort it took just to make the air inside safe to breathe, simply to purge the boat of all filthy cushions and fabrics, merely to destroy the mold and mildew . . . all so the real work of rebuilding and replacing could begin.

Some refit boats were rescued following a sinking. Some had a fire in their past. Some fell off their stands. But all came back thanks to the love of a skilled and patient sailor. Sometimes the important skills were learned "on the job," as someone who never held a wrench or stirred a pot of epoxy asked, "How hard can it be?" By the time a boat has been fully rehabilitated, that someone has accumulated all the required skills one step at a time and fully deserves the self-confidence that resulted.

You've read these tales too and perhaps have your own pride of accomplishment knowing you have brought your own refit boat back to good-as-new condition. We hope this collection of refit articles will fill more sailors with the necessary can-do spirit that will have them happily sailing their own boats, sailboats they are proud to say they saved from decline or certain destruction. They are the ones who have made the affordable dream come true.

The *Good Old Boat* crew

CONTENTS

Good old catboat

Before the refit:* Dabbler *as a Marshall Cat Sanderling.

AT AN AGE WHEN MANY SAILORS retire, sell the house, move aboard, and go cruising, my wife, Dee, and I built a house, sold the boat, moved ashore for the first time in 25 years, and started a business.

But we didn't walk inland with an oar over our shoulder; we "retired" on the shores of the Chesapeake, just to keep our options open. And while we learned about hammers and saws, we were each privately thinking about all that Chesapeake water. When we started talking about it, we discovered we knew exactly what kind of "retirement" boat we wanted:

- Very shallow draft (2 feet or less) to give us access to little-used marshy headwaters and other unspoiled Chesapeake niches, let us moor in our local creek, and use the primitive launch ramp there.
- Courageous sail area for the bay's light summer air but on a divided rig for easy reduction in squalls and breezy weather.
- Accommodations for short cruises, with emphasis on staying out of the sun and bodily comfort generally, including good ventilation for summer and a wood stove for winter.
- Inboard power (for all those rivers).

Unfortunately, we knew of no such boat. But we had recollections of encounters with a couple of little catboats — Marshall 18 catboats, called Sanderlings — that impressed us with their abilities and possibilities. We saw one in the Gulf Stream, in reefing weather, making no more fuss than our deep-water ketch. We knew one in the Bahamas that could explore wherever we could take our sailing dinghy.

In magazines, we found photos of Sanderlings and defaced them with sketches and doodles. Encouraged by the ease with which a pencil transformed the little daysailer/overnighter into our idea of a comfortable, handy pocket cruiser, we decided we could work the same transmogrification on a real Sanderling, substituting a Sawsall, epoxy, and plywood for the pencil.

by Stuart Hopkins

All we needed was a lonely, battered, decrepit *(cheap!)* edition of the design to operate on. Since Sanderlings have been in continuous production since the early 1960s, this would surely be possible.

Right off the bat, we found her. The voice on the other end of the phone in Florida said "Hull and deck sound . . . otherwise not too good." No trailer. No equipment. No motor. Suspicious sponginess in plywood components like cockpit and bulkheads. Old sail. Built in 1966. Cheap. Just our meat.

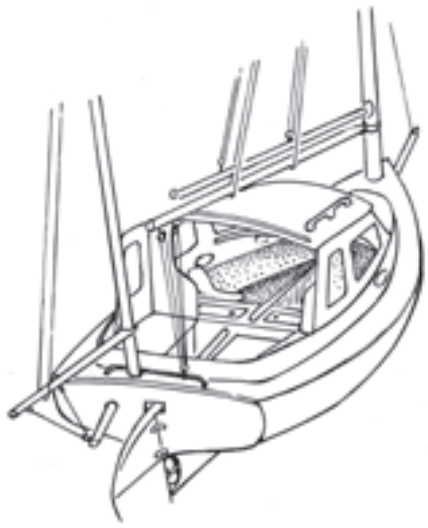
A terrifying round trip on I-95 landed this econo-prize in our driveway.

Dee (a woman used to Brixham trawlers, Gloucester schooners, and deep-water yachts) stifled her reaction when she discovered we couldn't even *sit* upright below! Instead, she went to her studio and began some serious sketching and doodling. I (a sailmaker) rigged the boat where she lay on her trailer, and backed off a few yards to imagine how she would look as a yawl.

One of a kind:* Dabbler *following the "transmogrification."

Original Marshall 18 Sanderling.

***"Transmogrified Marshall 18," also known as* Dabbler.**



Sketch of revised interior.

While mulling over several schemes, we took a mattock and removed almost 200 pounds of bad plywood cockpit seats, sole, and waterlogged foam, right down to a naked hull from the companionway aft. This made it easy to plan for an engine installation, tankage, storage, and comfort. The finished job included a lucky bargain — a 10-horse Kermath that had lain for many years, mothballed, in a local boatbuilding shop. We had no interest in sharing an 18-footer with a diesel. This smooth, quiet antique went in without problems.

A cutout in the solid glass "deadwood" ahead of the rudder (Sawsall job) accommodated the stern bearing and prop. We measured for the beds by suspending the little engine in place from the boom. With an 11-gallon aluminum tank, blower, and electrics, we were beginning to look forward to poking up rivers and creeks in style.

We replaced the original benches with a U-shaped cockpit surrounding the engine box and introduced a bridge deck with big lockers and more lockers aft. We dropped the sole several inches for more leg room. Under the seats, outboard, was space for bins and sailbags held in place with removable fiddles.

Our more comfortable and useful cockpit (worked up out of CDX and epoxy) weighed about what we chopped out. A few pigs of lead ballast were removed to compensate for the motor.

We launched the *Dabbler* (named after the mallards that dabble in our local creek) for some cruising with a local club. The inboard and new cockpit were a great success, but otherwise the experience confirmed our opinion that we wanted to replace the single big sail with a divided rig. And after a few nights cramped below, we could hardly wait to haul her out, grab the Sawsall, and take the lid off the sardine can.

Doghouse cum main saloon

Some of our bold, even arrogant, sketches evolved from a doodle for a dodger. Why not make the dodger rigid and cut away the aft part of the cabintop so the hardtop effectively encloses a greatly enlarged cabin? Why not provide standing headroom for the mate (5' 5"), with a little "galley" on the new bridge deck? Why not have full sitting headroom on comfortable chairs aft of the bunks? Why not fit removable windows and screens? Why not extend the roof far enough aft to provide shade and spray protection for the helmsman?

"We decided we could work the same transmogrification on a real Sanderling, substituting a Sawsall, epoxy, and plywood for the pencil."

A mockup in cheap ⅛-inch luan ply (which later served as templates and as a building mold for the final construction), proved there was no reason why not.

A few minutes of surgery liberated about 90 pounds of cabintop and bulkhead. Immediately, we could test with our bodies the thesis expressed on paper. Proof we could sit upright, surveying some lovely, lonely anchorage from the comfort within, spurred the work.

The house was designed to join the existing structure across the cabintop a few inches forward of the original hatch opening with an epoxy filet; outside the cabinsides and cockpit coamings, with a 2-inch overlap, were epoxied and throughbolted.

We turned our backs on the local lumberyard for the deckhouse project and ordered expensive 3-mm okoume marine ply to be laminated in place over the mockup to lock in the heavily cambered top and curved front and create the eyebrows that trap the removable polycarbonate windows. All the construction was done in a corner of my small sail loft between sailmaking jobs.

We barely got it out the 8-ft wide doors! It dropped in place as neat as a cab on a pickup. Final weight was less than what had been removed with the Sawsall.

The new effective interior includes the bunks (as original), our "easy chairs" (cheap but comfortable plastic swivel-bottom fishermen's seats) port and starboard, the bridge deck, comprising "galley" with gimbaled kero stove to starboard, solid-fuel cast iron Pet to port, and the forward half of the cockpit. At anchor, if desired, the fitted Sunbrella aft closure snaps in place, enlarging the "interior" to include practically the whole boat. In cold or wet (and on the mooring) the large screened opening in this closure is covered

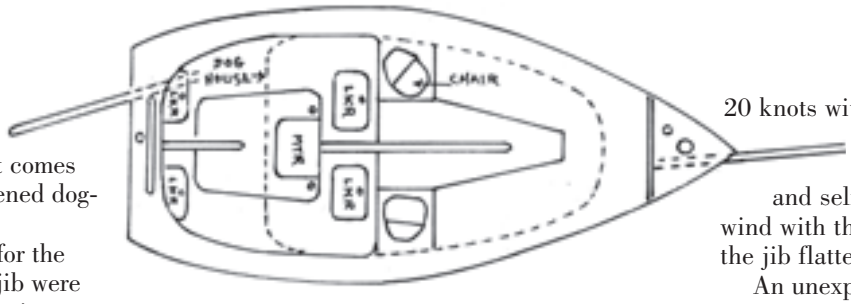
with a vinyl window. Otherwise, the screen liberates the breeze that comes in the forehatch and opened doghouse windows.

Eventually, controls for the main and roller-furling jib were brought into the house to jam cleats on the shelf formed by the little bit of cabintop inside. Raising, dousing, and reefing the main are all done from "below" *standing up!* Ditto deploying and furling the jib. What joy! Which brings us to:

The rig

There is no novelty in the cat yawl rig. The aim is to easily have more sail area when you want it and less when you want it in order to balance the boat under almost any condition. We have about 25 percent more sail area in the three working sails than the original cat rig. From the comfort of the cockpit, we can set a mizzen stays'l, and be flying 375 square feet. In races, we have been able to astonish the locals with five sails.

The new rig satisfied all our expectations. Sails can be adjusted to tame weather helm (a notorious fault of catboats) or dropped (instead of reefing, notoriously difficult in catboats) to suit the breeze. In gradually increasing wind, the mizzen might come down to lighten the helm. In a squall, we drop the main and stay in comfortable control under jib and jigger. Under this rig, she will go to windward in 15 or 20 knots with just a little weather helm, broad reach with almost neutral helm, and selfsteer indefinitely downwind with the mizzen broad off and the jib flattened in.



Dabbler's *modified interior.*

Demolition: out come 200 pounds of rotten and waterlogged cockpit.

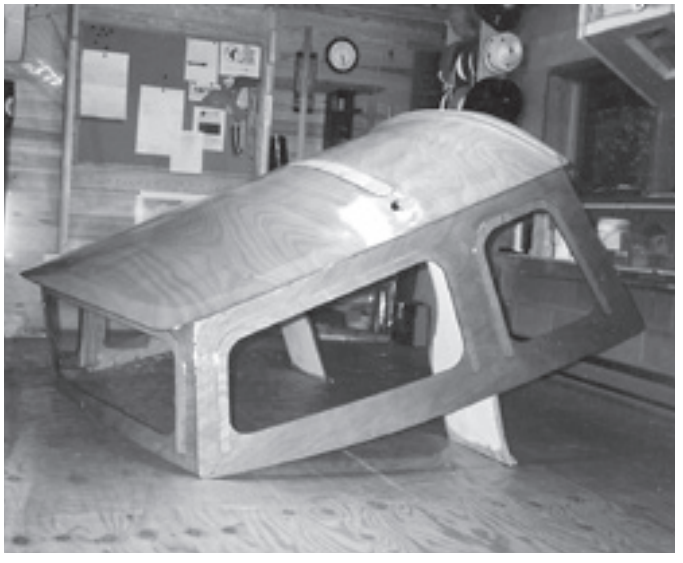
Dabbler's *removable, waterproof, polycarbonate windows.*

An unexpected but welcome bonus is that when anchored by her long snout, the windage in the house and mizzenmast makes her lie to the wind like an arrow, whereas catboats are known to wander restlessly at anchor.

Engineering was fairly straightforward. The main boom was raised (to clear the housetop) and shortened (to clear the mizzen). Sawsall holes accommodate the mizzen mast, bowsprit, and bumpkin. The latter can be removed for trailering, and the 'sprit just clears the towing vehicle. But we would make it retractable, if we had it to do over.

The new spars are Schedule 10 aluminum pipe, fitted with tapered douglas fir inserts to complete the finished lengths and help fool the eye, while providing meat for sheaves, eyebolts, anchor rollers, and so on. The mizzen steps easily by hand. It can be temporarily relocated to a special hole in the foredeck (which doubles as the anchor rode deck pipe) where it serves as a gin-pole for stepping the main.

Finally, the sailmaker gets into the act. Since my business is making traditional sails, the suit for the new rig presented no unusual difficulties. We chose Egyptian



The new cabintop takes shape in the sail loft.

Dabbler's *deckhouse is in place, the engine box removed, the bridge deck lockers installed.*

Dabbler ***out cruising with first mate Dee Carstarphen. The trans-mogrification accomplished standing headroom with a great view through large windows.***

Dacron for a good color scheme, and because it has a nice, moderately soft hand. The full battens may look modern, but Nat Herreshoff used them on a little cat yawl of his own way back when. They help flatten and control the very-low-aspect main and make it stack neatly in the lazy-jacks. This is also ideal for the mizzen, which must be kept very flat when sailing and when left standing at anchor. A half-wishbone sprit boom controls mizzen shape on all points of sail. The jib furls on its own braided Dacron luff rope, which acts as a forestay.

Would we do it again?

It was exciting work making dramatic changes, spiced with moments of delicious anticipation and delicious satisfaction when we got what we hoped for. The final product is a great, very small cruising machine, in which we have prowled both shores and many tributaries of the bay, sailing in comfort and safety, holding our own with bigger boats in fair weather and foul (we take shortcuts), yet coming to anchor in the marshes, while the bigger boats tough it out with the crowds.

In between all the fun, we had the grubwork of any restoration: things like removing 25 years of bottom paint; repairing centerboards and rudders, coamings and rubrails; cleaning, sanding, and refinishing everything; rebedding everything.

We might have been spared much of this work if we started with a younger, well-maintained hull. But who would take a Sawsall to a Bristol-condition late-model boat, even if they could afford it? Much better to do surgery in good conscience when the patient is already teetering on the brink.

Would we do it again? Well, ah … actually, we *are* doing it again. It's the fault of a friend who had a Marshall 22 catboat (twice the displacement of the 18-footer, but only 6 inches more draft). He had an epiphany of some kind and all at once wanted to move to the mountains. His house sold out from under him before he had a chance to advertise the boat. Would we … as a favor … at a distress price … ?

"She's 30 years old," he said, "but basically sound, except for a few little things … " She's got that solid old pre-blister hull, but rot in the cockpit and splits in the rail. Corroded through-hulls and rusted-up steering system. Busted hatches. Tired sail. And, believe it or not, you can't sit upright below! Just our meat.

No reason why not to take a Sawsall to the poor old dear and trans-mogrify her a little. Dee has already made a sketch of what we think she'll look like.

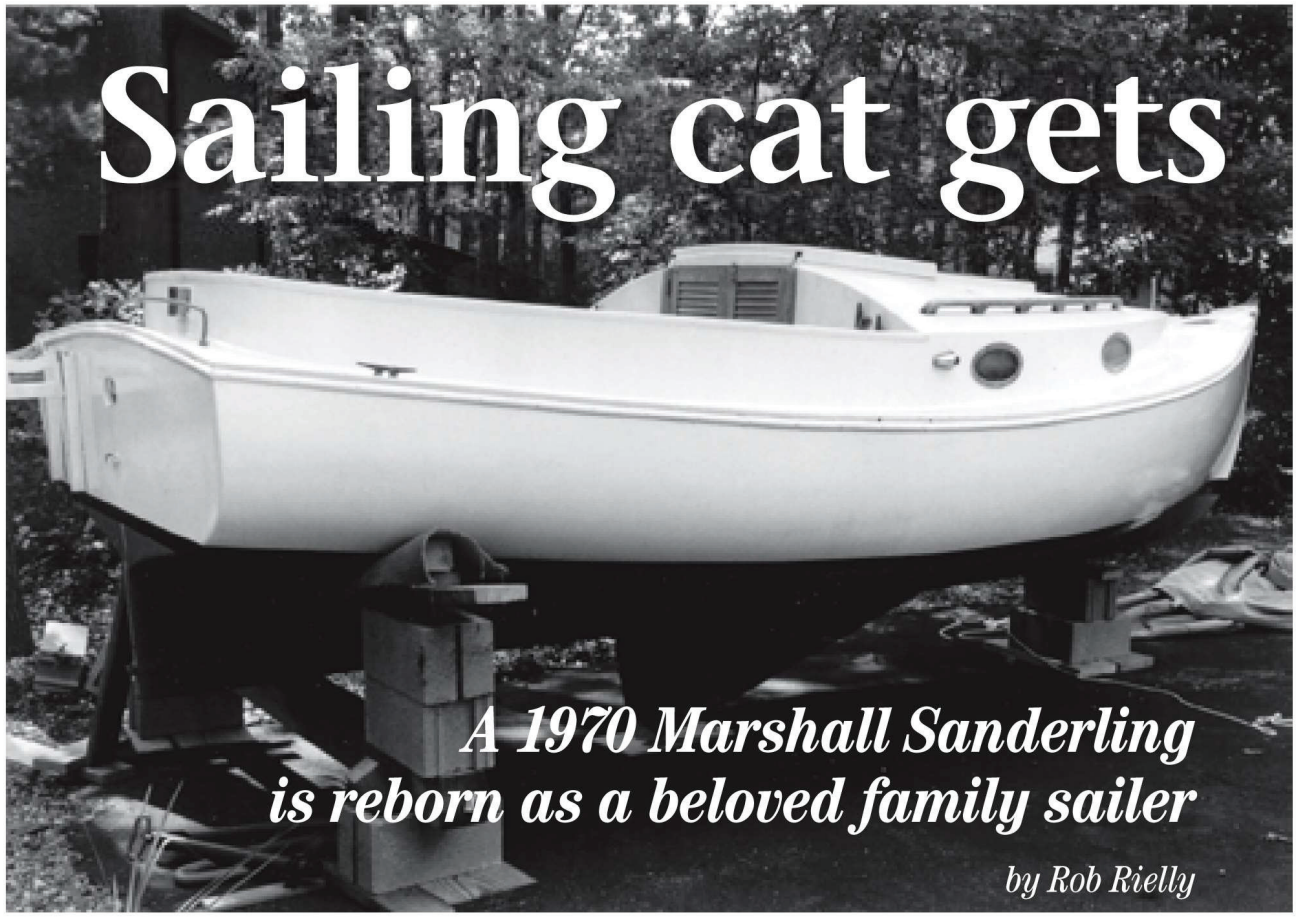
After a false start in life as a journalist, Stuart left Chicago aboard a 30-foot ketch, and stayed afloat for 25 years. His wife, Dee Carstarphen (a founding member of the Seven Seas Cruising Association) had an even longer career on the water. They now live near a Chesapeake Bay creek just deep enough for catboats. In his retirement, Stuart is a full-time sailmaker, specializing in traditional small craft sails. Dee is the author of four illustrated nautical books, including Narrow Waters, *reviewed in the September 1999* Good Old Boat.

***Dabbler's* favorite rendezvous**, where Stuart and Dee like to "astonish the locals (with *Dabbler's* sailing ability)" is the Turkey Shoot Regatta, held each October on Virginia's Rappahannok River. This year's event is set for Oct. 12-14. Stuart says, "*Dabbler's* tiny cabin is adorned with three little brass plaques, each indicating her participation in a Turkey Shoot. We were always the smallest boat in the fleet. Every participant gets these plaques. The T-shirts you have to buy!"

Boats in this event must be of wood or of a classic design 25 years old or older. Last year's winning boat was a 1970 Irwin 38, sailed by Wayland Rennie. This year Hal Roth will serve as honorary chairman. And for the first time the event will include restored skipjacks (*see January 2001* Good Old Boat *for more about skipjacks*) in the race. All proceeds go to the Northern Neck Hospice. Want to know more?

Yankee Point Sailboat Marina: 804-462-7018 or <http://www.yankeepointmarina.com>.

Sailing cat gets



A fleet of 18-foot Marshall Sanderlings caught the attention of Rob and Lucille Rielly, but they wanted a fixer-upper. This one fit the bill nicely. These days Marshall Marine is offering an open-cockpit version of this classic catboat. This earlier standard version had a small cabin.

A 1970 Marshall Sanderling is reborn as a beloved family sailer

by Rob Rielly

We had sailed for about 20 years before putting a halt to our nautical adventures. The necessity of repowering our Pearson Triton and the prospective costs of sending two children to college had made it financially impractical. We moved on to other less costly endeavors.

Our admiration for classic boats had never abated, however, and by happenstance we were brought back to our love for boats. In the summer of 2002 we attended the Green Head Fly Festival, an annual event held at the Tuckerton Seaport Museum, south of our home in Toms River, New Jersey. That afternoon, six Marshall Sanderling catboats made their appearance and tied up at the docks.

As we stood by admiring their classic good looks, I casually asked my wife, "So what do you think, should we buy one?" To my surprise, she responded positively, and we both recalled how we had investigated the purchase of one many years before but found Sanderlings to be out of our price range at the time. Although, with children settled, we could now afford to spend money on a boat in our retirement years, my wife reminded me that I was as enamored of working on boats as I was of sailing them. Our decision was to find a fixer-upper I could play with.

As we looked at Sanderlings in the local boatyards, online, and in the newspapers, it seemed that a decent boat would run about $12,000 to $15,000, depending upon age and condition. Since the frames, deck, and seats were made of wood, I was reluctant to spend the maximum, figuring there would have to be bad wood somewhere in the boat that would require serious work. A piece of bad wood was like the tip of an iceberg, I figured. Where some is visible, there is much more below. I decided the only important thing was a sound glass hull, including the glassed-in plywood transom.

"As we stood by admiring their classic good looks, I casually asked my wife, 'So what do you think, should we buy one?' To my surprise, she responded positively…"

In need of repair

The ideal boat for my purposes appeared in the newspapers. It was a 1970 model, and the owner was asking only $7,000. When I saw her laid up in the yard, it was obvious why the price was so low. The elderly gentleman who owned her had not sailed her in a few years, and she was sadly in need of repair. While the glass was sound, the wood was another matter.

Sanderling cabins have an opening in the aft end near the sole, which allows the placement of ballast under the cockpit sole. I reached under the cockpit and came up with wet, disintegrated wood. In spite of having been on land for a couple of years, the frames under the sole seemed damp. The aft end of the cabin is a plywood bulkhead glassed to the gelcoated and finished exterior. All around the door the wood was soft and rotted. The entire bottom half of the cabin bulkhead was equally soft, indicating that it would need replacement. The hatchway was framed with ancient and split teak, and the louvered teak doors were cracked. Black mildew covered the interior of the cabin. This boat needed a complete redo.

The Sanderling's construction is similar to many glass boats of her size. Most have longitudinal stringers and transverse bulkheads used for stiffening the hull. Water eventually finds its way to the wood and rots it, requiring replacement. The procedures described in this article can be adapted

10th life

to other boats of similar construction.

An exterior survey indicated that most of the gelcoat was sound. There was some crazing in the gelcoat and pits on the toerail where air bubbles had broken through. My plan was to fill in the crazing and any nicks or dings in the hull and deck and repaint it. The hull was white, but the decks, cabintop, and other parts were a faded blue. Buff-colored paint would cover the blue, and the hull and other areas would be painted white. The aluminum mast, boom, and gaff were sound but covered with scrapes and scratches. The coaming caps and rubrail on the older Sanderlings were of vinyl. These would be replaced with teak. Affixed to the transom was an outboard bracket of vintage design and in poor condition. It would be replaced. Wires peeked out from under coamings and floorboards. The running lights were on their last legs. These would all need replacement. I had what I wanted: a sound hull in need of some serious restoration work.

Sloppy work

Discussions with the boatowner revealed that the cockpit sole had been replaced, allegedly with marine plywood, glassed in. The work was sloppy; I could only guess that the owner had wanted to repair the obvious defects to make the boat more saleable. Negotiations were difficult, as the old man had his price, but I managed to get it for $6,000, and within two weeks the Sanderling was sitting in my driveway ready for work.

The first stage involved determining what needed to be replaced and how to proceed. I stripped everything off the boat that was in the way — vinyl rubrails and coaming cap, portlights, chocks, cleats, and miscellaneous hardware. After 30 years, the windows were heavily crazed and cloudy.

"The ideal boat for my purposes appeared in the newspapers. It was a 1970 model, and the owner was asking only $7,000. When I saw her laid up in the yard, it was obvious why the price was so low."

I was concerned that the hull not lose its shape, so I determined that I would have to take the frames out and replace them one by one. I cut an 18-inch square opening in the cockpit sole, aft of the cabin and investigated the first frame (see photo below). The entire frame was wet, as was the one behind it. I decided to replace all of the frames and any other wood I could get my hands on.

This undertaking was not as reckless or bold as you might think since working on boats has been an avocation of mine for many years. Our first boat was a Hartley Trailer-Sailer 21, which I built in our garage from a set of plans. It took about two years to complete, and I enjoyed building it.

Wood rot was evident around the companionway door and bulkhead, below left. Rob fastened new half frames in place with epoxy, below right.

We had that boat for 11 years, and our two kids grew up on it. We cruised with them, and I spent the off-season maintaining it. We outgrew it and purchased a 1964 Pearson Triton sorely in need of work. The only shortcoming was the aged Atomic 4, which eventually led us to sell her after five years.

Years of grime

The work on the Sanderling began with a good cleaning. My wife, Lucille, went after the interior mildew with a vengeance and many bottles of Spray 9 cleaner. She removed years of grime.

To get at the sole and bulkheads it was necessary to remove the seats. With them out of the way (and saved for patterns), I was ready to tackle the sole and frames. Work began on the cabin wall and first frame. The gelcoated glass cabin wall ended about deck level. Beneath it was a ¾-inch plywood bulkhead with a compartment on either side of the centerboard case to hold the ballast. Much of the wood was rotted. I set the depth of the cut on my circular saw to a hair less than one-half inch in order to cut through the half-inch plywood but not score the fiberglass. I removed the rotted wood with a chisel and mallet and pulled the rotted bulkheads free. Next I went over the area with a rotary sander, preparing it for the new glass and plywood.

Fortunately the old bulkheads had come out in one piece. I purchased ¾-inch fir marine plywood and cut bulkheads from it. After careful fitting, it was ready for the next step. To prevent water saturation in the new wood, I rolled two coats of epoxy

resin over the surface of the frame, paying particular attention to the edges of the plywood. It was not my plan to have water in my bilges, but as an experienced boatowner I felt it better to cover all my bases.

No great difference

A note about materials is important. I use only marine-grade plywood. Some builders use exterior-grade plywood, but the difference in cost between a few sheets of marine-grade and exterior plywood is not that great. The major expense in this type of restoration is in man-hours. I would much prefer to finish the job and have confidence that I have used materials that will last as long as possible.

I fastened the two new half frames in place using epoxy resin. Clamps held each in place as it cured. The outboard parts of the frame were clamped using blocks of wood, screwed together, on each side of the wall. In each side, I cut a rectangular hole to allow the placement of ballast under the cabin sole.

I fastened the bulkhead below the cabin wall and the next bulkhead in place using #10 silicon bronze screws and epoxy. Three layers of 6-inch fiberglass tape and epoxy secured all joints. Each of the bulkheads had a notch cut out in the top to take a wide plywood stringer to stiffen the boat and provide a place to secure the two halves of the plywood sole.

I worked from fore to aft in the cockpit area, carefully cutting away the old deck, chiseling out the old glass tape, and sanding it with 60-grit paper on a rotary sander. I then cleaned each area with Interlux Fiberglass Solvent Wash to degrease it. Each bulkhead was secured to the next with temporary battens to keep them aligned. Once the entire sole was removed and each frame securely in place, I ran battens fore and aft in the cabin to make sure there were no high or low spots. Since I had taken care to line things up properly, the tops of the bulkheads needed only some minor planing. After giving each bulkhead two coats of epoxy resin, I glued and screwed the ¾-inch plywood stringer fore and aft to tie them together. At this point most of the nasty work was done. I could begin construction of the cabin sole.

Bulkheads were secured with temporary battens to keep them aligned, above left. Fore and aft stringers tied them together, above right. Because the cockpit sole would not be removable, the installation needed to be impervious to water, below left and right.

Two epoxy coats

The sole was cut from ¾-inch marine plywood and glued and screwed into place. Prior to laying each half down, I rolled two coats of epoxy on the bottom to protect it. Once the sole was in place, there would be no way to check it, so I wanted it to be impervious to water. Because each of the screws had been countersunk, it was necessary to cover the holes and center seam with polyester putty. In order to make a smooth transition from the sole into the hull sides, I filled the space between the edge of the plywood and the hull with fiberglass-reinforced polyester putty. Two layers of 6-inch glass cloth finished all seams and bonded the sole to the sides. This was then sanded smooth so I could cover the sole with glass cloth.

I laid several sections of glass cloth, overlapping by about 6 inches at each joint. Then I rolled on two coats of epoxy resin to fill in the weave. I sanded the edges smooth once it had cured.

Using the old seats as a pattern, I cut new ones from ½-inch marine plywood. For stiffening, I screwed and glued battens made from ¾-inch Phil-

ippine mahogany to the underside, one running along the seat edge and two running perpendicular to it. I gave the entire undersurface of the seats two coats of epoxy resin as a sealer.

I made support battens from ¾-inch mahogany and glued and screwed them to the transom and aft end of the cabin at the appropriate height to support the seats. I planned to make face frames and doors under each seat to enclose the storage spaces. I secured the outer edges of the seat to the hull using two layers of 6-inch cloth and resin, top and bottom. I then covered the entire seat with a single layer of cloth and two coats of epoxy resin. Two coats of paint on the seats and cabin sole finished the job.

Trimmed to size

One of the factory options on the Sanderling is a pretty teak centerboard cap that extends into the cockpit. I purchased one from Marshall Marine and trimmed it to size. Final installation would have to wait until some more basic construction was completed.

A pair of cabin shelves was another option. Since extra storage is always useful, I cut some patterns out of scrap plywood and fashioned the final shelves out of ½-inch marine plywood

and glassed them in place. I covered the surface of each shelf with cloth to make everything consistent. Now painting was necessary before I could install any more teak trim.

Preparation of the surface to be painted is important. A layer of paint is extremely thin and will show up any imperfections beneath it. The hull had numerous dings where 32 years of sailing had taken its toll. It also had many tiny holes in the toerail area, where air bubbles in the layup had worked through. I filled these with polyester putty and sanded them smooth. The non-skid pattern on the deck had worn over the years. One spot was crazed and cracked. Since it was my plan to use non-skid paint there, I scraped out the cracks and loose plastic and filled them with polyester putty. After it hardened, I sanded it smooth. It would provide a good surface for the paint.

I used Interlux paint on the boat hull and deck, painting with two coats of Brightside Polyurethane White. This went nicely with the Sundown Buff color for the deck, cabintop, and other areas. Since the original non-skid surface was quite worn, and two coats of paint would not improve traction, I mixed Interlux No-Skid Compound in the deck paint. This proved to be extremely good, particularly when the deck was wet. I also mixed in the Interlux Flattening Agent so the deck and cabintop would not be too shiny.

The cockpit sole installation is sanded and prepped, above left. The cockpit grate becomes a reality in Rob's workshop, center, and in the cockpit, below left. Coaming caps, at right above, and cabin, below.

Some of the Sanderlings I had seen carried the buff color up the cabin sides. Instead, I masked the walkways carefully and painted just the areas that had originally been blue.

Helpful suggestions

One of the benefits of restoring a boat that is still in production is that many materials are available from the manufacturer. Marshall Marine was helpful in making suggestions and shipping parts that were impractical for me to make. I purchased two teak rubrails, handrails, coaming caps, eyebrow trim, and a pair of teak louvered doors. They were shipped promptly. I could not have purchased the teak for the doors or rubrails for the price I paid for the finished products. Since there was much work to be done on the boat, and I wanted it in the water by spring, this saved time.

The next step was screwing the rubrails into place using 1½-inch #10 stainless screws. Each hole in the teak had to be drilled and countersunk to take teak bungs. Screws were set on 10-inch centers with a couple of extra screws at the forward end of the rail. I gave each hole in the hull a good glob of BoatLIFE caulking. Then I plugged each hole in the teak rail. Since teak is expensive, I always save any scrap. The drill press and a plug cutter provided all the bungs I needed.

Once the rubrails and handrails were on, it was time to do the coaming caps and cabin trim. I ran the trim around the cabin edge first, since producing a fair curve between it and the coaming caps might require some planing. The trim was fastened with 1-inch #10 stainless screws on 10-inch centers. Once the trim reached the edge of the coaming I clamped a long flexible batten in place and marked how much had to be planed off the top part of the coaming so the line would be fair. With this material removed, it was now possible to screw the coaming cap in place. I used bedding compound in the groove under the coaming cap to seal the top edge of the plywood coaming. I then removed the hatch and trimmed it all around with teak.

"One of the benefits of restoring a boat that is still in production is that many materials are available from the manufacturer."

Built-up ring

Sanderlings have a hole in the deck through which the mast is stepped on the stem. On early models, such as mine, it's flush with the deck; on later models there is a nicely built-up ring around the hole to prevent water from entering. I decided to update to a newer type. I cut two rings from ¾-inch teak and glued them together at cross grain using resorcinol glue. After the ring was dry, I gave it a final shaping and sanding and then gave the bottom three coats of Cetol. Once it had dried, I applied a liberal amount of mahogany-colored Sikaflex bedding compound under it and screwed it to the deck. The screw holes were plugged and finish sanded. Then I gave the ring four coats of Cetol.

Next I installed exterior hardware, running lights, and ports. The new Plexiglas was a decided improvement. The next stage would involve some serious customizing of the cockpit. I decided the seat lockers should have three lids. I cut a teak frame about 2½ inches wide on top, bottom, and between the locker lids. The aft end needed to be wider to conform to the rake of the transom. Once the frames were screwed and glued together I screwed them to the underside of the seat and the cockpit sole. Liberal amounts of bedding covered the screw holes in the sole to prevent water from creeping in. I made three lids for each side and fitted these in place using brass hinges and hasps.

New teak trim

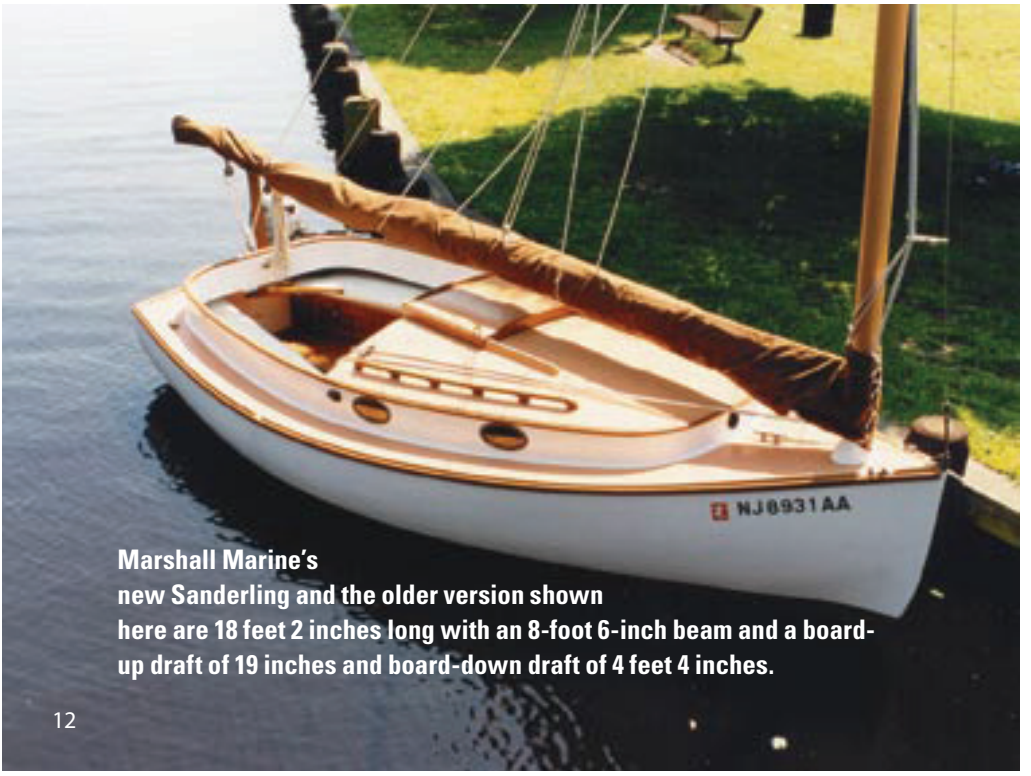
The companionway was next. New teak trim strips and entrance framing had to be fashioned from ¾-inch wood. Once the frame had been fitted, I fastened it — along with the centerboard cap — securely in place using screws and bedding material. I installed an Aquameter compass through the port cabin wall.

I decided a teak grate would finish the job nicely. I made this in two sections with a strip of teak running down the center of the cockpit sole to keep it in place.

The interior needed some additional work. After carefully painting the overhead, sides, berths, and sole, it was time to install teak trim. I trimmed the shelves with teak and made holders for my VHF, binoculars, and general storage. I placed a teak cap over the centerboard case inside the cabin and installed drop leaves on each side using brass piano hinges.

I gave all teak, inside and out, four coats of Cetol. Teak has oil in the wood that must be prepared before finishing, or the varnish will not hold well. This is countered by sanding and wiping with acetone prior to application of the Cetol.

The original berth cushions were showing signs of deterioration. We had new cushions made to match the paint scheme, threw in some pillows, and we



Marshall Marine's new Sanderling and the older version shown here are 18 feet 2 inches long with an 8-foot 6-inch beam and a board-up draft of 19 inches and board-down draft of 4 feet 4 inches.

were finished. We had cockpit cushions custom made for us.

I installed a new outboard bracket on the transom. The engine that came with the boat was a 10-year-old Johnson 9.9 long shaft. Although it was in good condition, I purchased a Honda 9.9 four-cycle. The feature that interested me most was the generator, which meant that I would not have to continually remove my battery for recharging every week or two.

Obvious choice

The choice of a name was easy, as our first grandchild, Meghan, had just been born. I took a look at various nameboards at a nearby boatyard and came up with a design. I cut it from ¾-inch teak and carved the letters. Then I gave it four coats of Cetol with gold paint on selected areas between the third and fourth coats. Its curve matched that of the transom, and the *Meg* was officially named.

The rig was the last thing to be tackled. I took the fittings off the original aluminum mast and cleaned it with Interlux Solvent Wash. Then I gave it a coat of Interlux Viny-Lux Primewash Base, followed by Brightside Primer and three coats of Sundown Buff. I painted the top of the mast and the ends of the boom and gaff white. I purchased new mast hoops. The gaff saddle had no cushioning on the inside and was sure to scratch the new paint. I cemented a piece of naugahyde inside the saddle.

The old sail had several tears in it. I purchased a new sail with two rows of reef points. Marshall Marine had brown sail and tiller covers made for me to match the paint scheme.

Resources

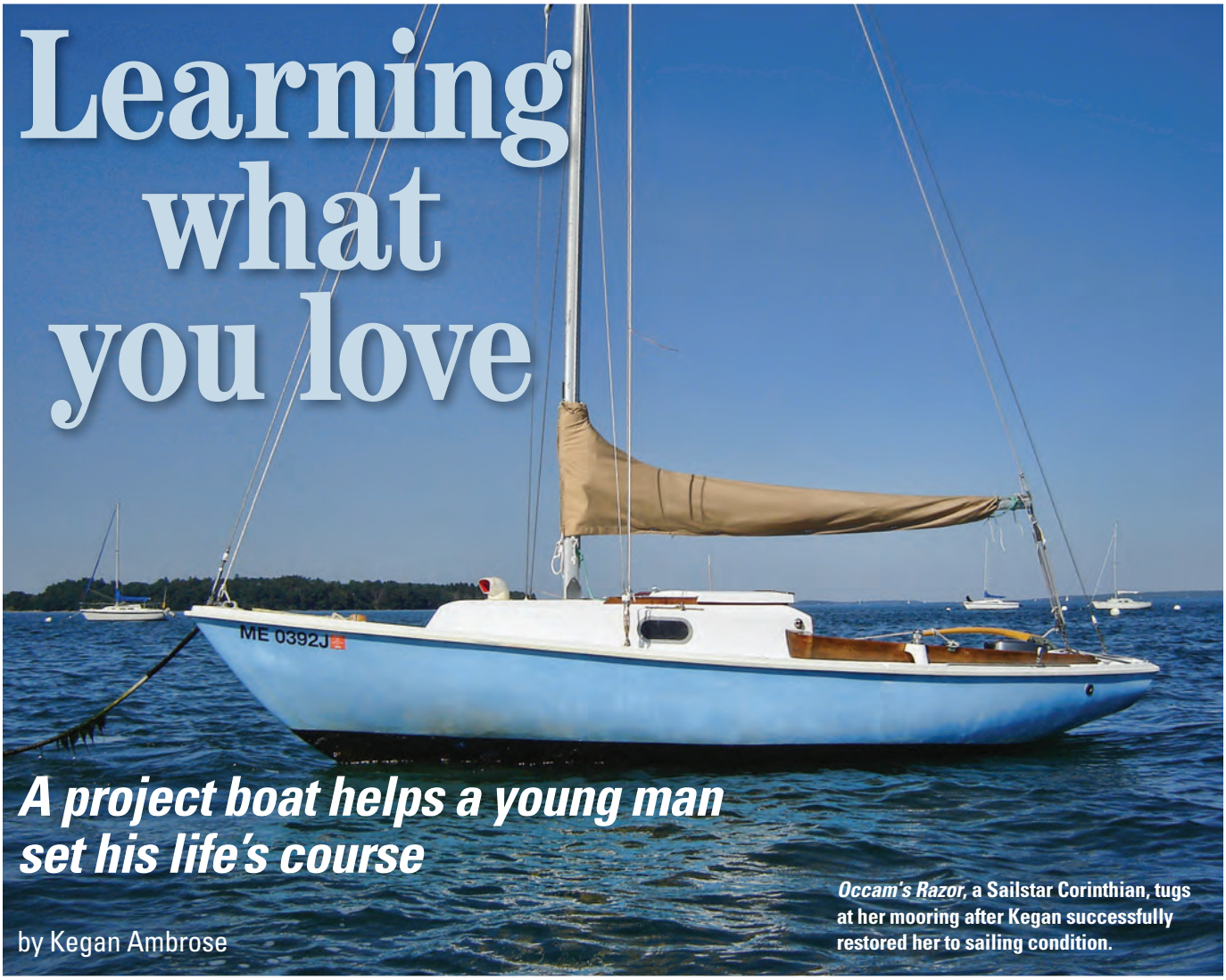
Marshall Marine
508-994-0414
<http://www.marshallcat.com>

Ready to go

After some final attention to the boot stripe and bottom paint, *Meg* was ready to go. Our local boat hauler took her out of our driveway and deposited her in Forked River at the Tall Oaks Marina May 8, 2003. People ask me if she is a new boat and are surprised to hear that she is 33 years old. She has been a pleasure to sail. We have adjusted to the catboat rig.

This rebuild took nine months and wasn't necessarily cheap. I have about $16,000 invested in the boat, including the purchase price, along with the new sail and motor. I could have found a boat in good condition for that price, but it is likely that I would have had to replace the sole or some other wooden parts. In addition, it would not have come with the cockpit grate, cabinets, and other things I added. The time and money invested have given us a boat that is truly ours and a bit unique as far as the class is concerned. With more grandchildren on the way, we have many good days of family boating pleasure ahead of us.

Learning what you love



A project boat helps a young man set his life's course

by Kegan Ambrose

Occam's Razor, a Sailstar Corinthian, tugs at her mooring after Kegan successfully restored her to sailing condition.

For as long as I can remember, I was scheming to buy my first sailboat. I spent many hours of my childhood poring over classified ads searching for free fixer-upper sailboats. I first wanted a simple 8-foot sailing dinghy, but as I grew older and larger, my vision grew too. I started looking at boats in the 16- to 19-foot range. During this search, the "ultimate" boat on my mind was the Cape Dory Typhoon. If you've spent any time shopping for boats, you know the Typhoon isn't a boat a kid can afford on income earned mowing lawns.

Once I left home for the Maine College of Art in 2006, my focus switched and sailing wasn't on my mind as much. This lasted until 2007 when I landed a summer job working as a deckhand on the schooner *American Eagle* out of Rockland, Maine. I was 20 and had a desire to be on the water and to see how a schooner worked. Little did I know this was going to be one of the hardest summers of my life. Sailing a schooner is nothing like sailing my family's 25-foot Catalina. But the schooner taught me a lot about what sailing means to me. I once again began the search for my own boat.

In March of 2008, I saw *Occam's Razor*, a 1964 Carl Alberg-designed Sailstar Corinthian. Shrink-wrapped and sitting on jack stands, she looked a lot like a Cape Dory Typhoon. Unlike a lot of "fixer-uppers" I had looked at, *Occam's Razor* hadn't yet lost her soul and I believed I could complete the project. The boat was surprisingly original. There were no crazy modifications, such as portholes below the waterline or "custom" motor mounts on the transom. The original light-blue gelcoat, although faded, was in pretty good shape. The decks seemed solid (in reality, the rotten parts were just frozen). Most important, this boat had decent sails and overbuilt standing rigging.

The boat needed work — lots of it. All the wood needed to be replaced but I felt I could accomplish these repairs myself. Everything seemed right, even the price. While working on the schooner, I had saved some money and $900 seemed reasonable. A few days later, I signed a bill of sale, paid the money, and became the owner of my first sailboat. In the middle of May, she was transported to my parents' house in Denmark, Maine, and the restoration got under way.

Expectations meet reality

When calculating how long a boat project is going to take, I've learned to take whatever arbitrary number seems to be about right and multiply by three or four. This was a common theme

throughout my restoration. I spent more time looking for tools than actually restoring the boat.

Early in June, demolition began. I removed the old wood — cockpit seats, main bulkhead, and cockpit support beams. My original plan was to remove the seats, add some extra support to the cockpit, and patch the main bulkhead. But the project grew bigger and bigger. As I took things apart and realized how difficult demolition was, I kept saying, "Well, I might as well replace this rotten piece of wood right now because the boat isn't going to be taken apart like this again anytime soon." Before I knew it, I was doing a complete rebuild and spending a lot more money and time than I had anticipated. The $900 price tag started to look a little high, considering the boat's true condition.

It took considerable elbow grease to buff her oxidized gelcoat back to its original powder blue.

Creative financing

Since the jobs I was working at the time paid just a hair above minimum wage, I had to be creative with how I earned money to acquire parts. My boat came with only a 135 percent genoa and no furling unit, so I was going to need a working jib. As there was no way I could afford a new jib, I contacted Michael Chasse in Freeport, Maine, who owns Northeast Sailboat Rescue. Michael travels all over the East Coast picking up unwanted sailboats, then fixes them up and finds good homes for them. As a result, he has a lot of extra sailboat parts kicking around in his barn. I sent him an email offering to help around his boatyard in exchange for a used working jib. This started a great relationship. I could trade work for boat parts, as proposed by the T-shirt sold by *Good Old Boat* that states, "Will work for boat parts."

I also needed an outboard, and with this I got lucky. A family sailing friend offered to give me a 1980-something Mariner 4-hp long-shaft that came off one of his first boats. There was one stipulation, though. He told me the motor hadn't been started for close to 20 years and, if I took it, I couldn't return it. This was music to my ears. I showed up the next morning and grabbed the motor.

That evening, with some fresh gas in the tank, the little outboard roared to life in a 55-gallon trash can. But while the engine purred like a kitten, there wasn't much cooling water coming out. That meant it probably needed a new impeller. The local marine mechanic wanted more than $100 to do the job, so I did some research at the library. I found books on outboard motors but the information on how to replace an impeller was vague. A librarian suggested I try the library's online small-engine database. There, I found a complete 1980 Mariner 4-hp shop manual in PDF. It provided precise

By the time Kegan had removed all the decayed wooden parts, the boat was looking rather bare, at left. At last reconstruction began, with the base for the main bulkhead, at right.

Kegan spent an entire summer working on the boat and launched her the following spring, by which time she was gleaming, at left. The venerable Mariner outboard, at right, was a gift — Kegan just had to get it working. All it needed was gas and a water-pump impeller.

instructions for replacing the impeller. Problem solved. I found the part online for $16, and after an hour of somewhat stressful engine work, I had an outboard that pumped water the way it should.

As summer came to an end, my boat project was 99 percent done. I had replaced the upper and lower bulkheads, the cockpit seats, and the cockpit support beams. I had redone all the wiring and installed a new compass, automatic bilge pump, solar panel, and electrical panel. (The list may not look like much on paper, but you have to remember that projects take four times longer than originally expected). All that was left was to put on some trim pieces, apply bottom paint, and install a battery. My father helped me build a winter frame to shed the 7 feet of snow we were about to get that season and *Occam's Razor* was zipped up until late April 2009.

Winter and doubt

My senior year of college felt like the longest school year I've ever had to endure. All I wanted to do was get the boat in the water and go sailing. After the summer occupied with working on the boat, I began asking myself a lot of questions about my life and what I wanted to do with it. I spent that school year wondering where my place was in the world of graphic design and whether I even wanted to commit to design as an occupation. A feeling in the back of my head told me I wasn't going to be happy sitting at a desk staring at a computer screen all day.

In spite of my misgivings, I made some of my best work ever. I won a beer logo design contest, built giant cardboard letter-form furniture, wrote my thesis, did my senior independent project, had my heart broken, and got into great physical condition . . . all while surviving on saltines and hummus. I don't want to live another year like my senior year at Maine College of Art but, when pushed to my maximum, I started to see things differently. Even though I was making decent work, I was learning that design wasn't my calling.

With new cockpit seats and the sole refinished, *Occam's Razor* began to look like a proper yacht once more.

In early spring, I began my search for a summer job. I knew I should look for a job with a future, but soon realized there really aren't many jobs in the area other than washing dishes. One day, I came across a sailing-instructor job on Craigslist. I sat down and wrote out all the pros and cons of staying in Portland and washing dishes or taking the job at Linekin Bay Resort teaching sailing on their fleet of 20 Rhodes 19s. I chose to sail. I had just one stipulation: they had to give me a mooring for my Corinthian, and this they did.

Post-launch stress

Occam's Razor was launched May 2, 2009. I was incredibly excited. I was so excited, in fact, I forgot to bring clevis pins, so I couldn't raise the mast on launch day. One thing I've learned through this whole good old boat restoration thing is that while you can try to be prepared for everything, on launch day, something will always go wrong. In my case, things went wrong for a few weeks after launch day.

First, I fell off the boat while motoring to a mooring. That day, I also ran the boat aground. The following day, I decided I was going to try to bend on some sails and maybe go sail a bit. I had attached the foot of the mainsail to the boom and was raising the main when I heard a little "ping." The next thing I knew, my main halyard was at the top of my mast. In addition to that, my electric bilge pump was malfunctioning. I knew this because

it wasn't pumping out the seawater that was coming into my boat through a small mystery leak.

I was becoming very frustrated. How could a project into which I'd put so much blood and sweat be giving me so much trouble? I had been imagining for so long how the first few days of sailing my own boat were going to be that I somehow overlooked how little I actually knew. My knowledge was secondhand; I had always had someone with much more experience nearby watching out for my mistakes. Now *I* was in charge and it was scary.

Things started to improve, though. I found a faulty float switch in the bilge pump. As it was still under warranty, I just switched it out. The mystery leak was small and came through the motor well. It really leaked only when I was sailing on starboard tack or when I had three or more people in the cockpit. I retrieved the main halyard with some help from my father and a family friend and replaced the halyard fitting with a $25 hunk of stainless steel that would survive the Apocalypse. I also started to be very careful while walking on deck so as to not fall off again.

I had that job in Linekin Bay, 40 miles away, and I had to get my boat there. The passage from Portland to Linekin Bay is pretty exposed, especially for a 19-foot boat that had recently been restored by an amateur boatbuilder. My father suggested that he take his Catalina 34 and I follow him. That way, we'd have an extra boat if there was a problem with mine.

We picked a day with moderate winds and set out under power from Portland at 6 a.m. At 6:07 we ran into dense fog that socked us in until we reached the entrance to Linekin Bay at 4 that afternoon. Keeping up with my father was difficult. At ¾ throttle, I was only able to hold 4½ knots or so while my father, with his Universal diesel basically idling in gear, was walking away from me. We arrived safely and I instantly fell in love with Linekin Bay. It's absolutely beautiful. I couldn't wait to start my summer job at the resort.

Summer and certainty

Work started at the resort in mid-June. I spent the next couple of days rigging boats, fixing small problems, and taking occasional "staff training cruises." The days were long with few days off,

> **"I learned that working on boats and being on the waterfront isn't just a hobby for me; it's my life."**

but I loved the work. I met some amazing people from many different countries including Ireland, Slovakia, Russia, and England. On our evenings off, we often went out for night sails into Boothbay. It was a summer I'll never forget.

Into everyone's life will come a few days that he or she can honestly say everything was perfect. I experienced one of those days toward the end of that summer. All the sailing instructors had the same day off and we decided to go sailing. I hopped on my boat with a special girl from Ireland. One of the other sailing instructors took out one of the Rhodes 19s with another group of people. We spent the day sailing and rafted together in the late afternoon for music, swimming, and snacks. When the wind died later, I towed the Rhodes back to the resort in the late-evening sun. It was a day I'll never forget.

When summer ended, I had to return my boat to Portland, and this time I was going to do it without an escort vessel. I invited a friend from high school to join me. We motored for only an hour before catching a nice 10-knot breeze. I put up the main and genoa and we sailed all the way to Portland at 5 to 5½ knots. I was feeling a lot more confident than when I first launched *Occam's Razor* in May.

As I write this, I'm working at a sail loft in Falmouth, Maine, learning to do custom canvaswork. This is a nice way to combine my interest in design and my passion for boats. While restoring the Corinthian, I learned that working on boats and being on the waterfront isn't just a hobby for me; it's my life. If I hadn't bought *Occam's Razor*, I'm not sure I would have applied for the sailing-instructor job and I might still be sitting at a desk.

I could make the argument that the leaf-infested, faded-blue disaster I bought in March of 2008 might have saved my life. At the very least, it taught me what I loved.

Kegan Ambrose grew up sailing with his family on the Maine coast. He graduated from Maine College of Art in 2009 and is now restoring a good old Pearson Commander.

On a breezy spring day in 2009, *Occam's Razor* hitched a ride to the launch ramp. Her gleaming brightwork and polished gelcoat highlight the work Kegan put into her restoration.

Restoring an

Essentials first, then the fun parts

BY NATHAN BAYREUTHER

I first laid eyes on an O'Day Mariner as a teenager while working at my family's marina in Niantic, Connecticut. It was a derelict, but there was something about the lines that attracted me. As much as I wanted to restore it and claim it as my own, schoolwork and other commitments prevented me from doing so. Fast forward 10 years and, after taking my wife sailing in my Dyer Dhow and hearing her later utter the magic words, "I think you need a bigger boat," my thoughts returned to the Philip Rhodes-designed Mariner.

Based on the Rhodes 19, the 19-foot Mariner was first built in 1963, sported a large cockpit and a small cabin, and was meant to appeal to families wanting to daysail or cruise overnight. O'Day made about 4,000 hulls, and the design is still produced at Stuart Marine in Rockland, Maine. The Mariner Class Association is extremely active and celebrated the 50th anniversary of the birth of the Mariner in 2013.

Although far from being a derelict, the boat I bought did need quite a bit of help. The deck and hull had separated at the transom, the rubrail was chewed up and smashed at the bow, the centerboard was a rusted hunk of iron, the mast step was sinking into the deck, the chainplates leaked, the portlights were crazed, the gelcoat was faded and mottled . . . the list goes on.

There was a lot to do, but I decided to take some very important advice my father gave me: only do the work necessary to make the boat seaworthy and get out on the water as soon as possible. This gave me the opportunity to sail the boat, figure out how I wanted to restore her, and prioritize restoration tasks. Fixing the sinking mast step and removing and refurbishing the iron centerboard were at the top of the list, but I also wanted to do a fun project and design a new cabin sole.

Replacing the deck core

O'Day Mariners from the early 1970s have a single strip of plywood fiberglassed fore and aft under the the cabin roof as a stiffener for the mast step. Beneath that is a thicker arch made of oak and fiberglassed in place from port to starboard. This provides sufficient support for the mast that a compression post is not needed. While the cabin arch seemed to be in good condition, I suspected the plywood core under the mast step was rotten. A few test holes confirmed that.

Since the arch impeded my access to the core from inside the cabin, I decided to remove the fiberglass skin from the top. From inside the cabin, I drilled a small hole in each corner of the core, going all the way up through the top skin so I could see exactly where it was from above. I connected the dots with a marker and carefully cut off the top skin using a small cordless hand-held Makita circular saw. The skin came off quite easily — there was no bond left between it and the core. The entire length of the plywood piece was soaking wet and it crumbled and split apart when I probed with a screwdriver. I chiseled and scraped out the rest, dried the area with a heat gun and, using West System's *Fiberglass Boat Repair & Maintenance* manual as a guide, sanded the surrounding edges with an electric disc sander to create a 12:1 bevel.

I obtained a new carbon-fiber G10 deck core from Connecticut-based Forte

Nathan was first attracted to the O'Day Mariner as a teenager. Later in life he acquired one to sail, at top, and restore, above.

O'Day Mariner

Carbon to dimensions just slightly smaller than the rectangular recess in the deck. *(Forte does not currently list this product –Eds.)* Following the directions in the West System repair manual, I prepared the new core and recess by sanding them and wetting them out with epoxy. I then mixed a substantial batch of West System 105/205, adding 404 filler to make a mayonnaise-like consistency. I used a notched spreader to coat the bottom and all the sides, making sure to get it in every crevice. After that, I simply placed the core in the slot and pressed it down firmly until a little epoxy mix squeezed out the sides.

The thickness of the fiberglass cabintop varied somewhat, although it was generally about ¼ inch thick. To build up close to this thickness, I used three layers of 24-ounce woven roving and two layers of 12-ounce cloth, alternating them. Each layer was slightly larger than the previous one to match the sanded bevel and spread the load. After applying the fiberglass with epoxy, carefully sanding it after it cured, and fairing the surface with epoxy and fairing compound, it looked pretty good. After painting, it looked fantastic and, when I drilled and tapped the holes into the G10 for the mast step, I took comfort knowing it would never rot again.

Centerboard cleanup

To restore the 165-pound centerboard, I needed to remove it from the boat. With the boat on jack stands, my plan was to lower the board out of the trunk and into some kind of cradle while keeping it level.

I built a wooden cradle out of 2 x 4s. It consisted of a longitudinal piece, a crosspiece on the bottom at each end, and two pairs of vertical supports to guide the centerboard onto the longitudinal piece and hold it upright. I fitted large rubber casters on the ends of the crosspieces so I could move it around. The vertical supports were short enough that the whole cradle could fit beneath the boat.

I used a floor jack to take the weight of the forward end of the centerboard while the pendant supported the aft end. With a piece of wood on the jack, small enough to fit just inside the centerboard case opening, I put slight upward pressure on the front of the centerboard. This allowed me to easily knock out the pivot bolt from inside the cabin. I positioned the cradle under the boat to catch the centerboard as it came down, then alternately lowered the floor jack and eased the centerboard pendant from inside the cockpit. Eventually, the board came all the way out. I cut the pendant and removed the board.

The centerboard was completely rusted and the leading edge was scarred from collisions with underwater objects. I took the board to a metalworking shop that sandblasted the whole thing for only a few dollars. A fellow Mariner owner had previously recommended a rust-preventive paint

The cabintop mast step on Nathan's Mariner was collapsing, upper left, due to a rotten plywood deck core beneath it, upper center. He cut out the plywood, ground the area clean, and replaced it with carbon-fiber G10 material, upper right. After epoxying the G10 in place, above left, he fiberglassed over it, above center, then faired and painted it. With the mast step back in place, above right, it was as good as new, but stiffer.


The 165-pound centerboard was covered in rust and presented a challenge. However, Nathan's ingenuity in building a trolley on casters, and muscle in the form of a floor jack, at left, enabled him to extract it and move it around for sandblasting and painting, at right.

called POR-15. I ordered a quart of it and applied three coats right after the board was sandblasted. Four years later, I can happily say that POR-15 has helped keep my centerboard rust-free.

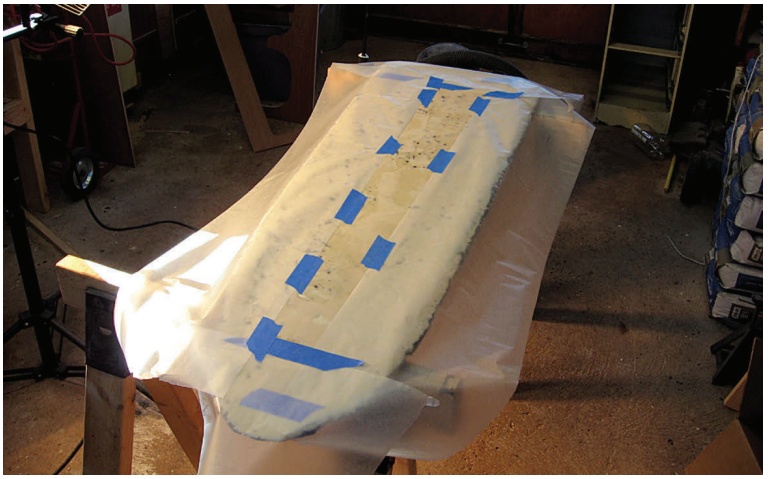
After applying several barrier coats of epoxy, I faired the surface with the same compound I used for the deck core project. When I had finished, it began to look like a centerboard again, but something needed to be done about the edges. I used a technique described on the Mariner Class Association online forums. I taped wax paper around the edges, then flipped the board over and put fairing compound on the edges. Wrapping the wax paper around the edge and pulling it snug, I taped the free edge to the other side of the board. I let it dry, removed the wax paper and, voilà! A new edge — that desperately needed sanding.

I sanded it smooth, applied more epoxy barrier coats, and added two coats of bottom paint. It looked brand-new. Eventually, I put the board back in the boat using the removal process in reverse. It was a little trickier getting it back in, but by using a large screwdriver inside the cabin to align the boltholes, I was able to insert the pivot bolt without difficulty.

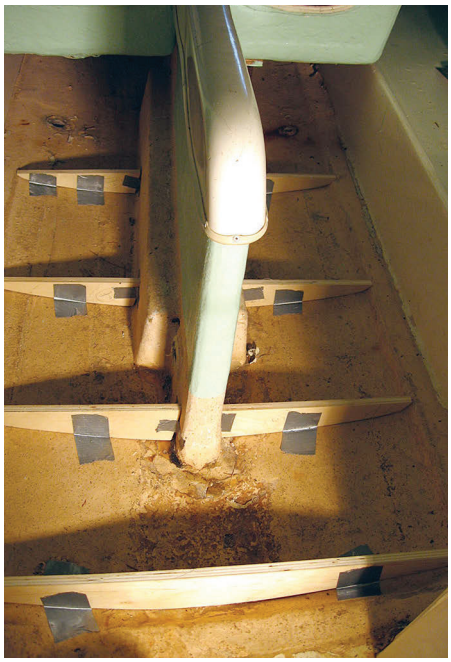
Cabin sole

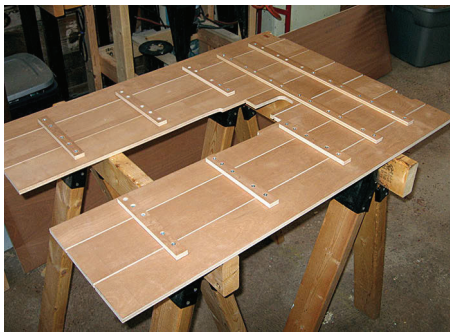
Most boats have a common problem: they leak, whether a lot or just a few drops. Mariners are notorious for leaking at the centerboard bolt. Try as I might, I hadn't been able to seal it correctly and I suspected there were a few other small leaks as well. I got tired of having gear slide off the berths while sailing and landing in the small puddle that accumulated in the bilge. I decided to make a cabin sole that could be removed in a hurry, but would be stable and look nice. I originally thought I'd make it out of mahogany boards, but after a conversation with my wallet I decided to go with mahogany plywood. This was still expensive, but I could use the leftover pieces to make new hatchboards.

The first part of the project was to make supports for the sole. I used the technique of "story-boarding," (also called a "story stick," or "joggle stick"). This is a 19th-century technique that works very well and allowed me to duplicate all the curves of the boat extremely accurately. An Internet search will provide the finer details. In my case, I created a joggle stick, clamped a board to the side of the centerboard case, and traced away, transferring the markings




Nathan had a metalworking shop sandblast the centerboard. He then coated it with POR-15 rust-preventive paint and epoxy barrier coats and faired it, using wax paper to wrap and form fairing compound around the edges, at left. Two coats of bottom paint, at right, finished the job.





Nathan decided a cabin sole would be an improvement. He carefully measured and cut supports, shown taped in place, far left, then made a pattern for the sole. He made the sole of boards cut from a sheet of mahogany plywood, at left, with gaps between them. The varnished sole looks grand, below.

to plywood I later sealed and epoxied to the cabin floor.

After I made the supports, I used the story stick technique to get an outline for the new sole. I could have taped pieces of cardboard together, but the story stick method was extremely accurate and fun. I transferred my tracings to a piece of scrap plywood. It fit extremely well, and I needed only a few small adjustments to make it fit perfectly.

I procrastinated before taking a saw to the nice mahogany plywood. I finally said, "I'll never *finish* it if I don't actually *start* it," so I made the last measurements and just plowed ahead. I cut 4-inch-wide strips and clamped them together with bits of 3/16-inch-thick wood in between to create spaces for water to drain through. I then put the scrap-plywood template on top, traced all around, and carefully cut the boards with a jigsaw. I joined them with crosspieces on the underside.

I took the sole to the boat, fully expecting to make marks for adjustments, but everything fit so well I didn't need to do a thing. While several coats of varnish made the sole a bit slick, it still looks fantastic, is extremely functional, and requires only a couple of coats in the spring. No more wet feet or gear!

Over the next few years, I completed a number of other projects that have turned the boat into a small cruiser. There's more on my website. If you ever have the opportunity to buy an O'Day Mariner, do it! You won't regret it. It's a fast, easy, comfortable boat to sail and maintain, and the Mariner Class Association is a top-notch organization that offers a tremendous amount of support for its members.

Nathan Bayreuther has owned his 1970 O'Day Mariner, Orion, *since 2007 and is the current president of the Mariner Class Association. A professional full-time organist, he grew up next door to his family's marina, Bayreuther Boat Yard, in Niantic, Connecticut. Nathan lives with his wife and son in Wallingford and sails the waters of Long Island Sound in his spare time.*

Resources

Mariner Class Association
www.usmariner.org

Nathan Bayreuther's website
www.mariner1922.com/index.htm

West System books
www.westsystem.com/ss/use-guides

Forte Carbon
http://fortecarbon.com

POR-15
www.por15.com

Story stick
Type the term into any search engine.

Typhoon of a refit

We pulled around to the field in the back of the old farmhouse, and there she sat, her fenders, mottled with mildew stains, still hanging over the sides. My nephew, John Phillip, and I jotted down all the reasons we shouldn't buy the 22-year-old Cape Dory Typhoon. "Teak in very poor shape — two pieces need replacement, indent on starboard side of the hull, all running rigging stiff and eaten by years of sunlight, ports cracked, sails — original, tired, and stained."

"Holy @$*&#!" I shouted, diving off the boat into the grass. "Put down 'Hornet's nest in cabin.' " The list went on. Funny thing about idiots and do-it-yourselfers: for every negative, one of us had something positive to say, "Well, a little bleach will help." Or, "Your face isn't really swelled-up that much."

You shouldn't buy a boat this way, but after four months of looking at a picture of the darned thing on the fridge, we did. The owner tried all summer but had not found a buyer. She finally called up and said, "You need to buy this boat." How could we say no?

By now, winter was on the way. During a lovely spell of fall weather, I spent an afternoon scrubbing the inside of the 19-foot hull. When the bleach fumes got to me, I emerged to questioning looks of neighbors and drive-by gawkers who, I am sure, only dream about saving a boat like this. Well, maybe not, but I liked to think so each time I drew blood or smacked my head.

By the end of that day, I reasoned the little boat could sail as is, even with the broken taffrail and old lines. Maybe nothing more was needed, and we could just sail next spring and call it even. We patched up the hand-me-down boat cover from my brother, John, who also owns a Typhoon, and we laid her up for the winter.

Growing list

The keep-it-simple plan was not to be. As winter progressed, my wife, brother, nephew, buddies, and boss added to the list of renovations. We all were sure it would be more than an old sailboat; it would be a fine little old sailboat. I also had the specter of my brother's Typhoon to deal with. His 1975 *Moana* is one of the finest Typhoons anywhere. She has custom woodwork, systems, and accessories that speak to a very talented, and quite possibly insane, owner.

Work began in the spring. John loaned us his shop, a working man's dream: high ceilings, heat, electricity, and more power tools than a trade show. As a valuable plus, John Phillip and I could usually mooch a well-prepared meal or two: heaven indeed.

We pulled everything off: all the teak (except the toerails), deck hardware, cockpit coamings, hatch rails, blocks, maststep fitting. She looked naked and cold.

We discovered wet deck core at the foredeck hatch. Decision time. Do we leave it and keep sailing or fix it? Before we had thought this through, I had dug it out with a coat hanger and drilled 22 holes in the top of the deck to dry it out. Thank God Cape Dory used end-grain balsa core instead of plywood, or the entire deck would have been rotten.

The teak grain was raised, so we sanded with John's incredible team of sanders, one sander for each grit. We oiled the teak, as ours was to be more a working man's boat than a varnished princess. John Phillip took on the task. The ravenous wood sucked in four or five coats. It glowed.

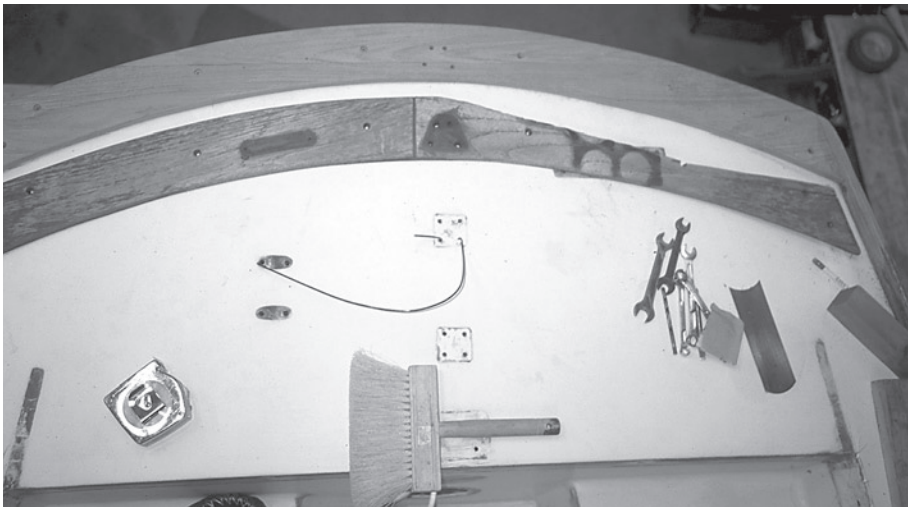
New taffrail

I busied myself with the taffrail. Poised to cut into a $20 piece of half-inch teak, I prayed my plan for it would work. After biscuit-joining two halves of the plank together to get the full curve, I cut and shaped using for a pattern what was left of the old piece. With John's help, and all the tools of the shop, now christened "The Typhoonery," I got a lovely new taffrail bedded, screwed, and bunged. We moved John's boat in beside ours, and they became our "television," as we sat pondering their lines and discussing centers of effort.

The seacocks for the cockpit drains were next. This job went well, thanks to one Typhoon owner's response to my request on the California Cape Dory Owners' Association Web page <http://www.toolworks.com/capedory/>. The hero even had part numbers for each part needed. For one of the few times in my life, I did not reinvent the wheel. With the new ball valves, bronze elbows, adapters and hoses, and the through-hulls bedded, the cockpit drains like a flush toilet in high gear.

Moana ***and*** **Hornet** ***emerge from "the Typhoonery." Photos of the reborn*** **Hornet** ***from the deck of*** **Moana,** ***above and to the right.***

A little money, a lot of elbow grease, restore a 22-year-old Alberg classic



The discovery of wet deck core meant decision time: fix it or ignore it. The answer is obvious at top. Replacing the taffrail, above, called for a silent prayer and the old truth: measure twice, cut once.

After the bottom was patched, sanded, and painted, we painstakingly marked and painted the bootstripe (there was none before), and we patched and buffed the topsides and painted the non-skid deck areas. We rebedded the hardware and teak in silicone. We filled the delaminated deck area with epoxy, left over from a cedar strip canoe project a few years before. Now there were two beautiful Typhoons in the Typhoonery. John replaced *Moana's* seacocks after helping with ours. With warmer weather, the opened garage doors showed the distinctive bows of both boats and the antlike behavior around them.

Right wire

Work turned to the rig. I had built a new mainsail from a Sailrite kit over the winter and wanted the boat to sail as well as possible, so we cleaned all the mast fittings of rust and replaced the forestay and a few other fittings. The owner of a local marine store let me wander around his shop attic for just the right wire. We found it on an old broken C-scow mast. The wire was in perfect shape, but I really would like to have seen how that mast broke in two! John Phillip and I wet-sanded and waxed the mast, added new running rigging, and spliced in the shackles. We painted the name on the transom.

On the way back to our place, several people called out. "Hey, what a beautiful boat!" The new bronze portlights gleamed, the bootstripe was fair, the wood grain looked alive. All the pieces fit together to draw your eye to her. She was indeed a fine little sailboat, and a worthwhile refit.

Paul Danicic is a USCG captain who has taught sailing on Lake Superior and worked in a marina. He is now director of a YMCA camp, a wilderness tripping camp in Grand Marais, Minn.

Then came Romance

Rescuing a rare classic: a Cape Dory Typhoon daysailer

by Sandy Davis

Sandy didn't see the bottom of her Cape Dory Typhoon until she was well into her refit project and needed to haul the boat out of the water for fairing and painting. Luckily, the boat was in good shape below the waterline.

I retired in July and, after clearing up a few projects around the house, I began searching for a new summer project. As one who enjoys working with my hands and loves the water, I began thinking about building or restoring a daysailer.

I had previously built a kayak from a Chesapeake Light Craft kit, and I had restored an old 14-foot Hobie Cat. My husband and I have a Ta Chiao 35, but I wanted something that I could take out by myself for an afternoon sail. I had given thought to building a little catboat from one of Dynamite Payson's *Instant Boats* book. I even went as far as to order a book of plans.

One evening in October, as I was scanning the classifieds in the marine section of our local newspaper, this ad caught my attention:

"FREE. 1975 Cape Dory Typhoon for a donation to charity. Call…"

I called. A friendly young man answered and said, "Sure enough, the Cape Dory is free if you are willing to donate $500 to the American Heart Association." He went on to say that the boat had belonged to his dad, who had died 10 years previously.

He initially thought he and his wife would use the boat, but they had other interests and the years slipped by. The boat had been left unused on a lift at a pier at his parent's summer home for at least 10 years, but Hurricane Isabel came along and destroyed the pier and dumped the little boat into the water. As a part of her fury, Isabel had torn a portion of the toerail off and added many scratches and dings to the hull. The owner was pretty certain that no structural damage had been done, but he realized it was time to find a new home for the little boat. He felt that his dad would have liked the idea of the proceeds of the sale going to charity. He mentioned that there were several other people interested in the boat and he would show her on Saturday morning.

Took binoculars

My husband, Jim, and I made a special trip the day before to see if we could get a look at the little Ty before we met her owner. We took our binoculars, since the boat was tied at the end of a pier that was no longer there.

To my surprise, this Typhoon had no cuddy cabin. I thought to myself, "Someone has made a mistake. This can't be a Typhoon." But Jim recognized the Alberg hull. When we were first married, we had owned an early vintage Cape Dory. He knew the lines well.

> **"To my surprise, this Typhoon had no cuddy cabin. I thought to myself, 'Someone has made a mistake. This can't be a Typhoon.'"**

Knowing how well that boat had sailed and how stable it had been in all kinds of weather, I was sure this would be a fine boat for me to single-hand. She appeared to be a little shabby, but she was floating. I called the owner Friday evening, upped the donation, and begged a little before convincing him that I would take care of his dad's boat and make her look pretty. He agreed to sell her to me.

The next day a friend towed her by water to my community marina. She was filthy from 10 years of neglect: full of moss, mildew, and debris. There were even old duck eggs aboard. I immediately began cleaning her up; I didn't want anyone at our marina complaining about a derelict boat in one of the slips. Out came the bleach cleaner and scrub brushes. Soon the mildew and duck eggs were long gone, and she was white again…a little beaten

Sandy can see herself in the topside finish of the boat, which she named *Romance*. One of three Cape Dory Typhoon models, this daysailer is similar in appearance to the Herreshoff 12½, with coamings made of fiberglass instead of wood. Only 30 of this model were built. An early photo, on facing page.

up, but clean. The teak bench seats cleaned up very nicely too.

Over the next few weeks I started having doubts about whether I really wanted to keep her. She was an open boat and had that strange-looking faux coaming ridge all the way around her deck. I thought she looked like a big bathtub in a pretty hull. I had always liked the looks of the Typhoon with the cuddy cabin and the little portholes. I had to admit, though, that she sailed like a dream . . . almost effortless with her self-tending jib. I convinced myself, "If I can't make her pretty, I'll sell her after I restore her."

New gear

Jim had other ideas. Christmas came and Santa brought her a new main and jib and a brand-new Tohatsu 3½-hp outboard. Now I *had* to make her look good.

Over the winter I plowed through every marine paint chart I could find, looked at pictures of nice-looking small boats on the Internet, and made sketches using various color schemes.

I also inquired of members of the Cape Dory bulletin board whether anyone knew anything about this particular Typhoon design. To my surprise, I received six responses and pictures. I learned that this model is a sought-after boat. My attitude began to change. One of my correspondents sent me an article about this model of the Typhoon daysailer. It seems that there were three deck styles offered on the standard Typhoon hull. Only 30 of this model were produced. It was designed after the Doughdish daysailer, similar in appearance to the Herreshoff 12½ but with fiberglass coamings instead of wood coamings. Armed with this information, I searched the Internet for some examples of Herreshoff daysailers and decided on a color scheme from one of these lovely boats.

In April, I sailed her to a nearby marina to be hauled. This was the first time I had seen what was below the waterline. Her rudder was a little ragged but repairable at the bottom, otherwise she appeared to be in good shape. Jim ripped off the old broken toerail and left the rest to me. I was excited. I had a project.

My first task was to fill in the hundreds of scratches and gouges, evidently made as she was scraped and battered in the violent action of the river during the hurricane. To my good fortune, Read Beigel, a friend who belongs to the Alberg 30 Association, as we do, happened to be working on a hurricane-damaged Alberg on stands next to my Typhoon.

> **"Finally the moment I had waited for arrived: her first coat of paint. I will never forget how excited I was that morning."**

Good advice

He took a break that afternoon and looked over my little Ty and asked me if I would like to learn the best way to get rid of all those abrasions, and smooth out those areas on the hull where the weave was showing. He runs a boat repair business and is very good at boat restoration.

"Yes," I responded quickly. He proceeded to educate me on the correct way to repair and fair a hull. Following his directions over a period of a few weeks, I cleaned and sanded the gelcoat and removed all the old filler from previous repairs. I wiped off the residue with denatured alcohol. Next I applied a thin coat of epoxy with microballoon filler. This was applied over the entire hull with a plastic fid, making sure that the mixture was pressed tightly into all the damaged areas. After it cured I washed the hull with soapy water to remove epoxy blush.

He then introduced me to the "long board sander." I made my own from 3/16-inch plywood cut to a strip 3½ x 20 inches. To this strip I epoxied blocks of scraps 1 x 1 x 3 inches at each end to use as handholds. I purchased two rolls of sticky-back sandpaper, 100 and 220 grit, cut strips to fit my new long board, and was ready to begin the process of fairing the hull.

This turned out to be easier than I expected. The hull was easy to sand.

Following retirement, Sandy was looking for a project when she found her Typhoon. Now that the work is done, she says, "*Romance* continues to receive many compliments on her good looks, and I still get a sense of pride every time I walk down to the marina and see her there, waiting to be enjoyed."

By the end of the second day of sanding — back and forth, then diagonally, slowly sculpting the hull — it began to look very smooth. When I thought I was finished with the sanding, Read showed me an interesting way to check the hull for smoothness by wetting it down with the hose and then checking the reflection for distortions. The reflection was almost perfect, I needed to do very little touchup.

Epoxy waterproofing

The next step was to roll on a thin coat of epoxy over the hull for waterproofing. I used a marine-grade foam roller, hand sanded it smooth after it cured, then applied and sanded the primer. This process went very smoothly and only took a few days. Next I made repairs to her rudder and sanded and painted the bottom a traditional dark red.

Finally the moment I had waited for arrived: her first coat of paint. I will never forget how excited I was that morning. I used the roll and tip application method, using a marine-grade foam roller and tipping with a 4-inch foam brush. I chose Brightside polyurethane enamel for its ease of handling, durability, and high gloss. I added a few ounces of Penetrol, an additive that enhances the flattening of paint and varnish and slows the drying time. This allows the brush strokes to flow into each other. I could barely find a brush stroke in the finish after it dried. I drove home that day exhilarated. My little boat was beginning to look pretty. After three coats she looked dazzling. I could actually see my reflection in her topsides.

My color choices took some planning. I wanted to paint her a dark teal color, but I could not find the color I envisioned on any of the marine paint charts. Since she was such a rare design, I wanted my little boat to be different but with a classic flavor. I ended up buying Brightside dark green and borrowed a half can of dark blue from a friend. I bought a paint bucket and mixed the color I thought I wanted. I then added some white to lighten the shade. Before I knew it, I had almost three quarters of a gallon of paint… a lovely shade of green with a subtle blue tint.

Paint scheme

I painted her deck white with the non-skid areas masked off. Then I painted those areas with a warm beige blend with non-skid filler. I painted her interior a soft beige above the seating to give some definition to this area and to tone down the previous all-white color-scheme, eliminating the "bathtub look."

I masked and painted the bootstripe. This posed a small problem because there was no previous bootstripe to indicate where the waterline was. Luckily that Alberg 30 was right next her. The Alberg 30 hull is so similar that a friend with a good eye for this sort of thing spent several hours that morning going back and forth from the Alberg to my Typhoon, masking the outline for the bootstripe freehand and hoping that the waterline would be correct. It was perfect.

The most important decision I made in the boat's color scheme was for the faux coaming. Since the four- to five-inch fiberglass ridge around her deck was supposed to represent coaming, I decided to paint it the color of teak, giving it the appearance of a wooden coaming. The idea worked. My Typhoon didn't look tubby anymore. She was beginning to look like a little classic.

At last the day came for her to receive her new toerail. Jim had precut the teak to size and scarfed it to fit her 18-foot length, including the curve. With the assistance of a friend, the toerail was caulked and screws countersunk into place. We hammered wooden plugs into the screw holes. After a light sanding, the toerails framed what had become a work of art…a rare adaptation of a sweet little Doughdish-style sailboat.

One of my proudest days in many years was when one of the longtime yard employees told me that when I first had my little boat hauled, several of the guys made comments such as, "I don't know why she wants that piece of 'junk' (word substituted)." He continued, "Now when the guys walk by they stop short when they see your boat, and I hear them say, "Holy 'Cow' " (word substituted). I felt that as a novice in the art of boat restoration, I had won the respect of this small group of men who had been doing boat restoration for many years.

Finally it was time to put her name on the transom along with her numbers and registration sticker. What did I name her? *Romance*, of course. From the moment that broken toerail was removed from her hull, to the moment I proudly tied her up at the slip in our community marina, I found that the romance was there all the time, just waiting to come out.

Wrecked in the

…but none the worse for the off-road experience

BY NICK BIGNEY

That bright October afternoon, conditions were perfect for our Sunday motorcycle ride. We rumbled along for a few miles in the warm sun, looking at the fall colors and soaking in the mountain air. As we banked around a curve, there appeared before us an eye-popping wreck. I put the bike on its stand and we stepped off into the dusty high desert. With an eye out for nasties, we picked our way through the rabbit brush toward a small sailboat perched on the edge of a ravine.

The high desert is not the usual final resting place for sailboats. As we got closer, we could see the bright yellow hull lying on its starboard side in the dirt, almost tipping over into a dry coulee. It looked a little like a plane crash. The boat's rigging was uncoiled like a crazy tangle of steel spaghetti. Colorful bungee cords littered the chewed ground. Looking back toward the road, I could easily read how this sad little drama unfolded.

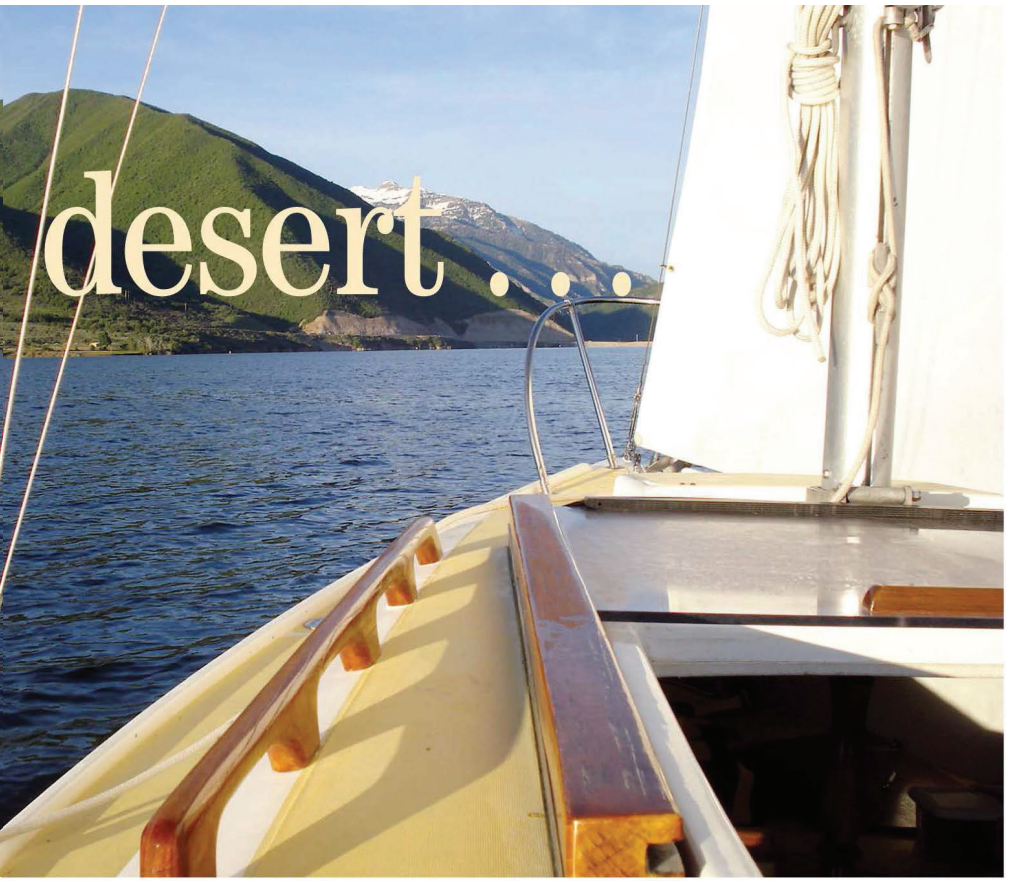
A bent and detached trailer hitch was still engaged to a 2-inch ball, the lone safety chain sporting a clearly insufficient shackle. Like the path of destruction from a tornado, mangled fenders, lengths of channel iron, and shattered wooden boards marked the path from the boat back to the highway. It was clear that the two-wheeled trailer had apparently flown off the road and into a drainage ditch that stripped the trailer away from the boat like a dry husk. The sturdy boat literally tore the trailer apart as it continued on, skidding on its retracted keel and plowing a fair-sized furrow to where it now lay. One yard more and she may have rolled over into the ravine, but miraculously she had stopped just short. Marooned and abandoned, the boat now lay in the dust after what must have been a dramatic wreck.

A wish granted?

We shook our heads. What a shame. For the last two years, Sue and I had been looking for a capable trailer-sailer. Our big boat lived in Rockland, Maine, and, as part-time cruisers, we work in Utah during the winter season. Boat withdrawal is a serious ailment for us. It's excruciating to be so far away from our beloved floating home for months at a time. We needed a little sailboat to help us endure the separation. As we live near two high mountain lakes, it was easy to imagine spending the autumn weekends anchored out in deserted coves surrounded by grazing deer and diving eagles. We had searched locally for a vessel, but in vain. We could not find a small seaworthy boat in our price range.

When we followed the trail of destruction back to the marooned yellow sailboat, we noticed that the hull, unbelievably, was still in one piece. It was at least 150 feet from the road, every bit of it tough sledding, so we expected to see a few jagged holes and ruptures in the hull. But as we examined the boat more closely, we determined that the hull-to-deck joint was still intact and the hull, although

Fortuitously, the little yellow sailboat chose a spot to slide off its trailer and into the desert where Nick and Sue were able to rescue her with their hay trailer and other farm equipment, at left. The trailer was in much worse shape than the boat, but that, too, was restorable, at right.



Nick and Sue now enjoy sailing the once high-and-dry Balboa 20 on a mountain lake.

scored in a few places where it had skidded along in the gravel, had no obvious breach.

Closer examination revealed one deep gouge created as the well-built boat tore the front support off the trailer, but in general, the yellow mini-cruiser looked like it had survived its rowdy trip. The nameplate on the boat identified it as a Balboa 20, a vessel from the drawing board of Lyle Hess, designer of many "skookum" ocean going craft, including Lin and Larry Pardey's hardy sailboats. There she lay, a beached yellow derelict and a golden opportunity!

Sue rolled her eyes at my obvious excitement. She knew all too well that the steam that was starting to come out of my ears meant a mad adventure was sure to follow. She correctly guessed that this wasn't really a shipwreck at all . . . but a boat for sale! It was obvious that the unlucky owner had to get the boat out of its present resting place. He would have to hire a flatbed and a crane of some sort. Then, when he got the boat home, what was he to do with it? It was a little large to be a birdbath. It was our great luck that this sturdy boat was marooned right on our beach. We scrawled a note, included our phone number, and affixed it to the transom, "Will buy boat, as is, where is."

That evening brought a phone call from the boat's owner and, following Sue's suggestion, I offered him a "reasonable" price. A reasonable price for a shipwreck, that is. Actually, it was a ridiculous amount, but he immediately and gratefully took our offer. We were the surprised and happy owners of a beached Balboa 20.

Recovery and a refit

Our four-wheel-drive farm tractor has forks as well as a loader bucket so, while Sue drove out to our new mini-yacht with our hay trailer and farm truck, I put the forks on the John Deere and followed in high gear. We put two slings around our new boat's yellow belly and the forks creaked as she was lifted from the high desert floor. She had no hidden damage to the hull and, as she rose from the desert sand, we were gratified to see that the swing keel was still firmly in place. Sue backed the flatbed under the hull and we lowered her gently onto half a dozen fenders. We loaded the mast next, and Sue took off slowly for home with our prize, the tractor following in formation carrying the parts of the trailer that could be loaded on the forks.

The boat trailer seemed at first to be nothing but scrap steel, but a close examination revealed promise in that pile of twisted wreckage. We brought the bent metal home and blessed our luck that the trailer axle was still relatively straight and the wheels and the brand-new tires were unharmed. The rest of the trailer was not so lucky. The frame was twisted and buckled, and jagged tears showed where welds had failed and cross-members had torn off. There was still one lone upright remaining where a board had once been attached to cradle the hull. The rest of the uprights had either been torn loose or mowed flat. The frontmost support, where the bow had once rested on a rubber roller, was torn completely off the frame, and we found it lying in the dirt some yards away from the wreck.

Starting early the next Saturday morning, we carefully straightened each bent piece of the trailer using a coal fired forge and a large anvil. The trailer was constructed of thick channel iron, so blacksmithing techniques worked well in reshaping and straightening each part. We "repaired" the smaller parts of the trailer frame on an anvil with a sledgehammer and torch — a delicate operation to be sure. With a MIG welder, we reconstructed the trailer, complete with a new winch and new 2 x 8 boards for the cradle.

At the end of a long Saturday, the heap of metal was once again welded together, and we were pleased to see that this jigsaw puzzle now looked a lot like a boat trailer. With a coat of black paint, it was as good as new. It was an exciting moment when the little Balboa once again met the trailer, settling into its place as if it had never left.

The boat itself was next. The mast was straight, the rigging unkinked, the boom and sails fine. The rudder was not only perfect, it was still attached to its brand-new laminated tiller. The little roller furler was worth several times more than we paid for the boat and the cockpit cushions looked new. The hull had a small puncture hole at the waterline, a tiny knife slit, and

After boat and trailer were restored, it was time to check out the sails.

the galley countertop had cracked where the hull side flexed as she landed hard in the dirt. A few hours of glasswork made her sound again, but the worst of the restoration wasn't due to the wreck at all.

It wasn't the gouges in the hull or the mangled boat trailer, but the neglected interior that made us question our sanity in messing about in this old boat. The carpeted cabin smelled as bad as it looked. Poorly bedded deck hardware had resulted in small leaks that had led to unappetizing mildew and stains under the carpet. As if the carpeted interior wasn't a bad enough idea, mice had held council in the bilge over the summer, lending a truly uninhabitable air to the interior.

Sanitized and restored

Holding our noses and donning rubber gloves, we tore out every bit of the original carpet, exposing underlying insect nests and much unidentifiable bilge detritus. We bought bleach in mass quantities, and for the next few days we bleached the cabin sole, cabin sides, bow, stern, quarter berths, countertop, cabinets . . . and then we did it again. After removing everything portable from the interior, we put a hose in through the companionway and filled her six inches deep with bleach water. It was bath time, and she was her own bathtub. We let her soak. After we siphoned the water out and vacuumed the bilges dry, the interior became much more appealing. She appreciated the attention. All she needed was a day in the warm sun with the hatches open and she smelled as sweet as a desert rose.

Finally she was habitable. The original contact cement that had held the carpet to the hull had hardened to the point where some work with an oscillating sander left a pleasing orange-peel finish, a fine texture for new paint. We donned our Tyvek and within a couple of hours had painted the overhead and V-berth white, making the interior seem much lighter. We then replaced the carpeting on the cabin sides with bright cedar battens screwed onto expanded PVC strips glued onto the inside of the hull. Every piece of deck hardware, including the mast step, bow pulpit, and genoa track was re-bedded with 3M 5200 and reinforced with proper stainless-steel fender washers or backing plates made in our machine shop. We repositioned the chainplates and bolted them on the outside of the hull. Pressure washing her outside proved her to be dry inside. She was ready to launch and she was really looking good.

Our little yellow mini-cruiser now sails in our high mountain lakes during the cool spring and summer months and we never cease to be amazed at her seaworthiness. We fondly regard her as our big cruising boat's little sister. Setting a small Bruce anchor off her robust anchor roller, we stay overnight in small calm coves, watching the sun rise and set over the nearby mountain peaks. On such quiet evenings, we sit together in the cockpit before retiring, savoring the fruits of our imagination in restoring the small yellow shipwreck. We realize once again that the universe always seems to provide sailors what we need as long as we have a little vision, a little inventiveness, and plenty of sweat.

Nick Bigney grew up in Boston and spent his youth on the ocean. Sailing came naturally to the great-great-grandson of a Yankee privateer who died of injuries suffered in the War of 1812. Nick imagines Captain Tom Duncan striding the deck, proud to have at least one of his progeny under sail. Nick and his wife, Sue, have homes in Texas and Utah and boats in Maine and, now, Utah.

GOOD OLD BOAT
Digital Subscriptions

New Subscribers

Try our digital subscriptions and you'll receive an instant **free** copy. Your subscription will begin with your download of the next issue.
Notification of each issue and a link will be emailed.

Already a subscriber?

Your remaining issues can be converted from paper to electronic if you prefer to receive digital copies.

Sign up online

www.goodoldboat.com/
subscription_services/
digital_subscription.php

One-year subscriptions
$39.95

Junkyard wars for a boatless sailor

Getting back to the water with very little money and a lot of effort

by Brian Gilbert

I CLEARLY REMEMBER DRIVING DOWN the interstate behind a 1972 MacGregor Venture 222. The boat was being pulled by its current owner …headed toward my home in Chattanooga, Tennessee, where I would begin its restoration. As I drove through the shower of leaves and twigs, I remember wondering to myself, "Gee, what was I *thinking*?"

The sailboat was a sad case. Because it had been lying in the woods half full of stagnant rainwater, everything inside was rotted or mildewed. It had been heavily modified by the previous owner, who may have been a skilled cabinetmaker, but he didn't understand the subtleties of marine carpentry. Once beautiful interior-grade hardwood plywood had delaminated, and mild-steel screws had turned to rusty, powdery barbs.

So what *was* I thinking? I once lived aboard a Catalina 27. But I sold her, got married, and returned to graduate school. I never regretted making those choices, but I'd often wished I could have done all that and kept the boat as well.

With my new responsibilities, replacing my Catalina was out of the question, so I began searching for a smaller trailerable boat that I could keep at the house in the winter and sail on our nearby lake in the summer. Sailboats are rather rare near Chattanooga, and those I found were expensive, often at prices well above book value. I was starting to get discouraged.

"A blind man could survey this boat with his nose and come up a reasonably accurate assessment: it had serious problems. To pay a surveyor to tell me the obvious seemed a waste of money."

Things going for it

That's when I came across the MacGregor Venture 222 that I was following home. This boat did have a few things going for it. It was essentially complete: mast, boom, sails, trailer, cushions. Much would be replaced, but having all the parts gave me the option of rebuilding if possible. If a part was too far gone to restore, it could be used as a pattern. Another advantage was that it was relatively close, only 30 miles away. And it was cheap. I paid $500 for it, though in hindsight I paid too much.

The final advantage was that the seller was willing to sell the boat delivered at my house. This was no small consideration. Since the sale depended on delivery, it was comforting to know that if the boat did ball up, I wouldn't be responsible for the resulting mess on the highway. But we made it to the house with no problems, and the boat was soon blocked up under a shady tree beside my house. I thanked the former owner for his help, and we closed the deal. As he drove off, I took a good, close look at my boat and assessed the mess.

Surveying a restoration case

One of the most important steps in buying a boat, for restoration or otherwise, is a survey. With larger or more valuable boats, hiring a professional surveyor is always a good idea. But with boats on the low end of the value scale, it makes less sense. A blind man could survey this boat with his nose and come up a reasonably accurate assessment: it had serious problems. To pay a surveyor to tell me the obvious seemed a waste of money.

I did my own pre-purchase survey. I uncovered the most obvious problems: a cracked and delaminating keel, water-damaged interior, rotten trim, and an electrical system beyond repair.

Looking none too cheery, *Sunshine*, a MacGregor Venture 222, awaits a new dawn at the hands of Brian Gilbert.

The interior in the beginning and the improved interior following three and a half years of hard work.

This was sufficient to get the price reduced from $1,800 to $500, though a professional survey might have gotten the price down even lower. Actually, I had to explain to the owner that $1,800 was a completely unrealistic figure for this boat. BUC International gives the retail price range for a 1972 MacGregor Venture 222 at $1,500 to $1,800 for a normally-equipped, sound boat in ready-to-sail condition without the motor. This boat had a motor, but it had an unrepairable lower unit, and the boat was a long way from ready-to-sail. For more information on boat values, log onto <http://www.BUCvalu.com>.

The seller had said that this boat needed "a good cleaning," which seems to be a favorite phrase among owners of hopelessly neglected watercraft. I started the next day, doing much of my cleaning with a hammer and crowbar. This had been a much-loved and well-used boat at one time, but clearly if it were to have any hope of ever sailing again, it needed to be "cleaned" down to its most basic structure and reassembled.

Better picture

After two weeks of scrubbing, removal, and general demolition, a more complete picture of the boat's deficiencies came to light: old hull repairs made with Bondo, a pair of pine grubs happily munching away at my winch support post, and a thin repair on the topsides where one could easily poke a screwdriver through the hull. It's doubtful that a more thorough survey on my part (or a professional surveyor) might have revealed these problems, but you never know.

"The seller had said that this boat needed 'a good cleaning,' which seems to be a favorite phrase among owners of hopelessly neglected watercraft. I started the next day with a hammer and crowbar."

If you are seriously considering the purchase of a boat in similar condition, ask the seller if you could spend half a day cleaning your prospective purchase. Give it a good scrub. Clean the bilge. Empty the lockers. Wipe down the interior. You might uncover additional deficiencies that you can use to leverage the price. And the boat is going to need cleaning anyway.

The master list

Once I had stripped, cleaned, and thoroughly inspected the boat, I was ready to make my "master list," an itemization of all the repairs, improvements, and enhancements I wanted to make. A list like this can take any form. In *This Old Boat*, Don Casey goes into great detail about making your repair plan, identifying nine different categories of jobs. I wasn't nearly so organized. I just made a big list in a spiral notebook that I called my *Boat Restoration Log*. I also recorded the money spent on parts and supplies for the boat, as well as the time spent on each repair job.

It was often very helpful to break down a big job, like "fix keel," into smaller, more manageable parts. Thus, "fix keel" would have several subheadings, like "lift boat," "remove keel," "strip off old glass," and so on. It was a great morale booster to cross a job, no matter how small, off the list.

The way I went about completing each task wasn't methodical. I'd look at the list, choose something I felt like working on that day, and have at it. If the job required lots of hours, like scraping the hull, I'd often scrape for a few hours, then switch to something a little more manageable, like plugging holes in the deck or renewing a piece of hardware. Certain jobs had to be completed in some kind of sequence — I didn't install any hardware until the painting was finished, for example — but skipping from job to job kept me from getting too bored with the work and feeling overwhelmed. (Most of the time, anyway.)

Sequence of repairs

The basic sequence of repairs went something like this:

1. *Removal of everything* to the bare hull and deck. This included hardware, woodwork, electrical system, and paint.

2. *Clean and prepare for painting.* This meant repairing all rot, drilling limber holes so the lockers could drain, replacing earlier repairs that were weak or substandard, reinforcing joints with epoxy fillets, and sandblasting the interior.

3. *Repair or recondition* as many parts as possible: keel, rudder, blocks, and winches. Replace those that are substandard or deteriorated, such as the table, the exterior trim, and the electrical system.

4. *Reinstall and re-bed* all of the repaired or new systems.

While there isn't enough space to

How long it took

Job	Hours
Interior preparation	12
Interior painting	16
Exterior preparation	66
Exterior painting	30
Interior repairs (includes rewiring)	92
Exterior repairs (includes re-rigging)	103
Keel repairs	22
Upholstery and canvas	33
Trailer repairs (not including sandblasting and painting)	8
Miscellaneous work	15
Total hours	**397**
(and still more to do)	

write about every single job, here are my thoughts about some of the larger efforts:

Painting the interior

Since this boat had a piece-built interior rather than a liner, I had to paint. When I restore my next boat, I'll look for one with an interior liner. I've heard disparaging remarks about liners. They are a cheaper, and often weaker, form of construction. They allow poor access to the hull. The interiors look like the inside of a refrigerator. But as long as their attachment to the hull is good (they are often tabbed to the hull or screwed into wooden stringers, which can rot), liners are much easier to clean up. Mold doesn't imbed itself permanently into the surface and, since they are out of the sun, their gelcoat surfaces can look good for a long time, much longer than exterior gelcoat.

Despite a year or so spent with standing water inside, the interior didn't have too much rot. I was able to remove all of the rot by replacing one seat top panel, addressing the wooden keel winch support, enlarging the seat locker cutouts, and replacing the lids. The lockers were originally hacked out roughly at the factory with a circular saw. By enlarging these with a jigsaw, I improved access and upgraded to lockers with rounded corners. I was able to cut away some rot while I was at it. This is a minor detail, but it gives the boat a more professional finish.

The interior had some sort of fabric attached to the hull. This might have been done at the factory to give the interior a warmer look. I'm sure it looked nice for about a year and a half. Then the inevitable mold set in. After 30 years, it was shot. I ripped it out, revealing a nasty surface of flaky old glue and/or paint. I sanded much off (if you do it, wear a respirator), but some areas could only be sandblasted. I bought a small pressure pot. Next time, however, I'll rent a large industrial blast pot and compressor. (On second thought, I won't be doing this again because the next boat will have a liner, right?)

I added structural reinforcing at the corners of the keel trunk, the transom, inside the lockers, and so on, using thickened epoxy. These joints were already fairly strong; no cracks were showing after 30 years. But the joints were rough. Adding a rounded fillet left a smooth, rounded inside corner that is stronger, looks better, and is easier to clean. Then I painted the interior with polyurethane enamel, dented cans on sale for $2 a quart. I used 4 quarts. It's holding up well.

***Fluke,* a refurbished MacGregor Venture 222, sails once more.**

Replacing the wiring

Older MacGregors have a reputation for being poorly wired. On my boat, that reputation was well deserved. The electrics were substandard from Day One, relying on lamp cord, household switches, and a single fuse to distribute power throughout the boat. I threw everything out and replaced it with larger-diameter wire, a distribution panel, and new navigation and interior lights. I tried to follow the ABYC specification for marine wiring as closely as possible. I was unable to find a consumer version of the specifications, but I managed to piece together various parts from the Internet and boat-repair manuals. The result is a vast improvement over the stock system.

What it cost

Boat	$500
Consumables	66
Tools	140
Cover	205
Stainless-steel fasteners	243
Canvas and upholstery	214
Epoxy, paint, fiberglass	349
Electrical	270
Wood and raw materials	128
Rigging	400
Sails	471
Motor	505
Taxes and registration	43
Trailer	105
Interior equipment	355
Deck equipment	116
Total	**$4,110**

Centerboard rebuilding

The centerboard was a major problem. The MacGregors of this era had centerboards that were made from three ½-inch steel plates, sandwiched together and set in a female mold containing a few layers of glass, but mostly resin. Over time, water finds its way to the core, causing rust. The rust expands, cracking the brittle resin covering and allowing more water in. These centerboards are often found wedged tightly into the centerboard trunk.

Mine had been "repaired" by slicing away some of the fiberglass covering, but it still needed to be driven out of the trunk with a steel pin and a sledge. Lifting the boat off the trailer to access the centerboard was a nightmare. The boat nearly fell over twice despite being shored and braced nearly every way imaginable. The soft ground over which I was working made this a dangerous and difficult job.

But I was able to remove, strip, sandblast, paint, relaminate, and reinstall the centerboard. That's about three months of part-time work in one sentence. I discovered the ½-inch keel bolt had bent nearly 45 degrees, so I bored the pivot hole larger and installed a ⅝-inch grade 8 bolt. This keel should last awhile, but were I to do it again, I'd get a cast-iron replacement keel as was used on later models. That keel has a better foil shape, and renewing one consists of sandblasting the rust, priming, and painting.

Canvaswork

One of the more enjoyable jobs was the canvaswork. I learned enough about sewing to muddle through replacing and recovering the interior cushions and to do some exterior projects as well (see *Good Old Boat*, July 2003). Recovering the cushions was a long job that sometimes got tedious, but it's a great project for the winter months. Next to painting, new canvas makes one of the most noticeable improvements to the overall look of a boat.

It's been about three and a half years since I started my restoration project. To date I've spent about 400 hours and $4,000 on the boat. I've won my junkyard war. I have a boat that — while it isn't perfect, nor the last

boat I'll own — looks, smells, and feels like a nearly new boat. And I've kept at least one boat from the junkyard for a while.

If I were to do it again, I'd do a few things differently. First, I'd look for a boat that was a little less modified by the previous owners. Some of these fixes could not be repaired because of the inordinate amount of work and money required. Second, I'd look for a boat that wasn't quite so badly neglected, has an interior liner, and has a higher resale value than mine does… one that can be sailed immediately would be ideal. Of course, now that I have a boat, I can be a little more selective.

In fact, I'm hoping to put my experience to good use on my next boat, maybe something big enough for a Tennessee family of three to sail downriver and spend a season in the Caribbean.

Bonita's meta

Chrysler caterpillar turns into

Sara was dangling from a bosun's chair high atop the mast. Last night, Sara had gone to the prom. This morning, still wearing her fancy fingernail polish, she was trying to free the jib halyard and attach the wind-direction indicator. Sara is the best friend of my daughter, Katie, and was carefully selected for the task because she is so tiny, knows no fear, and is game for anything.

It started two years earlier with an email message from my friend, Steve, who runs an RV storage lot. He wondered if I would be interested in a free boat. My immediate response was, "What kind of boat?"

"A 1978 Chrysler 22 sailboat," was his reply. "It's been in my lot for four and a half years without moving,"

It was in awful shape. It had been parked under a stand of firs. The fiberglass hull was dull and gray. Green algae stains were everywhere. The deck was covered by pine cones and needles; the trailer was covered in rust.

It was worse on deck. The wooden handrails and dropboards were dirty-gray. The hatch had been left open, and the boat was filled with 18 inches of green, slimy water. The interior woodwork was gray and weathered. The boom and other parts had been tossed randomly below. Everything was just plain dirty. She was a mess.

I thumped on the hull in several places; it seemed sound. "OK," I thought, "I can clean and fix this boat up. After all, the price is right."

Make an offer

Steve gave me the owner's phone number. The owner went through the features and said he'd tried to give it to the Sea Scouts, but they took one look at the boat and decided it needed too much work.

"Make me an offer," he said.

"I thought you were trying to give the boat away," I said, somewhat surprised.

"Well, I was going to at least get a tax deduction from the Sea Scouts. Go ahead, low-ball me. Make me an offer."

"How about $500?"

"Sold."

It looked like I had a project on my hands.

I returned to the living room and sheepishly confessed to my wife, Connie. "I think I just bought a boat." I expected an explosion.

"Good, you need something like that," she said. "You spend so much of your time taking care of us, it's about time you did something for yourself."

That weekend my 13-year-old daughter, Libby, and I drove over to the seller's house to give him a check and take care of the paperwork. We learned a bit about the history of the boat.

The seller had owned the boat for 21 years. He bought it when his daughter was 13. They had sailed it all over Puget Sound. Unfortunately, his marriage had dissolved. About 10 years ago he had remarried and his new wife hated sailing. The boat had become a bitter point of contention between them.

Monthly bill

In a fit of exasperation, he hooked his pickup to the boat trailer and towed it to Steve's lot. There it sat for four and a half years. Every month they got a bill for the storage. Every month the wife seethed at having to spend $50.

"I am so tired of paying every month to keep that boat," his wife had told Steve. "I would love to just give it away. Do you know anybody who wants a boat?"

The next day Libby and I piled into our Dodge minivan and drove over to Steve's lot to bring the boat home. I backed the van up to the boat trailer and lowered the trailer hitch onto the van's ball. I cranked down the trailer tongue. When I had cranked as far as I could, the front wheel on the boat trailer was still on the ground.

"Dad, look!" cried Libby.

The front wheels of the minivan were about 6 inches off the ground. This was obviously not going to work.

We unhooked the trailer and headed home. I needed to find someone with a big pickup. Peter, our neighbor across the street, volunteered the use of his truck. That worked just fine, and when we pulled up in front of my house with the boat in tow, I expertly backed (sometimes, you just get lucky) what seemed to us like a very big boat into the driveway. It filled the drive; it stood nearly as tall as our house. It is amazing how big a sailboat looks when it's out of the water.

As I got out of the truck, Peter's wife came to the door of their house. "Oh-my-god!" she exclaimed. "Does Connie know about this? When Peter said he was going to help you go get a boat, I thought it was, like, a little Boston Whaler."

A gawking crowd

By this time, many of our neighbors had gathered in the front yard. There must have been a crowd of 20 people gawking at the *Queen Mary* blocking half of our driveway. I would not be able to park my car in the garage for

Sara, the fearless and small friend of Penn's daughter, Katie, retrieves the jib halyard, above, which had been overlooked when the mast was raised on the Wallace family's new (used) Chrysler 22. On facing page, *Bonita* — large in some ways and small in others — awaits future adventures. A portion of the Wallace family, inset: Connie, Libby, and Penn.

by Penn Wallace

morphosis

22-foot butterfly

a long time. Fortunately, Connie would still be able to get to her side of the garage. All this occurred while she was at work. I wanted to have the boat already stationed when she arrived. That way she couldn't tell me not to park it next to her flower bed.

The real work began the following weekend. I started by scrubbing the boat. After years of neglect, just getting her clean enough to work on took an entire weekend. The following weekend I began removing what seemed like hundreds of gallons of water. At least I knew that her hull was watertight. I scooped bucket after bucket of slimy green water out and dumped it in the cockpit, which drained overboard. Then the real work began. Everything from the cabin sole up 18 inches was coated in slimy green algae. (*Note: It's far wiser to bail the boat* ***before*** *towing it.* ***–Ed.***)

I scrubbed and scrubbed. I borrowed all of Connie's household cleaning agents in search of something that would remove the algae. Windex worked well. Algae removal took a full day.

Next was the job of cleaning the cabin enough to move around in it without getting dirty. Years of dust and dirt had accumulated. The cushions were a total loss, so I tossed them. The Porta Potti had been put away five years ago without cleaning. I cleaned it out only to discover that it leaked. It had to go too. I was the only one on the block with a Porta Potti on his Christmas list.

Caught the bug

When the boat was clean enough to crawl around in, Libby climbed up to see what I was doing. Incredibly, she caught the boating bug. She became an integral part of the restoration. She scrubbed and cleaned. She did all the brightwork. I was amazed at her level of interest. This was *her* boat.

The woodwork, what there was of it, was gray and dirty with age and exposure. I removed what I could and bleached it with Te-Ka to restore it to its natural color. I've tried several other products but found that the Te-Ka works best.

Te-Ka comes in two parts. Formula A opens the pores of the wood and draws out the dirt and grit. It's amazing to see the grime come to the surface. Formula B neutralizes Formula A and restores the teak to its natural golden color. This took several applications. When we were done, the wood looked like new.

Once we had the teak restored, Libby took over and oiled all the woodwork with several coats of Deks Olje. The first part of the treatment restores the wood and preserves it; the second gives it a gloss finish that rivals varnish. The major benefit is that when it starts to show wear, you don't have to remove the old coat. You just add a new coat over the old one. I discovered Deks Olje when I owned a teak-drenched Cheoy Lee and swore I would never use varnish again.

Now came the hard part. The fiberglass was dull and gray. I spent several weekends buffing it out and waxing it, using 3M Marine Fiberglass Restorer and Wax. I used the 09012 version, which is the heavy-duty oxidation

Bonita's interior — once full of 18 inches of green, slimy water and the accumulated dirt of many years of neglect — was vastly improved with the help of Windex (removes algae), a thorough scrubbing, and new cushions.

remover. Rather than use a buffer, I rubbed it out by hand. I didn't know what kind of condition the gelcoat was in and didn't want to wear through it. That would have entailed an expensive refinishing project. The final result was that it looked like new. We were beginning to have a boat we could be proud of.

Presentable again

I'm sorry we didn't think to take any "before" photos, because she arrived as a wreck. When we dragged her home, no one could imagine that she would look so good again. After three months of hard work, she was presentable. She wasn't ready for sea yet, but the winter weather was setting in and I didn't intend to work out in the cold and rain. Connie didn't want the boat in the driveway all winter. She had been very patient with me so I relented and took her (the boat, not Connie) back over to Steve's storage lot for the winter.

I wasn't going to let the elements destroy our hard work. I bought a huge blue tarp and we covered her for the winter.

We had a boat-Christmas that year. On my list were a boathook, mooring lines, an air horn, a flare gun, and all sorts of other nautical paraphernalia. Santa was good to me. Everyone in the family got a life jacket too.

Late that winter, Libby and I went over to the RV lot to check on the boat. We were surprised to find the tarp full of water. The mast spanned the length of the boat and served as a center pole over which I had draped the tarp. As rain fell during the winter, it had accumulated in low spots on the tarp so I had two huge pockets of water on each side of the mast at the cockpit.

My first thought was to climb up the ladder and lift one edge of the tarp to let the water flow off. But there must have been a hundred gallons on each side of the mast. There was no way I could lift the edge. I needed a new strategy.

Untied the tarp

The next idea was to untie the tarp so it could move freely. Then maybe the water would shift and find a spot where it could flow off. As I walked around the boat untying the tarp, Libby climbed the ladder to check out the problem. As I untied the ropes holding the tarp down at the bow, the water shifted aft, the front of the trailer rose in the air, and the boat stood on her transom.

Libby was still standing on the ladder when this happened. A shift of 4,500 pounds of boat and trailer and several hundred pounds of water caused a violent alteration in the boat's position. Libby jumped to save her life. She hit her hand on the way down but luckily suffered no permanent harm.

> "We had a boat-Christmas that year. On my list were a boathook, mooring lines, an air horn, a flare gun, and all sorts of other nautical paraphernalia."

The final solution to the problem was to cut holes in the tarp where the water had accumulated. The water drained into the cockpit and overboard. This caused another violent reaction. As the water drained out, the stern lost all that weight. Finally, the trailer — boat and all — came crashing down. By some miracle, neither people nor boat suffered permanent damage.

When we got home and related the adventure to Connie, she told Libby, "If you are going to sail with your father, you are going to have to expect to get hurt." That was the voice of experience speaking.

In the spring I had a chance to secure a slip in the Everett (Washington) Marina, so I grabbed it. The boat was a long way from being ready to launch, but I didn't want to lose the chance to obtain dock space.

New cushions

We brought her back home in April. More hard work and expense was ahead of us. I had new cushions made for the cabin at a cost of $1,750. I checked out the mast, rigging, and sails. With the exception of a broken spreader, they all appeared to be in good condition. I was able to order a replacement spreader.

We still needed an outboard. I found an ad in the newspaper for a 20-year-old Mercury 10-hp motor for $500.

Libby and I painted and cleaned and scrubbed and prepped our boat all spring. In late May we were ready to launch her.

Our neighbor towed her down to the marina for me. Connie and Libby met us there. The yard hands picked her up with the lift and let us touch up the bottom where we had not been able to paint under the trailer's rollers. Then it was time to commit her to the sea.

I climbed aboard. As they lowered us down to the water, I was nervous. Would she float? Sure enough, she did. No leaks.

My next problem was to get the outboard motor started so I could move the boat out of the way to clear the launch area for the next boat. I pulled and pulled on the cord to no effect. Finally, they used the little harbor tug to tow me to the guest dock where a crane was waiting to step the mast.

We rigged a sling on the mast and the crane hauled away. While one of the yardhands held it in place, I scrambled around attaching stays and shrouds. But some of the turnbuckles

that attached the shrouds to the chainplates didn't have clevis pins in them. I asked Connie to run up to the marine hardware store and buy enough pins to secure the mast. The guy working at the marine store was not very helpful, and Connie couldn't find the pins.

Got it secured

Before it was over, I had to leave the yardhand holding the mast in place while I ran to the store. We finally got the mast secured and the yardman and crane left.

Now we were alone on our boat with a motor that wouldn't start. I went to work on the motor and finally got it going. We cast off our lines and headed toward our new slip. Then the engine died. We drifted in the marina while I tried to get it going again. I could get it to run for a minute or two at a time before it died again. We managed to get around the end float and start down our own row when the engine emitted a belch and a cloud of blue smoke, coughed a couple of times, then quit, never to run again.

Fortunately, there was a light breeze blowing us toward our slip, and we had steerageway. Connie took the bow line; Libby had the stern line. I managed to maneuver into the slip. Anyone watching would have thought we did this every day. Connie was an old pro from her sailing days early in our marriage, but Libby had never been on a sailboat before. It was all new to her. Just getting the boat safely moored was triumph enough for one day. I decided to tackle the engine problem later.

The next weekend was later. The engine was shot. It had virtually no compression in it. The repair shop said that they wouldn't even work on it. "I'm not going to take your money when I can't help you," the owner said.

Needing a new engine, I looked around and found a 9.9-hp Evinrude for $1,000. The Evinrude would take cockpit controls. Since the boat had cockpit controls, I was happy that I wouldn't be leaning over the sternrail working with the engine all the time.

Unfortunately, the cables from the cockpit controls had been cut. Of course, the outboard motor shop didn't stock those parts, so I had to order them and wait weeks for delivery.

It took me all summer to get the parts, figure out how to install them, and, finally, to get the controls working. When I first hooked them up, if you pushed the throttle forward, the engine would go into reverse; if you pushed it backward, the engine would go forward. It worked well but was counterintuitive. I got some help from Jeff at Olympic Marine and learned how to hook it up correctly. But now the motor wouldn't go into reverse. Finally, I had to buy a new control box designed to work with the Evinrude. Eventually, I got the whole thing working.

Final obstacle

We were almost ready to sail. The last obstacle was the jib halyard. After we had the mast up and the boom truck was gone, I discovered that the jib halyard was all the way at the top of the mast. Somebody was going to have to go up there and get it. That's where Sara came in.

When we were finally able to go sailing, we had a family meeting to choose a name for our boat. The previous owner had never named her. That left us free to name her without incurring any of the bad luck associated with changing a boat's name. She would be the *Bonita*.

In Spanish, bonita means pretty, and that she is. A bonita is also the smallest member of the tuna family. She was a small boat to us, particularly after having a 32-foot sloop as our previous boat.

Chryslers are not common boats in the Pacific Northwest. They were built in Texas for lake sailing. Instead of a trunk cabin, her cabin slopes into the foredeck. The *Bonita* has a white hull and light blue trim.

She is quite pretty under sail. She has a swing keel that I can't get used to. When we are beating to windward there is a constant clunk-clunk-clunk as the keel works against its pivot bolt. She is stiff and a good sailor but is slow in light air. I don't have a genny for her, but I think she would behave better with a genny when there is little wind.

A little cranky

With the swing keel and spade rudder, she is a little cranky to sail. She won't track on a straight course for very long. You need to pay constant attention to the helm. On the positive side, she is very responsive and will spin on her keel. We have never had any problems tacking. She has quite a bit of weather helm; it takes a strong hand to keep her on course in a stiff breeze.

The Chrysler 22 is roomy belowdecks for a 22-footer. Because she was designed as a family cruiser, she has a pop-top cabin. The roof lifts up about two feet to give standing headroom below. Side curtains seal the opening.

In the forepeak there is a V-berth with a Porta Potti beneath it. Coming aft, on the port side there is a dinette that makes into a berth. On the starboard side is a settee. An ingenious sliding galley with a sink and two-burner alcohol stove slides back under the cockpit when not in use and slides out over the settee for cooking. It diminishes the space in the starboard cockpit locker and we haven't used it yet, but somebody thought it was a good idea.

I am $3,500 and hundreds of hours of labor into my "free" boat, but she looks like a new boat and I'm sailing again. I wouldn't have considered buying a boat at this time in my life if Steve hadn't mentioned it. I wanted to get back into sailing but couldn't justify diverting the money from the family. With one daughter in college and the other going next, we need the money now more than ever. However, Connie has been wonderfully supportive. She knows what sailing means to me and has been very encouraging.

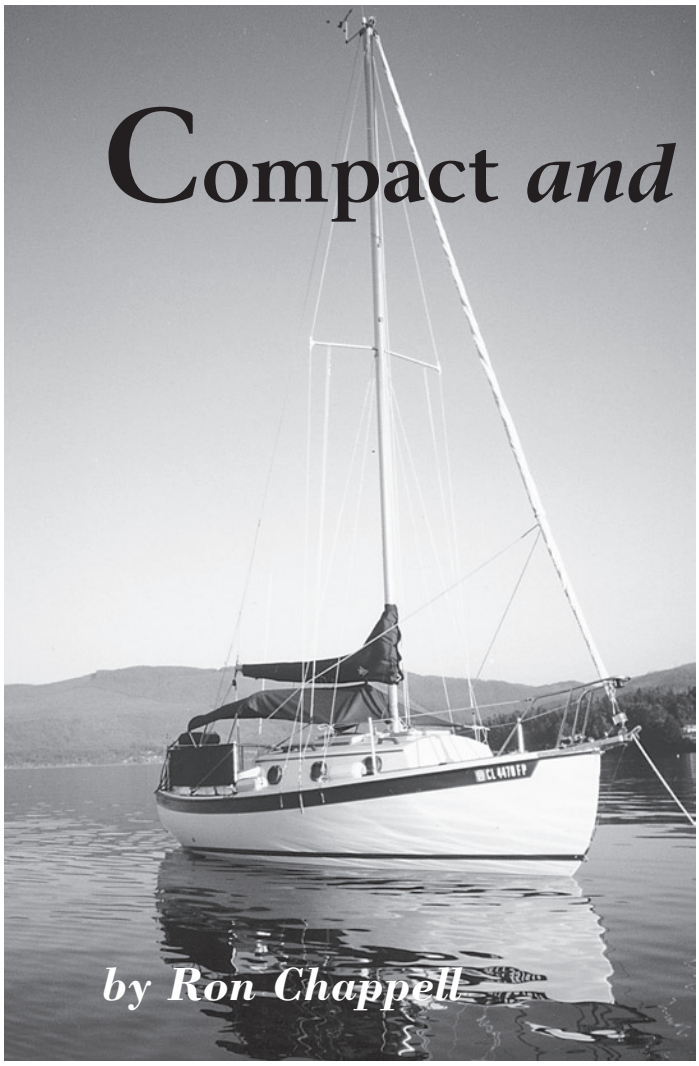
Resources

Te-Ka
ITW Philadelphia Resins; 215-855-8450; <http://www.marinetex.com>

Deks Olje
The Flood Company; 800-321-3444; <http://www.flood.com/Flood/>

3M Marine Fiberglass Restorer and Wax
888-364-3577; 877-366-2746; <http://www.3m.com/Product/information/Fiberglass-Restorer-Wax.html>

Compact *and* comfortable



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

by Ron Chappell

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

Hutchins Yachts, in Clearwater, Fla., knew exactly what they were doing when they first built Clarkie Mills' little 16-foot traditional cruiser. Designed for retired Florida sailors, it was meant to be a safe, easily handled coastal cruiser that almost anyone could afford. It succeeded beyond anyone's expectations, becoming popular among young families also. Here is the diabolical part: Hutchins intentionally built excellent little boats, then proceeded to lavish service on their customers, going well out of their way to keep buyers happy . . . unheard-of business tactics at the time. This allowed Hutchins to weather the lean years when many others failed and, at the same time, to build a customer base of near cult status.

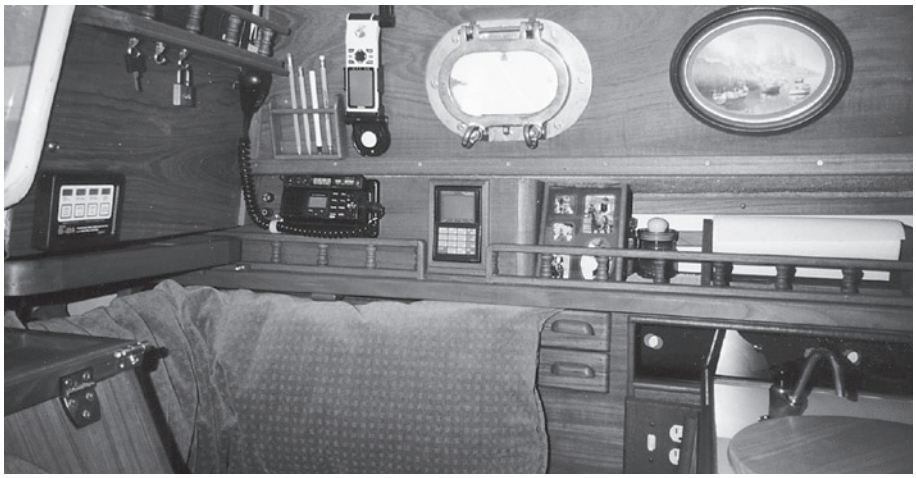
The 16 would soon be outgrown. So Hutchins built a 23-footer, also designed by Mills. Larger boats would follow, all the way up to a 37. Com-Pac owners never had to leave the fold; when they got two-footitis there was a brand-new Com-Pac that looked exactly like their previous model (which they loved)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

But why, you ask, would anyone buy a boat that looks like a Josh Slocum weekender? It even has old-fashioned bronze portlights, a shippy little sheerline, a transom-hung rudder, a spoon bow, and (Lord help us!) a teak bowsprit . . . not to mention rumors that concrete makes up part of its ballast (as it did in Slocum's *Spray*).

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

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

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



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

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

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

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

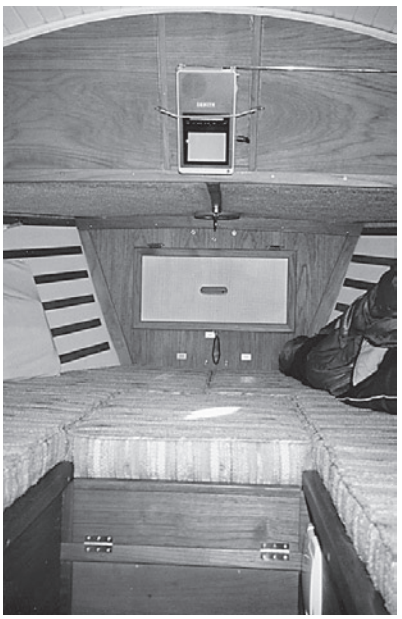
A cutting-board sink cover and a small fold-down side table completed our new galley. We made up and installed sliding Lexan doors on the cubby above the cabinet. The entire unit takes up 27 inches of settee space, leaving a usable sitting area for one or a 5 foot 1 inch quarterberth suitable for a child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

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

The remote control/warning panel for the propane system is mounted close at hand on the aft bulkhead below the binocular rack. The heavy teak and Formica chart table, a slide-out, is positioned against the top of the quarterberth and takes up only 2 inches. The table features five locking positions and a built-in instrument case. A fold-up seat is hinged to the companionway step and provides a comfortable place to sit while doing … whatever it is one does at the nav station these days. Holes left in settee backs, from moving the electronics, were filled with small teak drawers that were time and labor intensive but have proven to be as handy as the pocket on a shirt.

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

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



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

Hutchins Company, Inc.
<http://www.Com-PacYachts.com>
727-443-4408

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

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

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

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

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

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

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

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

Scallywag to the rescue!

Scallywag, ***a 1973 MacGregor Venture Newport, before and after her refit.***

by Brian Pickton

We were stormbound in Eureka, Calif., on our voyage south from Vancouver, British Columbia. One thing leading to another, we had wintered over in this delightful, friendly town. I was walking the dock one cloudy winter day when I noticed a boat tugging at her mooring lines. Even from the embarcadero, I could see she was something special. Her clean graceful line was uncluttered. No clunky pulpit or lifelines to distract the eye from the exuberant swoop of her sheer. Her dark green hull and immaculate brightwork were eye-catching, and her proportions were simply wonderful. There was a feeling of rightness about this boat. It said this was what sailing was supposed to be about: grace and beauty under sail, unassailed by modern pressures about speed or conformity to the latest Euro-styling fad.

This was *Scallywag,* a 1973 MacGregor Venture Newport, arguably the most handsome boat built by the firm renowned for its water-ballasted trailersailers. The Venture Newport predates the firm's water ballast development and is equipped with a swing keel, displacing 2,300 pounds. Other vital statistics are length: 26 feet overall, 23 feet on deck, with a beam of just under 8 feet. She draws 18 inches with the board up, 5 feet with it down … perfect for gunkholing around Humboldt Bay. *Scallywag* is cutter-rigged with a cloud of tanbark sails, but as beautiful as the boat is, the story behind how she came to be restored is even more interesting.

Drifting apart

Owners Mike Fuller and his son, Jake, told me the story behind the restoration. Mike had been worried. With a young family to support, he was working all hours of the day. As a result, he and his 12-year-old son, Jake, had started drifting apart. Jake was listening to punk rock. There were heavy metal band posters on the wall of his room, and he was hanging out with people Mike thought were hoodlums. There were long sullen silences as Jake withdrew into himself. Mike knew he could not offer guidance to a son who would not listen. They had a common interest in surfing, but it wasn't

Bronze portlights are yet to come. Those pictured at left are painted wooden reproductions. A teak hatch and trim has transformed the cockpit, at right.

enough. Mike decided that the situation was his to solve if he chose to. He could either continue working as hard as he was or cut back and spend more time with his family. For Mike, family had to come first.

But even when he committed the time, what could he do to connect with Jake? A few years before, the two had gone on a three-day trip to Catalina Island with Mike's sister. From that time on, both he and Jake had been interested in sailing. Mike found an old 1911 Estrallita, so tired that not even the Boy Scouts wanted it anymore, and he bought it. He fixed it up with minimal help from Jake and took his son sailing to see what would happen.

Jake enjoyed the sailing immediately. They spent every spare hour sailing and would often spend the weekend nights on Humboldt Bay. "Anchored out in a little boat with no place to go, and being only three feet apart, you have to learn to communicate," Mike says. The father and son team liked sailing in heavy weather, and every time the weather was rough they learned something new about sailing and each other. "Jake would soak it up like a sponge," Mike said, "and even months later, when we ran into heavy weather again he would remind me, 'Hey Dad, we have to do this or that thing.' I would have entirely forgotten what we had done the last time, but Jake remembered everything." It is clear that the father and son team came to depend on and trust each other while learning how to sail in rough weather.

"Anchored out in a little boat with no place to go and being only three feet apart, you have to learn to communicate"

Unfounded concerns

Did sailing change anything? As Jake puts it, while other kids were out partying he was busy sailing. Although he thinks his father's concerns about where he might have been headed were unfounded, he quickly adds that when he has children one of the things he will do with them is teach them how to sail, as his father did with him. According to Mike, buying the Estrallita, working on it, and sailing together straightened everything out between them.

That first sail was 10 years and three boats ago. It was a foggy November day when I met Mike and Jake Fuller aboard their latest effort, *Scallywag*. Much had been changed from the original. According to Mike, the hull, deck, mast, boom, and stern light came with the boat, but little else remains of the boat they bought. Even the chrome has been stripped off the stern light to reveal the underlying metal. Mike and Jake prefer the patina of unpolished bronze. The original anchor platform has been replaced with a proper bowsprit complete with whisker stays. The fiberglass forehatch and companionway hatch have been replaced by teak finished bright. The detail work even extends to the boat's Honda 7.5-hp outboard, now painted in the same dark green acrylic as the hull. The interior cushions and instruments were acquired in trade: Mike traded signs he painted for them.

The paint is flawless. Mike is a paint foreman and graphic artist. The mast, which even under close inspection looks wooden, is an aluminum section painted with acrylic enamel.

From stem to stern,* Scallywag *has become a source of pride and the epitome of accomplishment for owners Mike and Jake Fuller.

The mast was already completely painted when Mike decided to experiment with his airbrush. "Five minutes later," he said, "I had added a woodgrain effect. If I had known it was going to go that fast I would have added some whorls and knots to it!"

Faux teak

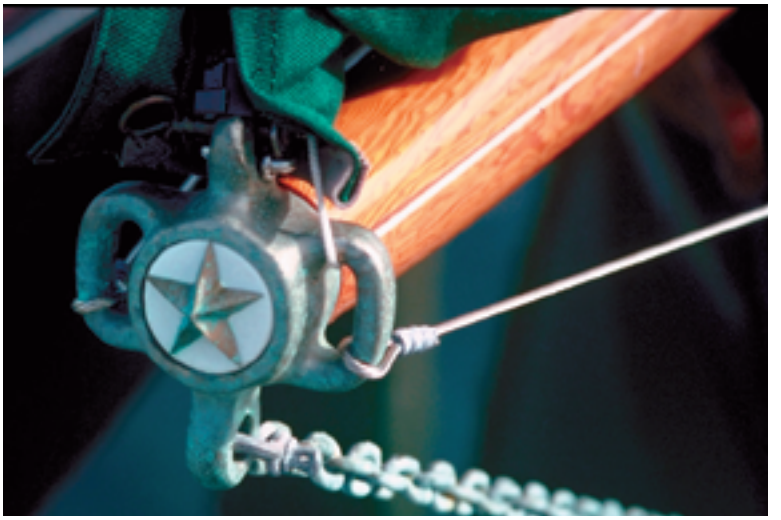
He was thinking of adding a teak rubrail. Realizing he had to draw the line somewhere, however, he decided to paint the original hard rubber rail to look like teak instead. The paint job looks so realistic, right down to the teak plugs, that I refused to believe it was painted. The "bronze" portlight frames are painted wood. One night Mike and Jake cut out and routed the wood, and the next night they painted the frames with a mixture of copper and bronze powder in a clear latex. Then before it had completely dried, they sprayed this with a patina paint to give it the green hue. Finally the ports were covered with a clear enamel. This is but a temporary measure while they wait for genuine bronze ports to be cast.

"There are many remarkable restorations whereby a boat is brought back to showroom condition, but there are exceedingly few restorations that transcend even the builder's original product"

Talking it out

Both agree that decision-making has been easy. "The experience has been good for me," Mike says. "I had to learn to listen to Jake's suggestions, because we are partners. I couldn't just go out and do something, like I had on the earlier boats. I had to consult with Jake first, and he has had a lot of good ideas." Both father and son emphasize the partnership aspect of what they are doing. "There's nothing like sanding fiberglass together to strengthen a relationship," Mike says, and they both laugh. When asked what part of the restoration process he liked the most, Jake replied emphatically, "The sailing part!"

There are many remarkable restorations whereby a boat is brought back to showroom condition, but there are exceedingly few restorations that transcend even the builder's original product. Unrestrained by the need to merely conform to the builder's original intent of producing a boat built on a budget, this yacht is an expression of the Fullers' vision of what a proper little cruiser should be.



Salty, pristine, and "traditional," Scallywag has surpassed the builder's original product.

The detail work continues into the interior which the father-and-son team gutted to the bare hull, sanded, filled, and painted to a glasslike finish. They completely rebuilt the interior in mahogany. The accommodation features a V-berth forward, a dinette to starboard, and a galley to port with a small settee opposite the table. The area under the cockpit is used for storage. The stove is a simple one-burner Origo alcohol unit and, together with the removable Porta Potti concealed under the V-berth, is completely in keeping with the boat's daysailing and occasional overnight purpose.

Unlike earlier boats which Mike owned and Jake helped with, *Scallywag* is a jointly owned and funded father-and-son project. The equality of ownership helped Mike recognize the coming of age of his son. It turns out that Jake is the more practical of the two, while his dad is the procrastinating perfectionist. It is Jake who says how much is enough and who sets deadlines for when the work should be done. "If it weren't for Jake," Mike admits, "we wouldn't have gotten the boat into the water for another three years. It was Jake who set the launch date and made sure we met it."

One of *Scallywag's* hidden charms is the pleasure of knowing there is not another like her. This boat is unique. How many of us can afford the luxury of a custom-built yacht these days? Mike and Jake have achieved this enviable status on a budget whose principal currency is composed of equal parts of mutual love and respect with a good portion of sweat added to the mix. Just as with boats, there are many human relationships worthy of salvage and restoration. Maybe what they need is vehicles to help bring people together in pursuit of a common goal, sharing adversity and triumph together. For Mike and Jake Fuller, *Scallywag* and her predecessors have been those vehicles.

Brian and his wife, Alexis, grew up in Nova Scotia and practiced law in Alberta until they bought a boat, sold the house, quit the profession, and left Canada. They have lived aboard in the Caribbean for five years and are looking for a larger boat with which to begin a charter business.

The restoration of *Ravensail*

It was love at first sight — then the hard labor began

by Richard Coberly

THE FIRST TIME I SAW ONE OF THESE BOATS, I asked the owner who built it and whether his was for sale. This was a most unusual craft: only 23 feet long, with a cutter rig, bowsprit, wooden taffrail, and beautiful classic hull and deck shape. The problem was that it was yellow. Very, *very* yellow. This was a problem I knew could be solved with some carefully chosen paint but, sadly, the boat was not for sale. Looking beyond the yellow, I could see that this could be a beautiful boat.

The boat was a Venture of Newport 23, built by MacGregor in the 1970s. Ah, the '70s. No *wonder* it was yellow. This is the same era that brought us the Ford Pinto with the flowered vinyl top, harvest-gold appliances, and shag carpet. Since they only built about 2,000 of these boats over several years, I assumed my chances of finding one worth having would be very slim. My assumption proved to be right.

These boats also came in blue and red, I learned. The original sales brochure stated that the Venture 23 "is a modern replica of the famous English and American pilot cutters of the late 1800s. Fleets

***Ravensail*, a 1974 MacGregor Venture of Newport 23 (also referred to as a Venture 23), makes her inaugural sail after three sailors rescued her from an uncertain fate. They invested $500, an untold quantity of materials, and many hours of labor. They were rewarded with the boat of their dreams.**

of these swift little ships sailed from the seaports of England and North America to meet incoming transatlantic sailing ships. On the outbound trip, the fastest cutters carried the pilots who would guide the square-riggers into the crowded harbors. On the return trip, the cutters carried priority passengers and light cargo to avoid the many hours, and often days, required to bring the big ships the last miles into port."

Over the next few years, I kept my eye out for the funky little boats, finding only a few for sale, generally in a very sad state of neglect and disrepair. Those that had been "restored" or "upgraded" were often not much better. It seemed that many of the boats had simply evolved, gradually turning into something less and less resembling the original craft. All appeared to be projects so large and costly I knew they would probably never be finished. This did not diminish my desire to own one of these elusive boats.

Monumental project

In 1999, a derelict Venture of Newport appeared in the storage yard near my house. She was for sale for $500 with a mostly useless, patched-together trailer. This was a project boat of monumental proportions. We would be buying a stripped hull, a deck, and a mast. There were only a few pieces of usable wood or hardware inside or out and an interior full of trash, broken wood, and rotting cushions, not to mention many gallons of stagnant water.

But the hull, deck, and keel appeared to be sound. My friend, Bryan O'Neal, and I formed a partnership to breathe life into this hulk. We gleefully hauled our new project to my house, parked it in the driveway, and prepared to work our magic. Our work was cut out for us.

When author, Richard Coberly, and friends, Bryan O'Neal and Veronica Veerkamp, purchased their Venture in 1999, the inside was filled with trash, broken wood, stagnant water, gold shag carpet, and rotting cushions. With know-how and fortitude, they converted the discouraging picture, top left, to a much more pleasing one, top right. The exterior underwent a similar remarkable transformation, as the photos below show.

You know you've really bitten off a lot when your neighbors all stop to ask you about your "project" with knowing smirks. Comments like, "Do you think you'll ever finish it?" fell on deaf ears. Bryan and I, along with Veronica Veerkamp, my partner, were on a mission. This boat would sail and would be beautiful, one way or the other!

The first order of business was to completely strip the hull and deck of everything. Every screw, nut, and bolt was placed in a plastic bag and marked for later identification. All the hardware and usable wood was also marked. It's too easy to forget where something went, especially if you pile it all up in the garage and then move it a few times. Although a good theory, this would later prove to be somewhat less useful than I had hoped.

After the obvious cleaning inside and out, including the removal of rotting gold shag carpet from the inside of the hull and hatch cover, we set about repairing fiberglass. Every nick and crack was filled, sanded, and faired with epoxy. With only three holes of any real size to repair, this process took us less than a week. The

hard part, we would soon discover, was yet to come. Sanding the hull down to the old gelcoat seemed like a good idea at the start. This was not an easy task; it turned out to be all but impossible. Beneath the topcoat of blue paint were various coats of red and more blue, each one tougher than the last. We considered using chemical paint removers, but tests proved them to be all but useless. To do the entire job, we would have ended up with a toxic spill reminiscent of the *Exxon Valdez*. Common sense took hold. We agreed that, since it sure wasn't going to come off anyway, it was unnecessary to do more than sand the old paint smooth.

"You know you've really bitten off a lot when your neighbors all stop to ask you about your 'project' with knowing smirks. Comments like, 'Do you think you'll ever finish it?' fell on deaf ears."

Sanded and primed

Our next painting task was the interior. Veronica and Bryan sanded and primed with Interlux Brightside Primer. They then brush-painted it with two coats of off-white Interlux single-part polyurethane. We decided that the original finish on the cabin liner (seats and floor) was in good enough shape to leave without repainting. We would be covering all the horizontal surfaces with new cushions and teak-and-holly flooring anyway.

The most difficult painting job was the deck. The biggest problem was that with no scaffolding we had a difficult time reaching some of the areas in the cockpit and in the middle of the deck without walking on fresh paint. This was generally solved with ladders and extra hands handling the air hose. Spraying the finish seemed mandatory. In spite of what Interlux tells you about the ease of brushing, all the complex curves and the amount of surface area make spraying a preferred method. True, there is the clean-up factor of the spray gun, but the quality of the finished paint job is well worth the extra effort. After priming and sanding, one full coat of offwhite Interlux two-part polyurethane was applied to the entire deck.

While applying the second coat, we painted everything except the nonskid surfaces, allowing as much overspray onto them as possible. This left a slightly rough surface on the non-skid areas. After the deck paint was sufficiently dry, we taped off the nonskid areas, then rolled on an additional coat of paint mixed with Interlux flattening agent. This left a very even, ever-so-slightly-textured nonskid. The matte finish contrasted nicely with the glossy deck, giving it a very subtle visual difference. The combination of the original texture and the overspray worked great. The nonskid functions properly and is still easy to clean. We chose not to use sand additives. They are difficult to apply evenly, retain dirt, wear away quickly (taking paint with them), and are not very "skin friendly." We are pleased with the results and with ourselves for being so clever.

Dramatic change

Painting the hull had to be the most dramatic and rewarding change in the overall look of the boat. After priming and sanding, we applied two coats of black Interlux two-part polyurethane down to the waterline. Last, we applied a couple of coats of red bottom paint.

Now the neighbors were stopping again but this time to congratulate us on our beautiful boat. We patted ourselves on the back and admired our handiwork. All fine and dandy, but many tedious tasks still lay ahead.

Now it was time to put the boat back together. One minor error in judgment had been to remove the aluminum rubrail without re-bolting the deck and hull together. Having the rail off had made painting easier, but when we began reassembly, the deck and hull had shifted sufficiently to make

Like the remainder of the interior and exterior of the project boat, the cockpit, above, was a mess. At left, the new cockpit gleamed once the cleaning and painting were finished and the new wheel was installed. Although they also painted the interior, the hull, and the bottom, the most difficult painting job, Richard says, was the deck, since some areas of the cockpit were difficult to reach and nonskid is tricky. Painting the hull was the most rewarding of the painting projects.

inserting the new bolts more difficult than it really needed to be. It was an annoyance that could have been avoided.

Then we got another unpleasant surprise. Remember all those carefully bagged and labeled nuts and bolts? Unfortunately, the only reusable bolts turned out to be the ones used to attach the chainplates and the bowsprit. Seems that, at the MacGregor factory they used long bolts almost everywhere, and then cut off the excess length as necessary with bolt cutters. Anyone who's ever tried to screw a nut back onto a cut bolt will tell you there's no practical way. Granted, we now knew how long each new bolt should be and how many to get, but almost every screw and bolt on the boat had to be replaced. The upside to this is being able to use new Philips-head bolts instead of the old slotted ones.

All-synthetic carpet

While the paint cured, we got to work finishing the interior. To cover the inside of the hull, we chose an all-synthetic marine carpet. The original plan was to use padded marine grade vinyl, but the interior hull was so rough, we were concerned about the unwanted texture showing through. After some discussion and research, we determined that the vinyl would be better suited to cushions and that the carpet would offer more insulation, soundproofing, and durability, not to mention being much easier to install.

Over the next few months, we methodically fabricated each piece of wood for the taffrail, bowsprit, and all interior bulkheads out of mahogany. Veronica turned the spindles for the taffrail on a small lathe, and we redesigned the bowsprit to accommodate an anchor roller and to better match the width of the bow pulpit. We also cut teak-and-holly plywood for the cabin floor and for lids to be used on the molded-in storage areas.

All three interior bulkheads and the dinette table were cut from ⅝-inch mahogany plywood. The forward bulkhead was redesigned to be shorter than the original, helping make the small interior seem a bit more open and roomy. The dinette table was designed to drop into place between the seats, forming a berth. The removable table leg and two pop-top stanchions store in 1-inch clips on the underside of the table. We finished all the interior wood with Minwax satin urethane. We custom-made every piece of wood except the grabrails, which we ordered through our local MacGregor dealer.

"This is a prime example of an over-improved boat. But it's not about the money. You only have to go sailing to make it all worthwhile."

We got to know Frank Grizzaffi of Sail Venture Yachts quite well. Among other things, he helped us locate and order a new keel winch, sails, roller furling, and stanchions. He also made new standing rigging. His years of experience as a MacGregor dealer were invaluable, as were his frequent words of encouragement. He even gave us an original sales brochure for the boat.

Fresh mounting holes

Slowly each component of the running and standing rigging was installed, each one requiring fresh mounting holes, careful alignment, and a bit of engineering. With the mast stepped, one last bit of business was installing new tanbark sails. We chose sails by Hong Kong Sailmakers. Their quality was superb.

New winches, running lights, Windex, stereo, interior lighting, and wiring all had to be installed as well. Routing the wiring proved to be a challenge, but we finally accomplished that with the help of some flexible conduit. Switch panels and a bilge pump also had to be installed, and we fabricated a battery compartment out of the way under the starboard seat. A friend who was replacing interior lights in his Pacific Seacraft Orion donated all of his old fixtures to our project.

All that remained now was steering. Since the boat had had two wheel steering systems installed previously, we decided to go all-out and put in a new Edson Small Boat Steering system. This is a redesigned push/pull system that works like a dream. It's also the only one that would fit into such a small boat. We installed the system in a couple of days without very much trouble. We located a great little classic-style wooden wheel, adapted it with some carefully crafted spacers (the Edson shaft was a little long for this wheel), and were ready for a test sail. This would be our finest hour.

Lost all power

Ideally, on an inaugural sail, you motor out, carefully set the sails one at a time, check to see that everything is working, then slip away into the distance with a huge smile on

Just the facts

Boat name: *Ravensail*
Year manufactured: 1974
Model: Venture of Newport 23 (later brochures referred only to Venture 23)
Manufacturer: MacGregor
Total cost (new): $3,395
Current investment: Equal to national debt of a small country
Cockpit length: 6 feet
Bunks: On paper, 5. For real, 2.
Length: 22 feet 7 inches (excluding bowsprit)
Beam: 7 feet 2 inches
Weight: 2,000 pounds
Draft: Keel down, 5 feet 6 inches; keel up, 18 inches
Keel weight: 600 pounds (steel)
Rig: Cutter-rigged sloop
Sail area: Original, 263 square feet; now, 270 square feet

your face. Unfortunately, just as we motored into the mouth of our busy channel, we lost all forward power. Visions of hidden pilings, jagged rocks, scraped paint, sunken boats, and the general indignity of such occurrences raced through our heads. Without panic, but with a sense of extreme urgency, we did a "rapid sail deployment."

As luck would have it, everything functioned properly, the wind was just right, and we were able to sail quietly away, keeping ourselves off the rocks and pilings. Turns out we had snagged a large plastic bag on the prop. After removing the offending plastic bag, the rest of the sail went off without a hitch, smiles and all.

Although some old boats, and even some newer ones, might seem better suited to life as a dive site or restaurant sign, it was evident to me from the beginning that the Venture of Newport 23 is not one of them. There is a lot of satisfaction in saving a deserving old boat, especially one with as much character and potential as this one. This is a prime example of an over-improved boat. But it's not about the money. You only have to go sailing to make it all worthwhile. The bonus is to have other boaters chase you down to tell you what a beautiful boat you have. In fact, the only time I really think about how much work we all put into her is when I consider doing it again.

The trio of sailors installed an impromptu painting booth of sorts, above, and sprayed two-part polyurethane on the hull and the deck. *Ravensail* lives up to her name, below, and she does it with grace and charm. Part of the joy of bringing a boat back, Richard says, is having other boaters chase you down to tell you what a beautiful boat you have. Pride of ownership and pride of workmanship? You bet.

Renovating a 1978 Kittiwake 23

A really thorough job: Even the deck was removed

by Larry Franklin

Larry's Kittiwake 23, *Asbury's Legacy*, afloat after her refit, at left. Early stages are shown below on facing page, including that distressing time when the deck was separated from the hull.

While work was stalled on my 1969 Kenner Kittiwake project boat, I learned of a newer Kittiwake being auctioned on eBay. I was intrigued and, since my wife had shown interest in getting a boat for our niece and nephew, I placed a bid and was the successful bidder. It was just 230 miles from our home and a tandem-axle trailer was included with the boat. Another attraction was that it had an inboard engine. This was, in fact, the only Kittiwake ever built with a factory-installed inboard engine. This boat, hull #538, was built in 1978 by River City Sailcraft.

In the mid-1960s, Kenner Boat Company in Knoxville, Arkansas, was building the South Coast 23, a Carl Alberg design, for the South Coast Boat Company. For reasons that are not clear (and possibly not forthright) the South Coast people took the molds and moved to Louisiana. Left without a mold, the Kenner people modified a hull and deck that had been stored offsite by increasing the overall length by 7 inches and the beam by 2 inches. They added a 2-inch step to the aft part of the trunk cabin and relocated the outboard well from the cockpit to the port side of the lazarette. They used the modified hull and deck as plugs to make new molds, and the Kittiwake 23 was born.

There have been three builders of the Kittiwake 23: Kenner Boat Company, Ray Greene and Company, and River City Sailcraft. The total number of Kittiwakes produced is unknown, as records from Kenner and Ray Greene are not available. Kenner built approximately 300 boats, Ray Greene probably built fewer than 50, and River City Sailcraft built 69 boats. The construction period spanned from 1966 through 1978.

For personal use

The person auctioning the boat that caught my eye had intended to refit it for use as his personal sailboat. There was evidence of a hull-to-deck-joint leak along the starboard side, aft of the main bulkhead. There were no associated rot issues with the leak. He had removed the teak toerail, separated the deck from the hull, and removed the engine. Then other things in life had become priorities for him, and the boat collected dust in his shop for a year.

When my wife and I went to pick it up, we found that it came with four North sails. The mast had internal halyards led back to the cockpit, the genoa winches were two-speed Barients, and there were single-speed Barients on the cabintop for the working jib and halyard tensioning. Because of the uniqueness of this Kittiwake, when I saw it I decided to renovate it for my own use and let our niece and nephew have my 1969 Kenner boat instead.

In spite of the disassembly that had been done, this boat appeared to be in good shape. All items necessary for putting it back together appeared to be there. Later I learned that a bit of the teak toerail and some of the engine-exhaust piping were missing, but these were minor items.

I parked the boat under a carport. With the help of hydraulic jacks, I raised the deck and cribbed it with 4-inch timbers. I began removing the silicone sealant from all surfaces of the hull-to-deck joint. Once I had mechanically removed all of the silicone sealant, I sanded all the joint surfaces. Next I washed these surfaces first with xylene solvent then with acetone. I hoped to eliminate all silicone sealant residue so the 3M 5200 sealant I planned to use would bond well.

I enlisted a friend to help put the hull and deck back together. We each took a caulking gun and applied 5200 liberally to the hull flange. Then my

wife and my friend pushed screwdrivers through the bolt holes to hold the proper alignment as I lowered the deck to the hull. This worked well; all the bolt holes lined up nicely. We installed the bolts and pulled them up just enough to begin squeezing out the sealant and to check for gaps showing daylight. I let the 5200 sealant cure, undisturbed, for a couple of days.

Mast compression beam

The compression beam for the deck-stepped mast was cracked in the middle beneath the mast. The builder had put one through-bolt exactly in the center of the beam and the trim piece beneath the beam had been attached by #8 1-inch wood screws. A couple of these screws were driven into the beam at the midpoint of the span. The original owner of the boat had drilled a notch in the top edge of the beam near its center, further weakening it. These factors combined to make the beam weakest at the point of greatest load. The beam consisted of two pieces of 3- x ¾-inch mahogany cut to fit the overhead, spanning from port to starboard.

I cut two new beam pieces from ¾-inch red oak. *(Note: white oak is a better choice for boat projects.* ***–Eds.****)* The old beam pieces were used as a pattern for the upper arc, but the lower arc was flattened to make the depth of the beam about ¾-inch greater at its midpoint. The new beams were mounted with four bolts instead of five and the trim pieces were reinstalled with the mounting screws carefully located to avoid weakening the center of the deck beam. Then I reinstalled the rest of the main bulkhead trim pieces and the compression posts.

Electrical work

All the wiring had been stripped out of the boat. Fortunately, the documentation I received included a very good engine-wiring diagram. I also had a cabin-wiring diagram from my first Kittiwake. I wanted to add a depth sounder, GPS, radio/cassette player, automatic bilge pump with float switch, and a 30-amp shorepower receptacle. The boat came with running lights for the bow and stern and the original five-switch panel with fuses but no steaming light on the mast. It also had a lighted compass that had never been hooked up.

> **"I decided to renovate it for my own use and let our niece and nephew have my 1969 Kenner boat instead."**

I added a switch panel to provide switches for the GPS, depth sounder, instrument lights, and the radio/cassette player. It also houses the separate manual/off/auto switch for the bilge pump. I made mounting brackets for the GPS and depth sounder that allow the instruments to swing out into the companionway for viewing while sailing. In the Porta Potti compartment, I mounted a battery master switch that will allow for the future installation of a second battery. I bought a combination steaming/deck light to install on the mast.

Engine

The engine is a single-cylinder, two-stroke gasoline marine engine made in Finland, called a Vire 7, that had been marketed in the United States by the Westerbeke company. It is a pretty interesting little engine, but parts are getting hard to find. It has a discussion group on the Internet at <http://gofree.indigo.ie/~vire7/>. It has a transmission with forward, neutral, and reverse. The single-lever throttle and shift control was still mounted in the cockpit. The ignition switch panel, with blower switch and kill switch, was mounted in a panel at the aft end of the cockpit. I did not get a key for the ignition switch. A local locksmith was able to cut a new key for me.

The engine-cooling water pump was reported to be a problem area by the Vire discussion list participants. The pump is driven by an accessory shaft from the transmission. It is mounted very low on the aft end of the transmission. It is very small and, with the engine installed in the boat, it is almost impossible to see and even more impossible to work on. I decided to install a separate water pump, driven by a 12-volt DC motor. I mounted this pump near the engine in the engine compartment, which fortunately is quite roomy

The new compression beam installed, at left above; the new switch panel and automatic bilge pump switches, at right above. The GPS gets a new mounting bracket, at left; and the depth sounder in its new swing-away bracket, at right. Facing page: the new combination mast light, at top; the Vire 7 engine, at left; and the workings of the engine compartment — the water pump, muffler, and prop shaft — at right.

compared to some I've encountered on much larger boats. I wired this pump to the ignition switch through a solenoid so the pump is only powered when the ignition switch is on.

The Vire 7 engine has a belt-driven generator that also acts as the starter. The engine is fired by a magneto. Once the engine starts up, the ignition switch can be left in the accessory position to provide 12-volt power for other equipment. The accessory position provides power for the engine-cooling water pump I installed. To shut the engine down, a push-pull switch on the engine control panel is pulled out to ground the magneto. Turning the ignition switch to the off position will not kill the engine.

Filled the silencer

One thing I learned after getting the boat in the water was that the ignition switch needed to be turned to the off position just before pulling out the kill switch. The first time I ran the engine after launching the boat, I failed to do this. The cooling water pump continued to run. This filled up the Hydra-hush exhaust silencer and allowed water to feed back into the engine exhaust pipe and fill the engine cylinder with water. Fortunately, a two-stroke engine is pretty easy to clear and no permanent harm was done. To prevent this from happening again, I have replaced the original push-pull switch with a new one that breaks the circuit to the cooling water pump when it is pulled out to kill the engine.

I wanted to check out the operation of the engine before attempting to reinstall it in the boat. At first, it would not run, but after I rebuilt the magneto and carburetor, it fired up and spun like a top. I hoisted the engine aboard, moved it back onto its mounts, and bolted it down.

With the engine in place, I determined that the location I had selected for the Hydra-hush exhaust silencer would not work. The silencer had to be relocated behind the aft bulkhead in the main cabin on a small flat area at the end of the keel. The exhaust hookup was completed from the engine to the silencer and from the silencer to the exhaust port through-hull using exhaust hose and pieces of stainless-steel exhaust pipe.

The throttle and shifter cables were already connected to the Morse control unit mounted in the cockpit. These cables were routed to the appropriate locations at the engine and connected to their respective devices. The ignition switch panel in the cockpit had a convenient hole that I used to mount a manual choke control, purchased from a local truck parts supply house.

Painting

Once the majority of the wiring was done, the weather warmed up enough that I could begin refinishing the boat's exterior. The previous owner had sanded and repaired the bottom. I had learned of a paint that was developed for use on the underwater portion of offshore oil rigs.

This epoxy paint has an extremely high solids content composed of minute ceramic particles. It has a very high adhesion and is quite flexible. It is so slick that marine organisms are supposed to have a difficult time bonding to its surface.

I decided to use this paint as a barrier coat below the waterline. I did not apply any antifouling bottom paint,

in order to test the surface slickness properties. At this point, the success or failure of this experiment has yet to be established.

I filled blemishes in the topsides with gray Marine-Tex epoxy putty and sanded them fair. The hull and deck were then prepped and primed with Interlux Multithane 2100. I painted the topsides and the smooth portions of the deck with two coats of Interlux 2359/2314 Interthane Plus White. Neither of these products provided the brushmark-free finish that the manufacturer claimed, even though I followed the application instructions closely. I applied a contrasting dark blue waterline stripe with Interlux 4990 Brightside boot top paint.

Next I applied Durabak 18 to the non-skid areas of the deck. This product was featured in an article in the September 2004 issue of *Good Old Boat*. The Durabak product is providing an excellent non-skid surface and shows no wear.

I found a name graphic and vinyl tape for the cove stripe and an eagle relief with which to adorn the transom.

The interior of the boat was in pretty good shape. I cleaned it up and painted the inside of the hull and the berth surfaces with Interlux Brightside one-part polyurethane white paint.

Toerail

Once all painting was completed, reinstallation of the teak toerail began. The toerail had been broken in several places during its removal. I removed the loose splinters, cleaned the breaks with acetone, coated the broken ends with Gorilla Glue polyurethane adhesive, and aligned and pushed the pieces together. I fabricated a jig to pull the broken ends tightly together. Once the glueup was complete, the jagged ends worked like finger joints and the repairs are almost unnoticeable.

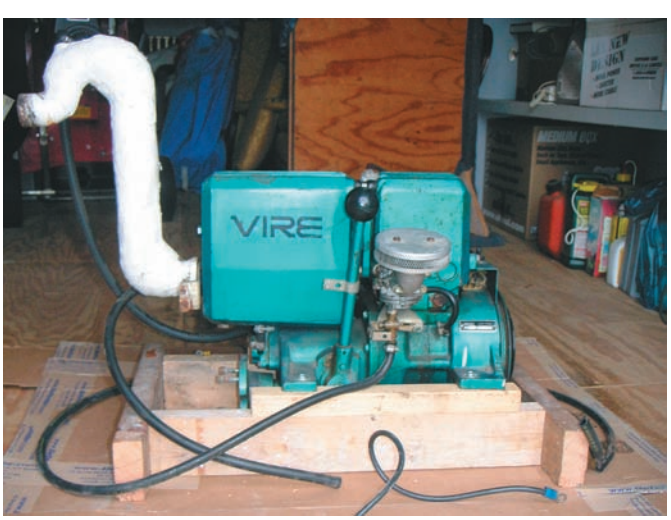
Kittiwakes have two molded-in depressions at the low point of the sheer on each side. These are supposed to act as scuppers to drain water from the deck. The toerail forms a continuous bridge above these depressions. However, the small opening gets clogged, reducing the flow through the scuppers. I elected to cut the toerail at these scuppers (photo on Page 12). This has been a satisfactory solution.

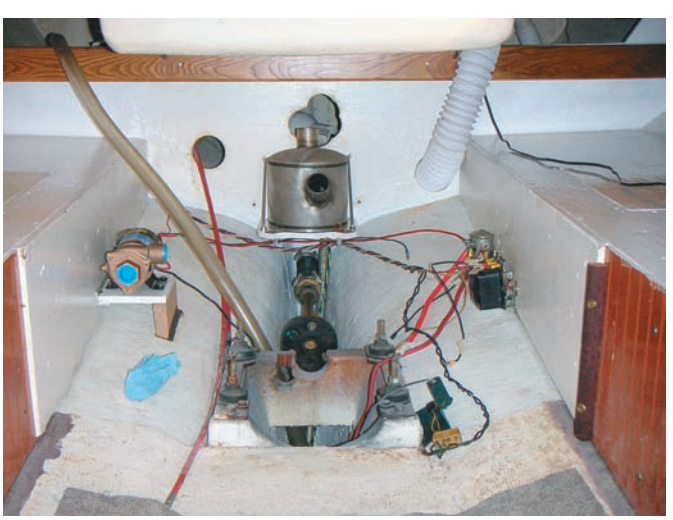
The pieces of toerail that were missing when I picked up the boat were about 6 feet long. They were supposed to be mounted at the aft end along each side. The piece of toerail that goes across the stern was also missing. I made a template in the necessary shape and cut new pieces. All pieces of the toerail were primed with BoatLife Lifecaulk Primer and bedded with a liberal amount of BoatLife Lifecaulk polysulfide sealant. I wish I could say that this was 100-percent successful, but there is still a slight leak along the starboard side aft of the main bulkhead. I'm developing a plan to attack and correct this problem.

Miscellaneous

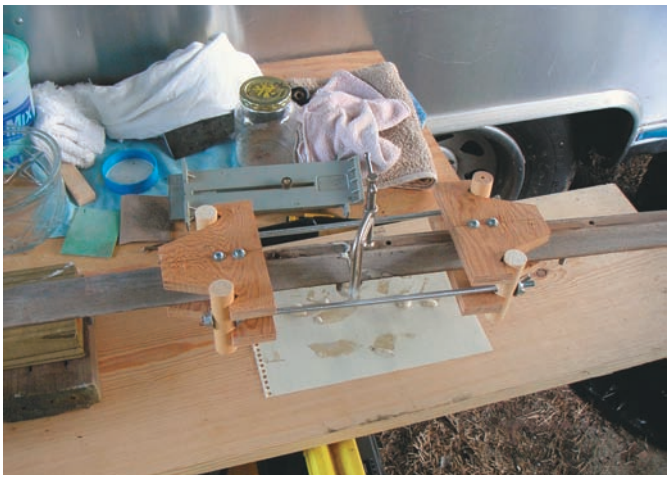
The old Cutless bearing for the propeller shaft needed to be replaced. I ordered a properly sized new bearing. There were no retaining screws holding the old bearing in the hull tube. I had to cut it lengthwise in three places with a bare hacksaw blade. Once these very careful cuts were completed, I was able to pry the three segments of the bearing out of the tube. The outside surface of the bronze tube of the old bearing had been scored, coated with an epoxy paste, and pushed up into the hull tube, where it hardened in place. The old epoxy left ridges in the hull tube that had to be removed to allow the new bearing to be pushed into the tube. The new bearing was scored, coated with epoxy, and installed in the same manner as the old bearing had been.

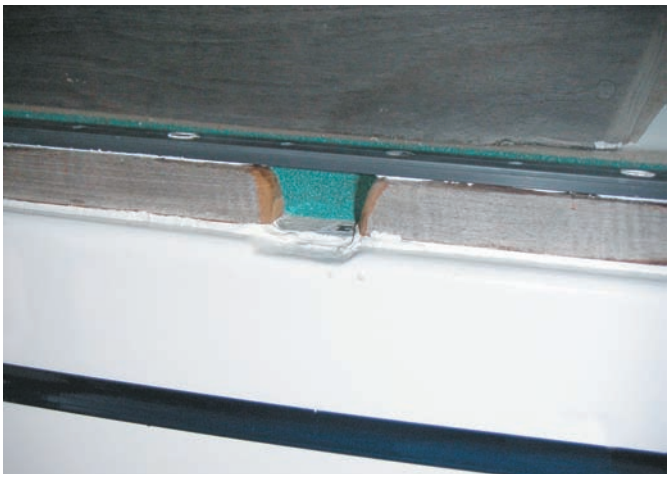
The inboard end of the prop shaft tube provides the attachment point for the piece





The Vire 7 engine is hoisted in, left; the exhaust silencer is relocated forward of the rudder tube, right; the deck is prepared for painting, left center; and the transom gets an eagle, right center. Larry made a jig for repairing the teak toerail, left below; and added drainage openings, right below. On facing page, the prop shaft and packing gland, top left; the automatic pump and suction foot for the manual pump, top right. The prop shaft tube and old Cutless bearing viewed from inside, bottom left, and the manual bilge pump, cockpit drain hose, and bilge discharge lines, bottom right.





of hose that houses the propeller-shaft packing gland. There was only room enough for one hose clamp to secure this hose to the tube. I was uncomfortable with this situation so I built out some additional length to this tube using epoxy and fiberglass tape. This has enabled the use of double hose clamps on the packing-gland hose.

I purchased new Teflon-coated packing, cut and installed it in the packing gland, and applied packing lubricant to the packing prior to the reinstallation of the prop shaft.

There were some small cracks in the rudder along the lower leading edge. I ground them out with a Dremel tool and filled them with Marine Tex. I sanded the Marine Tex fair and applied a couple of layers of fiberglass cloth to reinforce the whole cracked area. This reinforced area was also sanded fair.

Rebedded deck hardware

Using liberal amounts of Boat Life Liquid Life Caulk, I rebedded deck hardware that had been removed. Liquid Life Caulk is a polysulfide bedding compound that remains flexible when cured and can be removed if the hardware needs to be replaced in the future. I made a new teak spacer block to go between the mast step and the deck. The deck had three sets of holes where the mast step had been repositioned at various times. I plugged these holes with epoxy-coated hardwood dowel rods. Then I drilled four new holes to secure the hinged mast step to

the deck. I bedded the mast step and teak spacer block with Life Caulk and bolted them to the deck. It is important to apply Life Caulk primer to teak components to ensure that the Life Caulk will adhere to the oily teak.

The acrylic in all the portlights was crazed and one of the pieces was cracked from top to bottom. I removed the entire frame of the cracked portlight only to learn that this was not a good thing to do, as the aluminum frame had been bonded to the hull very securely with silicone sealant. I created a significant cleanup problem for myself because silicone sealant is the preferred material for bonding the aluminum frame to the fiberglass, but fresh silicone sealant bonds very poorly, if at all, to old silicone sealant. I had to very diligently clean all the old sealant from the fiberglass and the frame and then wash everything down, first with xylene solvent and then with acetone, with the hope of removing all the silicone residue.

The acrylic was easily removed from the frame by first removing a plastic retaining trim ring and then pushing the glass out of the frame. A soft, very pliable and sticky sealant provided the watertight seal between the acrylic and the aluminum frame. I removed the trim rings and popped out the panes from the other three portlight frames. The trim rings had shrunk and hardened and were very brittle.

Scrap polycarbonate

I cleaned all the old sealant from the frame flanges where the panes mounted. I obtained a piece of scrap polycarbonate from a plastics supply house. This polycarbonate had a very light smoke tint. The new pieces for the portlights were marked up for cutting by using the old portlights as templates. Cutting was done on a bandsaw and then the edges were smoothed with a belt sander. A sealant material called Putty Tape is sold by RV parts houses. This appears to be the same sealant that was used between the aluminum frame and the acrylic before. This is what I used to bed the new polycarbonate pieces into the frames. I used window screen gasket tubing in place of the old hard trim rings and applied a bead of silicone sealant all around the joint between the frame and the polycarbonate on the outside.

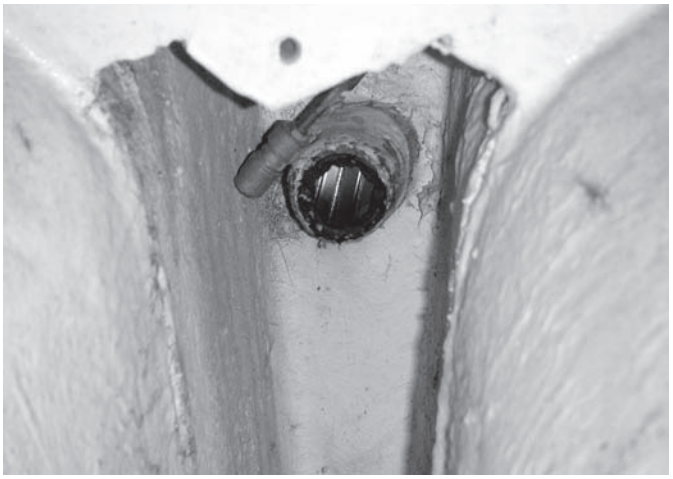
The boat came with a manual bilge pump that was mounted so that it could be operated in the cockpit. I added an electric bilge pump with an automatic switch to take care of the water that accumulates from the occasional drip from the packing gland. The electric bilge pump is connected directly to the battery via a manual/off/auto switch and fuse. I also mounted a solar panel on the port side

lazarette hatch cover to keep the battery topped off. New hoses were run from the cockpit scuppers to the drain through-hulls. All hoses to through-hulls are double clamped using stainless-steel hose clamps.

The sails were in good condition. Only the mainsail needed some minor repairs. This work was done by a sailmaker.

The only rot I found in the boat was in the knee beneath the deck at the transom. This knee is the attachment point for the backstay chainplate. I removed the chainplate and poured a liberal amount of GitRot into the knee. I had decided that I wanted an adjustable backstay, so I fabricated two new backstay chainplates and mounted them on each side of the transom. I shortened the original backstay and rigged up a split backstay with tensioner.

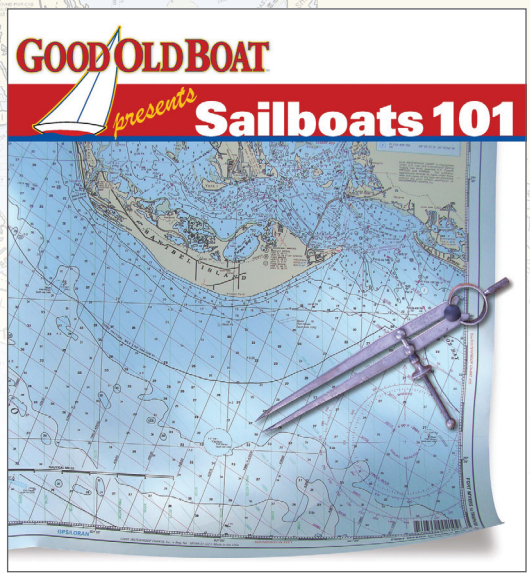
I launched the boat in September of 2005 at Applegate Cove on the Robert S. Kerr Reservoir on the Arkansas River. I was able to enjoy several beautiful fall sailing days. The boat sails beautifully . . . just as a Kittiwake should.



Archive eXtractions

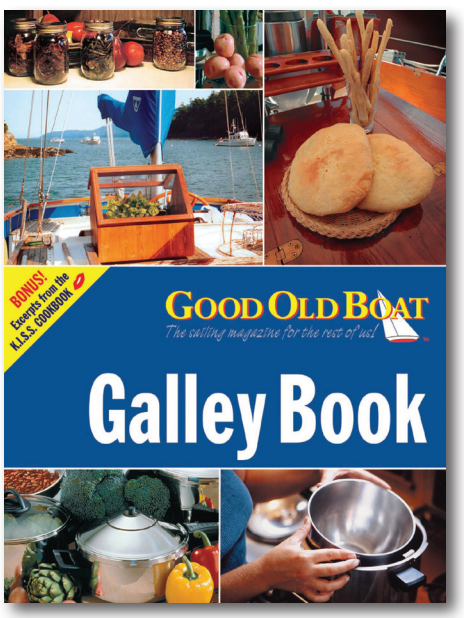
Articles compiled for you from *Good Old Boat* archives

Sailboats 101



The Sailboats 101 series of articles — written by Don Launer and illustrated by Ted Tollefson — was introduced in 2003 in our July issue. Beginning with Depth Sounders 101, Don came up with the subjects for each 101 article. Subject matter has varied widely and includes binoculars, bilge pumps, bronze, and brass. The Sailboats 101 collection contains all Don's articles from July 2003 to November 2011. As their titles suggest, 101 articles present introductory information on a variety of subjects covered in other ways in the pages of the magazine.

There's no one better at explaining something concisely than Don Launer, a lifetime do-it-yourselfer, sailor, engineer, and tinkerer. We asked him to write no more than 900 words on any topic and to work with Ted Tollefson, another sailor who would be doing the layout and developing the illustrations.



Be it ever so humble, there's no place like . . . Your Boat's Galley!

Galley Book

- No oven? No refrigeration? No ice? ***No problem!***
- Simple bread recipes, including stovetop baking
- Making your own yogurt
- Growing sprouts
- What to do when the salad is gone
- Canning meat • Drying foods
- Harvesting the bounty of the sea
- Dealing with too much of a good thing: storing and preserving the food you catch, collect, or buy in bulk

- Bonus tips and recipes from Corinne Kanter's ever-popular KISS Cookbook!

- Pressure cooking tips and recipes • Solar cooking • Conserving water
- The priorities (tools and recipes) in a trailersailer's galley
- One-pot meals • Provisioning • Growing your own herbs aboard
- Preserving cheeses when on long passages

Delivered to you in a jiffy!

Download these PDF format article compilations from our site directly to your computer. Visit www.AudioSeaStories.com to begin your download now!

www.AudioSeaStories.com

During the day, the O'Day's main cabin is set up for sailing and sitting, far left, and at night the seatbacks become part of a whole-cabin mattress, near left. The galley slides out when it's time to prepare meals, bottom left, and away at other times, bottom center. Dan's fiddled shelves add to the available stowage areas, bottom right.

From weekender to months-on-ender

Minor modifications add up to a major improvement

by Dan Cripe

In 2004, we sold the 31-foot Bombay Clipper we'd purchased specifically for an extended summer cruise. We intended to leave the sea, content that we had done what we had dreamed of for so many years: spending a full summer on the water on a five-month cruise. On to other adventures. That is the way it worked for a couple of months . . . until we heard that unmistakable siren's call once again.

By the fall of 2005, we were looking around for a new (well, new to us) sailboat. This one would be an interim boat, a weekender, until we could save up for a larger, more comfortable boat.

Southern Idaho is not noted as a hotbed of ocean-going sailboats, or any sailboats for that matter, but we stumbled onto a 1982 O'Day 23. Sitting on her trailer with peeling bottom paint, she wasn't looking at all good, but she seemed to be in good shape otherwise. Her sails were almost new. In fact, the genoa and spinnaker had never been flown. That clinched the deal and we had our interim boat.

Each summer for the next few years we packed her full of stores, pointed her bow north of west and, going to windward at 55 mph, took off toward "Big Water" in the Pacific Northwest for a week or two of cruising. Meanwhile, we were saving all we could toward our next sailboat.

This plan was going fine until the economic downturn came along in 2007. By fall 2009, we decided our interim boat was going to be our cruising boat for the foreseeable future. It was time to make some changes. Redoing the dated (original) interior while creating more storage topped the list. Adding a few other items would make life aboard more comfortable.

Re-engineered cushions

I first pulled out all the old vinyl covering the hull sides and replaced it with layers of insulation and then carpet.



Adding the vanity in the forward cabin, at left, made living aboard easier and hardly affected use of the V-berth, which is too small for two anyway, at center. Behind the new carpeting on the hull sides is a layer of insulation. The rail that supports the bed slats is visible on the settee front, at right. More of Dan's shelves can be seen above the settee back.

When the time came to sew all new cushions and replace the old worn-out foam, the next issue of *Good Old Boat* arrived to show us how to fabricate cushions. While we were at it, we did a little redesigning.

The original interior had fixed back cushions for the settees and a small storage shelf behind each settee. I made up removable cushions that were big enough, when laid down, to fill the space between the two existing settee seats. On the fronts of the fiddles that hold the settee cushions in place I installed rails so boards could be placed athwartships. Laying our new back cushions on these boards made a continuous berth across the beam in the main saloon, a full 8 feet by 6 feet. This was more comfortable by far than the narrow single settee berths. (We use the V-berth for storage; it's too small to sleep two).

On our summer adventure we discovered that by using just one of these back boards/bed boards we had a comfortable seat to use when cooking and doing galley chores; we no longer had to kneel to cook or clean.

The next job was to construct some new shelving, complete with pinrail, to increase storage. When done, our little O'Day looked new. The total cost for this addition came to less than $300.

Ablution solution

Yet there was just one item missing: a vanity. Besides the convenience of being able to stand upright in our Bombay Clipper, we missed her really nice head and vanity arrangement. On the O'Day, we performed our personal-hygiene tasks at the galley sink, but it's a slide-away galley and using it this way for very long becomes inconvenient. It was bearable for shorter cruises, but we were planning for a longer adventure, something more like our five-month cruise of 2004.

When I redid the V-berth cushions, I made four sections rather than just two. This allowed easier access to the storage bins under the V-berth and, with the starboard aft cushion removed, I had room to install a portable vanity. I first considered adding a sink and hand pump, but after contemplating all the plumping associated with this route, we agreed on a portable bowl that we could dump overboard.

In my shop, using some old boxes and the sailorman's secret weapon, duct tape, I quickly constructed a prototype for the new vanity. Keeping the cardboard ends long for scribing on the sections that would touch the hull, off to the boat I went. Using a compass to scribe the cuts and a pair of scissors to cut them, I soon had the prototype fitting perfectly against the outer hull. I could now construct the final product.

I used teak-and-holly plywood along with some mahogany ply, all scrounged out of a dumpster, and added a couple of fiddles from some leftover maple. The only purchased items were the pinrails and hinges. The total cost came to less than $20. If you have to buy the wood, it might run closer to $100.

We really like the sliding doors in the upper section of the vanity. I used ¼-inch teak door-skin material, a section of aluminum track (left over from a past project) as the lower track, and made the upper track from scraps of teak. Behind the doors, I added fiddles to keep items from moving around and to allow a bit of organization. To add a touch of class, the top shelf has a pinrail.

The lower section of the vanity is accessed by a drop-down door. This is where we store the wash bowl (we spent all of 99 cents on a dog's watering bowl we found in a thrift shop). There is more than enough room left nearby for washcloths, soap, and hand towels. The middle section, behind the sliding doors, holds toothbrushes and toothpaste, deodorant, and my shaving kit. The top shelf is a catchall for various items; in other words, we're not yet sure what to put there.

In January of 2010, I was laid off. We suddenly had the whole summer free to go cruising. We launched *Fantasy* in the waters of the Pacific Northwest on May 27 and pulled her out 104 days later. All the work we did over the fall and winter of 2009 — the extra storage, the new cushions, the queen-sized main-saloon berth, and especially the new vanity — made the cruise more enjoyable. From an adequate weekender, we created a comfortable summer cruiser. (Now, if we could only do something about the 4-foot 10-inch headroom . . .)

We had a need and, with a little ingenuity, found a way to fill that need. By scrounging around for material, we spent very little and yet wound up with very usable improvements to our good old boat.

Dan Cripe and his wife of 39 years, Teresa, have owned a series of boats, all named Fantasy, *which they have sailed with their four children at home in Idaho and also on the "big waters" of the Salish Sea. Their current* Fantasy *is an O'Day 23. Dan's "early retirement" from the building industry in 2010 has given him lots of time to devote to sailing and writing.*

Needs

I once had a Catalina 22. Nice little boat, but the emphasis has to be on *little* if you plan to do more than daysail. So when I found a really good deal on a bigger boat, I couldn't pass it up. The San Juan 24 isn't *much* bigger, but at least it has the room for a real galley and a marine head.

I found her in an ad that said she "needed a little work." At $1,500 for the boat *and* a twin-axle trailer, I figured the ad was a bit optimistic. I was not disabused of that notion after seeing her. A 300-mile trip verified that she would still float and the twin-axle trailer had wheels. Not much more positive could be said for her condition. A little negotiation and a handshake later, I was the owner of a 1975 San Juan 24.

The first assessment was good news/bad news. The good news was that she was floating when I saw her. That meant the bottom was impervious to water. The deck, on the other hand (why is there always another hand, anyway?), was like walking on a mattress, which meant that it was not impervious to water.

The assessment was:

- The bottom was in great shape. It had a barrier coat and no blisters.
- The keel had been faired with automotive Bondo and was one solid blister.
- The deck had virtually no core and would require extensive epoxy work.
- The interior was non-existent, unless you count mildew as upholstery.
- The topsides had been painted, but the blue paint was badly faded.
- The deck had been painted so many times that the non-skid blended with the trim.

It came with two Sears outboard motors. Neither ran, and they were different models, so the parts didn't interchange.

The boat at her worst, at top; primed and ready for the finish coat, in center; ready for splash, at left.

"a little work"

Project Man Syndrome strikes again

The plan:

- Strip the exterior of all hardware — if it goes through the deck, it comes off.
- Cut the liner out of the inside of the hull where deck rot is evident: all of the foredeck and all of the cabintop.
- Replace the deck core with foam and epoxy.
- Sand the keel, let it dry for a month or more before coating with epoxy prior to a bottom job.
- Drill all through-deck holes oversize and fill with epoxy for re-drilling prior to hardware replacement.
- Strip and sand the deck, topsides, and interior prior to painting with single-part polyurethane.
- Replace the hardware, all 3,000 bolts and screws.
- Install a marine head with holding tank.
- Put her in the water and sail her while the project continues.

Once she floated, the list of goodies would include a stereo with tape player, VHF radio, knot/depth meter, cabinetry, interior lighting, upholstery, and alcohol stove.

Why do it?

By the time the project is finished, I'll have close to $6,000 invested in material, and my labor (even at minimum wage) is worth another $5,000. For that I could have bought a good clean 25-footer and be sailing it already. So why put myself through the pain, anguish, and expense to refit an old boat?

Obviously there is the dollar factor. I was able to buy a boat with more performance and creature comfort than my current boat offered, at a price my checkbook could cover. It will take a lot of work and a substantial investment to bring the boat up to specs, and that's a choice I make happily. But there is more to it than just cash.

For some of us, the allure of classic lines is strong. Beauty is in the eye of the beholder, and what I beheld was more than a tired old neglected boat. I saw classic lines penned by Bruce Kirby, a designer of boats both fast and beautiful. I saw a boat that would withstand the test of time, water, and wind. I saw a beautiful sea-green boat with white trim named *Green Eyed Lady* from a song popular when she was new and a pet name for the love of my life.

by Andy Shanks

Without being critical of modern trends, I really prefer the boats of 15 or more years ago. The trend to water ballast, while practical in so many ways, and the move to higher freeboard for increased interior space is making many cruising boats under 28 feet look somewhat like landbound motor homes.

Other extreme

New race boats seem to go to the other extreme, reducing the boat to little more than a cockpit and sail plan. Throw in the fact that the number of boat manufacturers is shrinking, and the personality of older boats becomes even more attractive to those of us bent toward refitting.

Another piece of the puzzle over refitting is what my wife, Lynn, calls "Project Man Syndrome." She threatens to outfit me with a cape and leotards emblazoned with a large "P" on the chest. Sailors are, by nature, tinkerers. We're always messing with something on or about our boats. Perhaps this is a trait engendered by constant sail-trim adjustments or the free time we have when the wind dies and the boat isn't going anywhere soon. I'm not alone in this. There are people at marinas all over the world who take on large and not-so-large projects just for the sake of doing them and the sense of accomplishment they offer. There is, after all, nothing quite so worthwhile as simply messing about in boats.

In the case of an extensive refit, there is also the pride of ownership. By the time this project is over, I will have laid hands on every square inch of *Green Eyed Lady*. The entire exterior, interior, wiring, standing and running rigging, decks, hardware, and accessories will be, at the very least, inspected, touched, and re-assembled. This kind of intimacy brings ownership to a completely different level. It becomes a blending of personalities.

When you refit a boat and do the work yourself, you know what she's made of and what you can expect from her. From daysailing to inland cruising to the Gulf of Mexico, I'll take *Green Eyed Lady* anywhere. Our daysails are stretching into weekends, and we have plans to do more extended cruising in nearby lakes.

Who knows? Before it's all over she may cast her green eyes on the white sands of Caribbean islands. And because I rebuilt her myself, I have no doubt she can take us there and bring us back.

Andy is a leading-edge baby boomer who could never maintain an interest in a hobby past mastering it. He was introduced to sailing and golf by a friend, about eight years ago. He found he was a better sailor than golfer, and sailing moved from the hobby category to "a way of life."

Andy and Lynn, the original green-eyed lady. He writes, "The SJ24 is phenomenal in light air. It will move when nothing else on the lake will."

Yachting for pennies

A cheap boat and cheaper labor add up to sailing riches

by Jim Kiley

I had put our O'Day 22 on the local Craigslist and was hoping to find her a new captain by the end of May. We had sailed her out of Lansing, New York, on Cayuga Lake for five years and, like any good old boat owner, I thought she was the prettiest boat in the marina. She was a pretty little sailor, but my 2-X beam didn't fit well into her narrow berths and I had been looking for a 25-footer that fit my big butt and narrow budget. While checking to see if someone had secretly removed my ad from Craigslist, I saw a listing for a 1968 Morgan 24 for $3,000. The ad said she was solid, but the hull showed dings and scratches and she needed a good cleaning.

The pictures on Craigslist were a couple of years old and taken at a safe distance. The boat was on a trailer, she had a heavy keel, and I liked the handsome lines of the Morgan. I spoke with the owner and asked for his best sales pitch and bottom line take-it-away price. He didn't make any pretenses about her general condition, but he did say $2,500 would take her away. My online research turned up a couple of sites that showed restored Morgans of the same year. They cleaned up just fine, so I made an appointment to have a look.

The boat didn't give me a terrific first impression. She looked like any number of derelict boats at any local marina waiting for their owners to come and explain where they'd been for the last five years. As advertised, she bore many scars from rough docking and banging against algae-stained fenders while waiting to be hauled out late in October. The brightwork hadn't been bright for many years and the hull was as dull as chalk. Gary, the owner, seemed like a nice fellow whose love of sailing had been cooled by the cost of boat ownership and maintenance, but he still had some affection for his Morgan and seemed quite proud of her.

I was inclined to wish him a good day and take my leave but — not wanting to offend him and since my wife, Ruth, and I were there — I climbed the ladder and stood in the spacious cockpit. The tiller looked like a dead branch. The standing water on the cockpit benches was stained reddish from the debris of tree branches hanging over this sad scene. Gary continued smiling like the best was yet to come, but I wasn't seeing it on the boat's exterior. He stepped

A leak at the starboard chainplate rotted the bulkhead, far left. After pricing repairs, Jim replaced it himself, at left.

In fresh paint, at left, Jim's Morgan 24 looks vastly better than when he bought her, at right. The bulkhead repair prompted Jim to remove the counter, bottom left, and install seating in its place, bottom right.

down into the dark interior and invited me to come down with him. The cabin was cluttered and smelled like any boat that had been sealed up for years. The cushions had been removed for storage so the interior décor was mainly dull white spackle paint. The condition of the interior matched the outside. My impression wasn't improving, but I did like the standing headroom and generous sleeping space. By now, Ruth was looking over the rail and smiling like she was looking at a different boat.

I walked up to the foredeck to look at the mast hardware and shuffle my feet around looking for soft spots. Then it struck me: this old boat was built like a tank. The deck was as solid as my living-room floor and, other than the obvious dirty condition, she wasn't in bad shape. I told Gary, "I'll take her off your hands." I wrote the check and waited for buyer's remorse to set in.

I clicked a few pictures, walked around the chalky hull one more time, and we made arrangements to meet and pick up the motor and sails at his house later in the week. I noted that the lights on the trailer had been broken off, the tires looked soft, and I wondered about the bearings.

The next weekend, I borrowed my friend's truck and towed her home with my son as an escort (à la *Smokey and the Bandit*), parked my new yacht in the driveway, and started my job list.

Inspect, scrub, and paint

First, I stripped off all the exterior wood trim and inspected it. It was all in poor condition. I have never liked refinishing wood, so I decided to use composite deck material to make new pieces and planned to paint them, rather than use stain and varnish. The trim was mostly straight with a slight bevel; all of this I could duplicate with my limited skills. The handrails were another matter. My plan was to trace the shape and make a pattern but, before I could do this, Ruth had stripped and sanded them, and I was pleasantly surprised at how good they looked. She had already started priming the pieces so it was too late to change my mind and opt for stain and varnish, but there were now fewer jobs on the punch list.

Meanwhile, my son-in-law, who worked with auto paint, looked her over and said he could spray the hull right there in the driveway if I could scuff up the old paint. While he was there, he did a quick repair with some Bondo on a nasty gash in the fiberglass at the bow. Apparently, the previous owner couldn't find the brakes while docking on a windy afternoon. (I would later re-gash the same spot while docking.)

The interior was just a matter of scrubbing off the mildew and repainting, or so I thought. I did not plan to restore her to new condition; my goal was to fix what was needed, clean her up, and get to the lake. It was early June and I hoped to launch her by early July. The restoration was progressing nicely, but a surprise was lurking.

I was anxious to be done with the trim and interior painting and move on to another part of the restoration. The marine toilet worked but the plumbing to the holding tank was in bad shape and the diverter valve was frozen. I decided to remove the toilet and buy a Porta Potti. I had to raise the base where the potty sat because the new one was bigger, but that was easy.

My first big setback came at the end of a rainy afternoon when I climbed into the boat to see if the windows

were leaking. The seals were old and had been repaired with putty, but didn't look very weatherproof. To my surprise, they were not leaking, but there was water coming into the starboard locker from the slot where the chainplate came through the deck to attach to the bulkhead. That looked like an easy seal to replace but, as I sat there thinking about more pressing repairs, I began to wonder about the condition of the plywood bulkhead under the leak.

A case of rot

I picked up a hammer and, starting on the port side, tapped the three exposed bolts that hold the chainplate. They all made a sharp "clack" sound. Then the starboard side. Thud. Tapping on the veneer all around the bulkhead produced the same dull sound. I picked up my drill, cut a hole through the veneer with a butterfly bit, and probed with a screwdriver: the wood was like balsa. Now I really had buyer's remorse. One of the questions I had asked Gary was about any soft spots. He assured me she was solid. This would have been a deal breaker.

I was able to pull off the Formica veneer and expose the entire front side of the bulkhead. There was not enough solid wood left to splice in a piece. It looked terminal. Back in the house, I went online to see what I could learn about replacing a bulkhead. It didn't look as terminal as I first thought, but it did look expensive. I emailed photos to Gary and explained the dilemma. I wasn't sure what I wanted to do. I couldn't sail her in the present condition, but I was becoming attached to the old Morgan. By now my wife and I had about 100 hours invested. I decided to sleep on it, but sleep didn't come. The next day, Gary called and offered to help with the expense of the repair. I wasn't surprised at that, but I was pleased and inclined to press on. I told him I'd check at the two local boatyards and call him back. Both estimates were close to $1,000. I decided to demolish the old bulkhead myself and then re-think the job.

> "... Ruth painted the bulkheads and locker a soft pumpkin color ..."

My first impression had been correct; the Morgan is built like a tank. I had to remove all the tabs on the back side of the bulkhead and split it with a Sawzall to free it. The boat didn't have a galley, but there was a large counter with a small sink and icebox to starboard. It took up a lot of room and didn't offer much storage or utility. I decided to remove the counter and re-shape the space for a settee. There were plenty of solid tabs attaching the ⅜-inch plywood to the hull. These could be reused.

Once I removed the bulkhead and surveyed the job, it didn't seem so daunting. The Formica veneer I had removed was in one piece and made a perfect template. The tabs that held the old bulkhead were tough as leather. It appeared that I had only to cut out a new piece and glue it in place. I realized I could do this myself and, as I work cheap, the budget would remain intact.

After the demolition work, I thoroughly cleaned the inside of the hull with a brush, soapy water, and a hose. The next day, I repainted the inside walls a glossy white base coat. I glued gray carpet to the cabin sides and sole around the dinette and sat back to admire my work. I really needed to see a spot that looked completed. This worked. I felt that I had turned the corner from deconstruction to reconstruction. Ruth, meanwhile, had refinished the tabletop and tiller and they looked brand-new. My enthusiasm returned.

Fresh energy

I bought a sheet of ¾-inch birch plywood. It took a half-day to cut out the new bulkhead and put it in place. West System makes a caulk-gun-applied epoxy that mixes itself while being dispensed and has a thick consistency for ease of use. I added a spreader between the bottoms of the two bulkhead halves to force the new one into the tabs and left it there as a base for new floor planks that I cut from composite decking material. I was pleased and confident with my repair and saved a big chunk of money.

Next, Ruth painted the bulkheads and locker a soft pumpkin color that blended nicely with the light gray carpeting and the restored wood trim. I reinstalled the locker and the new Porta Potti, put the V-berth cushions in place, and stood back to admire it all.

With the forward area completed, I worked on the dinette and reinstalled the refinished trim and old cushions. The cushions looked dated, but were in fair condition. My next and last interior project was to convert the old counter area to a settee. This took a day and a half of measuring, climbing down the ladder, cutting, climbing up the ladder, and assembling.

At 61 years of age and, as I earlier confessed, a bit wide in the beam, I was feeling exhausted from long days working on the Morgan. Every task inside the boat required several trips up and down the stepladder with arms and pockets full of parts and pieces, a giant step over the rail, and a climb down into the hot interior without the help of the refinished steps that were stored out of harm's way. I felt we would never get to enjoy our boat that year ... but it was still just June and we were making progress daily.

Ruth refinished the tiller, at left, so it no longer resembled a "dead stick," and new trim and paint gave the deck a yachty appearance . . . for pennies.

My son-in-law came over one evening and we plugged numerous holes on the cabinroof and coaming where I had removed useless and forgotten pieces of hardware and gadgets. He then primed and painted the coachroof, coamings, and companionway with two quarts of Brightside Polyurethane. The repair looked beautiful. The paint looked like new gelcoat and gave a brand-new look to my old sailboat. I then reinstalled the refinished exterior wood trim and filled, primed, and painted the screw holes.

Cruising to launch day

The end was now in sight. There was still a lengthy punch list, but we continued working at it with enthusiasm. July brought a record-breaking two-week heat wave. We took a Sunday off to go to the lake and admire everyone else's sailboats. We deserved the rest and enjoyed it. The next week, my son-in-law and youngest son finished spray-painting the hull. My oldest son re-wired the switch panel, installed the freshly charged battery, and discovered that it was no good. A new battery and a couple of new bulbs later and we had lights.

A friend with a vinyl lettering business cut new hull numbers and a Morgan 24 logo out of bright red material to match the red sails. We hung the 7.5 horsepower Mercury longshaft, set up a bucket of water over the lower unit, and primed the fuel line. After three pulls I was sweating profusely. This Mercury seemed to pull much harder than my old 6-horsepower Johnson.

The outboard hangs directly on the transom and is some distance from the tiller and where the mainsheet bridle and backstays attach. I was concerned about having a hard-starting motor, especially one that's hard to get to. As I hadn't installed the tiller yet, I was able to remove the top cover easily and discovered the choke was stuck in the closed position. Part of the linkage was binding on a fuel line. I tied the fuel line back, and one pull later the Mercury was purring. I repeated the experiment several more times between cool-offs and was confident about the ease of starting.

As it turned out, my first suspicion about the Mercury was right. Because of the distance back from the tiller and the rigging and hardware in the way, it was a brute to start and nearly impossible for one person to control the motor and tiller at the same time. I found a 9.9-horsepower Mercury four-stroke with electric start and controls for $500 on Craigslist. I felt like I'd discovered indoor plumbing. Life is good.

I installed a new Windex and a set of curtains my wife had made. A few touchups on the inside and a few more on the exterior, and the Morgan was officially ready to launch.

Reflections on restoration

I'm not a craftsman or a boatwright by anyone's measure, but the repairs and restorations we performed were the same as those done by thousands of frugal, do-it-yourself sailboat owners every year. We saw our project boat stripped to the hull and reassembled piece by piece, learning how to do new things along the way and truly earning the pride that comes with accomplishment. For less than the price of a vacation with the grandkids at Disneyland, we have a good old boat that will give us pleasure for years to come.

Sailing truly is a sport for any and all. There is a certain elitist feeling in the statement, "I'd rather be sailing," but the truth is that the majority of sailboats, at least at my marina, have had several owners, missed a few seasons sitting on the stands, and suffered neglect and seeming abandonment. Then the right person found the right boat and a new bond was formed. What's more, this often occurs for well under $10,000. We bought the Morgan for $2,500, spent around $600 on materials, and the previous owner refunded $300 for the soggy bulkhead. This doesn't count the cost of our many hours on the project and the favors called in to do things I couldn't do. The bottom line is that we are on the water for around $3,000. Truly yachting for pennies.

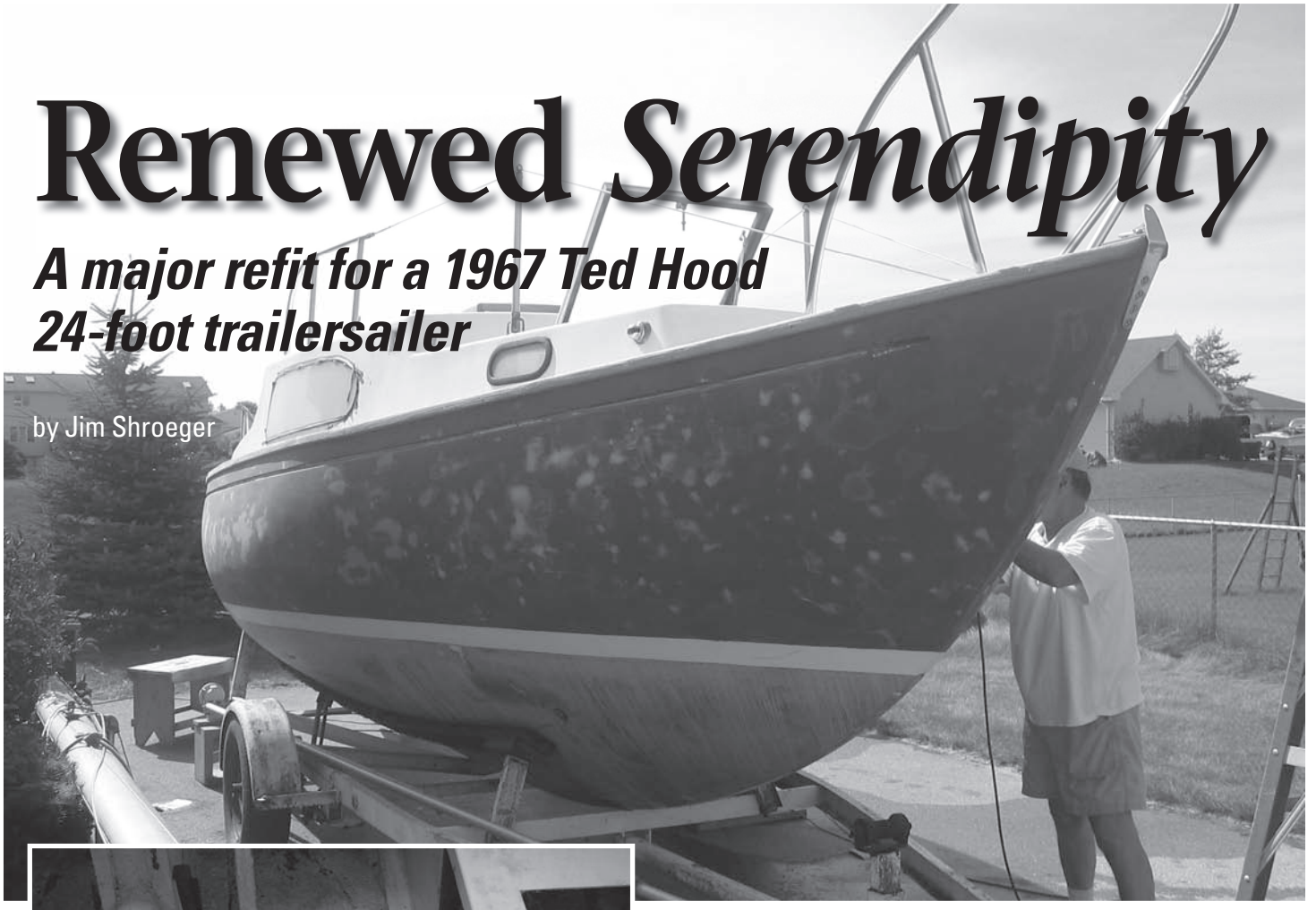
The sails went up on the third Sunday in July on Cayuga Lake. I hanked on the smaller jib, even though the wind was a gentle 5 to 7 knots, and we savored the solid feel of this born-again boat. She pointed up like a pro and gave us a good sail until the wind died and we used her as a swim platform. My O'Day is still looking for a new captain and crew; I'm sure when the right person finds her, she too will provide sailing pleasure for pennies for several more years.

Jim and Ruth Kiley sail their Morgan 24 on Cayuga Lake in central New York. As they began sailing only in 2005 with the O'Day 22, they think of themselves as newbies, and admit that their marina neighbors get a kick out of watching their occasional antics.

Renewed *Serendipity*

A major refit for a 1967 Ted Hood 24-foot trailersailer

by Jim Shroeger



Jim sands and fills and sands and fills. The top photo was taken after the first week of sanding and filling. The original companionway steps and what remains of the original electrical panel, center. The aft port bulkhead, at right.

She was a wreck. When I first saw her, she was sitting on a derelict trailer with two flat tires. Her hull was faded from blue to dull gray. Somewhere along the way some intrepid soul who fancied himself a boat finisher had used a belt sander on the hull to try to remove the discolored gelcoat. (He was very successful.)

The companionway hatch and dropboards were missing. She had a foot of slimy, bug-infested water in her bilge and over the cabin sole. The cabin cushions were wedged in the cockpit. What remained of a winter cover was flying in the breeze like a well-used gale warning flag. The deck was completely covered with pine-tree needles and other sticky stuff. The acrylic cabin windows were either missing or had turned milk-white with age.

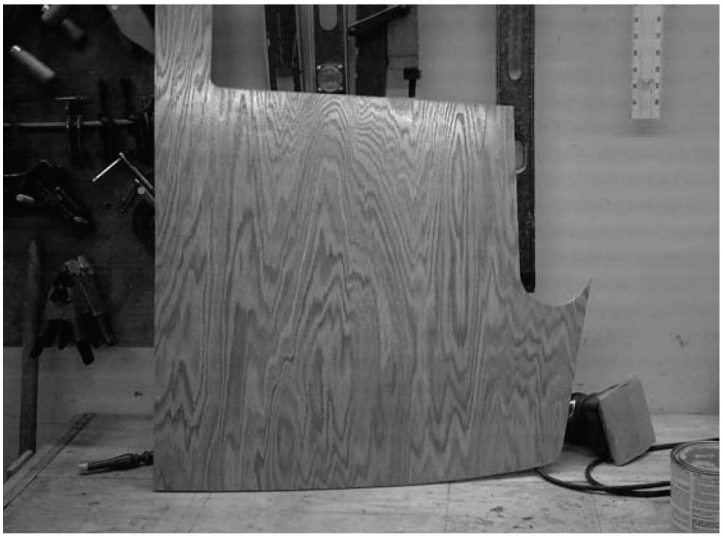
In spite of all this, I fell in love with her. What could inspire such emotion? Beneath it all she was a Paceship Westwind 24, circa 1967. The Canadian-built Westwind was designed by Ted Hood and is, in my opinion, one of the sweetest trailerable sailboats ever made.

After doing a little detective work, my wife, Barb, and I discovered that she was for sale and the owner was highly motivated. He was moving and was not able to take the Westwind with him. The asking price was $2,500, but we whittled it down to $1,700. The owner threw in three pickup truckloads of miscellaneous marine gear to close the deal. (We eventually sold most of the items for more than we paid for the boat, but that is another story.)

Unique hull design

The Westwind is 24 feet long overall. She displaces 4,625 pounds, draws 2 feet 6 inches with the board up and 4 feet 8 inches with the board down. She has a unique “perch belly”

hull design featuring an internal keel that weighs 2,600 pounds. Belowdecks she has a traditional layout with a mid-ship galley, V-berth, two quarter berths, and a head forward under the V-berth. The main cabin has 5 feet 8 inches of headroom.



When I got her home I began to make job lists that grew longer and longer. I had plenty of time, so I divided the list into warm-weather jobs and winter jobs. (We live in Northern Lower Michigan.) It was August when we bought our Westwind, and I began work on the topsides. It was not long before I developed a real dislike for belt sanders and anyone who ever used one anywhere near a fiberglass boat hull. I spent three weeks filling, sanding, fairing, re-sanding, and re-filling until all traces of the belt sander's gouges and grooves had disappeared.

It was a great day when I decided the hull was smooth enough to apply the first coat of primer. We decided on Interlux finishes. The primer was Interlux Top Coat (gray), the topsides eventually were coated with Interlux Toplac (Lauderdale blue), and the deck, cabin, and cockpit received Interlux Brightsides (bright white). All these paints were one-part polyurethanes and promised high gloss and durable wear factors. I selected Interlux because I was planning to use a brush to apply all finishes. Our research indicated that Interlux leveled up the best when a brush application was used. We were not disappointed, but I am getting ahead of my story.

Winter cover

Soon after the first coat of primer was on and dry, Mother Nature announced winter's arrival. Consequently, the next step was to create a cover that could withstand a Michigan winter but still allow me to get aboard to take measurements and make patterns. A trip to Home Depot turned up a reinforced nylon tarp. Fortunately, we got several Sunfish masts with our truckloads of "bonus stuff." Two of these made an excellent ridgepole. Two pieces of 3/16-inch mahogany underlayment were hinged together and made a "roof" over the cockpit area. The tarp was spread over the ridgepole, tied to the trailer, and voilà! a winter-proof boat cover.

Now the indoor phase of the project was started. In addition to an addiction to belt sanders, the previous owner had an "all or nothing" approach to boat restoration. He had removed *all* the interior fixtures, wood trim, and electrical systems and replaced or saved *nothing*. Our project began with an empty hull and a partial cabin bulkhead. One good thing about starting with nothing is that there is nowhere to go but up.

As the Westwind is a medium-sized trailerable, her interior space is "compact." The original interior was done in mahogany. Because the cabin space was small we opted to use a light wood to create an airy and open feeling belowdecks. I found a significant amount of "culled out" oak molding at our local lumber yard. This material was offered at a reduced rate because it had defects. It was perfect for what I had planned. With sawing and planing, I converted the molding into planks that measured 3/8 inch thick, by 2½ inches wide. These planks were used to create all the interior trim for our Westwind.

Items made from this material include: a laminated mast-

Salvaged from the scrap pile, the original mahogany trim cleaned up well, at top. The new oak main cabin starboard bulkhead, center, after staining and finishing. At bottom, the original storage drawers await their turn for a touch of the magic (refinishing) wand.

The winter cover, at top, had to provide access during the colder months. Jim was not content to be idle with a project boat in the yard. The original winch pads, center, were completely rotten. The replacement parts were made from mahogany shipping pallets salvaged from Home Depot. The new cabinet doors, lower center, were made from oak molding. The finished interior, at bottom. *Serendipity's* cabin is bright and inviting.

support beam, four laminated main-cabin window frames, new oak flooring in the main cabin, stiles for the doors between the main cabin and the V-berth, frames for all cabinet doors and all drawer fronts, trim for instrument boxes, main-cabin curtain rods, swing-away curtain holders for the forward ports, hanging-locker items, and numerous pieces of trim throughout the interior.

Another source of economical fancy wood we found was shipping pallets. I obtained many board feet of Philippine mahogany for free. You have to be persistent and hang around your local lumber yard — in our case, Home Depot — and sooner or later you will come up with mahogany shipping pallets. Just be sure you remove all the nails before running them through your planer. I used the free mahogany to frame the companionway, trim the companionway hatch, and also to make two beautiful winch pads, a boom prop, and several other trim pieces. I still have a good selection for our next round of projects.

As the winter progressed so did my collection of finished interior components. The list included window frames, new cabin doors, new tongue-and-groove oak floors for the main cabin, new cabinet doors and drawer fronts, a new mast support beam, and numerous pieces of new and restored trim. We were able to salvage the original sea rails, most of the bulkhead trim, an original swing-out dish rack, the original companionway slide, the original forehatch, and the original Paceship identification plaque with our boat's hull number. These were refinished and added a nice touch of class to the interior.

I also created new hatchboards, a screened forehatch insert, and a screened hatchboard for warm buggy nights.

Hatch and portlight repairs

Another area of concern was the acrylic windows and forehatch. These had the appearance of the inside of a milk jug after it has been left sitting in the sun for a week. They had to go. A local glass shop reproduced the exact shape of the saloon windows and the forehatch top. We also replaced two non-opening windows in the V-berth with Beckson opening ports, which improved the ventilation 100 percent.

By the time I had completed my "to do" restoration list, Mother Nature had just about finished up with her winter activities. So on a relatively warm day in May we took the winter cover off *Serendipity.* (The name means an aptitude for making accidental fortunate discoveries. In a word, lucky.)

Once the cover came off the exterior improvements began. The first thing was to re-sand the primer that had been applied the previous fall, then closely examine the hull for any imperfections that had been missed. After that, the

second coat of primer was applied, followed by two coats of Interlux Toplac. Other paint jobs included sanding and applying three coats of red bottom paint, cleaning, priming, and painting the cabin and deck areas (except the non-skid sections, which were thoroughly cleaned) and the entire cockpit. Additionally, all interior fiberglass areas were primed and painted with marine-grade enamel.

When all painting chores were completed the interior work began. The first job was to rewire the entire boat. I discovered that the U.S. Coast Guard has an electrical code that most marinas adhere to. If your boat's electrical system does not meet this code you could be denied access to their electrical hookups. Most new boats do not have to worry about this little fact, but if you are restoring an oldie you had better check out the electrical codes. I'm about as electrical as a dead battery, so we hired a certified electrician to do the new wiring. He had a code book that clearly stated the requirements for marine wiring. It was well worth the $600 we spent to have the job done correctly.

Months of work

Reconstruction of the interior took almost two months of fitting, sanding, refitting, bleeding, and cussing. When the dust had finally settled, all the wood chips had been swept up, and all the stain and varnish had dried, we stepped back and looked at an elegant interior. The light-oak stain on the oak interior gave the cabin a golden glow that was warm and cozy. It was a place where we felt at home. With the addition of the curtains, some instruments, interior clock, barometer, oil lamp, and new cushions for the V-berths and quarter berths, *Serendipity* was transformed into a beautiful lady.

Strangely, the most expensive portion of the entire project was not part of the boat restoration. Back in the 1980s we had a larger sailboat and had the opportunity to spend several months cruising the North Channel in northern Lake Huron. We have always loved that area and have planned to return someday. *Serendipity*, with her shallow draft, is a perfect boat for North Channel cruising. Getting her there on her own bottom would take more time than we have available. To solve this little problem, we decided to have a special road trailer built that would take *Serendipity* and us to the cruising grounds more quickly than sailing her there. The final product cost $4,400. Before you say "Wow! That's a lot," stop and figure that having a trailer saves you launch and haulout fees and possibly even winter-storage costs. Just one year's fees for marinas in our area equal half the cost of our new trailer. So our trailer will pay for itself in two years.

Hurdle to overcome

All the interior work and exterior refinishing was done. The only hurdle to overcome was to get *Serendipity* from her winter restoration area to her new slip at our local marina. Trying to use the rickety trailer that she was already sitting on would be like asking a beetle to carry a Volkswagen. After a few inquiries about competent crane operators, we contacted a crane service. The operator knew his stuff. There were some anxious moments…such as when we had moved the old trailer from under the boat and discovered the new trailer was too heavy to move by hand. Eventually, though, *Serendipity* came to rest on her new set of wheels without any disasters.

The rest was easy. A short trip to the marina, an official christening and launching, followed by a summer season filled with sailing fun and friends. *Serendipity* turned out to be a real lady. She received many compliments wherever we went and did not fail to impress us with her seaworthiness and easy handling. We had a summer-long date with a real lady, and we enjoyed every minute.

Would I do it all over again? You bet. Was it worth it? Without a doubt.

It is difficult to explain the wonderful feeling you get when someone recognizes your efforts by saying, "That sure is a great looking boat! Where did you get it?" That's when I get to tell *Serendipity's* story all over again.

Launch day, at top above, for *Serendipity*, a Paceship Westwind 24. Her new trailer is a valuable part of the refit. She brightens the dock at Suttons Bay Marina, bottom above, on her first extended cruise. On her first sail after more than seven years, at right, *Serendipity* had forgotten nothing!

New life

for an old Bayfield

Tackling a makeover with more enthusiasm and elbow grease than money

by Butch Evans

The renovated *Thermopylae,* at top, is cheerier with the attention she's received from Butch and Gretchen Evans. A shot of her former cabin, above.

AFFORDABLE BOATS ARE OUT THERE — neglected or little-used boats that a little elbow grease can transform into a sharp cruiser. You want one that needs some weekend work, not cash, to restore to fighting trim. Finding one is not always easy; some luck and a little perseverance is required. Luck was the factor in our case.

Upon moving to eastern Tennessee from Kansas, where I sailed a West Wight Potter 15, I met a fellow Potter owner, named Max. He also owned a 1974 Bayfield 25, kept at the local yacht club. My wife, Gretchen, and I were soon friends with Max and were fortunate enough to be invited along to sail the Bayfield on many occasions.

We learned to short-tack up to a mooring and to push off the mud when we ran aground. Most of all, we learned how much we enjoyed having a boat large enough to carry some amenities along. She was equipped with a head, a built-in icebox, an alcohol stove, a dinette, and best of all, standing headroom. One day, Max (one of those guys who is always trading boats and usually owns three or four at any one time) mentioned that he might be interested in moving up to a 30-footer if he could sell the Bayfield.

Gretchen and I locked eyes, and the deal was born. Our budget is limited, as we are putting aside a cruising kitty and hope to take a couple of years off for cruising.

However, we wanted the experience of a bigger boat and figured we could recover our costs if we didn't go overboard with refurbishing. We became the proud owners of *Thermopylae*, named after the Greek battle that was made famous in part by this quote:

"When Persian envoys came to demand surrender of Leonidas, the Spartan king who led the death stand at Thermopylae, they said, 'You are fools to resist, the Persian archers alone are so numerous that

their arrows will darken the sun.' 'So much the better,' said Leonidas, 'we will then fight in the shade.'"

You've gotta be impressed with an attitude like that.

Serious polishing

The boat was in good shape but needed several upgrades and some serious polishing and cleaning. The first job was merely to clean and upgrade the interior. We stripped it out and attacked with Clorox and Simple Green. The bilge was a slimy oil pit, not full of oil but rather the result of years of neglect. Gretchen did *not* like the smell. Many, many new oil absorbers and much Simple Green later, the air quality was much improved. We found wasp nests in every corner and inside the stereo speakers, which in any case had been destroyed by humidity. There were holes cut into the wood paneling for old radios, the original electrical panel, and who-knows-what. The original cabin lights were cracked and discolored from the heat of the lightbulbs. The alcohol stove only worked on one burner and leaked when pressurized. The depth finder was rolled up in wiring in a storage locker, and the cabin sole, a nice piece of teak and holly, was in need of refinishing. The cooler drain was non-functional, and the cooler had been used for storage. The teak was bare, and the hatch slides were worn down to the screw heads.

After a good cleaning, we started fixing. My father built a nice piece holding a new clock, hygrometer, thermometer, and barometer for us. It was cleverly designed to cover up the old radio hole cut into the paneling. A framed postcard map of the Bahamas covered another small hole. A Weems & Plath oil lantern covered the last holes and gave us a salty look, while a colorful sliding curtain sewn by Gretchen was hung to separate the V-berth and head from the cabin. Modern cabin lights with low-output lightbulbs replaced the 1970s-vintage originals. We replaced the alcohol stove with a propane camping stove using the original stovetop.

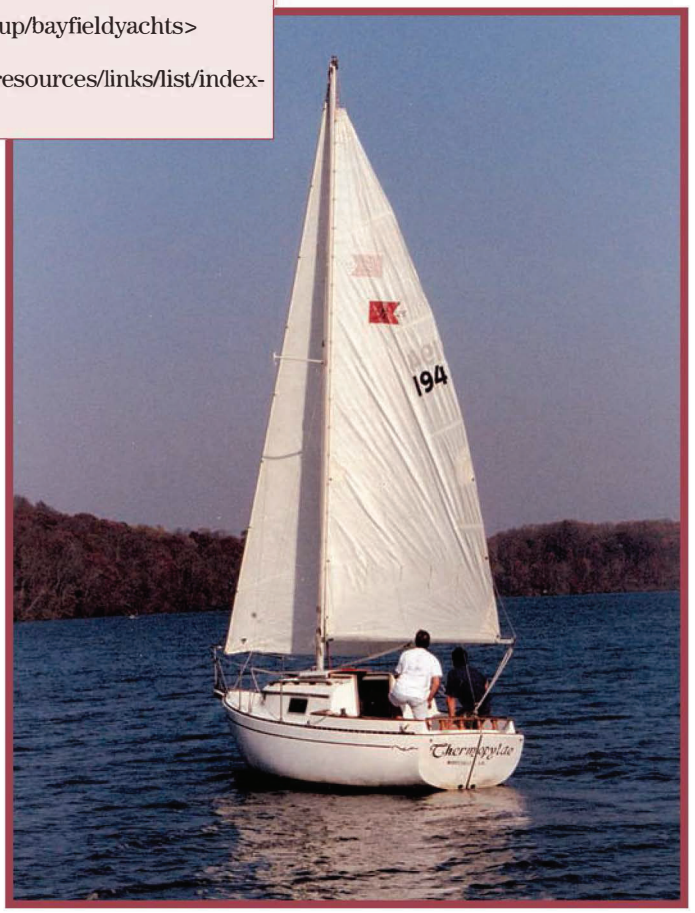
"The bilge was a slimy oil pit, not full of oil but rather the result of years of neglect."

Replaced linoleum

We stripped and polyurethaned the cabin sole, refinished most of the varnish on the interior woodwork, and replaced the linoleum in the dinette with inexpensive bathroom floor linoleum. The drain in the cooler was fixed. Then I sanded and painted the inside of the cooler with white refrigerator enamel for a brand-new look. Thanks to a mother-in-law who is a great seamstress, we were able to recover the old cushions for the cost of the material, which we got at a 50-percent-off sale. The new cushions made a dramatic difference, brightening the interior and giving it a tropical feel.

On the outside, after several attempts with different products, Gretchen, master of the wood-refinishing chores, decided to stick with teak oil for the brightwork. The teak glows golden when she has finished a piece. That job is taking a lot of sweat, but not too much money. A local carpenter had a scrap piece of teak leaning against the wall of his shop that he used to create the new hatch slides. A bit of candlewax lubricant, and now the hatch flies open at a touch. (I also cut a piece of candle and put it in the mast track between the top two slides; it lubricates the mast track each time we raise the main.) Gretchen found a window polish for the plastic windows that actually worked (Maguires Mirror Glaze Plastic Cleaner) and removed much of the effect of years of UV exposure.

Mechanically the boat needed some elbow grease but not too many expensive parts. The electrical system was in pretty good shape; someone had overhauled it and installed a new control panel prior to Max's ownership. One new battery was needed, along with a new alternator, new belts, and some cleaning of several grounds. I installed a voltmeter to keep an eye on things. The impeller and hoses were replaced, a



Butch Evans sailing his 1974 Bayfield 25.

Bayfield resources

Bayfield yacht owners' website
<http://www.geocities.com/bayfieldyachts/>
Mail list
<http://groups.yahoo.com/group/bayfieldyachts>
Bayfield discussion list
<http://members.sailnet.com/resources/links/list/index-new.cfm?id=bayfield>

leaking water tank repaired, new water hoses installed, and a new Jabsco head and hoses installed.

Gobs of corrosion

The through-hulls had gate valves on them, most of which were little more than gobs of green corrosion. These were replaced with new ball valves. The cockpit drains in a B-25 go to a through-hull that is below the waterline and completely inaccessible unless you're a double-jointed elf. Because of my nightmares of a cockpit drain hose developing a leak and sinking the boat while we were absent, I capped them off (eventually I'll glass them over) and re-routed the cockpit drains to a new through-hull in the transom just above the waterline. Now when we leave the boat and close the ball valves, the hull integrity is sound. We installed swim-ladder mounts on the starboard side; the ladder is stored in a cockpit locker. I installed a Racor fuel filter/water separator and new fuel hoses. I also installed an inline free-flow electric fuel pump with an on/off switch. Not used during normal running, it's only there to help bleed the fuel system (NAPA Part #6101050 made by Balkamp, <http://www.napaonline.com>).

We didn't like fumes in the cockpit when we motored in light wind, but two simple fixes eliminated the diesel stink. These old Yanmars (YSE-8) had no positive crankcase ventilation systems, so the valve cover breather is vented directly into the engine compartment — one reason the bilge was so oily. I replumbed the vent directly into the intake pipe so the fumes are burned in the engine and exhausted through the transom. We also tried some Soy-Fuel, a soybean-based bio-fuel diesel substitute. It can be mixed in any ratio, although 50/50 is recommended. It has a higher octane rating than diesel, so the engine starts and runs better, but more importantly the exhaust odor is almost undetectable, and what there is smells like popcorn! A search on the Internet will turn up several suppliers of biodiesel. (*Be sure your engine can use this.* ***–Ed.***)

"Our investment has already paid off in terms of many wonderful evening sails and weekends out with the scenic Smoky Mountains in view, multiplied by the experience we've gained sailing and working together."

No rot or sagging

The rigging was in good shape and needed no repairs. The deck-stepped mast base was sound, no rot or sagging in the cabinroof had occurred. Bayfields are built heavy enough to last many years when sailing on a lake. A new sailbag for the jib allows us to leave it hanked on for quick getaways. With practice, we can have both sails up a few boat-lengths out of our slip. We use a 130-percent genoa most of the time in the light air of Tennessee. This moves the boat very well. There is also a 100-percent jib and an unused storm jib stored below. With the help of Sailrite's book, *The Sail Repair Manual*, and some of their thread, we learned how to sew sails on a home machine. We did some repairs and added a double layer where the spreaders rub when tacking, something we do all day. The book, at $11.95, was well worth it. The double layer turned out great.

Next up is finishing the exterior brightwork and perhaps replacing the trailboards (or we might let the next owner have *that* privilege).

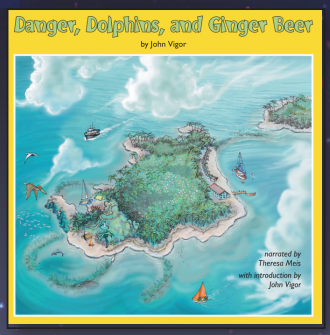
We've enjoyed our time on the water, whether sailing or applying elbow grease. Our investment has already paid off in terms of many wonderful evening sails and weekends out with the scenic Smoky Mountains in view, multiplied by the experience we've gained sailing and working together. With an investment that fit our budget, we didn't change our cruising plans. And with the liberal application of sweat equity, we've turned a serviceable, but neglected, boat into a trim cruiser that is reliable, has a good-looking interior, and is very comfortable to spend weekends on.

Now — if we can just find a 38 footer like her . . .

Distinguishing features of the Bayfield sailboats are the trailboards at the bow and taffrail at the stern.

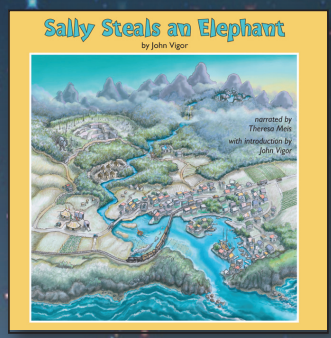
Read Me a Story

Bedtime Stories for Young Sailors



Join Sally, Peter, and Andy Grant as they sail their way through the unpredictable waters of childhood. A great two-part series for children ages 8 to 12. *Danger, Dolphins, and Ginger Beer* takes readers on an exciting romp across the islands of the Caribbean as the children save an injured dolphin and fight to save their own lives.

Sally Steals an Elephant finds the Grants in the South African jungle, where the children encounter a kindly elephant, her cruel circus owner, and even a witch doctor.



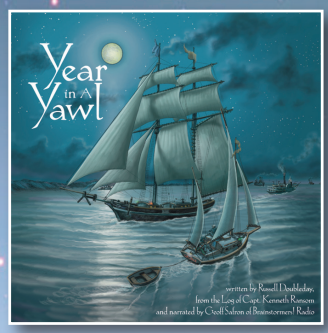
John Vigor:
Danger, Dolphins, and Ginger Beer

John Vigor:
Sally Steals an Elephant

John Vigor:
So Long, Foxtrot Charlie

Foxtrot Charlie just wants to get along with his foster family. But sometimes being an ordinary 13-year-old boy gets him into trouble — messes, explosions, accidents — the harder he tries, the more he fails. Just when he thought things couldn't possibly get any worse, Foxtrot is lost at sea with his foster father, foster sister, and a friend. With the lives of three other people in the balance, Fox is faced with a challenge that helps him understand what's really important.

Russell Doubleday:
A Year in a Yawl



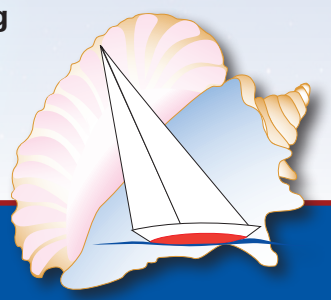
Not long after Joshua Slocum completed his historic circumnavigation, four young men from Michigan set out on another adventure that had never been done before: the Great Circle Route of the eastern U.S. They built a boat and traveled down the Mississippi, around Florida, up the Eastern Seaboard, back through the Erie Canal, and home to the Great Lakes. Their youthful enthusiasm and resourcefulness make this classic true story of a century ago a powerful influence on youngsters today.

So let us read your young sailor a story!

Enjoyable listening with your children or grandchildren, whether you're on the boat or wishing you were there. Good for long road trips too.

Delivered to you in a jiffy!

Download these audiobooks from our site directly to your computer. In keeping with the do-it-yourself philosophy of Good Old Boat, we produced these audio tales ourselves. And we did it just for you, our readers. Each of our audiobooks is unabridged. Listen to samples of all 12 audiobooks at AudioSeaStories.com.

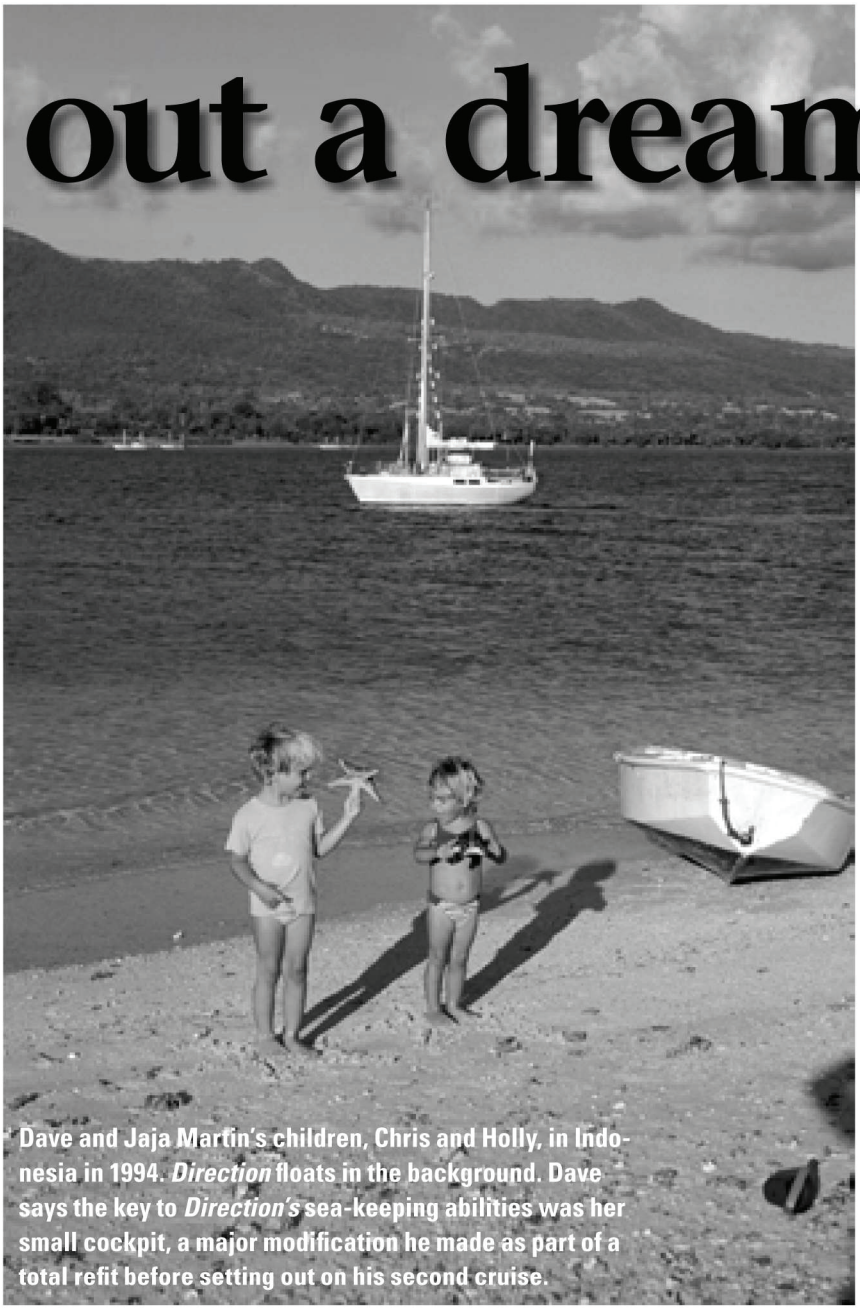


www.AudioSeaStories.com

Living out a dream

Youth and poverty turn a stock Cal 25 into a world cruiser

by Dave Martin



Dave and Jaja Martin's children, Chris and Holly, in Indonesia in 1994. *Direction* floats in the background. Dave says the key to *Direction's* sea-keeping abilities was her small cockpit, a major modification he made as part of a total refit before setting out on his second cruise.

My decision to rebuild a Cal 25 for a voyage around the world was inspired by one basic fact: I was broke. A 25-foot boat was all I could afford. But at age 22, I had a lot of energy and big dreams. When wise adults (hereafter known as The Skeptics) tried to dissuade me from going — saying it was a dangerous plan — I politely explained the reasoning behind my overall scheme, about how I was beefing up the flimsy hull with extra fiberglass.

I smiled, they smiled; each of us thinking the other an idiot for not seeing the obvious. Eighteen months down the road, as the project neared completion and I was getting ready to set off, the flak increased. I finally realized that people who are scared to be in your shoes will call you a fool.

A stock Cal 25 was never intended for long-distance ocean sailing. I discovered that while sailing the boat more than 10,000 miles between Seattle and New York via the Panama Canal. Bulkheads tore loose. The hull and rudder cracked. The problem with taking any older daysailer cruising is that the extra gear and provisions required for a lengthy voyage overburden the boat in ways that were never anticipated during construction. For example, an empty cardboard box can be dropped and remain intact. Fill the same box with heavy cans, and it will split wide open when dropped.

Although inadequately constructed, the hull has a superb design. The reason I entertained the notion of rebuilding the boat was due to its sailing characteristics. Designer Bill Lapworth knew what he was doing when he penned the Cal 25. With its long fin keel, spade rudder, and flat sections, the boat boogied.

Deck not normal

Some people had a problem with the way the boat looked. The trend-setting flush deck was definitely not normal. More than a gimmick for providing extra space below, however, the flush deck was the boat's saving grace during a circumnavigation. In severe sea conditions it provided extra freeboard. During knockdowns, the boat lay on its side and bounced down the faces of waves like a beach ball. In the same circumstances, traditional designs with sidedecks and cabin trunks tend to dig in.

The boat's major design flaw was its enormous cockpit. The gunwales, in particular, were too narrow. During a gentle knockdown, half the sea poured over the rail like a bucket dipped in a well. The companionway was also enormously wide, and the Cal sported a sloppy innovation called the pop-top — quite possibly the largest, leaking, fiberglass deck hatch in the world. Prior to the Seattle-to-New York trip, I had reduced the size of the companionway opening and replaced the pop-top with a hard doghouse to make the boat watertight. Now that I was doing a major overhaul, however, the cockpit had to go.

The most difficult aspect of any project is beginning. Apprehensions stymie action and large cash outlays cause shortness of breath. The best

way to get started on any rebuild project is to rip the boat to pieces as quickly as possible — before you know what has hit you. Then the only alternative is to put it back together again.

On a quiet Sunday in November 1985, I ran an air hose out to *Direction*, hooked up a cutting tool, and slipped on a dust mask. In less than two hours the cockpit was severed from the hull and lying on the ground nearby. During the week that followed I ripped out the V-berth, the galley, dinette, and quarter berths. I left the main bulkhead intact. I sanded the hull back to clean fiberglass.

The cockpit gets cut out, above. Dave rides it to the dump, below left. The hull is gutted, below right, and gets sanded back to clean glass.

Rocked the keel

I now had a bare hull and deck, minus a cockpit. To find out where the hull needed stiffening, I blocked the boat high enough so the keel was an inch off the ground. I then sat inside the empty hull with a 6-foot 2 x 4. Using it as a lever, I put the 2 x 4 into the deep bilge and began rocking the keel. Once enough momentum had built up, the keel swung freely from side to side, simulating its motion when sailing to windward. Without any interior to obstruct my view, I was able to observe that the transom twisted, the sides of the boat moved in and out, and the bottom of the hull flexed up and down. Using a magic marker, I put circles in all the areas that were contorting. Having completed the "research phase" of construction, I was able to map out my "structural scheme" to keep the hull rigid.

"Designer Bill Lapworth knew what he was doing when he penned the Cal 25. With its long fin keel, spade rudder, and flat sections, the boat boogied."

To curb the twisting and flexing, I chose to run three longitudinal stringers from stem to stern. I placed one of the stringers at the sheer to act as a clamp. Another followed the waterline. The third went across the flatter areas of the hull between the waterline and the garboard. After those were in place I added a thwartship bulkhead between the main bulkhead and the stem and another bulkhead 5 feet forward of the transom. Last, I curbed the keel movement by adding five box-section keel floors that were tied into the lower stringer. When I was finished with the boat's structural additions, the interior resembled the inside of a DC-3 fuselage (see photos on Page 31).

I designed the new cockpit with wider gunwales, a shallow footwell, and a long stern deck. This new aft deck not only prevented the hull from twisting, it kept following seas from slopping into the cockpit. A hatch provided access to the newly formed watertight aft lazarette. I also rebuilt the companionway. It was an 18- by 24-inch opening surrounded by a hard, fiberglass dodger. There was no sliding hatch. It was an extremely small opening for humans to wriggle in and out of, but it also presented a challenge for breaking waves (see photo on Page 31). *Direction* would prove herself to be a very dry boat.

Attacked her size

By the time I was finished with this structural phase of construction, I had invested 500 hours of my time, spread out over six months. The Skeptics still prowled, offering their advice and wisdom. They could no longer argue that the boat was not strong enough for a sea voyage so they attacked her size instead.

"Too small," they claimed. "She'll be overcome by large seas."

"We'll see," I said.

I did not want an interior that resembled the inside of an oak coffin. I wanted an interior that was light and airy, cheap to build, with enough room for two people to live in relative comfort. Although I was planning to begin

my voyage alone, I was hoping to find a partner en route. Never in my wildest dreams would I have imagined that children would one day prowl the deck and enliven the cabin with their frantic energy. Fortunately that was a few years off, and I still had some energy of my own left to complete the project and get moving toward my destiny of meeting my wife-to-be, Jaja.

I designed extra wide settees in the main cabin to provide maximum food and water storage capabilities over the keel. The advantage with these wide settees is they were also comfortable berths. I hate narrow bunks — even at sea. I want to be able to move my arms and legs and to be able to curl up in a fetal position when I'm seasick. By inserting two plywood boards with cushions between the settees, the entire main cabin was transformed into a 6- by 7-foot double bed.

The new, aft, thwartship bulkhead, above. The cockpit getting primed for paint, at right. Note the wide gunwales and the stern deck with its hatch (not installed). Installing deck hardware, below.

Dishwater back

The galley sink was to port and the stainless-steel Hillerange two-burner kerosene stove, with oven, was to starboard. There was not standing headroom in the galley, but it was easy to sit on the settees and cook, which worked well in rough conditions. Washing up was a different matter. You had to stand and bend over the sink in order to operate the hand pump. This created a syndrome Jaja would later term "dishwater back."

Instead of a traditional V-berth, I ran the cabin sole all the way to the new forward bulkhead. I built vertical lockers for hand tools, clothes, a sewing machine, and dry stores. In time, this area would be remodeled and become the nursery. The 5-foot space between the forward bulkhead and the stem was storage for sails and charts.

Building an enclosed head on a small boat is a colossal waste of space compared to how much use it receives. I installed the head on *Direction* at the foot of the sail locker. Since it was located at the bow, it was a fairly miserable experience to use it while at sea. But the boat had a head, and it did not take up any valuable space.

Compromises are the main theme when designing small-boat interiors. You have to weigh the pros and cons of each situation and pick the lesser of two (or perhaps more) evils. My main drive was to create maximum storage in the middle of the boat. When fully provisioned, *Direction* could carry 60 gallons of water and 15 gallons of kerosene. Most important, we could stock enough food to last a family of four for three months. As a rule of thumb while provisioning, we knew that six shopping carts brimming with supplies would somehow find a place aboard.

"The best way to get started on any rebuild project is to rip the boat to pieces as quickly as possible — before you know what has hit you. Then the only alternative is to put it back together again."

Got through gales

Direction proved herself to be an able sea boat, especially in severe conditions. Her extra freeboard and wide-gunwaled cockpit (and virtually leakproof companionway) were battlements against breaking waves. She got us through many gales, the worst of which was an 11-day blow in the Indian Ocean. And she held together during a 90-degree knockdown on the Coral Sea. In seven years we logged more than 45,000 miles on her without a single, structural mishap. Not bad for a boat that cost less than $15,000 to rebuild and fit out.

That's not to say we zoomed around the globe always reveling in cushy comfort. Far from it. At sea

The fuselage-like latticework of stringers, above. Dave made the stringers using 2-pound density closed-cell foam, covered with polyester resin and mat and roving. At the widest section of the beam the stringers got three layers of mat and roving, equaling ¼-inch thickness of material. He tapered the laminating schedule toward the bow and stern, down to one layer mat and roving.

when the wind blew more than 20 knots, the constant and unforgiving motion would sometimes chafe our nerves to distraction. Making a cup of coffee was akin to a high-wire act. And then there was the reality of a boat battened down tight for sea while holding a load of dirty diapers. But we survived and the children thrived. We knew we would be more comfortable living ashore, but would we be happier? Not on your life.

Well, it's been 20 years, three kids, and a voyage to the Arctic on a different boat since that Sunday in November 1985 when I tore *Direction* to pieces. If I have learned anything useful over the years it is this: unless you have unlimited funds, do not place "comfort and convenience" at the top of the priority list. None of us wants to sleep on a bed of nails or use canvas soaked in cod liver oil for raingear, but attempting to bring all the perks of shore life onto the boat will get complicated and costly. Prioritize. Buy only the stuff to make the boat safe and performance-oriented. Comfort is a relative state. I can adjust to anything and be happy about it — especially when a dream is being lived out.

Looking back, I would not have changed a thing. I chose cruising over college and incorporated a family into the general sailing plans. It really is true that the most difficult aspect of any project is getting started. You must be bold, hold firm to your aspirations, and not allow the questioning looks from others to hold you back. Do what you have to do, because time will charge on regardless.

To stabilize the keel, Dave built box-section keel floors using ⅜-inch marine plywood, sheathed in fiberglass, then laminated to the hull, above. A hard dodger and fiberglass doghouse, below left, prevented seas from entering the cabin. Launch day, below right.

Incidentally, not long ago I met a few of The Skeptics from my youth — the ones who had offered less-than-positive encouragement when *Direction* was little more than a boatyard disaster area. Now my aged adversaries clapped me on the back. They said, "I remember when you were just a kid, Dave, rebuilding that boat. Oh my goodness! I would have given anything to be in your shoes. What adventures you've had!"

I just smiled.

Once neglected, *Sinfonietta*, a modest Cal 25, now has a richly finished interior that has many details found usually in bigger, more luxurious vessels.

Glorious, luxurious *Sinfonietta*

Could she be the classiest Cal 25 ever?

by Chris Roberts

I have always loved boats, the sea, and being by water. I dreamed of one day owning a classy sailing vessel that would have a luxurious, rich, homey feel but I never thought I could afford such a boat.

A man with boat fever spends a lot of time in marinas and eventually I came upon a boat whose lines caught my eye. She was for sale at a most reasonable price. *Sinfonietta* is a 1969 Cal 25. She was scum-covered and grungy but sound and seaworthy. I was told the owner had been trying to sell her for several years and was "highly motivated," so I arranged for further inspection and a sea trial.

When my sons Corey and Larry and I went below for the first time, we knew instantly she was for us. Her thick fiberglass hull, solid mahogany interior, and comfortable layout immediately welcomed us with a feeling of warmth and coziness. She seemed to beg us to stay aboard and give her a new life. Her interior was in good shape. Now here, we agreed, is a "real boat" with the potential to be special. We fell head-over-bank-account in love with each other.

I struck a sweet deal with the owner. I then had to move her over three mountain passes and down more than 700 miles of highway from the West Coast, but by the end of September 2000, she was docked in her new home in Dayton, Montana. Over the next few summers, I cleaned her up and worked on improving my boathandling abilities. Since I spent much of my time teaching the Scouts of Camp Melita Island as they earned their sailing merit badges, true reconditioning didn't begin until the fall of 2003 when I obtained a trailer that enabled me to haul *Sinfonietta* 90 miles south to my personal boatyard at my Missoula home.

The project list begins

First, I went over the entire boat making a project list. Fortunately, except for some wood rot in the pop top and companionway, she was structurally sound. After some Internet travels, I arrived at a color scheme. It entailed changing her boot-stripe and sheer-stripe trim from sky blue to deep sapphire blue. But her bottom was a neglected mess of old paint and blisters so, first, we scraped, sanded, and filled holes, then applied a barrier coat followed by a red Teflon-based bottom paint.

Her aluminum mast was down and we buffed it using a scouring pad on a disc sander then brought it to a shine with metal polish. I was able to effectively and inexpensively clean her bronze fittings with a cleanser suggested by a former Navy man. He referred to it as "Atomic Joy Juice." It's made of lemon-flavored Kool-Aid mixed into a paste with a little water and vinegar.

I re-bedded her leaky windows using RV putty from the local RV supply store. This was very effective; the windows have not leaked in the five years since they were re-bedded. I also re-bedded all her fittings with Dolphinite.

Instead of painting her topsides, I decided to recondition her gelcoat

Chris started his upgrades to *Sinfonietta* on the outside. He scraped off her old bottom paint, above left, filled blister holes, above right, and polished her topsides and repainted her sheer stripe, at right.

using a technique I read about. It involved multiple wet sandings using several grades of sandpaper, starting at 400-grit and ending with 1,500-grit. This was followed by power buffing with rubbing compound and finishing to a bright shine with wax and Seapower Super Poly Boat Polish.

All this hands-on work bonded me with my boat, and my love continued to grow. I removed, stripped, and finely sanded her exterior wood. I then applied teak oil and allowed it to dry. Over the winter, I added up to 11 coats of varnish following the guidance Rebecca Wittman gives in her *Brightwork, the Art of Finishing Wood*.

The nonskid was so worn that I chose to paint the deck and cockpit area with gray deck paint to compliment the blue trim. During the four years that have passed since that project was completed, the deck has received three coats of paint in total and shows little wear, although it has been well used.

I replaced all the standing rigging the first year. Then, over the course of the next three years, I replaced the running rigging, using solid blue, white, and some red line to add a vibrant splash to the color scheme. A final addition was a brand-new mainsail.

Reflecting on her interior

While redoing the exterior is straightforward, upgrading the interior is another matter entirely. I wanted *Sinfonietta* to have a luxurious ambiance in her cabin. But what exactly does this entail? I did extensive online research, particularly on Yachtworld.com, looking at every Cal 25 I could locate, gathering ideas for

Using the boat for three summers prior to renovation also gave me a good idea of what changes made sense and what amenities I wanted. That first fall, I exchanged the old pumped-overboard head for a Porta Potti — Flathead Lake is too pristine to risk an accidental discharge. I plugged the through-hull permanently.

As I used her, I learned that my sailing habits primarily involve daysailing and the occasional weekend aboard. Because it worked for my lifestyle, I removed the freshwater bladders under the V-berth and chose to carry 5 gallons of drinking water on board. I tend to wash what few dishes I dirty in a bucket of lake water. I freeze water in milk jugs and keep them with the perishables and beverages in a carry-aboard cooler that fits neatly under the companionway step. This eliminates draining and gives me great dry-food storage in the old icebox in the galley.

Instead of the alcohol stove, I use a simple one-burner propane camp stove in the cockpit or on the galley top when it's cool.

When I'd slept aboard, I learned me satisfactorily and, in our warmer Montana summers, the vinyl upholstery was tacky and stuck to my skin. As I used the boat, I noted ideas for changes in my growing project list.

Inspiration from the classics

My primary sources of inspiration for redoing *Sinfonietta*'s interior are yacht-style books I've pored over and added to my library. Volumes 1 and 2 of *The World's Best Sailboats* by Ferenc Máté, *Classic Yacht Interiors* by Jill Bobrow and Dana Jinkins, and *Welcome Aboard: Inside the World's Great Classic Yachts* by Matthew Walker have been particularly helpful. With their aid, I chose upholstery and wood as the basis for her décor. I considered color first. While viewing the classics, I noted that emerald green blends with brass and rich wood in a very pleasing and relaxing manner. I determined that the upholstery should set the tone while tied into additional cabinetry designed for utilitarian purposes and effect.

Choosing fabric is a long, involved,

The Cal 25's galley was basic, above left. Chris removed the stove and mocked up cabinets to surround the countertop, above right. The finished galley, with its tiled top, glows, at left.

effect have to be just right. I wound up using three different fabrics in the same color scheme. For the saloon/dinette fabric, I chose a stain-resistant velveteen velour for its soft smoothness. The seat cushions are tucked and buttoned on their vertical surfaces only, so the flat areas won't collect dirt. The V-berth fabric is more substantial. It's water-resistant and its pile doesn't allow bedding to slip. To cover a section of the starboard quarter berth, which is also the floor of the sail locker, I chose vinyl. I eliminated the port quarter berth and converted that area into a substantial cockpit locker. I replaced all the cushions with thicker closed-cell foam.

After the upholstery phase was complete, I made cardboard mockups of cabinetry for the starboard galley top and to go alongside the port-side dinette table. I added stowage capability and class to these with a brass-and-wood fiddle rail. My neighbor Jeff Schroeder is a kitchen refinisher and he fabricated them for me, as my abilities are limited to finish work. Together, we looked at wood and chose lyptus for its grain and coloration and for its similarity to the wood that was already aboard. A year after completion of the saloon/galley cabinets, Jeff built *Sinfonietta* a new dinette table and cabinets for the companionway bulkhead. I designed the cabinets to hide instrument backs and to be easily accessible for cockpit items like sunglasses, lotion, and binoculars. We chose lyptus once more for the cabinets, and white maple with lyptus edging for the table to better reflect light and brighten the cabin.

The next project was the galley top. We put a new cabinet where the old alcohol stove had been. Since I didn't need the sink, I removed its plumbing and cut a hole in the center to mount the single-burner bottle-propane unit. When I need it, I attach the stove's bottle from behind a sink cabinet access door. When it's not in use, I hide the burner under a fitted chopping-block insert.

After more research with kitchen remodelers and suppliers, I chose polished porcelain tiles from Brazil for the top surface because of their durability and sea-foam-green color. These tiles are extremely hard, nonporous, impervious to heat or cold, and cannot be scratched by sharp knives. The surface is easy to wipe clean and will not stain or absorb oils. Since I was covering such a limited area, the steep cost of the tiles was not an issue. Small is beautiful when dealing with high-priced luxury items.

After the cabinets and galley top were installed, I gave the remaining interior wood fresh coats of varnish. I took all removable items, such as doors, drawers, and trim, indoors over the winter months so I could strip and render them as brightwork. I lined the drawers with green felt for extra classiness and for the heck of it. I repainted all white interior surfaces with water-based, mold-resistant paint. I used bright-white topside or bilge paint for ease of cleaning and to provide light in the interiors of lockers, storage areas, cubbies, and bilges. I replaced old screw-in light-bulb fixtures in the V-berth, head, and galley with halogen reading lights and added wood trim strips spaced across the cabintop to create a more expansive feel within the cabin.

Several years went by and, as the majority of the work neared completion, I looked for refinements with which to add "icing to the cake." There was nice carpet on the cabin floor, but all those classic yachts were graced with teak-and-holly soles. *Sinfonietta* needed a sole too. In my travels to the West Coast, I found a teak-and-holly veneered plywood. Jeff carefully fit and reinforced the five sole pieces for me and I finished them with 11 coats of varnish before installing them. *Sinfonietta*'s sole now shines brightly below.

As I used the boat, I found that the interior was a bit dark unless I raised the pop-top. Newer boats are fitted with clear ventilation hatches to add light, but these are pricey to retrofit to an older craft. My easy, inexpensive fix was to mount and seal a clear acrylic panel into a cutout in the forward hatch. Voilà! Not only does it provide ample light, but I can see the stars at night while lying in my berth.

Artworks in a work of art

Wherever I have wandered I have found treasures, such as artwork or books, to bring home. I treat *Sinfonietta* herself as a work of art and embellish her with objects that speak to my appreciation of creativity. Mounted on her port saloon bulkhead is a bronze Tibetan gargoyle face, a Northwest-coast salmon carving, a framed boat print procured at the Port Townsend Wooden Boat Festival, and a matching brass barometer and clock. Wood and stone carvings live among cups and crystal behind the fiddle rail. I search for vintage silverware and ceramics to outfit her galley. The V-berth holds home-crafted cushions, each uniquely hand-stitched.

Other than the cost of new cabinets, upholstery, and rigging the upgrades were relatively inexpensive since they mainly involved my time and labor. However, there is no point in trying to total hours, as they need not be tracked. Time devoted to family members or energy expended in "mucking about in boats" is not to be tallied. *Sinfonietta* is a cherished family member, whether she is sailing on the water or resting at home in my yard.

"I have transformed a classic Cal 25 into the luxury boat of my dreams. I am content with a job well done."

All in all, the return for this devotion to a dream comes in pride of ownership. The sense of relaxation and enjoyment she gives my family and those who encounter her provides me with plenty of pleasure and reward. To see visitors light up with awe, appreciation, and surprise as they step into her cabin tells me I have transformed a classic Cal 25 into the luxury boat of my dreams. I am content with a job well done.

Insatiable boat fever

As I completed the project, my boat fever did not subside. It was amplified. My desire to have a "place by the sea" fueled an increased drive to walk the docks and cruise the Internet searching for another right boat at the right price. This one was to be my "home away from home." My boys insist that I must have checked out more than 300 boats since finding *Sinfonietta*. Yet they also agreed that this due diligence ultimately paid off.

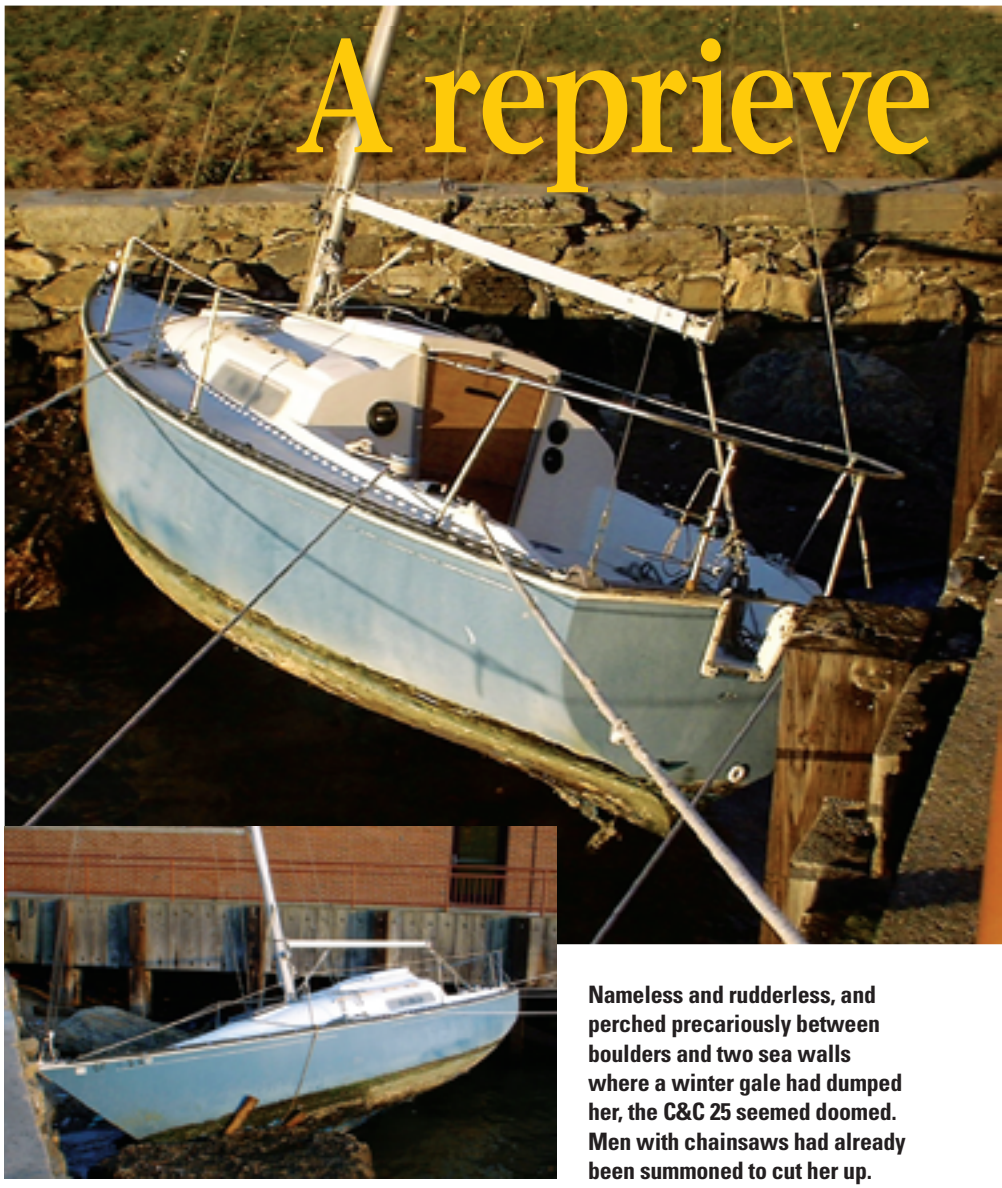
In 2007, I acquired another boat that seemed right for my family. She, too, is a classic plastic craft and kin to my Montana boat. She is a 1969 Cal Cruising 36. She was a bit haggard, weather worn, and wanting care when I lucked upon her. But, this time, I knew what I desire in a boat and what my capabilities are.

I am employing the expertise I gained with *Sinfonietta* to recondition and upgrade her bigger sister in a similar fashion. We've christened the 36 *Sognare*, which translates from Italian as "to dream." A labor of love has begun once again. However, this is another story.

Chris Roberts is a nationally known photographer of American Indian powwows. He is a traditional dancer and has been a powwow participant for more than 40 years. He lives in Missoula, Montana, where he is a Sea Scout skipper and teaches sailing using Sinfonietta *during the summer season on Flathead Lake. Chris also enjoys photographing and writing about maritime subjects. His company, Meadowlark Media <http://www.meadowlarkmovies.com>, offers a large variety of American Indian DVDs, books, and calendars as well as a broad assortment of DVDs on maritime topics.*

To fit Chris's vision for *Sinfonietta*, the blue vinyl had to go, far left. He reupholstered the dinette with velour and had a new table made, near left.

A reprieve



Nameless and rudderless, and perched precariously between boulders and two sea walls where a winter gale had dumped her, the C&C 25 seemed doomed. Men with chainsaws had already been summoned to cut her up.

In the tradition of all good seafaring stories, this one began on a night dark as pitch. The wind built from the southwest and white-capped waves roared up the channel across the moorings to explode in foam against the breakwater. A lone hanging lamp testified to the storm's violence, casting animated shadows in the gusts and illuminating the sheets of rain blasting inland.

At the height of the gale, a gust laid the little boat over hard and she swung against the run of the current. As she snapped back, the cleat on the foredeck let go and she was briefly free to explore. The cadet on watch in the waterfront center saw a flash as her mast whipped in the waves. She ripped by his elevated position, headed into the cove, and ran up onto the rocky beach. With some quick thinking and even faster footwork, he managed to secure some lines aboard and lay them back to trees and a large rock.

The next day was bright and cold, as is normal for early December in New York. I was on my way to class at SUNY Maritime College and, as I drove past the Science and Engineering Building down to the water, I noticed a mast pointing off toward the Throgs Neck Bridge, rather than skyward, as would be normal in the moorings.

On walking down to the seawall through the flotsam thrown across the grass bank, I saw the little C&C 25 propped against the wall and almost standing on her keel, which had worked itself into the fine sand that filled the spaces around murderous boulders. Not thinking, I said out loud, "Someone has their work cut out for them with this one." Little did I know that the boat gods were looking down at just that split second. They decided to have some fun.

Coming with chainsaws

A voice boomed from behind me: "Oh no, she's got to be off the college property by the end of the week and I have a couple of guys with chainsaws coming to cut her down to more portable proportions." It was the manager of the waterfront center.

"But what about the owner?" I asked.

"She was a donated boat, and a donation on the rocks is a pain. You move her, she's yours."

With 10 minutes before the start of my class, I looked over the hull and clambered aboard. There were only a few scratches on the hull as far as I could see and, although she had a grand collection of seaweed and shells tucked away in her cockpit, she looked pretty good. I stood on the foredeck looking at the four holes where once the vital cleat had been, my mind racing.

I can't just let her be cut up . . . someone would knock great fun out of her . . . but how do I move her? . . . class time . . . nice sheer . . .

The basic problem of moving the boat was compounded by the fact that the previous night saw the highest spring tide there would be for a month. Even with another tide as big as that, the sea level would not get back up enough to refloat her without a gale piling New York Bay against the outgoing tide from Long Island Sound.

But the little boat and her guardian gods had their own ideas. When I sighted along the mast to see if the rig had been damaged, I noticed a mobile crane moving large concrete traffic barriers on the bridge above me.

They must weigh a couple of tons; I bet that crane could shift her.

A couple of minutes later, I was talking to the crane driver and a fee was agreed. He could come on Saturday morning and we would see what we could do.

While digging the sand away from the upper side of the keel, I found the rudder buried in the sand. "Good," I thought, "At least this saves me the job of tracing shapes off other boats' rudders in the boatyard."

from the boat gods

Once stranded and condemned, she's now her salvor's Ruby Deux

by Eric Holohan

A gentle lift

Another bright and calm day dawned and the tide was as low as it gets. I pulled the strops under her hull and the crane took up the strain. "I don't know how much I can do for you," the crane driver said, as he realized that the keel was lead, and the strain gauge in the cab climbed to 4,000 pounds. But she shook herself free of the sand and, with the greatest of delicacy, she was placed in 2 inches of water alongside the pier to await the incoming tide.

The crane driver waved as he left and shouted, "I hope she floats after all that."

"Or I will be in a world of trouble," I replied under my breath.

Over the next five hours the tide filled, and finally, almost imperceptibly, she stood upright and floated free. Down below, her bilges were as dry as a bone and there still seemed to be something connected to the keel bolts. The next day, a launch from the waterfront center towed her to nearby Locust Point Marina and she was lifted for the winter.

And so the work began.

Although she was in reasonably sound condition, she was in bad need of a good overhaul. Even without the grounding, she would have needed a goodly amount of work. Having taken Don Casey's advice about softly abrading the baby blue topsides and waxing them back to life, I found that after a week I was getting nowhere. A topside paint job was in order. I did this with a two-part Interlux paint over several coats of primer. After fully degreasing and filling the surfaces, I rolled the paint on and tipped it off with a fine-bristled brush. It was my first attempt at this painting technique and I heartily recommend it, with the caveat that the preparation work *must* be 100 percent or the topsides you have will look better than what you will get.

Toiling in the cold

For those who have not experienced a boatyard in winter in New York (and I don't suggest anyone should go out of his way to do so), it is a right desolate place. Anybody with half a brain would stay at home reading boat mags and poring over the charts for next year's adventures in the warm.

I worked after classes had finished and before they began, hence avoiding the killer heat and sunstroke associated with 30°F weather. The final straw came as I was sanding the topsides with wet-and-dry sandpaper and the water froze as I applied it to the surface. The boat gods had a chuckle that day.

Some jobs could be tackled even with the inclement weather. The motor, a Danish-built Vire 5-hp, single-cylinder, gasoline engine, which looked so good, simply would not fire. I had come across these fine little motors in boats in Europe and knew they had a very good reputation. After a quick Google search, I had full diagrams of the motor's carburetor and electrical system. I bought a new 12-volt battery and charged it at home. The next day, after crushing the ice in the yard's water hose and connecting it to the water intake on the motor, I cranked the motor over and heard the faintest of kicks, then another, and away she went — not like a kitten; more like a cat coughing up a furball, but enough for me to know there was not much wrong with the motor.

A little homework

The tiny storeroom in our upstairs apartment in Hicksville became the workshop for the pulpit. I did not have any real tools of the sort I would have liked to do the job, but the $1,000

After a winter of work, the once forlorn little boat has regained her rudder, her good looks, and her dignity .

quoted to build a replacement pulpit for an "out of manufacture" boat was just too much to pay without at least giving it a go. I used standard angles, bases, and tees instead of welds to connect the parts. It was important to set all the locking screws and lock them in place with adhesive lock compound. After all, it might be me hanging off the bow screaming something about spinnakers and jibing.

The difficult part of the construction was bending the 1-inch stainless-steel tube. This I did using a length of 2-inch softwood with a 1-inch hole drilled in one end so the tube would slide through. As I bent the tube very slowly, using the wood as the lever and a door jamb as a brace, the correct shape began to appear. My wife-to-be watched, thinking, I am sure, second thoughts.

Once given away, then blown away, and now reincarnated as *Ruby Deux*, the C&C 25 has a bright, spruced-up interior, freshly painted topsides, and another chance to sail Long Island Sound.

The portlights were hazed to the point I could see nothing through them, so I bought some 7-mm acrylic and very carefully marked the shapes of the old ones on it. Without removing the protective film from the new acrylic, I cut them with a fine-tooth fretsaw, cutting through a piece of quarter-inch ply at the same time to prevent the plastic from splintering. I then drilled the holes and replaced the portlights in their frames, bedding them in high-modulus silicone mastic. This was the first time I could see something for the work, and I was glad to see it.

The Christmas break gave me some time to clean out the bilges and lockers and start on the woodwork both down below and on the deck. The handrails could be unbolted by removing push caps in the headliner. Along with the tiller (also found in the sand weeks later) I took them home and varnished them in the storeroom, where my wife-to-be pitted her asthma against, "Just another two, or maybe three, coats. Come see, they're looking great."

A boatyard springs to life

Regardless of the official date, spring comes when we have the required 50°F to dry primer and paint. And then one day, the boatyard morgue, where all winter I'd stalked between boat bodies veiled in white plastic shrouds, exploded into life with the smell of thinners, the sound of power tools, and an ever-present patter of Bronx idioms: "Yeh-yeh-yeh, and your mudda."

With the brighter evenings, work moved along at a good pace. The new pintles and transom capping went on, followed by the new stanchions and bootstripe. I removed all the old wiring to nowhere and replaced it with new wiring to somewhere. One evening, after I'd spent several hours sanding internal woodwork prior to varnishing, the VHF that I had written off crackled and then spoke. It was as if the old boat was feeling better and letting me know she was grateful.

Just a year before, I was living aboard my 40-foot steel gaff cutter in the balmy south of Spain before beginning studies for a degree in naval architecture. My beautiful home afloat was called *Rubicon*, affectionately known as *Ruby*, so subliminally the new boat was being called *Ruby* also. When it came time to name her it seemed only right to call her *Ruby Deux* and so her transom was anointed with this name.

"... as we made sail, there came that sublime moment when the sails start to pull and the motor falls silent."

Registration frustration

A situation I had not foreseen was the boat's registration status. Although she had been donated to the college, she did not carry papers. Either she had not been registered or someone had lost the papers. A two month-long back-and-forth with the previous owner finally yielded the necessary bill of sale and a very straightforward trip to the DMV.

"Just bring a rubbing of the HIN number from the transom, and a photograph of the boat, and the HIN number," they said. We got away without having to bring the actual boat. This was a real request at one stage, I kid you not.

In hindsight, registering the boat should have been my very first job, as the previous owner would have been liable for the costs of removing her from the beach and would have been happy to sign her over at that stage — a lesson learned the hard way.

Having secured a mooring in the perfect harbor of Oyster Bay, and after making sure all the rigging was sound, it was time to see if *Ruby Deux* would swim. She sat happily with the slings of the travel lift under her as I checked the through-hull fittings for leaks. Then I started the engine. It revved and ran. Then, after a mighty whoosh of steam burst from the cockpit locker, I switched it off. The rubber tube between the raw-water pump and block decided to split and spray salt water over the exhaust, hence the steam. It took the rest of the day to replace it as it was (as is typical) almost completely inaccessible. Point noted, I thought.

The next day was a perfect early-summer day and *Ruby Deux* motored down the cut and out under the Throgs Neck Bridge. A light breeze wafted from the Connecticut shore and, as we made sail, there came that sublime moment when the sails start to pull and the motor falls silent. It felt like heaven. She was lighter than I had thought and she picked up speed well, even under her well-used canvas and her hand-me-down asymmetric cruising chute.

Since then, I have added an inner staysail stay 3 feet aft of the stemhead that allows me to set a smaller sail to balance the reefed main. My now wife (yes, even after all that) and I re-covered the cushions with Sunbrella material, which makes her interior feel much better. I constantly update the safety equipment and I even carry a parachute anchor because you just never know when the boat gods might decide to have a little fun.

Eric Holohan is a Westlawn graduate, naval architect, yacht designer, a Lloyds-accredited marine surveyor, and an ABYC master technician. You can contact him at <http://www.holohanmarine.com>.

From eBay

An inexpensive boat proves to be a treasure

by Mike Dunsworth

Many times in my life I have found more than I was looking for. That was the case with the boat my wife, Sharon, and I are now cruising. I was looking for a cheap starter boat, but found so much more in *Morgan*.

I had a couple of things on my wish list for a boat. First, it should be cheap; second, it should be in halfway decent shape; third, it should have lots of room inside; and fourth, it should have a motor well. I'd been sailing enough to know I didn't want to listen to a motor during those times I couldn't sail.

I found a 1970 Coronado 25 on eBay with everything on my list. It was advertised as being in excellent condition and had a motor well. The Coronado is very roomy inside for a 25-footer as the trunk cabin extends nearly the full width of the boat. The bidding was at $600 with four days left on the auction. I bid $610, not expecting to win it. Four days later, I was the proud owner.

Amazingly, it actually *was* in excellent condition, except for the outboard, which could be easily remedied. One of the drawers contained a folder of receipts: new Doyle sails in 2000; new mast, boom, and standing rigging; a tiller pilot, life jackets, and flares. The list went on and on. It seems there was a problem with the girlfriend and the boat had to go *now*, hence the "no reserve" auction.

When I bought *Morgan*, I had been on only a couple of sailboats. One was a 36-foot sloop chartered for five hours during which I "helped" with handling the sails. The other was my brother's 19-foot cat ketch. I had much to learn. Once I got *Morgan* home to Indiana, the real fun began: learning to sail. I gave her two fresh coats of bottom paint and a 1989 Johnson Sailmaster 6-horsepower outboard. We were ready to go.

We spent nine months sailing the Ohio River near Evansville, Indiana, with one 100-mile trip upriver. I learned a lot about river sailing during that time. I learned about the "valley effect," in which the wind blows either upriver or downriver. The good thing is, this teaches you to tack. The following year, Sharon and I sailed *Morgan* down the Ohio to the Cumberland River, up the Cumberland to Lake Barkley, and over to Kentucky Lake. We sailed on Kentucky Lake for two years, having fun and learning a lot about our boat and sailing in general.

Upping the cruising ante

I had a dream of living on a boat and cruising full-time. The plan was to sell *Morgan* (our "learner boat") and buy a bigger boat when we were ready to go. Unfortunately, the economy had different plans. We reached the point in our timeline when we should have been buying the larger boat, but we didn't have the funds. Sharon suggested we go with *Morgan*. I thought she was joking. She wasn't, and she got me to thinking. Why not? I knew the boat and all its systems from top to bottom. We had spent weeks at a time aboard without killing each other. Could we? Should we?

We made a list of the things to improve. Our guiding rule was that we would have to be comfortable when sleeping and cooking. If you sleep well and eat well, the rest is easy. We had an almost useless quarter berth. We decided to extend the countertop from bulkhead to bulkhead and do away with the quarter berth. That gave us 7 feet of counter space. I built an Igloo five-day cooler into one end of the counter. I also installed two inches of foam on all six sides of it for higher efficiency. Now, two blocks of ice will last two weeks. We installed shelving under the companionway and across from the head. *Good Old Boat* gave me the solution for a holding tank, as we had none. I read of making one using 6-inch PVC pipe. Three days later, I had a holding tank and retired the Porta Potti to the shed.

Morgan **rests in her slip, at top, covered stem to stern by the sunshade Mike and Sharon made to keep her cool. Belowdecks, at right, the simple layout contains the essentials for cruising, and the deck design permits an outside view from the dinette and from the galley.**

to the ocean blue

We ordered a chart plotter, grill, and other essential equipment.

We made a sun cover for the hot sunny tropics. It covers the entire boat from cockpit to the bow. It took us a full week to custom fit it, but in the end it fit perfectly. It's unbelievable how much cooler the boat stays with the sun cover in place. The deck used to get so hot it hurt our feet to walk on it. Now it stays cool and, in turn, the cabin does too. As soon as we drop the hook, up goes the sunshade. It takes only 5 to 10 minutes to set up and is worth its weight in gold. As I burn easily, this was high on my priority list.

We added cabinet doors and more shelves to use every cubic inch possible in this 25 foot boat. We installed a new mattress, cushions, curtains, lights, fans, batteries, and a hundred other little things. We worked on the refit for about five months. Finally, we decided she was finished. If anything else needed to be done, we would do it on our way to paradise . . . after all, they do say cruising is nothing more than working on your boat in exotic places.

Down the river to the sea

We left on November 4, 2010. We sailed down the Tennessee River to the Ohio, down the Ohio River to the Mississippi, and down the Mississippi River to New Orleans. We then traveled along the ICW to Florida.

As I write this, we are taking our time while exploring the Florida coast. We are having the time of our lives. We hope to be far enough around Florida by next winter to make the crossing to the Bahamas.

With the purchase price and refit, we now have about $5,000 in our good old boat. That is more than I could sell her for, but that doesn't matter. She is now a well equipped cruiser through and through. She meets all of our needs and more. She handles easily, sails well, and is comfortable at anchor. We have all heard the Pardeys' famous phrase, "Go small, go now." We did . . . and found hidden treasure in this old boat.

Mike Dunsworth grew up in southern Indiana and met his wife, Sharon, in San Antonio, Texas. They lived in Mexico for two years and Australia for four years before returning to Indiana. Mike was an avid motorcyclist before the sailing bug bit. He has a master electrician's license and a building contractor's license. He and Sharon are cruising in the Florida Keys on Morgan, their Coronado 25.

Mike's modifications made *Morgan* more appealing for cruising. He extended the galley all the way aft, at top left, and built in a cooler. Comfortable sleeping quarters were high on the list, at top right, followed by numerous shelves to hold gear and stores, all photos this page.

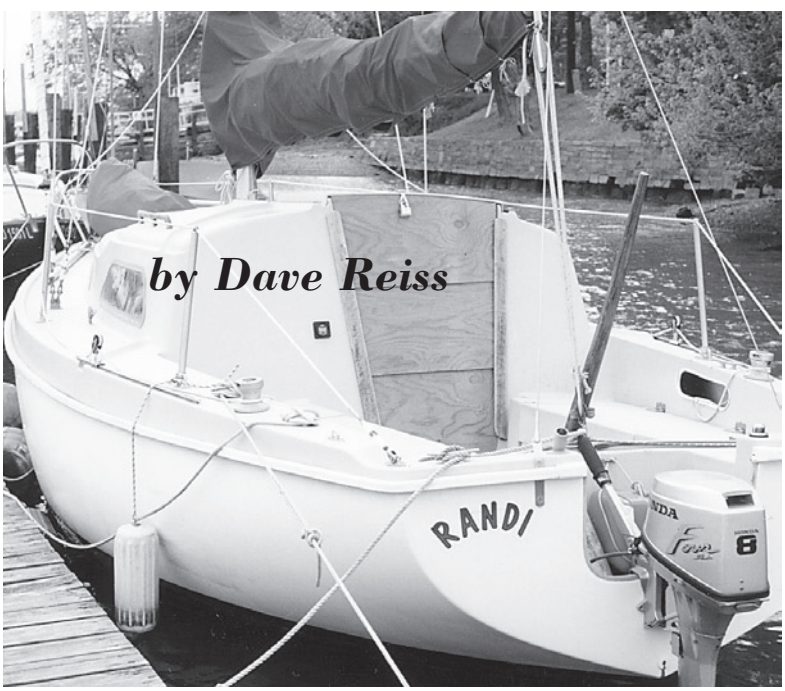
Green machine

Refurbishing a 1972 Pearson 26

by Dave Reiss

Green seems to follow me. First, I'm a self-admitted green sailor. I'm beginning my fourth season of sailing since I started out with a loaded-to-the-gills West Wight Potter 19, purchased new in 1997. After two seasons of learning the basics, I was yearning for a larger boat that I could refurbish over the winter.

My marina owner is constantly buying used sailboats to fill his slips, but the boats tend to be under 22 feet long. One day, however, he picked up a used 1972 Pearson 26, which he sailed down the Chesapeake and up the Potomac River, towing another used boat, a Tanzer 22. The Pearson was still completely stock, without any instrumentation and sporting the retro '70s interior. She had belonged to a summer camp, and although the sails, hull, and rigging were in great shape, the interior was shot. The once green-and-yellow cushions were worn to the foam, and the carpet disintegrated into messy clumps as I removed it. Oh, and she had a sea-green-colored deck that was covered in a white haze.



After inspecting the boat, I took my wife down for a look. "It's green," was her first comment.

"Yeah," I replied, "but the inside I could redo in any color you want."

We both liked the interior, with a real dinette and enclosed head. It seemed huge compared to our Potter and also very solid and safe. Unlike our Potter, the Pearson had minimal gadgets, and I was ready for simplicity.

Definite novice

At the end of the summer of 1998, I became the proud owner of hull #395 and began the process of refurbishing the interior. As I was a definite novice when it comes to fixing up old boats, having no elaborate workshop and only basic power tools, green was the right description once again.

My first task was to unload all the stuff in the boat. All the sails, cushions, and gear went into local storage. Then I removed all the fake wood paneling. I cleaned the cabin and bilge, removing 25 years of crud from every nook and cranny. And I scrubbed the interior until I had a clean surface to work on. The magic solution was a bucket of Pine-Sol and a lot of scrubbing.

I scrubbed and compounded the deck before the weather got too cold. To my surprise, the green hazy decks began looking better. The cabin walls, ceiling, and floor were in a dingy cream color, which I painted over with two coats of white. I opted for a water-based, mildew-resistant paint from West Marine.

The main bulkhead panels, like the rest of the wood in the boat, are marine plywood with a dark fake-wood veneer. I replaced the bulkhead panels with tongue-and-groove ceiling fir strips at 30 cents a foot. After purchasing $40 worth of lumber, I found a local woodsmith to cut the strips to length using the old panels as a guide. Woody (his real name) had owned boats before and knew what I was up to. While he was at it, I had him make a new hatch from a dry, pressure-treated piece of plywood he had lying around. Finally, I had him install a single-burner propane stove in the existing galley table. The total cost for his services was about $600.

Resources Dave recommends:

The National Pearson Yacht Owners Association and its members' web pages, 718-789-7105, <http://www.pearsoncurrent.com/>;
West Marine, 800-262-8464, <http://www.westmarine.com>;
BOAT/U.S., 800-937-2628, <http://www.boatus.com>;
Rigging Only, 508-992-0434, <http:/www.riggingonly.com>;
Star Upholstery, 703-751-3147;
and ***The 12-Volt Bible for Boats***, by Miner K. Brotherton.

The fir strips, at left, add warmth, and the propane burner, above, improves liveability.

Slate blue

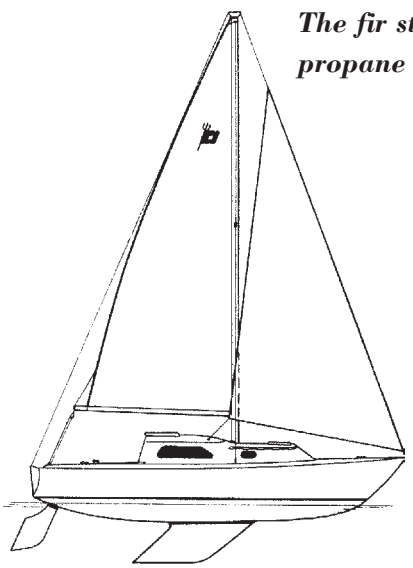
One weekend at home in my dining room, I painted the finished wood with polyurethane. Now the bulkhead was done, but the rest of the wood panels and trim needed something. I painted over the side trim panels in a slate blue my wife picked out. The rest of the wood I cleaned up, and decided to live with.

During the winter of working odd weekends I also:

- removed and recaulked the main ports
- installed a depth sounder
- ran a charging line from my Honda 8-hp outboard to the battery
- replaced all the running lights
- installed new electrical terminals on the leads running to the switch panel
- installed a cigarette lighter adapter and small fan in the main cabin, and
- installed a Porta Potti in the head.

When spring finally came, I was excited to get the cushions redone and the gear back in the boat. After taking the cushions to a few upholstery shops, and getting quotes from $800 to $1,000, I managed to talk one shop in recovering the existing foam cushions for $380. The existing V-berth cushions were covered with a BOAT/U.S. fleece V-berth sleeping set which fits perfectly.

Holy cow! The interior looked great! The white walls really brightened up the cabin, and the change from green to various shades of blue was a welcome relief.



Pearson 26

New halyard

Topsides, everything was still vintage 1972 as well. I replaced the fairlead blocks and the genoa block at the top of the mast. All that was needed then was a new halyard with a shackle, and she was ready to sail. After some harrowing experiences in a borrowed bosun's chair, I broke down and got a mast ladder that used sail slugs to keep it secure. After a memorable morning, my boat was rigged and ready to sail.

With a purchase price of $5,800 for the boat, then the cost for the services and supplies for the refit, and after buying a handheld VHF and other safety gear, my new old boat cost about $8,500.

After I had tied her up following one of the first sails of the season, a friend who is docked two boats down from mine, passed by. "She really looks nice, you did a great job," he offered.

"Thanks, what do you think of the green deck?" I asked.

"Looks a lot better than when she came in here," he admitted with a grin, "It's kinda growing on me."

"Me, too," I said with a smile, thankful I wasn't the only one.

Dave has sailed his vintage Pearson Randi, named after his wife, on the Potomac River in Washington, D.C., for two seasons. This year the boat and his family have moved out to Maryland's eastern shore, where they are looking forward to sailing the Chesapeake Bay. Dave can be contacted via email at davereiss@compuserve.com.

Pearson 26 upgrade

Turning an old daysailer/weekender into a self-sufficient modern cruiser

by Douglas Nikkila

FOR YEARS I DREAMED OF SEEING THE WORLD FROM THE deck of a sailboat. My mind was filled with images of anchorages near and far. Three years in the Canadian Navy reinforced my passion for the water and gave a new meaning to "it's in my blood."

I grew up sailing dinghies in Canada and had longed for the day when I could purchase my own boat. But I had neither the finances nor the right partner to bring my dream to fruition. Similar to the change in current or the ebb and flow of the tides, 1993 introduced me to Bonnie (now my wife) and gave us the ability to finance a sailboat we could fix up and sail.

In the fall, after scouring the area for a 22- to 26-foot boat, we settled on a 1973 Pearson 26. Its condition was far from perfect, but the price was right. She had been raced for years and neglected for many more. The signs were everywhere: faded and damaged gelcoat, bent stanchions, broken or missing hardware, and a dated and worn interior. Yet the potential was there. We just had to make it happen.

Bonnie is a teacher, and I am self-employed. Since most of our summers would be spent cruising, we wanted our new boat to be as comfortable as possible. I have been around boats for most of my life and have my own cabinetmaking business, which made me a little less fearful of the upcoming refit. Once the boat was out of the water and home, we erected a plastic-and-wood enclosure to protect the boat and us from the elements.

Because of the age of the boat and the fact that some blistering was found during the pre-purchase survey, we opted to sandblast the bottom. The bottom could dry out during the winter. Meanwhile, we stripped every piece of hardware from the deck and interior. We even removed the ports and the interior fixtures right down to the hull liner.

Cardboard mockups

The next couple of months were spent drawing up plans of what we wanted the interior to look like. Making up full-scale cardboard mockups was the key to a successful interior layout, giving us a feel for how everything would fit and function before building the real thing. We spent the remainder of the winter gathering information and purchasing necessary items.

By the middle of March, the refit began. I was in for three hectic months. To me, a Pearson 26 interior is not very functional. As with most boats designed for daysailing, little thought had been given to cruising amenities, and a lot of space was wasted between the hull and the liner. Making the most of the interior was a challenge. I had to cut away a fair amount of the hull liner prior to making modifications.

In the bilge I epoxied fir stringers to help stiffen the hull and provide support for the new teak-and-holly sole. I also epoxied new partial bulkheads and cabinets to the hull, adding even more strength. With this done, in went the modular cabinetry, two iceboxes, a bookcase, cabinets for pots and pans, a storage cabinet in the head, clothing storage in the V-berth and cabinets across from the head. I notched a section of the V-berth to create more room in the head area and to make accessing the V-berth easier. I added cabinets in every space I could get to.

We replumbed the boat with a stainless-steel sink and a foot pump in the galley, a bladder tank for fresh water

Above, *Xingu*, before and after her refit. Douglas and Bonnie Nikkila at home on board. Note the window modifications to accommodate opening ports.
Facing page, Douglas and Bonnie removed most of the interior and hull liner to begin the refit. The completed interior at far right.

under the starboard settee, and a bladder-style holding tank under the port settee. We installed one manual and two electric bilge pumps along with new seacocks in the bilge and, for the chef, we fitted an Origo 3000 alcohol stove.

New everything

The wiring was outdated and required a major overhaul. The installation of a new electrical panel, the heart of the system, was followed by tinned copper wiring, halogen reading lamps in the V-berth, DC outlets throughout the boat, a Loran, VHF radio, new Autohelm Bidata speed/log/depth instruments, a solar panel to charge the batteries, a gasoline fume sniffer/bilge blower and a large plywood/epoxy battery box under the cockpit.

Pearson 26s were built without opening ports. To improve ventilation, we installed Beckson plastic opening ports in the V-berth and head. We used ⅜-inch Lexan with cutouts for opening ports in the large main saloon windows. The overhead hatch in the V-berth was another weak spot, which we replaced with a new Lewmar Ocean hatch (definitely a wise investment).

I consider the mast-step support beams to be problematic in many Pearson 26s. Our beam was cracked when we bought the boat, and I have since seen many others in poor shape. Ours was made of laminated pieces with a contact-paper covering. A small deck leak is all that would have been necessary to turn that support into sawdust. I made our new support by laminating white oak strips and putting in three pieces of threaded rod for additional strength. This may be overkill, but I could sleep like a baby knowing it was not going to collapse.

Besides helping me whenever possible, Bonnie finished out the interior. She did a wonderful job, making new cushions and painting the interior woodwork and hull liner.

Wave protection

Tackling the exterior was the next step. Since the companionway on a Pearson 26 is low, we decided to add 12 inches to the bottom of the hatch to prevent potential boarding waves from making their way belowdecks. Under both cockpit lockers, I epoxied in shelves for the 5-gallon outboard tanks. These were plumbed to a three-way valve and a Racor filter, which made changing fuel tanks a breeze. To ward off the potential for hazardous fumes in the cockpit lockers, we put in a sniffer/bilge blower along with plenty of natural ventilation. We never had the alarm go off. It is unlikely to have an ignition source problem in the bilge with an outboard for power.

We knew we had to paint the deck and topsides — a job I was not looking forward to. We chose white for the deck and black for the topsides. As with any painting project, 90 percent of the work is preparation. For what seemed like weeks, we filled, faired, sanded, primed, sweated, and cursed the day we bought this scrap pile. Eventually we prevailed. Interthane Plus two-part polyurethane made painting a breeze after the preceding

torture. When we finished rolling and brushing three coats, the boat looked like it had just rolled out of the factory. The yard workers were sure we had sprayed the boat. That's how shiny it was.

For the first time since this tremendous undertaking had begun, our spirits were renewed. A light was rising on the horizon. With the painting completed, drilling holes for hardware was a bit unnerving. But with careful measuring, everything went together without a hitch. New stanchions and lifelines with opening gates, a small teak anchor platform and roller (nonexistent on the original Pearson 26), rope clutches, organizers, roller furling, genny tracks, and a mainsheet track were some of the additions. On the cockpit sole, seats, and coamings, we put Treadmaster non-skid, which we consider an excellent choice. On the remaining decks we added sand to the final coat of paint. With hindsight I would opt for something else for non-skid. The decks wound up being a little more slippery than I would have liked.

Bottom painting

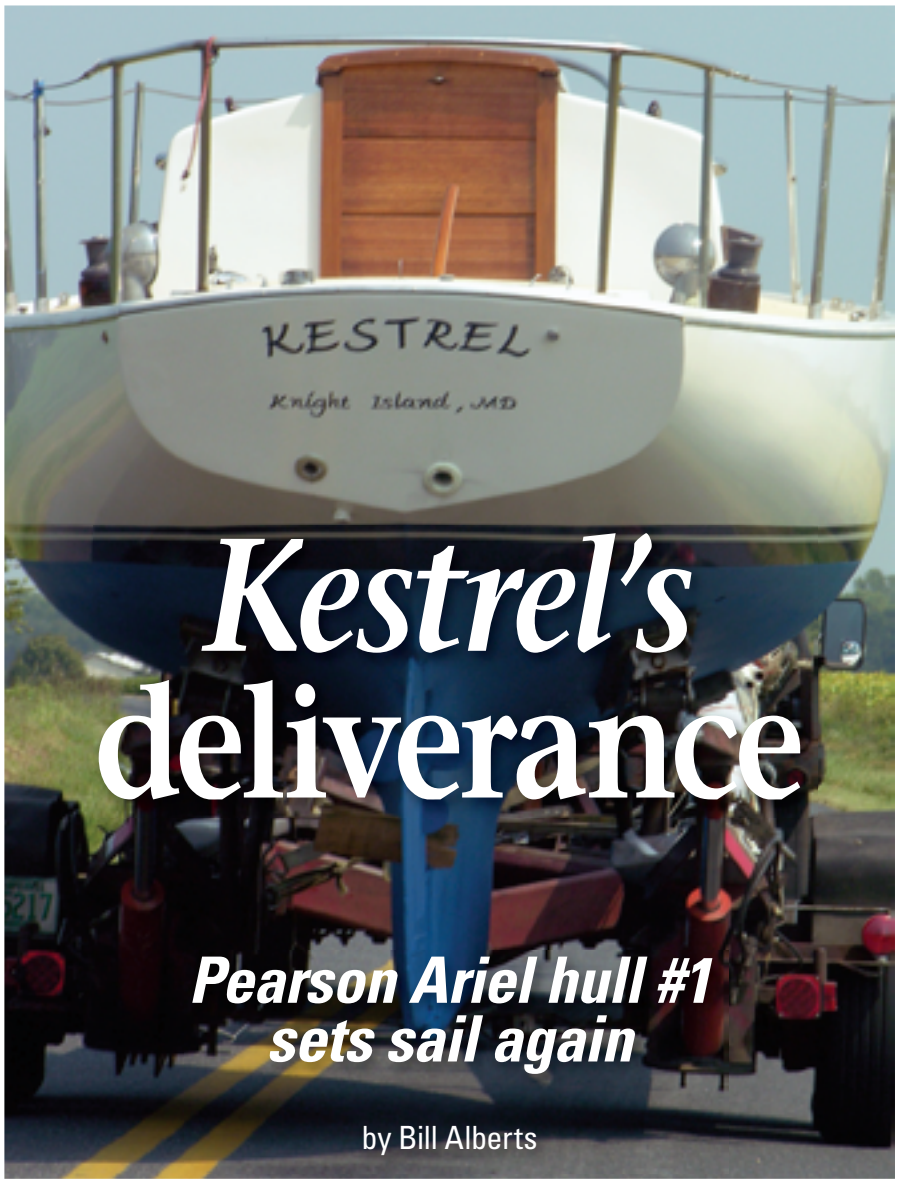
Our anticipated summer vacation was fast approaching, and we had yet to tackle the bottom. More filling, fairing, sanding, priming, sweating, and cursing was followed by the barrier coat and bottom paint. Weeks before, we had made plans to take a vacation on our new boat with another couple who owned a Beneteau. We were running out of time; the boot stripe and bottom paint were still wet when we launched our pride and joy. We named her *Xingu* after a tributary of the Amazon and also one of our favorite beers. Although we spent the trip meandering down the Hudson installing last-minute hardware, we had a most memorable vacation.

Over the next few years, we added many other items: a dodger, a larger holding tank, and, amazingly, more storage. We have cruised the coasts of New England and New Jersey and up and down the Hudson River. Then, with about $9,000 depleted from our bank account and more than 600 hours of work behind us, we left our home on the Hudson River to cruise up to Thunder Bay, Ontario, on Lake Superior, where I grew up dreaming of far-off harbors. To celebrate the dream becoming reality, I thought it fitting that we should sail our new summer home up there to visit.

For two years, *Xingu* wintered in Thunder Bay. The second summer was spent cruising Lake Superior, and the third summer we sailed her back to the Hudson. In those three years on the Great Lakes, we put more than 3,500 miles on our revamped Pearson 26. She came through with flying colors.

Back when we first purchased *Xingu*, our humble ambitions were to fix her up and do a few overnighters aboard. Cruising has turned into so much more for us. It's a way of life we have come to enjoy immensely. We have since sold *Xingu* and are refitting a 32-foot Westerly Fulmar which we hope will take us a little farther afield. In the meantime, our thoughts still go back to the wonderful times we had on our modest little Pearson 26.

Xingu **during and after the refit at right and above. Having a boat at home and protected from the elements makes a big difference when the job list is extensive.**



Kestrel's deliverance

Pearson Ariel hull #1 sets sail again

by Bill Alberts

A few years ago, when my wife, Ann, and I were searching for a boat, we happened upon a beauty. We were in Oxford, Maryland, for the weekend and found ourselves strolling around the docks. There she was, an Ericson 29, polished, painted and looking mighty good in the afternoon light. A "For Sale" sign was posted in her shrouds.

Ann and I called the owner and he invited us aboard for a look. Since it was a fine afternoon, he asked us if we wanted to take a sea trial right then. Of course we said "Yes!"

The sail was effortless. The boat was exciting, very clean, responsive, and apparently well cared for. We drove home talking excitedly and decided to make an offer. That night, I called John Griffiths for advice. John is a friend, a boatbuilder, and a retired boat surveyor. I respect his judgment. I wanted him to tell me only good things about our choice. However, John is not inclined to praise boats. He tends to point out their faults. It's the surveyor's instinct, I suppose. In this instance, his comment was "What year?" When I told him, he said, "She's got bad decks."

I remember thinking, "You haven't even seen her yet. How can you say that?" I stiffened . . . listened . . . and then went ahead with my own plans. The owner accepted our offer and we were off into the heady world of yacht buying. The first thing I did after we sent in our deposit was to arrange to have her surveyed.

Launch day. *Kestrel* on the road to the marina.

Detailed report

Seven hundred dollars' worth of survey later, I was given a very detailed report. The bottom line: she was in great shape except for one thing . . . she had bad decks. In fact, the word the surveyor used was "saturated." When I looked into how much it would cost to repair them, I was given estimates that raised our purchase price by 50 percent. We withdrew our offer. Chastened, I decided to listen to John in the future.

That fall, John sold his C&C 40, *Moonlight*. He and his wife, Sandy, had decided to swallow the anchor and sell while their classic cruising yacht was still in top condition. She went fast and John found himself without a boat. Then, by coincidence, while in Oxford on an errand, he came across *Kestrel*, Pearson Ariel hull #1, vintage 1963. And he took her home.

When I first saw *Kestrel*, I was quietly stunned. She was a wreck. Even my inexperienced eye could see that it was going to take a huge, sustained, effort to get her back into the water. Her decks and coachroof were bad. The original Atomic 4 engine had been submerged and left to rust. Everywhere I looked I could see work to be done, and I knew that what I could see was nothing compared to what must lie beneath it.

Now, if anybody on this planet knows about boats and rot, it's John Griffiths. He certainly knew that *Kestrel* would require a tremendous amount of work. As time went on, when I commented on how one job just led to another, seemingly endlessly, he smiled. "It's a hobby," he said, "You don't want to rush it."

Three-inch hull

I remember sitting in the cabin with him after he had removed the old bookshelves. He showed them to me. They were the better part of an inch thick. As he held out the wood to me, he said, "Look at that. They don't build them like this anymore . . . don't have to. Back then, they didn't know. These boats were overbuilt. The hull is 3 inches thick in places along the keel."

Weeks later, when I visited again, I found that John had removed the old engine, cut away the top skin on the decks and coachroof, re-cored the decks, and glassed over everything. Yet, after all this work, the boat still looked awful. It was overwhelming to contemplate the work that lay ahead.

The look on my face must have been transparent. John said, "Do the worst jobs right away, when you're still in love. Don't start with the brightwork."

He certainly didn't. The work went on: New portlights. A new hatch was fitted and bedded in. Since the Ariel's mast is deck-stepped and the original strong beam had sagged, John built another: an arch made of solid cherry that he had harvested, milled, and seasoned right on his farm. He took the supports straight down to the keel, so the mast is now better braced than when *Kestrel* first came off the line.

He removed the old Monel water tank. The quarter berths were made into settees with the angle of the backs adjusted for comfortable seating. Lots of little storage cubbies were also incorporated into the seatbacks. The woodwork was all of cherry and poplar from the farm.

Rebuilt Yanmar

He found a Yanmar 2GM that BoatU.S. had for sale as a write-off. It was judged to be irreparably damaged. John took it apart piece by piece. I remember seeing it all laid out on his bench: springs and bolts and bits and pieces . . . hundreds of them, it seemed. I wondered if he would be able to put them all back together again, not to mention whether or not the finished product would run.

He was able . . . and it does run. Like a clock.

So *Kestrel* was repowered. A new fuel tank was added beneath the cockpit sole; the engine beds were made and glassed in; the drive shaft and stuffing box installed. John made a new rudder and replaced the old rudder tube and shaft bearing. He made a stainless-steel tiller-stop to keep the rudder from slamming over in reverse and running afoul of the new three-bladed prop, a bigger prop than the original because of the larger, slower-turning diesel.

"Now, if anybody on this planet knows about boats and rot, it's John Griffiths. He certainly knew that *Kestrel* would require a tremendous amount of work."

John drilled holes in the keel and let out gallons of water that had collected in voids around the ballast. After letting it dry for the better part of a year, he injected vinylester resin into the voids until they were completely filled.

He built a beautiful, heavy-duty, double anchor roller on the bow. After making careful measurements, he had a stainless-steel pushpit constructed, and added stanchions and lifelines all around. One winter, John's old friend

***Kestrel* with her bottom painted, top, waiting for transport to arrive and at anchor on the Sassafras River. At 25 feet 7 inches, the Pearson Ariel and Pearson Commander are sister ships that share the same hull design.**

and fellow sailor, Mike Arms, came over and spent many days painting *Kestrel's* hull, but before he did, John removed the rubrail and re-bedded and re-fastened her hull-to-deck joint.

Fixed bit by bit

At one point, John and I were sitting in the cockpit and he mused, "They made all kinds of mistakes on hull #1. Then, they fixed them bit by bit as more boats came off the line. Remember how thick the hull is at the keel? Other spots, it's too thin." He laughed. It didn't matter.

After the hull and decks were painted, John made a cockpit grating out of teak. He added a Gusher bilge pump that could be handled from the cockpit. He installed the instrumentation for the engine and framed it in cherry, rebuilt the slides for the hatch, and made mahogany double handrails for inside the cabin and for the coachroof.

He painted the mast with Awlgrip and replaced the standing rigging; added new, heavier-than-stock chainplates; rebuilt the lazarette hatch; and added a waterlift muffler for the Yanmar. He removed the old head and glassed over the holes where the seacocks had been. His plan was to sail *Kestrel* as a daysailer, not a cruiser, so a Porta Potti would do. Likewise, he didn't feel that he needed a sink or an icebox. Those were torn out and new cabinetry built to replace them. A new electrical panel and all-new wiring followed, as well as an engine cover that also provides steps up from the cabin to the bridge deck.

The work went on and on. I began to wonder when, if ever, John would launch *Kestrel*.

Mike said, "The problem is, he has no plan to campaign her. He may just tinker with her forever." After five years, a hip replacement, and gall bladder surgery, it began to look like *Kestrel* would stay in the shop, almost ready to go, with no one to sail her.

Sudden change

But that all changed suddenly. In August, John's son, Trevor, and his fiancée, Gwen, hatched a plan. They would quit their jobs and sail *Kestrel* south for the winter . . . if John would agree, that is. The original plan was to go to the Bahamas, but anywhere south would be fine.

Young . . . in love . . . no kids . . . Well, why not?

I have no doubt that there was a sparkle in John's eye when he learned of the idea.

That was it. The ice broke and things began to move in earnest. With the prospect of giving *Kestrel* to his son, to open the door to the cruising life that John and Sandy had shared for so long, the Griffiths' family shipyard went into high gear.

The Porta Potti came out and a new head was installed, along with a holding tank and a diverter valve for pumping out at sea. New seacocks were installed where the old ones had been removed. All that cherry was varnished and re-varnished. New LED lighting was installed and an additional battery bank was added for onboard electronics.

A depth sounder was added, and the sender glassed into the hull beneath the port settee. A mattress was made for the V-berth and an insert added to cover the toilet and make a double berth. John made a dinette table that can be folded and put away in the hanging locker. *Kestrel* now carries 22 gallons of water in 2-gallon collapsible jugs. For dishwashing, there is a collapsible camp sink. A two-burner camp stove completes the galley.

Ready for launch

John made a sea hood for the hatch, and added a small spray-dodger. Sandy, Trevor, and Gwen worked tirelessly to complete all the little jobs that needed

PHIL SHEA

On February 25, 2008, *Kestrel* makes the passage from Bimini to Chub Cay.

Adventures in the Bahamas

When *Kestrel* went cruising, Trevor reports, they were in a rush to leave Bimini, in the Bahamas, because a weather system was coming through that would trap them there for a week.

Says Trevor, "We left hurriedly in the middle of the day with two other boats, one with our new friend, Phil [Shea], and another filled with young Swedish doctors. We decided that we would anchor for the night on the banks and continue to the Berry Islands the next day. It's a long run, about 90 miles in total. That night, however, the winds started to pick up and the banks got really choppy; no one could sleep. We decided to leave at 3 the next morning because we had 70 miles left to go and we couldn't sleep anyway. When we tried to fire up the engine, the diesel choked and went up in a puff of smoke (or steam)."

Not willing to mess with it in the dark and the choppy conditions, they sailed off anchor with the other boats and headed to Chub Cay. With Phil's help, they managed to fix the engine under way. It turned out that they had been slamming around so badly in the night that water had been forced up the exhaust and flooded the engine. "We were lucky that we got it all out with no problems," Trevor recalls.

"It was good that we were able to fix the engine since the wind completely died in the late afternoon and we were forced to motor the last 20 miles or so. This passage turned out to be somewhat of an ordeal and an adventure . . ."

attention before launch. By the second week in October, *Kestrel* was ready to be moved out of the barn and back into the world . . . even if it was only the landlocked world of the farm. Trevor, Gwen, and John went to work with pipes for rollers and a small tractor for power. Some leverage provided by a large block, a length of very stout rope, a hydraulic jack, and a lot of youthful energy, tempered by John's knowledge and patience, were all the other ingredients necessary.

I watched that "birth" and assisted the midwives whenever necessary, as they hauled *Kestrel* out of the barn where she had been gestating for so many years. But mostly, I was there to photograph that baby as she was presented to the world afresh.

When she was launched the following week, her bottom freshly painted, her name on her transom, I was again there to document the event. It was exciting to see her touch down in the Sassafras River, a tributary of the Chesapeake Bay, and to ponder the world of possibilities that lay before her and her new owners. It was a privilege to be a part of the process. Because one man saw something beautiful beneath all that rot, something worth the effort it would take to save her, and because that same man ultimately had the wisdom to let her go, to give her away, *Kestrel* is free to soar once again.

I said a prayer as that beautiful little pocket cruiser splashed. "May she protect her crew as they have protected her." I'm quite sure she'll do her utmost. She comes from good stock.

Gwen working on the boat.

Since childhood, Philadelphian ***Bill Alberts*** *has spent summers on the upper eastern shore of Maryland. A musician, teacher, and writer, he has had the good fortune to be able to earn a living doing what he loves. He and his wife, Ann, sail their boat,* Haabet, *out of their home port of Hack's Point on the Bohemia River in Maryland.*

A good old classified helps a Chris-Craft Capitan

BY SUSAN PETERSON GATELEY

Sophie twice revived

It took two men and 16 years to complete an international effort to save *Sophie*. She was a little blue sloop, just like the boat in Richard Bode's popular book about sailing and life, *First You Have to Row a Little Boat*. Her earlier name was *Born Free*, and she was very near death when Chris Gateley, the man who would later become my husband, first saw her in 1994 on a late summer day in a boatyard by Lake Ontario's Sodus Bay. The 26-foot Chris-Craft Capitan, hull #7, had been put on her steel cradle backward. One pad had holed her, another had severely pushed in the bottom. The asking price was $500.

A few months before, Chris had launched a wooden daysailer, a 19-foot Lightning, on the protected waters of Port Bay near his home. He had spent the previous year building a shop to work on the boat, repairing, painting, and varnishing the Lightning and finding a new mast for it. He had never owned a wooden boat before and was shocked when his new boat began to sink during her maiden voyage. Her cedar planking and centerboard trunk had dried out and shrunk and water poured in through the open seams. After sailing and bailing for 20 minutes he returned to the ramp, hauled her out, and towed her back to the shop for more work.

That's when he saw an ad for a 26-foot fiberglass sloop with a hole

Bruce Milan, his wife, Diane, and sailing friend Bill McBurney show off *Wave Anvil* (formerly *Sophie*) after her third refit, top of page. Chris Gately carried out the first refit after he purchased *Sophie* in 1994. Among other repairs, he rebuilt the main bulkhead and mast support, above, using ash from his backyard woodlot.

in her bottom for $500. Wow! A 26-foot plastic boat for the same price he had just paid for a leaky wooden Lightning with rot in the centerboard trunk? Off he went, checkbook in hand, to survey the boat. A few days later, the Capitan made her way up the driveway aboard a U-Haul car carrier while the Lightning project went on hold. Indefinitely. He eventually gave away the Lightning — to his brother in Wisconsin.

A sorry state

Sophie turned out to be a considerably bigger project than the Lightning. As on many a boat of her era, the chainplate deck penetrations leaked and the interior plywood bulkhead they were bolted to had rotted. The bolts holding the 1,800-pound cast-iron keel were badly rusted and several sections of the glassed-in wooden stringers that reinforced the boat's bottom had also rotted. *Sophie*'s rudder was mounted on a skeg that had already been repaired once and was in need of further strengthening. A split on the forward edge of the rudder blade itself was also in need of repair. Both the forward hatch and the cover over the outboard well needed to be rebuilt. What's more, the aluminum holding tank had corroded through, leaving an unpleasant aftermath.

Beneath the grime and neglect, however, Chris could see the boat's potential. He liked her sweet sheer, her bold bow, and her general businesslike look of determination. Internet research revealed her good pedigree. She was said to be Sparkman & Stephens design #1860, created in 1965 and later modified with a larger cabin to become the Chris-Craft Capri. Modeled to race under the MORC handicap rule of the 1950s, the Capitan, with her big cockpit and small low cuddy cabin, was first and foremost a racer and lively daysailer. If you could tolerate sitting headroom down below, she was surprisingly roomy, with four bunks, a galley of sorts, and a built-in head.

The Capitan was created in an era when racing designs were wholesome and moderate enough to serve as capable coastal cruisers. The 1960s were also a time when sailing families cruised quite happily on yachts of 20 to 25 feet and when wheel steering, pressurized hot water, shorepower circuits, 6-foot headroom, and enclosed heads were not standard features for a *Sophie*-sized boat.

A workmanlike rebuild

Chris ripped out the rotten main bulkheads and glassed in new ones, and he rebuilt the support for the deck-stepped mast using exterior fir plywood and sturdy ash from his backyard woodlot. He rebuilt the galley and storage shelving and lockers, replaced the keel bolts, redid the forward hatch, made a new cover for the outboard well using plywood and epoxy, and repaired the damage to the bottom. He used close to 5 gallons of polyester resin on the bottom job and beefed up the lightly built hull. He installed a new holding tank and head and purchased a butane stove for the galley. The next spring, he and several friends sanded and primed the badly faded gelcoat and painted it Bikini Blue with a one-part polyurethane paint.

Sophie's rebuild was a solid workmanlike job using good-quality marine-grade hardware and epoxy. It was not a high-end restoration with teak

Sophie **had been sitting on her trailer in Chris and Susan's backyard for several years and looked a little forlorn before they sold her, at left. She perked up a good deal in the hands of her new owner, Bruce Milan, at right. When Susan and Chris saw her in 2012 she had new sails and a spiffed-up interior, at top.**

and mahogany elegance and 10 coats of varnish, though fresh paint and a few pieces of cherry trim from the woodlot did contrast nicely with the varnished fir plywood and ash in the cabin. Her non-skid decks were still in good condition, as was most of her hardware and rigging, but her mainsail was showing its age. Her new owner decided to try to get one more summer out of it with the help of a good deal of duct tape and some seam re-stitching. To his surprise, it lasted five more seasons before a 35-knot wind finally did it in.

The resurrected boat was launched on a quiet summer morning at a boatyard on Little Sodus Bay, New York, and motored to the dock with the help of a couple of friends. She was given a new name, *Sophie*, after the first command of author Patrick O'Brian's fictional sea captain, Jack Aubrey. When Chris first sailed his 5,000-pound boat, he said that, after years spent sailing a Sunfish, she felt like the *Queen Mary*. He took his fine big yacht on several weekend cruises that summer, sailing solo with his faithful dog or sometimes with his younger brother. But then, after just one season, fate sidelined the little blue sloop once again. Her owner fell in love. Another Chris-Craft, a 32-foot Cherokee, came along and caught his eye. With it came yours truly, his future wife.

Chris' younger brother sailed *Sophie* around the lake for two more seasons. Then *Sophie* returned to his rural upstate New York yard on a flatbed trailer and sat. Years passed. Her winter cover shredded, was replaced, and began to shred again. Leaves filled her cockpit and rotted. Mice made their way below, spiders spun their webs, and wasps built nests on board.

Finally it got to me. I was, after all, in large part responsible for her plight, having talked her owner into buying a share of the 32-foot Cherokee partnership in 1996, which led to our marriage not long after. (***Note:*** *Susan wrote of boat partnerships in the May 1999 issue.* ***–Eds.***) In the spring of 2009, I put ads up on several websites and sent one to the *Good Old Boat* classifieds. Within a week, the *Good Old Boat* ad was seen by another budget boater, this one in Prince Edward County on Lake Ontario's Canadian shore about 50 miles north of where *Sophie* sat. He drove down, looked her over, and a deal was made. We were delighted to see *Sophie* off to Canada aboard a flatbed with her enthusiastic new owner, Bruce Milan.

Sophie's new caregiver

Poor patient *Sophie*. Enthusiasm had been sorely lacking over the last 10 years of her life with us. Our enthusiasm had been absorbed, first by her 32-foot big sister, *Titania*, a Chris-Craft Cherokee, and then by *Sara B*, the elderly wooden schooner (who last appeared in these pages in the January 2011 issue). Bruce, however, was very enthusiastic. He had dabbled in sailing in years past, getting started with a Styrofoam-hulled 8-footer and later sailing on Lake Superior. After he moved to Prince Edward County, a rural region of limestone outcrops, rolling farm fields, and summer homes surrounded by the best sailing waters on Lake Ontario, the sailing bug bit him pretty hard.

> "Mice made their way below, spiders spun their webs . . ."

Via email he wrote, "I purchased a beautiful, but somewhat disassembled, plywood dinghy built in about 1960. It was a Zenith, designed by Ian Proctor of Wayfarer fame, and I spent a couple of years sanding and finishing it. Then I realized a racing dinghy was a little past my demographic situation and began looking at larger, more comfortable boats. What I soon found out was that I didn't like the looks of many of them and they were hopelessly out of reach cost-wise too." But he recalled when he first saw the Capitan sitting on the trailer, grimy and neglected but with her nose still in the air, he was quite taken with her looks, just as Chris had been 15 years before.

Bruce Milan saw the classified ad for *Sophie* in *Good Old Boat*, took a look, and purchased her.

Bruce sent regular email updates on the commissioning and launch. In June 2009, we stopped by Picton with *Sara B* to see how the Capitan was doing. Bruce met us there and we had a good gam as we checked out the newly painted and refurbished boat, now christened *Wave Anvil*. Bruce, a blacksmith for 35 years, explains her name by saying, "An anvil in the form of a classic good old boat will slice effortlessly through and over whatever waves she encounters. What better name for a boat as unstoppable as the 1967 Capitan has been than *Wave Anvil*?"

A windy awakening

But the next summer, *Wave Anvil* did come to a stop. It took a 35-knot blow to do it. Ironically, *Wave Anvil*'s former big sister, our Cherokee, was battling up Prince Edward Bay under storm jib and reefed main that afternoon when just 10 miles away off Picton a gust split the Capitan's old main and tore it asunder. That same windy day also convinced Bruce he could no longer ignore that loose feeling he was getting from the rudder. It was time for some more work.

As Bruce contemplated the urgent need for a new mainsail and possibly

a new rudder and skeg, he recalled a Chris-Craft Capri he'd seen in a nearby boatyard some years back. He had looked at the boat as a possible purchase and decided it was too far gone then. Now, he went back for a second look and found the boat had a good suit of sails and a rudder and skeg assembly that was, if not like new, at least considerably better than the wobbly appendage on *Wave Anvil*. The Capri's owner had abandoned her, so he made a deal with the boatyard to "harvest" parts off the hull and then cut it up.

He wrote that the boat was a "gold mine" of parts: "Friday I hauled out a pickup full of rotten junk from below. She pretty much looked like the inside of a dumpster with ruined moldy cushions and clothes and a weird assortment of collected junk the previous owner had left in her. I was severely stung by a wasp in the process as there is a colony on board somewhere. Luckily, I harvested the sails from her last October, as her decayed hatches really leaked this summer and increased the general funk to a high level."

Bruce drilled some holes in the hull to drain the water, "to aid in the unfunkage for later removal of some of the interior." He added, "Oddly, she is a rotten wreck and now officially doomed, yet has many very sound components that are specifically and exactly what my boat needs. What luck, except for the wasps!"

The Capri rudder and skeg bolted right onto the Capitan hull and were installed with a "giant glob" of 3M 5200 adhesive. Her bow rail and stern pulpit were fitted, and Bruce salvaged cleats, the galley sink and pump, lifelines and stanchions, a new tiller, winches, and other gear for his boat's refit. He spent a year on the job and relaunched *Wave Anvil* in the spring of 2012.

Sibling reunion

We thought it would be fun to get our Chris-Craft Cherokee over to Prince Edward Bay to sail again with her little sister as they once had while traveling together on a trip to Canada back in 1998. In late June, we met Bruce, his wife, Diane, and sailing friend Bill McBurney for breakfast followed by a photo shoot. It was a glorious day with west winds of 10 to 20 knots and flat water on Prince Edward Bay. The two old Chris-Crafts charged along together for about an hour, the Capitan staying in front of the Cherokee until the bigger boat pulled ahead very slowly once they were in open water and in slightly stronger winds. At last *Wave Anvil* tacked for home while we continued on our cruise, feeling very satisfied indeed about *Sophie*'s fate. Today, lucky Capitan hull #7 sails one of the most beautiful areas of Lake Ontario.

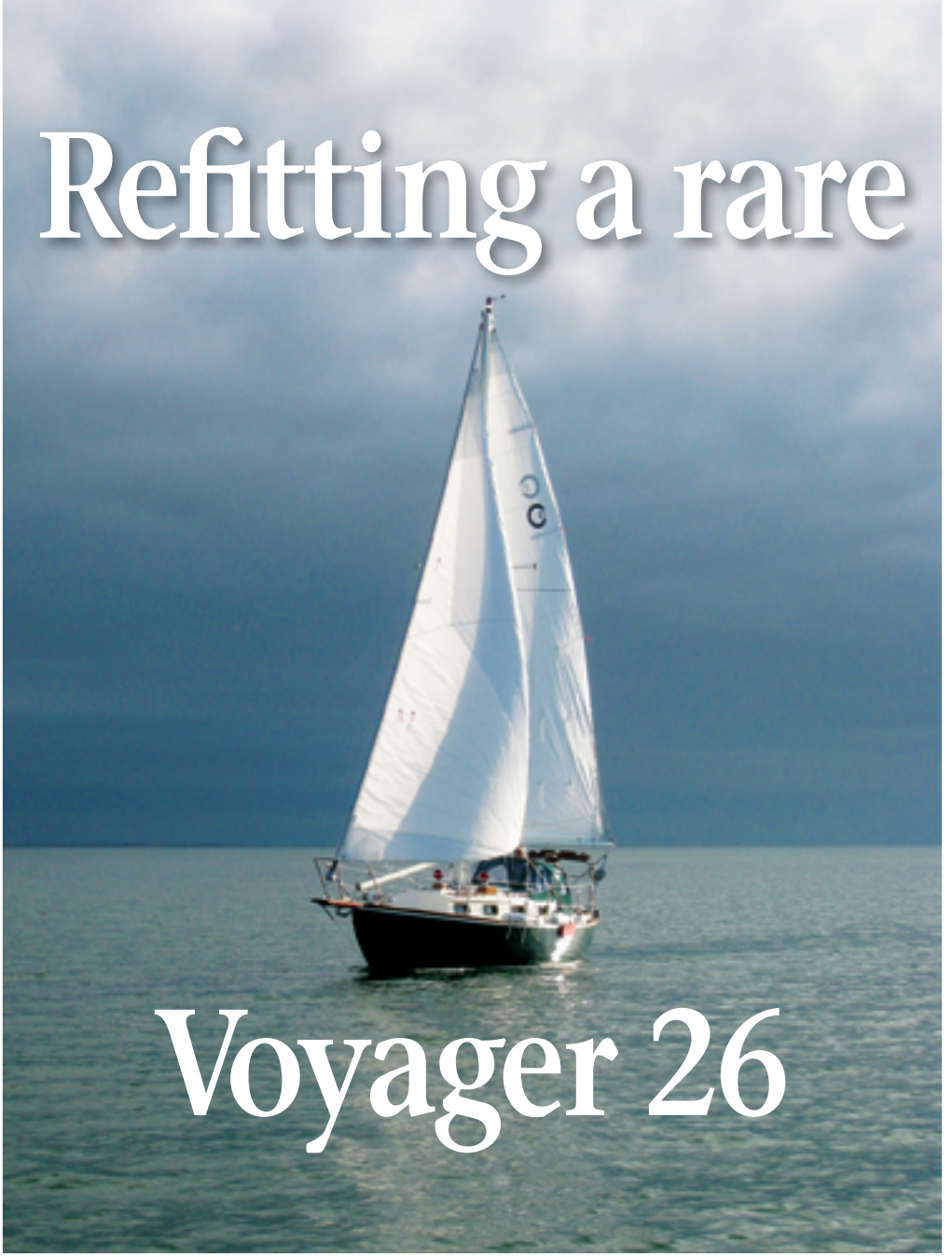
As before, this effort was not a perfectionist better-than-new showroom restoration. Bruce, a skilled artisan ironworker, describes his work on the boat as an "everyman approach." Chris, who writes computer code for a living, knows how difficult and time-consuming achieving the last one percent of perfection can be. Make the repair solid, strong, and well-engineered . . . and then go sailing. Shortly after Bruce bought the boat and got her safely back to Canada, he wrote, "Thanks a million for getting me into a good old boat that's within my budget. I think I'll have a great time using her here around Prince Edward County."

Well, we got 'er done. It took three people in two countries 16 years, and we couldn't have done it without *Good Old Boat* magazine's classified ads!

Susan Peterson Gateley writes and sails on Lake Ontario. Her books, including Living on the Edge With *Sara B*: a Sailing Memoir *and* Maritime Tales of Lake Ontario, *are available for sale at www.chimneybluff.com. Bruce and Diane Milan run a B&B. Bruce works as an artist blacksmith. See his work at www.pec.on.ca/islandforge.*

After Bruce bought *Sophie* and renamed her *Wave Anvil*, her first home was Picton Harbour, Ontario, at left, seen here in 2009 when Susan and Chris paid a visit in *Sara B* (whose gaff-rigged spars are just visible at the bottom of the photo). *Wave Anvil* with a bone in her teeth at the 2012 reunion, at right.

Refitting a rare Voyager 26



This one, he swears, is the final vessel

by Ron Chappell

There comes a time in the life of every sailor when he must contemplate his final vessel. The one (figuratively, at least) that will carry him to Valhalla . . . the boat that will epitomize who he has become. For my wife, Terrel, and me, this means a small ocean-capable cruiser of traditional design. No matter that it may never cross an ocean, the ability to do so should be enough to sustain the dream. For us, this last boat would be trailerable, at least within the context of being transported great distances but not necessarily on a frequent basis.

Several boats we've known fell within this general category. Among them was the Nor'Sea 27, which I have always considered the gold standard for a transportable, ocean-girdling, sailboat. Pacific Seacraft's 25 was another contender.

But one boat has stuck in our minds over the past 20 years of boat browsing, a boat that incorporated many of the best features of the previous two: the little-known Ocean Voyager 26, a Florida-built, offshore double-ender designed by Dan Avoures in 1975 and built through the 1980s.

Brooks Atherton, one of the owners of the Ocean Voyager Corp., recently said it was one of the sweetest sailing boats he had ever handled. He went on to remember famed circumnavigator Tristan Jones praising it at the Houston boat show.

A countrywide search

The search for our own Voyager was a long process, ending with a four-month sabbatical that led us from Colorado to Miami to look at first one (that proved beyond practical repair) and then to Tampa where a second candidate sold 24 hours before our arrival. (It had been on the market two years and I, in my infinite wisdom, felt there was no hurry.)

Seldom are two of these boats on the market at the same time. But, as luck would have it, we found our next target (a third one) on the Internet. It was in Seattle, Washington. We stopped by our home in Colorado on the way to Seattle and exchanged the motor home for the pickup truck and gooseneck trailer, on which I had previously installed a set of jack-pads with screw adjusters.

At Shilshole Marina in Seattle we at last beheld our new ship . . . and a sad, sad sight she was: mossy decked and down by the bow, her cataract-like plastic portlights staring sightlessly into the morning mist. We looked at one another with dismay. But we were there; we had little choice but to soldier on. We immediately noticed an ankle-deep mix of bilge water and diesel fuel. Things got worse as we sorted through piles of heavy, moldy, gear stuffed in the forepeak (this explained why she was down at the bow).

Neglected but sound

I surveyed the engine with a jaundiced eye, knowing it would never go chug-chug-chug again. The mate, not easily intimidated, manned the bilge pump and instructed me to begin tapping the deck for soft spots. I was sure there would be many. But, as it turned out, there were none and, upon closer inspection, we found the boat to be structurally very sound and obviously little used . . . just badly neglected by

a young and struggling owner. A fairly recent survey we found aboard stated that the bottom was in fine condition with no blistering of any consequence. All in all, things were looking up.

My philosophy in restoring older boats is this: I much prefer a badly neglected example in sound original condition to one that has been "upgraded" by previous owners. The terms "upgraded" or "good used condition" are meaningless phrases to the anal-retentive restoration guy. I would rather buy reasonably to begin with and figure on replacing everything — because in the end, I will anyway. The sailor who follows this plan is more likely to be a happier camper (though a bone-weary one) at the finish.

Few are aware that many of the later Voyager hulls and decks were built on contract by Island Packet. These had a very high-quality hand layup (the schedule being comparable to both the Nor'Sea and Pacific Seacraft). The standard deck core on these boats is ½-inch, high-quality marine plywood, just as Pacific Seacraft used. Even better, the core does not extend to the border-mounted stanchion-bases, cleats, and so on. They are bedded through solid glass, which is impervious to rot. So, unless a lot of "stuff" has been haphazardly added to the cored area, these decks are not prone to soft spots. (Months later, when we pulled the headliners on our boat, the clear glass overlay revealed plywood core as beautifully sound as the day it was laid).

Happily, the trailer fit, and we arrived back in Colorado (several snowstorms later) with our dubious prize in tow. A new dream was born.

A restoration begins

Fortunately, I was in a position to devote myself full time to the project, now parked in front of our shop. This is a huge advantage, by the way, and another plus for a transportable boat. I spent the first few months gutting the boat. Everything we could take off or out without using a cutting torch or saber saw we removed and stored for later refurbishment. We scrapped all the wiring, electrical panels, plumbing (including the head), and the engine (with its associated mechanicals).

"Fortunately, I was in a position to devote myself full time to the project, now parked in front of our shop."

I packed more than 60 pounds of cat litter into the bilges to soak up the last vestiges of diesel fuel. Weeks later, I removed it with a Shop Vac and replaced it with five gallons of Simple Green mixed with an equal amount of hot water. We then took the boat for a little 20-mile drive on hilly, curvy roads, employing the old "washing machine effect" to emulsify any residual diesel. This is yet another unsung advantage of a trailerable boat. It still took several flushes of hot soapy water and nearly another year spent "airing out" in western Colorado's high, dry climate to effect a complete cure.

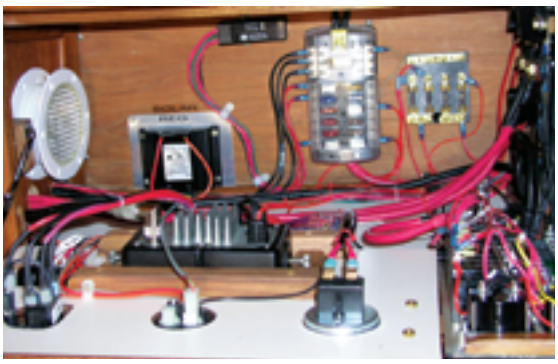
True to the survey, the bottom condition exceeded my expectations, with only a scattering of pinhead-sized blisters and perhaps a half-dozen or so the size of a nickel. There was no evidence of previous repair . . . not bad for a boat that had spent most of the last 28 years in the water. It did carry six or seven coats of very hard bottom paint that would have to be ground down to gelcoat to facilitate fairing and applying barrier coats. Our friends Rich and Sara Cardwell volunteered to help with this project. They clearly had no idea of what they were letting themselves in for. I jumped at the offer and, amazingly, they remain our good friends to this day.

We let the bottom cook in the sun for many weeks and then applied four heavy coats of industrial-strength epoxy barrier coat. Later in the restoration, we went back inside and coated every square inch of exposed fiberglass in the interior — lockers, overheads, bilges, engine compartment — with two coats of Interprotect barrier coat by Interlux. The laminate was thus protected from moisture inside and out.

Electrical and mechanical

This was the proper time to begin the job of rewiring: before the interior went back in. If I have a forte (and this is widely debated), it is wiring. I spent an inordinate amount of time installing circuitry for control panels, switches, fans, outlets, pumps, radios, solar regulator, GPS, various sailing

Under a dramatic sky, *Envy*, a Voyager 26, sets off on a new adventure, facing page. First, though, owners Ron and Terrel Chappell made the long journey of restoring her. The engine was among many items removed, at top, while the seasons changed around *Envy* in the Chappells' driveway, at bottom.



A "good used" Yanmar engine, courtesy of eBay, replaced the original Farymann without much ado, at left. Ron rewired the boat entirely, and the new electric panel is the master control station for many new systems, at center. Another eBay score was the stainless-steel hatch for the cabintop, at right.

instruments (including two separate autopilot circuits), and spare runs for future items not yet invented. All wiring runs were item-specific, individually fused, and with all circuitry terminating in a single-hinged-front cabinet for easy access. I chewed up about $600 in oversized Anchor-brand tinned wire in the process and the better part of an additional two weeks of restoration time. I was still shooting for a 16-month splash date and felt I was running only a little behind. Silly me.

As for diesels, all Voyagers had one. The first boats generally came with a single-cylinder Farymann or BMW, both raw-water-cooled and rated somewhere around 12 hp. While these were considered adequate in their day, their design has become a bit long in the tooth for most. We opted for a Yanmar 2GM20F we found on eBay.

Although it was a "good used engine," I elected, for peace of mind, to rebuild it completely. I've been spinning wrenches and building engines since high school and, for me, these little precision diesels are a joy to work on (out of the boat, of course). The fact that this particular engine had been coupled to a saildrive in its previous life left me no option but to purchase an expensive brand-new conventional transmission.

The Yanmar fit nicely in the old Farymann's space with only minor modifications to the bed. It later proved smooth and dependable.

The prop shaft on this boat is rather long, making it especially important to get a proper alignment on our new shaft and Cutless bearing. A Drivesaver coupling device was a good investment, in our opinion. Another nice feature of this engine bed is that it allows a nearly horizontal shaft run, which translates to more efficiency at the prop. We found that a 13 x 12 RH 3-bladed prop was just about spot-on for this setup.

Interior amenities

The Voyager enjoys a bright and airy Herreshoff-style interior and, while there were two versions, our traditional center-galley model made the most sense for us. Though the forepeak is a bit cramped, it does provide privacy for the V-berth and, surprisingly, a larger head area than the layout version with the aft head.

> **"Voyager Marine invested heavily in teak . . . only the best old growth from what used to be Burma."**

We installed a modern holding system with an integrated, oversized manual pump, which expedites things in a more dependable fashion. Waste goes first into the tank, leaving us with the option of sending it to the deck pumpout port or — with the help of a three-way valve (that's always locked) — to the through-hull below the waterline. This is a system design I have never had questioned by harbor authorities anywhere we've sailed.

The portlights were one of the few places the original buyer had skimped on his order form. While these plastic ports had (amazingly) remained virtually leak-free for 28 years, they were nearly opaque and a bit brittle. A call to New Found Metals in Port Townsend, Washington, confirmed the availability of our favorite style of traditional bronze ports and — happy day! — they were on sale. Still, buying eight of them was a budget-blowing experience. This is one of the few upgrades likely to return dividends at sale time.

While instructions for installing these are straightforward, I still spent about one day per port removing the old one and installing the new. However, they are now a strong structural part of the boat and will probably have to be chain-sawed out someday (but not by me). As a side note, while the screens that came with these ports are beautifully made, it's nearly impossible to install them and have the ports remain leak-free. Other owners hope NFM will address this issue.

At this juncture, I should also confess that I use only one type of sealant/caulk on our boats: 3M 5200. Yes, it's forever; that's what I like about it. Some folks may be unaware of the new spray-on release agent for this product, which should negate any lingering objections.

Our boat had no permanent stove installed. I couldn't justify the space for and weight of an oven model but we did find a wonderful little brass-and-stainless-steel gimbaled propane cooktop we could build in. We ran the new impervious-to-everything line aft and through the stern deck to a rail-mounted aluminum tank. These are tall slim tanks about the size of scuba tanks. Terrel, my better half, has provided them with insulated

The galley-forward layout on the Voyager 26 is not fashionable today but, in a boat of this size, it uses the width in a practical way, at left. On the port side, aft of the sink, the settee berth doubles as a navigator's seat. The bronze portlights add a big-ship touch, at right.

green covers to enhance that illusion. There is, by the way, a feeder line to the small rail-mounted Force 10 barbecue. The system does, of course, include the obligatory Xintex Fireboy 2 safety control panel connected to a tank solenoid and additional sensors, one in the bilge and one in the bottom of the stove compartment. This system is pretty much the standard in the marine industry. Over the years, we've become satisfied that it's safer than most when properly installed.

Crowning achievement

Terrel, a skilled seamstress, did all the interior upholstery, then went on to build Sunbrella sailcovers, lee cloths, tiller covers, and sunshades. Her crowning achievement was an honest-to-gosh offshore dodger of a quality you'd be hard-pressed to find commercially. Though she has often crafted elaborate wedding and graduation dresses, she admits this was the toughest sewing project she has ever undertaken. She built and rebuilt it over the course of six months until she was satisfied that it was exactly right for the boat. I have not seen a better one. Before you ask, she says she will never do another.

We were able to do all the work on this boat ourselves, save for the Awlgrip paint on the topsides and spars. It's a very tricky material to apply properly in our climate. Professional sprayers of Awlgrip are few and far between in western Colorado but, after casting about, I did find a local airplane painter, Jim Partsch, who was familiar with Awlgrip and not afraid to give it a shot. I'm happy with the results and he did it at a reasonable price, considering the materials alone ran $1,600.

Voyager Marine invested heavily in teak for these boats, inside and out. They used only the best old growth from what used to be Burma and, though our boat's outside trim was badly weathered, it was also very dense and quite thick. I had first thought some of it might have to be replaced, but it was amazingly solid and sanded out nicely, leaving plenty of wood on the toerails and coamings. We had always thought the bowsprit on these boats (consisting of one heavy narrow plank) was less than adequate for serious bow work in any kind of weather. Again eBay came to the rescue with a heavily built sprit from an expensive trawler. It was just the thing, vastly improving safety and the boat's appearance.

Finishing touches

At this point, I could no longer abide the heavy, fiberglass "cargo hatch" on the foredeck. While it was a popular design in its time, it did nothing for the general lines of the boat and I have never seen one that didn't leak . . . copiously. You guessed it: a brand-new all-stainless-steel, low-profile hatch appeared like magic on eBay. It fit with a minimum amount of surgery and melded well with the traditional lines of the cabintop. I was thus encouraged to add teak Dorade boxes with

A new journey ahead: Ron, Terrel, and son-in-law Michael Paxon, center, get set to raise *Envy*'s mast.

stainless-steel vents. These, along with the eight opening ports, made this the best-ventilated boat we've owned. Did I mention the day/night Nicro vent installed over the chain locker to exhaust wet-rode odors?

After nearly three years, we were coming to the end of this project. Then we decided the finishing touch would be a classic boom gallows. I'm talking about a real boom gallows with hefty bronze side brackets and oversize stanchions, something a sailor could hang on to in the dark and stormies. It would also provide support for a zip-on Bimini. There are innumerable reasons for a boom gallows (see *Good Old Boat*, July 2005).

After pricing bronze side brackets from the few people who still make them, I was beginning to have second thoughts but, once again, eBay came to the rescue! Sure, they were off a Westsail 32 and weighed roughly 12 pounds each, but they were priced right and I figured they could be worked down to a more reasonable size and weight.

After only six days with a hand grinder, they were down to 6 pounds each and my backyard looked like a golden fairyland. Polishing them out to a high luster took an additional two days. The cross plank of solid black walnut demanded another couple of days to fit, sand, and varnish. Inch-and-a-half polished stainless-steel pipe made up the stanchions, and we were good to go. In the end it was worth it. (That's what I keep telling myself.)

Better sailer

We have sailed both the Nor'Sea 27 and the PS 25 extensively in the past and, in the final analysis, thought the Voyager 26 to be the better sailer in most conditions. She is a tad beamier — at 8 feet 3 inches — than the other two and will accommodate more stores. She is surprisingly fast in light air, perhaps due to her sharp entry and knife-edge keel carried all the way to the stern. Her very shallow draft, only 3 feet 4 inches, reduces wetted area as well, I suppose, though I'm no design authority. Like the other two boats, the Voyager will pretty much steer herself when properly balanced. And at a designed displacement of 7,200 pounds, she is quite seakindly for a boat this size.

On the downside, she does make some leeway, as do all her ilk, and I would not expect to get any closer to the wind than 40 degrees. These are the trade-offs one must expect in a vessel with such shoal draft, trade-offs we happily concede. The ability to explore skinny water has always been a priority for us. Oh, and take care backing this boat out of a slip in a crosswind; she'll certainly entertain you.

We named our boat *Envy* — one of the seven deadly sins and the reason for her being. We have attempted to recreate in her the craftsmanship and virtues of boats well beyond our grasp at a price we could afford.

"In terms of expense, we are into her about half what a comparable off-the-rack boat of this caliber would cost."

In terms of expense, we are into her about half what a comparable off-the-rack boat of this caliber would cost (disregarding three years of intensive labor, of course).

We like this boat. We truly expect her to be our last.

Ron and Terrel Chappell have been restoring and sailing small cruisers for the last 20 years and, last winter, tried out Envy *in the Abaco Islands. Ron maintains he has gained much of his expertise through articles in* Good Old Boat *— he has been on board since the magazine's inception and archives every issue.*

A fresh bout

…and an International Folkboat feels the love

BY KEN JACOBSEN

Ken's "old-boat gene" first expressed itself when he was a teenager and he felt compelled to renovate a pre-1955 runabout.

It's my belief that an obscure gene compels some of us to complicate our lives with elderly boats. In my case, it first appeared when I was a teenager, drawing me to a pre-1955 outboard runabout my older brother Henry had found half-sunk in New York's Coney Island Creek.

The boat was one of the early experiments in fiberglass, finished without the benefit of gelcoat and painted bright blue on the outside and red on the inside. Unencumbered by any experience in boat restoration, I spent the next six months scrounging scrap plywood for seats and improving frames to reduce the old boat's alarming tendency to flex.

Although it never won any prizes, that little runabout gave me a summer of fun and taught me not to fear taking on projects that others thought foolish or hopeless. Even better, when I sold the boat the next spring, it helped pay for my first year in college.

The old-boat gene was dormant over the next three decades, subdued by the demands of family and career. It was not until the early 1990s, a few years after I retired from the Navy, that it struck again — and with a vengeance. At a time in life when I was at loose ends, I came across a 1961 Alberg 35, a true handyman's special with decks so saturated they squished. "Make an offer," the broker suggested, "They're about to give it to the Sea Scouts."

My lowball offer was accepted. I renamed her *Invincible Summer*, from an Albert Camus quote I'd always loved. The project was a moveable feast. It began at a little yard in Yorktown, Virginia, continued after the boat was trucked over the mountains to a spot behind our barn in Kentucky, and was finally completed (if "complete" can ever describe an old boat) after we moved to our new home in Charleston, South Carolina. Before long, though, I began to realize that, while varnishing, cleaning, and upgrading stretched ahead endlessly, getting away from the dock for a sail was becoming more of a challenge each year.

In the end, my insurance company and the marina management made up my mind for me by raising the cost of owning *Invincible Summer* beyond my tolerance level. It was time to sell. The decision, taken with sadness and reluctance, turned out to be a wise one. *Invincible Summer* went at a fair price to a knowledgeable, experienced sailor and, for the first time in almost two decades, I was boatless.

Switched on again

But not for long. Within a few months the old-boat gene, lured by the siren song of eBay, led me to a tired old 1967 Boston Whaler 13 that cried out for rescue. Then, as work on the Whaler progressed, I was tripped up again by another eBay offering: a sweet 1976 Marieholm International Folkboat, a design I had long admired. *Frihet* was one of the fiberglass models of the classic design by Tord Sunden, introduced in the 1970s and built until the mid-'80s. A lot of restoration work had been done, but it had apparently ended suddenly during the main cabin's renovation.

Cosmetic, I told myself. All minor stuff. And I placed my bid. It won and, just like that, I was back in the old-boat business. *Frihet* was shipped to Dolphin Cove Marina, one of the last DIY boatyards in the Charleston area, and within a few weeks I was waxing the hull and admiring the new dark green bottom paint. I'd had a fleeting urge to sand and paint the bottom myself, but old memories of paint dust in my hair, skin, meals, and bedding made me pause and surrender to the

# of old-boatitis . . .

wisdom and privilege of age. I let the yard do the work.

Once the boat was back in the water, an inspection confirmed that my first impression had not been too far from the mark. The hull and rig were sound, the sails had been professionally cleaned, and the renovation work already done was careful and neat. The interior, though, was a bit shabby. The headliner was gone from the overhead and the material covering the cabin sides hung in forlorn strips over faded green bunk cushions. Tan plastic flooring curled up around the edges of the cabin sole and the oiled teak bulkheads showed the tracks of old leaks and long-gone fixtures. It was a depressing sight, suggesting to me each time I opened the companionway hatch that I owed *Frihet* more care than I had so far given her. "Restraint," my sensible self said. This boat was *not* going to be a long, expensive project. "Cosmetic," I kept telling myself. "Cosmetic, realistic, and modest." But no cutting corners. And that's how the work began.

Easy does it

The teak brightwork below had originally been finished with some unknown product that had aged to a dull, muddy brown. Stripping and varnishing it was beyond my "modest and cosmetic" boundaries. Instead, I scrubbed the brightwork with household cleaner, rinsed it, and wiped it down with paper towels saturated with mineral spirits. Still not sure of what the original finish was, I lightly sanded one small spot and applied a few test coats of Minwax semigloss polyurethane, my favorite belowdecks varnish. After a few days, it was apparent that the varnish was adhering and drying normally and the teak would need no further prep work beyond a light sanding and a final wipedown with mineral spirits.

The forward bulkhead of the main cabin was another story. Both port and starboard sections were disfigured by screw holes, cutouts for long-gone equipment, and an assortment of water stains. Again seeking the simplest fix, I fastened new ⅛-inch teak veneer over the old bulkheads. I finished all the interior teak with four coats of satin finish Minwax.

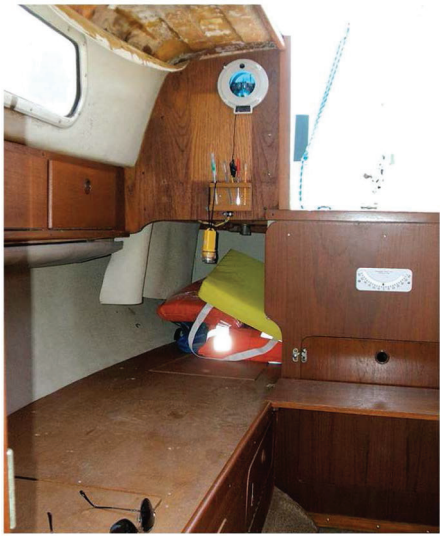
The next challenge was the sorry state of the hull liner that had become separated from the hull at various places and drooped like a flag at half mast. My first instinct was to tear out all the old vinyl, clean the surface, and install new material. The thought of that task was not appealing. It would require chemical adhesive removers, scraping and cleanup of the resulting goo, and application of fresh adhesive before fitting new material. I could see myself in the hot little cabin in the middle of a South Carolina summer, wrestling with sheet vinyl and addling my remaining wits with toxic chemical fumes. There had to be a plan B.

Upon closer inspection I noticed that, although the original adhesive had broken down in some areas, it was holding up well in others. I would need to repair only the bad areas and let the good adhesive stay in place. I cleaned the old liner and the hull sides where the old system had failed, then sprayed the cleaned areas with 3M Super 77 adhesive and reattached the old liner. For overhead areas over the quarter berths and places where gravity worked against me, I used improvised braces and props to hold the liner in place while the new adhesive set up.

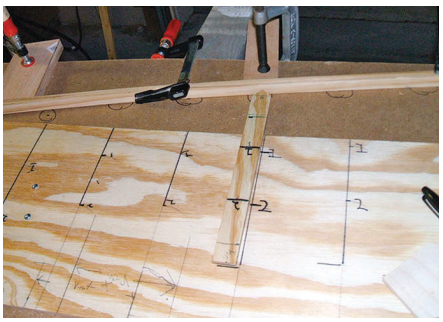
Tick stick and patterns

The overhead in the main cabin was a bigger problem. The original headliner material and rigid backing had been removed and discarded. Fortunately, the liner material was still adhering to the cabin trunk sides and was usable after re gluing with Super 77. The uneven top edge would be hidden once new overhead material was in place.

I used the traditional boatbuilder's tick stick system to transfer the overhead lines to a pattern, marking off a series of points from the centerline



A "before" view of the starboard side of the main cabin, near right, shows the liner missing from the overhead and the water-stained and patched-up teak bulkhead. The same view after the work was completed, far right, shows the new overhead, fresh varnish, Nu-Teak decking on the sole, new cushions, and Ken's old brass clinometer.



Ken used scrap lumber to hold pieces of the old overhead liner in place while the adhesive set, at left. Using tick stick marks and a flexible batten, he drew the shapes of the new overhead liner on hardboard, center, then screwed the hardboard patterns in place and marked them for trimming, at right.

to the outboard edge to establish the curve of the overhead for the port and starboard halves. Then I laid the lines out on sheets of Formica countertop laminate from the local DIY store. This would be the rigid backing for the overhead material. Staff at a helpful paint and wallpaper store found vinyl wall covering that was close enough in texture. With their help, I matched the color with an industrial acrylic latex paint. I glued the new vinyl to the port and starboard Formica sheets with Super 77 and painted them with the acrylic paint.

The original overhead material had provided no heat insulation and on hot days *Frihet*'s interior was a sweatbox. I decided to try reflective foil insulation. The brand I used, Reflectix, consists of a 5-mm layer of foam sandwiched and loosely fastened between two layers of aluminum foil. I fastened it to the backside of the new Formica overhead panels with double-sided foam tape. While 5 mm of insulation is not a lot, the Reflectix seems to have lived up to its billing. It keeps the cabin interior at least bearable in summer. It was certainly worth the effort.

I installed the new overhead panels with trim washers and self-tapping stainless-steel screws driven into the longitudinal plywood stiffeners. The color and texture match between the old vinyl hull liner and the new overhead panels was close enough to fool all but the most critical eye.

Sole remaining task

I'd ordered new interior cushions and backrests in persimmon orange and, once they were installed, the renewal of *Frihet*'s interior was one step closer to completion. Unfortunately, the freshly varnished teak, new overhead, and bright upholstery made the dingy cabin sole stand out. A nubbly tan vinyl material, with a pattern reminiscent of a 1950s diner, covered the sole and extended up into the curve of the hull. I hadn't thought much about replacing it but, with a little creative rationalization, I convinced myself that the job would be, well, *sort of* cosmetic and, by many standards, *sort of* modest too.

So I set about it. The vinyl was already loose enough to rip out by hand. The adhesive was long dried, sparing me the job of using a smelly chemical to remove old goop. Now, though, I had to decide on something to replace it.

I don't much like carpet, but a teak-and-holly sole would require a prohibitive amount of money and effort

A view of the starboard side shows the former sad state of the overhead liner and the bulkhead, at left. A similar view after Ken completed the work, at right, shows the new teak veneer covering the blemishes on the bulkhead and fresh varnish elsewhere. The new overhead is in place, fastened to fore-and-aft stringers with screws and trim washers, and Ken's clock and barometer from a previous boat adorn the port bulkhead.

The Nu-Teak sole brightened up the interior and gave the job a final touch, far left. Ken finished the curved hull sides with Ultra Tuff non-skid. The new material on the overhead closely matched the old material on the coachroof sides, at left.

and still leave unsolved the problem of covering the curved hull sides.

I decided on a combination and a compromise. I recalled seeing synthetic teak decking in the March 2011 issue of *Good Old Boat*. The brand I chose, NuTeak, is a 4-mm-thick PVC-based material that looks convincingly like the real thing. It's sold in 3-foot lengths and is available in 2¼-inch-wide planks with separate ¼-inch-wide imitation holly strips, both with grooved edges for a good fit. It can be cut easily with a utility knife.

I made patterns from heavy contractor's paper, picked up the removable floorboards, and brought everything home for ease of assembly. I cut and dry fit the NuTeak planks to the paper patterns at home, then disassembled them for final installation on the boat. I used the special adhesive sold by NuTeak that has a working time of about 15 minutes, more than adequate to lay and align the planks and strips.

The curved hull sides above the sole presented a minor problem until I remembered I had some Ultra Tuff non-skid paint left over from the Boston Whaler job. It produces a finish that's rough but not painfully abrasive (see "Fresh Traction on an Old Deck," July 2009). After sanding, I applied a coat of Ultra Tuff primer then two coats of the non-skid itself, tinted pale beige.

Finishing touches

The job was now essentially done. A pair of bright throw cushions from IKEA and my brass clinometer and old clock and barometer from *Invincible Summer* gave a final "decorator touch" to my modest restoration and reminded me of the continuity between the old boats that had claimed me. In the end, of course, the job turned out to be much less modest, more expensive, and more challenging than I had originally planned. But then, I suppose I knew all along that was going to happen.

The demands of the old-boat gene were placated . . . for now.

Ken Jacobsen rescued his first old boat and restored it to working order at the tender age of 16 and still hasn't learned his lesson. When he retired after 26 years as a seagoing naval officer, he began a new career as a freelance writer and defense analyst. He lives in James Island, South Carolina, and sails his 1976 International Folkboat, Frihet, *out of the Cooper River Marina in Charleston, South Carolina.*

Resources

Insulation

Ken used a radiant reflective foil sandwich sold under trade names like Space Age and Reflectix: reflectixinc.com; www.insulationsolutions.com. 3M double-sided foam tape to fasten the insulation in place is available at hardware and DIY stores.

Cabin sole

Interior teak-and-holly sole material is available in several combinations from NuTeak Decking Inc. Adhesive is also available. More information at: www.nuteak.com.

Wall covering

Ken used Sherwin Williams DTM Acrylic paint from their Industrial/Marine line and a textured fabric-backed vinyl (SW489370) from their decorating section. Although this is not a marine-grade fabric, he says the specs are more than adequate and the price reasonable: www.sherwin-williams.com.

Interior varnish

Minwax Fast-Drying Polyurethane is available in gloss, semigloss, and satin: www.minwax.com.
Ken has used Minwax polyurethane for an interior finish on several boats and has found it to be tough, easy to apply, and durable. He likes varnishes that don't require exotic solvents for thinning and cleanup. Minwax uses mineral spirits as a solvent, is quick drying, and has a pleasant, warm tint.

Adhesive

3M Super 77 Multipurpose Adhesive: solutions.3m.com. Work in a well-ventilated space and wear a mask. It's a good idea to experiment with Super 77 on some scrap material to get familiar with how the stuff behaves.

Non-skid

Tuff Coat non-skid coating is sold by Ultra Tuff Marine: www.tuffcoat.net/wordpress.
Ultra Tuff also sells a special primer for Tuff Coat and special high-nap rollers. For more detailed information on application see "Sole Revival," in the July 2009 *Good Old Boat*. Also available at marine stores.

Bristol 27 gets a second chance

by David Berke

Every day I would see her twice as I drove past to and from work. I could not tell if she was a boat or a derelict. This continued for seven years. She never moved, was never even touched. One winter we had a lot of snow, and she resembled an igloo! Finally, the house in whose yard she was dying sprouted a FOR SALE sign. Still the time was not right. Eventually the FOR SALE sign said SOLD, and I called the real estate agency.

"Excuse me, I am calling about that house in Eastport," I said. "It's sold," said she. "But I am interested in the boat in the yard." I could almost hear her eyes widen in surprise. I left her my name and number. Soon the telephone rang, and the boatowner was on the other end. "May I go on board and check her out?" I asked. "Yes," said the owner, "but beware of the bees, wasps, and other stinging things that have taken up residence."

Scott Walter, my friend and eventual partner, joined me to check over the hulk. The keel had been damaged slightly from being introduced to sandbars. Vines were growing up her sides, entwined in the cradle. Moss was a half-inch thick on her north side. Something had made a perfectly round nest in the head. The dirt and leaves had gotten everywhere during the 10 years she had sat in the back yard. An old mainsail had been used as a cover, but was now ripped and blown off. Scott was as skeptical as I was excited. I finally had found a boat I could afford! Several telephone calls to the owner resulted in a price of $2,500, and we were able to buy a Bristol 27, hull #30, with a steel cradle, two ladders, five sails, a 9.9-hp Evinrude, and a project of immense proportions.

We moved her the day the buyers of the house were moving into their new home. They were thrilled to see her go! Walter, the grizzled boat mover, walked around her, spat, and said, "I sure hope you didn't pay much for her." We had not. Following her down the highway, my car was showered with all the debris blowing off the boat.

Scott was nice enough to let the boat live at his place of business. This meant there would be no yard bills during the restoration period.

The first thing we did was empty the entire boat. This included removing dead squirrels and mice along with the sails, anchor, lines, stove, motor, and so on. Next we attacked the moss, vines, leaves, and dirt, inside and out. This process took a month. Then I built a cradle that fit outside the original cradle. Once the new cradle was in place, we lowered the old one away from the hull. We did this for two reasons: we needed access to the bottom of the keel for repairs; and two pads from the original cradle had rotted to dust.

We next removed 200 years of bottom paint! The paint was a full 1/8-inch thick! Once the bottom was down to the original glass, we barrier-coated it and prepared for new paint. While this was going on, I removed every piece of wood from the interior and refinished them at night after work in my wood shop at home. We set the outboard in a tub of fresh water and were amazed that, after sitting for 10 years, all it needed was fresh plugs and gasoline. It started right up, and lasted the entire first season! (It died while I was sailing with my 7-year-old son, and I had to sail into the slip, but that's another story!)

The restoration project was a true Tom Sawyer story. One close friend of ours is an "electro-magician," and he upgraded the electrical system from one battery to two. He also helped me install the new gauges and running lights. Another good friend is a plumber, and with his help we replaced the thru-hull for the sink (because the old one was stuck open) and replumbed the fresh water system. We also installed scuppers in the rear of the cockpit. Another dear friend was a "floor guy," and he refinished the interior floors. He also used his floor machine to sand the rudder, a task for which lesser sanding machines were useless. During the time that all of this was taking place, my dear wife (who is kind enough to indulge my quirks and fascination with old boats and cars), was cleaning, sanding, masking, and repainting the deck.

The repainting process required over 1,500 feet of tape and about one month's supply of newspapers. The deck was two-tone colored from the factory, and we wanted to keep everything as close to the original as possible. My wife is an artist with very

We love a good story, tell us yours

With this article, we're introducing a new feature on boat restoration projects. We'd like to hear the short version of what your project involved. Dave sets the example of the kind of thing we'd like to hear from you in, say, 500 to 1,500 words (plus photos, please). We know your project was much more involved than words can ever express, but this is the short "overview" version.

steady hands. At one point, she spent two days on the deck with a quarter-inch-wide brush cutting all the edges around the two-tone, and around all the deck fittings. We then sprayed the boat, and it turned out like new!

We sent the mast to the rigger, and we replaced every piece of line and inspected the stainless rigging. The rigger pronounced the mast safe and strong and shipped it back to us. We then moved to reassembling the interior. Luckily, I had had enough sense to label every piece, so the result was just a giant jigsaw puzzle with screws. We also replaced the fixed ports that had turned white with age. This was a straightforward process, because every piece was marked.

We then painted the bottom, jacked the old cradle back in place, and removed the temporary one. We moved the boat and took her to her first launch in more than a decade.

Now Scott and I have one of the nicest B-27s around, and we were even bold enough to change the name. Because of what we gave her, and what she gives back in return, we have named her *Second Wind*. She lives up to her name every time we sail her!

Second Wind ***before the work begins, in the primer phase just before spraying, gleaming in "Bristol fashion" after the spraying is completed, and sailing as she was meant to do on the opposite page. This Bristol should not be confused with the Bristol Channel Cutter featured on Page 46, which had a different designer and was built by a different company.***

From *Loon* to *London*

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

by Peter Baumgartner

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 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,

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 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

***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.

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.

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 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 ⅜-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 inspection because the positive wire to the fuse panel was broken, the work needed by the electrical system was straightforward. I learned to use a simple volt/ohm meter to test for continuity and current flow and checked out all the wiring. It was intact, but nearly all the connection points had to be redone. I bought new battery boxes and batteries. The navigation lights were all out. I took them apart, resoldered the connections, and polished their metal pieces. I put new ends on the VHF coaxial cable and installed a new antenna. At the same time, I put an anchor light at the masthead and ran new wires through 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 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.

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

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.*

From *Loon* to *London*

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

In the January issue of Good Old Boat, *Peter wrote about the project he took on when he bought a 27-foot Cape Dory that had been neglected for 10 years. With this article, we bring you to launch day and the trials of the first season. Perhaps the events which follow demonstrate the true origin of the expression "sea trials."*

by Peter Baumgartner

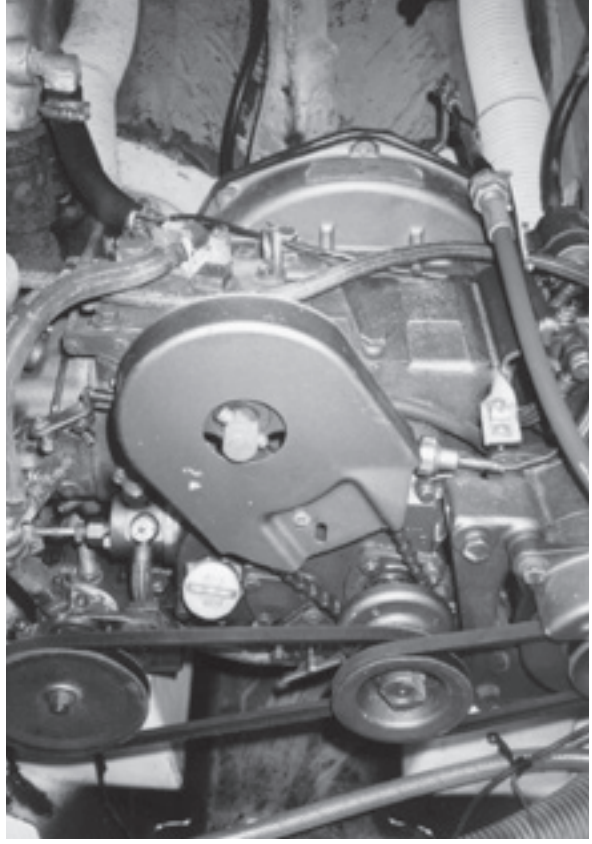
In a few days, we were at the water's edge. Before she was launched I sprayed her bow with English Ale and then said a few words of blessing. The truck driver, crane operator, and crew were smiling. I passed around the some of the rest of the beer. It was May 19, 1999. I wanted to go through this simple launching ritual because I had renamed the boat from *Loon* to *London* when I had applied for the documentation change. Since this is reputed to be bad luck, I wanted to make amends. Bass Ale seemed appropriate. It seemed to work.

When the boat was launched, water ran in through the stern tube in a steady stream, but after perhaps an hour settled down to a steadier drip and one that I, the batteries, and the new automatic bilge pump could live with. Once she was afloat and tied to the dock, I began getting used to the sensation of her movement underfoot as I knocked around down below looking for leaks. Other than the stern tube, not a drop! And so it would stay through her first season.

That evening my friend Pete came

Above, Peter Fifield waves as he and the author begin the trip which will deliver* London *from Quincy to Buzzard's Bay. At right, marina workers Dave and Nick at the launch on Town River.

by the dock. He helped me get the boom and the mainsail rigged. We ran the engine for a while but stayed tied to the dock, stowing supplies and getting things shipshape. It was a warm, still evening. The dock I had rented for two weeks of commissioning was way up a tidal river, almost at the limits of navigation, away from the open expanses of Boston Harbor. It was very sheltered, but this evening you could still smell the ocean a mile or so away. Our side of the river was densely developed. The narrow drive into the marina passed between a muffler shop and a body shop off a busy highway, past boats sitting among cars in various stages of rebuild. Four huge green oil tanks overshadowed the eastern end of the marina shoreline, but the view across the river was of a protected area, entirely green with open marsh and scrub trees.



***Old Reliable*, an 8-hp single-cylinder Yanmar**

Off cruising

The next day when Rich arrived, I started the engine, he untied the lines, and I backed her out. Quite suddenly, and as if we had been doing it forever, we were off, cruising down the Town River toward the open harbor. The much-anticipated instant of actually being underway in this sailboat I had worked on and obsessed over for so long was missed somehow in these first moments, but by the time we had traveled down this short stretch of river and made the turn out into the open water, I was feeling great. Better than great, I was soaring. The motor was on, and the mainsail was up, pulling just a bit. The bow splashed through the salt water, and I felt the first gentle breezes from the sea on my face. It all hit me: the pride in this accomplishment, the joy of being on the water, the sudden realization that I now had my own boat after all those years of standing on docks and looking and yearning. I became ecstatically happy.

It should have gone on like this for the rest of the day. Rich and I should have gone out through Hull Gut and on to at least Boston Light, but things don't go as we might expect or even think we deserve. Before I had hanked on the jib, the engine quit. It refused to restart. We were adrift in the ferry channel to Boston. The afternoon began to take on a different aspect. A little chillier. I got the jib on and hoisted before we drifted into the shallow water, and we soon had her sailing and under control. As we turned and sailed back the way we had come, the breeze came up suddenly in our faces. We ended this first sail in my new boat with an awkward spread-eagle landing at the marina slip.

I spent the next three days on my knees in the cabin with my head in the engine compartment learning to bleed the engine. The consensus was that after all the work I had done on her fuel system, there was still air in there somewhere, or maybe I had a bad fuel pump. Don Casey says, in his book, something to the effect that the problem with gasoline engines is keeping the fuel in, and the problem with diesel engines is keeping the air out. One of my neighbors at the marina, who has a nicely rebuilt Ericson 28, and who had generously helped me with a few other problems, was now telling me about the virtues of gasoline power. As he spoke, a large pirate flag flapped behind him in the breeze from his mast. I heard that the Coast Guard had boarded him a few days before and stopped him from flying it while underway.

Pumping bilges

One slip further over, a recently launched wooden cabin cruiser had an emergency pump in her bilge and was now wired to the power mains. Every 30 minutes, she would shoot a stream of fresh water, enough to fill several bathtubs, out of her bilge with the force of a jet engine and lift again several inches on her lines. It was spring in the marina. We all had our problems.

After bleeding the system, I would let the engine run. It would run for 15 to maybe 30 minutes and then just quit. It would not restart until I bled it again. I would go through the process over and over, trying something a little different each time. Early on Saturday morning, on my way to the marina, I stopped at a marine store and read another book on the subject of bleeding.

I realized I had not been bleeding the complete system. I raced to the boat and tried a new method. By early afternoon, the engine had run for an hour before I shut her off. That was done.

I felt another surge of pride at solving a difficult problem and fixing it myself. The rest of the weekend was spent happily tinkering, followed by a successful Sunday sail with my wife, friend Bruce, and his son.

I had her all nicely cleaned up and had rebuilt the manual bilge pump when it was time to move *London* to her summer mooring in Buzzard's Bay. My friend Pete and I planned to sail out of Boston Harbor and turn south to cruise just off the coast past the old coastal towns of Cohasset, Scituate, and Plymouth to the entrance of the Cape Cod Canal. Once through the canal, we would go down Buzzard's Bay, almost to New Bedford, where my summer mooring lay. It was a distance of about 80 nautical miles. We planned to take our time and enjoy the trip, spending two nights on the boat. Sailboats are required to motor through the canal. To make good time you want to hit the tide right, because the current averages 4 knots. We left early to catch that evening's ebb tide at the canal entrance.

Changeable weather

We had a nice westerly breeze, maybe 20 knots, all day. It was a changeable day, with rainsqualls off Plymouth beach in the afternoon. *London* really showed her stuff. We seemed to be averaging better than six knots. This was the one thing that really surprised me about the boat: she could actually go faster than I had ever imagined. I had expected her stable, full-keeled shape to provide us

with a comfortable, but somewhat stately, ride; instead we could often coax her into a brisk run.

The wind was with us until we rounded the Mary Ann Rocks off Manomet Point. We decided to power the last eight miles to the canal in order to make the tide and have daylight through its length. Not far from the canal entrance mark, the engine quit and would not restart. My heart sank. I had thought that was behind me. While we drifted, I bled it again. And again it ran. We went through the canal with Pete at the helm and me standing near the engine with my wrenches laid out on the bunk, ready to bleed her again at a moment's notice. We were lucky; she ran fine right through the canal.

This is how it would go over the next few weeks. Most of the time the engine (now referred to as Old Reliable in the hope of flattering it into consistent performance) would rumble on, but at those moments when the most seemed to be at stake, it would cough, sputter, and stop with a rattle and a shake. I began to associate that last mechanical shudder with a sinking feeling in my stomach.

On my first solo sail in *London*, at the entrance to Wood's Hole, just as I was standing at the mast lowering the mainsail for the passage through that ornery current, and just as I was thinking: "This would be a terrible place to lose power," I noticed it had gotten very quiet. Looking at the rocks to my lee with resignation and a sigh, I quickly raised the main and tacked my way into a cove, dropped the anchor, and went down into the cabin to kneel before Old Reliable and bleed it again.

It quit again

With my friend Bruce, on a day when the small-craft warnings were up, and we were making that dogleg in the channel back to my mooring, right where it is the narrowest and shoal to either side, Old Reliable quit again. Bruce made the familiar rush to the bow to toss the anchor over, and I went below to relieve Old Reliable of that offensive air again. Bruce said, "You have got to get this fixed."

So with new resolve, on a day Nancy and I spent on the boat at the mooring waiting for the wind to drop from gale force, as *London* tacked back and forth on her pendant, we tried something new with some tape and a bicycle pump. I disconnected the vent hose from the fuel tank and sealed the opening with duct tape. Then I attached a needle valve on the end of the pump hose and used it to pierce the duct tape covering the vent. While Nancy gently used the pump to pressurize the tank, I assumed my position in front of the engine. The air pressure forced the fuel into the system as I felt around the fuel lines and filter with clean paper towels looking for leaks. We figured if it leaks fuel when being pumped, it will leak air when the fuel pump is sucking under load. We found leaks around the fitting to the new fuel filter. The fittings and clamps were as tight as they could be, but the fuel was leaking out around the metal threads of the fittings. I removed all the threaded fittings from the filter, spread liquid rubber gasket on their threads, and screwed them back in nice and snug. I bled the engine again.

Old Reliable ran through the summer and fall without any further trouble, and as the summer progressed into fall, the mechanics of the boat finally settled into the background of my thinking. I was now focused on cruises along the southern New England coast, on what to eat, who to have aboard, and where to anchor during *London's* first season afloat.

It is only now, as I write this with snow outside the window, and *London* again standing next to the garage, that I have begun to think about the next set of changes to the boat — but that's another story.

Peter says he sails 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. For more, see his Web site at <http://demo.napsys.com/london/>.*

Work done

Work done to *London* (née *Loon*) from Oct. 1998 to Oct. 1999:

General: Sand all exterior teak to bare wood and give two coats of Cetol. Remove everything from boat and scrub inside and out three times. Add anchor line pipe to foredeck. Repair cosmetic fiberglass around keel. Replace all protruding bungs in toerail with new teak bungs.

Mast: Replace all three halyards with New England Ropes ⅜-inch Sta-Set X Polyester Braid. Replace masthead/steaming light. Add anchor light at mast top. Replace VHF antenna. Scrub mast.

Freshwater system: Remove water tank, clean and reinstall. Add deck water fill and pipe into water tank. Replace all freshwater hoses with series 168 reinforced clear tubing. Add new 1-micron Aqua City water filter. Replace water faucet with a new Fynspray galley spout. Replace water pump with a Whale Gusher MKIII foot pump). Replace sink drain hose. Remove sink drain through-hull and seacock, rebuild, and reinstall.

Head system: Remove existing holding tank and destroy. Remove all existing hoses and replace with new. Buy and install new holding tank. Remove, rebuild, reinstall Whale Gusher 10 manual pump. Remove through-hull and seacock. Replace seacock and reinstall. Remove intake through-hull and seacock, rebuild, and reinstall. Install new bronze vented loop. Install new Whale Y-valve. Purchase Headmate spares kit.

Engine cooling: Remove intake through-hull and seacock, rebuild, and re-install. Install new Groco seawater filter. Replace all cooling hose.

Engine fuel system: Remove existing fuel tank and replace with new 12-gallon Skyline metal tank. Install new Racor 120 diesel filter with water trap. Replace all flexible fuel lines.

Engine: Purchase complete parts kit.

Galley: Replace existing pressurized alcohol stove with new non-pressurized Origo 4000.

Bilge pumps: Rebuild manual Whale Gusher. Add new Rule automatic electric pump.

Electric: Install two new batteries. Clean and test all connections. Install new grounding plate. Install two new halogen berth lights in main cabin. Rewire and restore navigation lights. Rewire spotlight. Replace cigarette-lighter light and socket with new. Replace antenna coaxial lines and connectors for VHF radio.

Instruments and navigation: Install new Raytheon Autohelm ST+ 2000 autopilot. Install new barometer in main cabin. Remove and service speedometer impeller.

Sails: Have leech line of small jib repaired.

Chrysler's S-27 reborn

A labor of love makes a tired old 27-footer better than new

by Martha Leonard

"Chrysler? Are you sure? I didn't know Chrysler made sailboats!" The words of our friends echoed our thoughts when we bought our boat. As we delved into her history, however, we found that Chrysler did indeed build boats from 1966 to 1980. Our 27-foot sloop was built in the last year of Chrysler's marine production.

We stumbled on our boat by accident. Because most of our interests had led us in different directions, my husband, Arnie, and I were looking for something we could enjoy together. We both like the water and since we live near the St. John's River in north Florida, buying a boat seemed a good bet. It was the day of the Mug Race, an annual sailing event that starts in Palatka and ends in Jacksonville. We watched the sailboats as they left the docks for the starting line downriver, then strolled down the pier of a small local marina to look at the boats left behind.

One particular boat with graceful lines and a "For Sale" sign caught our eye. After brief negotiations with the owner, the boat was ours. Ignorant and innocent, we bought it without seeing the bottom or the sails! (We wouldn't do that again, but we were lucky this time.) We knew the 7-hp Yanmar engine worked, and we liked the roomy cabin with four bunks, a small galley, and a huge head in the bow.

In appearance, the boat was a little forlorn — used but recently neglected. It appeared to be structurally sound but needed some renovating. This interested Arnie, who was looking for a project. Furthermore, the price fit our budget. We did not know for several weeks that our purchase was a treasure in disguise.

New franchise

In 1979, Chrysler Corporation introduced Chrysler Yachts, a new franchise. They contracted with Charles Morgan to obtain the design rights to his Morgan 27 and redesigned it to be comfortable for cruising and also competitive under MORC racing rules. This marriage of cruiser and racer was called the S-27 and was the proposed flagship for the franchise. She made her first appearance in Michigan at Sail Plan '79. (This was the first of what Chrysler planned to be an annual convention bringing together the biggest names in the world of sailing.) Introduced as "The yacht for all reasons," the new S-27 was toasted with champagne and hors d'oeuvres by an impressive array of guests.

The original specs were: LOA 27.25 feet; LWL 25.50 feet; draft 4.92 feet; beam 9.92 feet; displacement, 8,000 pounds; ballast 3,600 pounds. She was white and trimmed with teak. She was available in fixed-keel and shoal-draft, swing-keel models.

During the next year or so Chrysler built a number of sailboats of different sizes. Unfortunately, financial problems short-circuited their ambitious plans for Chrysler Yachts and an annual sailing symposium for sailing. In 1980, Chrysler Corporation applied to the federal government for loans to continue operating. As part of the federal bailout, Chrysler was required to drop the sailboat business. The last

of the Chrysler S-27s were built in 1980. The total number of S-27s built is unknown, but it appears to be small. The website of the Chrysler Sailing Association lists only nine current owners of S-27s.

> *"Ignorant and innocent, we bought it without seeing the bottom or the sails!"*

Special treatment

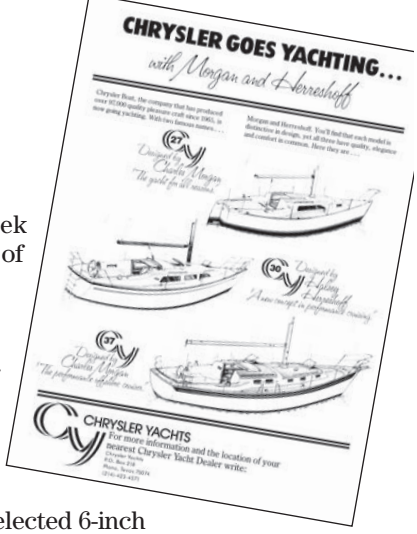
Since we have owned her, our lady has spent most of her time getting a "spa" treatment. The first step: a good cleaning from top to bottom. Next, we turned our attention to leaks. Some of the deck fittings and portlights had been improperly installed; in some cases, rotted core was the result. We removed all the leaking deck fittings and rebedded them. In addition to the leaking and rotted trim around the portlights, the Lexan was heavily scarred, reducing visibility. We decided to replace, rather than repair, them.

While we were at it, we removed the surrounding vinyl lining. Since the rest of the lining on the overhead in the cabin was dingy, torn, and sagging, we removed it also, leaving the bare fiberglass hull exposed. The resulting holes from the portlights were filled with ½-inch plywood, shaped and fitted to the recessed openings. We used ¼-inch waxed, threaded bolts and fender washers as clamps to ensure solid glue joints. The next day, when the epoxy had set, the wax allowed us to remove the clamp system easily. The holes were filled and faired inside and out until flush with the sides. We used epoxy fairing compound and some glass on the interior for strength.

We discussed replacing the vinyl lining in the cabin but elected instead to use wood, which we thought would stay cleaner, last longer, and give the cabin a homey look. To form a base for fastening, we glued ⅜- by 2-inch strips to the overhead on 16-inch centers from the forward bulkhead to the companionway hatch. Thin strips of ¼-inch by 2-inch tongue-in groove were presealed with epoxy and primer, then fastened fore and aft with stainless-steel ¼-inch countersunk screws. To keep the lines straight, we started from the center and fit each slat individually, following the curves of the overhead. In some cases the pieces had to be spiled. It was a challenge, to say the least, but well worth it. We finished the overhead with the application of two coats of marine primer and two coats of Pettit white gloss enamel.

Port replacement

After completion of the overhead and a portion of the sides, we turned to the replacement of the ports. We wanted to keep the sleek racing lines of the design, but at the same time allow better ventilation and air circulation in the cabin. We selected 6-inch by 24-inch Beckson Rain Drain opening ports. Using the outside trim piece, we traced a pattern and cut out the wood recently placed on the cabin sides. The holes were cut about ¼-inch wider than the ports in order to seal with epoxy and fiberglass cloth.



The new ports were installed from inside out with stainless-steel screws and caulked. We gave the remaining unfinished interior sides the same wood treatment as the overhead, except the boards were placed vertically and cut to length to correspond with the hull shape. The white wood overhead and sides were then trimmed with varnished mahogany.

With an eye toward the possibility of spending long periods of time aboard, we turned our attention next to refurbishing the cabin interior without changing the basic layout. We upgraded the electrical wiring for additional lighting and instruments. We rebuilt the galley sink and stove area, adding teak drawers for more storage. The sink was replumbed and fitted with a new hand-pump faucet. We recovered the various cushions, and we made curtains. We left the large forward head as it was with hanging storage, shower seat, Porta Potti,

***Lotsaknots*, a Chrysler S-27, on opposite page and above at launchtime. Arnie and Martha Leonard removed the worn vinyl overhead lining, at left, and replaced it with strips of marine ply, which was then painted white, shown at right.**

On deck, leaking fittings were removed and rebedded and new non-skid was added. In addition, ports were modified or replaced and the interior was updated.

and an additional sink.

Deck repairs and replacements were ongoing. We replaced the original mainsail, which was blown out and patched, with a custom-made sail complete with the CY insignia. Arnie found a new talent for sewing when he successfully completed a new sailbag for the genoa. When we found an inexpensive source for Sunbrella, he was enthusiastic about creating a new mainsail cover. He entered a new world of zigzagging, nylon thread, and cutting with a hot knife. For a pattern, he used an old sail cover and guidance from *The Complete Canvasworker's Guide* by Sailrite's Jim Grant.

Removed hardware

Repairing the leaks required removing some of the deck hardware. While we were at it, we re-located some of the tracks. We decided to replace some of the worn running rigging as our budget allowed. In repainting the boat, we kept the white hull, but used a sand-colored contrast on the non-skid areas. Our main extravagance was an autopilot.

> *"We did not know for several weeks that our purchase was a treasure in disguise."*

Since Arnie enjoys working with wood and is pleased at his newfound talent for cabinetry and sewing, most of the work on the boat has been a labor of love. He did get frustrated by the difficulty of obtaining good-quality materials and accurate tools, parts, and supplies. Because we live in a rural area, we had to travel or use mail order to get materials. We experienced a number of delivery delays, back-order holdups, and erroneous substitutions for what was ordered. Arnie also realized that the curving lines of our boat were more challenging than he'd expected when compared with the straight lines of housing construction.

I love the spacious cabin and have never felt closed in. The open ports make a big difference in ventilation. The galley is efficient and makes it easy to prepare meals. The two main bunks are comfortable, but we may indulge in better mattresses soon. The head is roomy, and friends envy us our large shower area.

To date, we have taken only short trips on the river. We have found our S-27 to be very responsive although with a bit of a weather helm. She moves easily and handles well in the gusty and unpredictable winds of a winding river. She also sails in the lightest of winds in spite of her 8,000-pound displacement. She can handle a larger-than-normal sail area for her size, but we generally use a Number 2 genoa. With a five-foot draft and fixed keel, she is extremely stable, a comforting thought for novice sailors.

On a rare day we have achieved five to six knots on a half-mile tack — unusual for river sailing. While we had a skimpy history from the previous owner, he did say she had been sailed off-shore. We did not doubt it when we found well-used charts for Bermuda and the Bahamas.

Bright future

The future looks bright for our fair lady and us. I retired from my practice as a mental health counselor last fall. That frees us to explore the Intracoastal Waterway and some of the islands of the East Coast. We hope to start in Georgia and go up to the Carolinas. Our long-term dream is to visit Canada's Maritime Provinces and explore the areas off Maine, which were the stomping grounds of Arnie's ancestors.

Three Mug Races have come and gone since we bought our boat and the fourth will occur in May 2003, as you are reading this issue. We would like to see how she does in that race. Sometimes it seems as if she is tugging at the lines to go. While we're a bit intimidated by the thought of racing, we may convince others to crew for us and give her the test.

And what, you may be wondering, is our lady's name? We christened her *Lotsaknots*. A lady her age certainly has a lot of knots behind her. We are confident she also has even more knots left, and we hope to enjoy them for many more years. When Chrysler and Morgan set out to unite the best of racers with cruisers, they did an excellent job. We revel in the renewed cabin and delight in the boat's grace and easy movement. It's been a pleasure to see her bloom with our improvements, and we're looking forward to different ports, steady winds, and all the other joys of sailing and cruising in our rare, classic "yacht for all reasons."

Chrysler Resources

Chrysler Sailing Association Web site: <http://www.geocities.com/sneeuwjagt/> or <http://www.geocities.com/thetropics/cabana/3135/>

SailNet Chrysler discussion group:
<http://members.sailnet.com/resources/links/list/index-new.cfm?id=chrysler>

Chrysler sailing page:
<http://www.kiva.net/~gentrysv/sail.html> but soon to move to this address:
<http://myclubs.excite.com/mycomm/browse.asp?cid=.A6AKtxoIztT>

A Web site with Chrysler sailboat brochures:
<http://www.isc-durant.com/nolan/sailing/chrysler/index.htm>

Reinsnest, an Ericson 27

A well-earned renovation for a well-used boat

BY JIM SHROEGER

When Ken and Ginny Reinink decided to buy a good old boat, they had a list of criteria. The boat had to be the right size for two people to easily handle, it had to have a wheel rather than a tiller, and it had to have a diesel engine and standing headroom. At the top of the list was that it had to be trailerable. Ken and Ginny wanted to be able to tow it from their home in lower Michigan to their favorite cruising grounds on the northern end of Lake Michigan.

They looked at Catalinas, Cals, Morgans, Bayfields, and boats from many other builders before they found and bought a 1977 Ericson 27. "Wait a minute!" you're probably thinking, "The Ericson 27 was never designed to be trailerable." Well, it wasn't. But that didn't stop Ken from acquiring the boat and designing and building a custom trailer that allowed him to rig, launch, and retrieve his 27-footer just like he would a Catalina 22.

To make an Ericson 27 trailerable, Ken had to build a trailer. In fact, he built two. The prototype left something to be desired but, based on lessons learned with that one, Ken created his masterpiece. This trailer sports tandem axles, each capable of carrying 6,000 pounds, giving it a total load capacity of 12,000 pounds. The trailer itself weighs 3,500 pounds and has no problem hauling the 6,500-pound Ericson 27. Several Ph.D.s from Ferris State University in Big Rapids, Michigan, assisted him by calculating the rig's center of gravity and made recommendations for the safest way to load the boat on her new trailer. The final tongue weight is only 1,650 pounds.

Ken's ingenious design includes a sectional tongue extension, a self-centering loading technique, and a special safety board that automatically secures the boat once it's loaded. It also has customized anchor rings for tie-down straps and storage space for all the components directly on the trailer.

A proper boat shed

Ken and Ginny bought *Reinsnest* in 1990 and sailed her as she was until 2006. Then the boat went into Ken's building shed for her five-year refit.

Yes, not only did Ken design and build a special trailer for *Reinsnest*, he also constructed a special building shed that included, among other unique features, a "keel pit" reminiscent of lube pits once found in gas stations in the 1940s and '50s and in some oil-change operations to this day. With the keel in a pit, the deck

To make *Reinsnest* trailerable, her owner, Ken Reinink, built a trailer, far left. He also built a shed (with a pit in the floor for the keel), at left, where he carried out the refit, top of page.



The saloon originally had some white surfaces and open storage shelves behind the settees, at left. Ken began his refit of *Reinsnest* by removing much of the saloon furniture, center. He also took out the V-berth, built a new holding tank into the hull beneath it, at right, and fitted a water tank on top of that.

could be closer to floor level, making it much easier to get materials aboard. As the project eventually lasted five years, Ken figures he saved more than four miles' of climbing up and down a longer ladder.

In addition to the creative touches Ken added to the boat, the shed itself is a work of genius. It's 16 feet wide, 38 feet long, and 14 feet from the floor to the ridge. The keel pit is 4 feet wide, 4 feet deep, and 20 feet long. A steel I-beam, 6 inches wide, 16 inches deep, and 35 feet long, runs along the ridge. Two chain hoists, each capable of lifting 6,000 pounds, are positioned along the beam.

To set up *Reinsnest* in the shed, Ken places her on the trailer over the keel pit and passes nylon straps from each of the hoists under the hull. He then lifts her off the trailer and lowers her into the keel pit. Once she's secured on adjustable stands, Ken can get to work on any project he may have in mind. The shed is heated and fully equipped with tools so work can proceed year-round.

The refit begins

Ken began his refit of *Reinsnest* after he and Ginny had sailed her for many seasons. First, he removed much of the original interior. Little was spared. From the V-berth to the galley, most of the furniture simply vanished.

While he was at it, Ken removed the original holding tank and water tanks. He molded in a new 30-gallon holding tank under the V-berth. To take further advantage of the space there, he installed a 25-gallon Todd polyethylene water tank directly on top of the new holding tank.

Ken replaced all the original wiring, increasing the number of circuits from five to 12, and installed a 12-volt fused panel with 12 circuits. He fitted a new stereo system with four speakers and a disc player, five new dome lights, a VHF radio, two new bilge pumps, and a 110-volt shorepower panel. While he was at it, Ken also installed a pressure water system and an onboard battery charging system.

For the new furniture, Ken selected red oak as his building material because the lighter wood tones would give the finished interior an open, light, and airy atmosphere. It was also readily available at a reasonable cost.

On the port side, Ken removed the original hanging locker, settee back, storage shelf, and a portion of the galley counter to make way for his new design. On the starboard side, he removed the dinette table, settee back, and storage areas.

The port-side renovation began with the construction of a new double hanging locker with a clothes hamper and drawers beside it, all in the space occupied by the original hanging locker. Then he shortened the original port settee to allow for a 2-foot extension to the galley that now houses a stove and a new water-cooled refrigerator. Additional storage is located above and below the counter. The new galley arrangement triples the amount of storage. A new spice rack is also part of the redesigned galley.

Ken came up with many innovative ideas for additional storage space. He rebuilt the port and starboard


Ken shortened the port-side settee and extended the galley forward, at left. He made his new cabinets and furniture of red oak for its light color. On the port side, Ken fitted lockers behind and above the seat backs, at right. The seat-back cushions are attached to panels that lift up and out to give access to the lockers.

settees, adding storage behind and beneath both. Lockers behind the settee backs are closed by unique "drop in and lock, lift up to remove" panels covered with the same fabric used for the settee cushions. Storage areas above the seats and beneath the sidedecks are secured with a retaining-pin locking system of Ken's design.

The original dinette table went the way of the original hanging locker and holding tank. Its replacement has two leaves with fiddles and three drawers built into the center section. Ken also fitted a support on it for the starboard settee that slides out to make a large single berth. He re-surfaced the table and all the countertops with Formica.

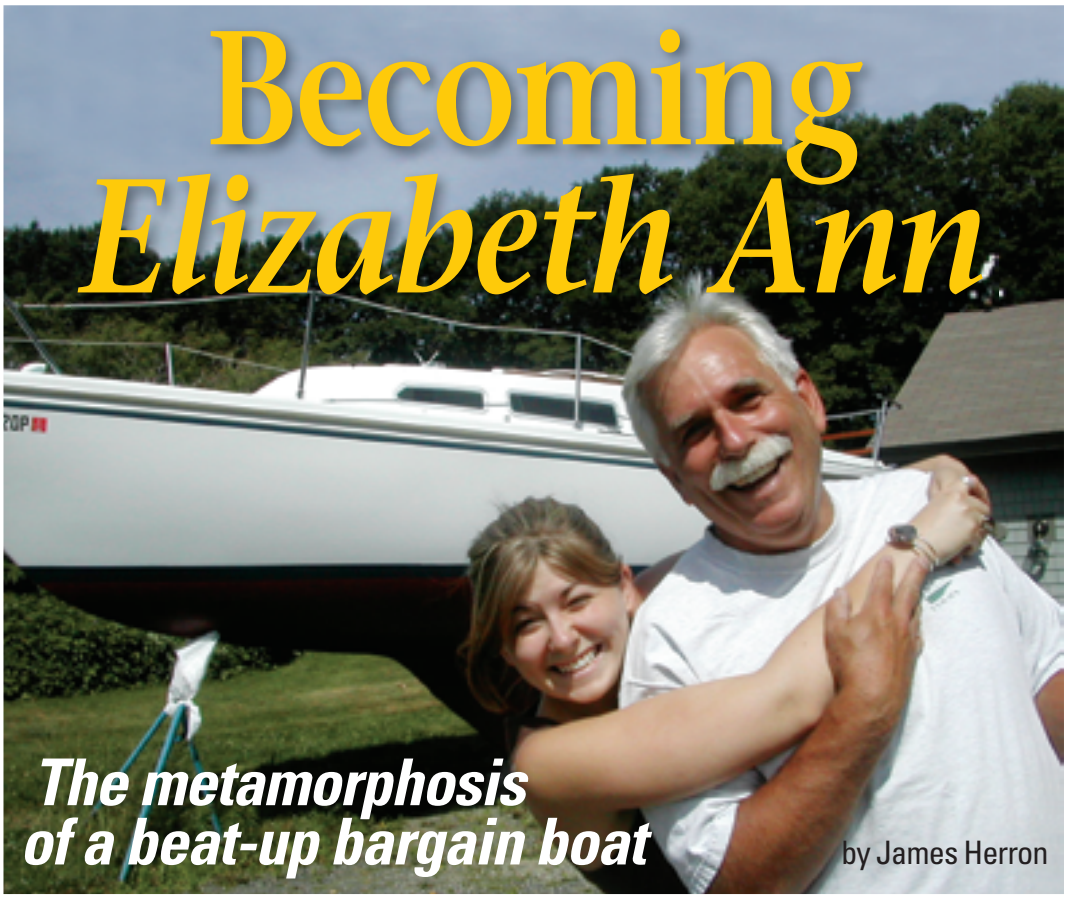
In the final phase of the renovation, Ken replaced two of the original ports with Bomar 2000 extruded-aluminum opening ports, one in the head compartment and one on the port side in the main cabin. To do so, he had to enlarge the original openings, but the result was much-improved ventilation.

Reinsnest now has a truly beautiful interior that even the original Ericson 27 designers would no doubt be proud to claim as their own.

Jim Shroeger has been sailing for 50 years. He began in Jet 14s at the University of Michigan and progressed through a series of small to medium-sized daysailers including a Star. In the early 1970s, he and his wife, Barbara, and their two kids began their summer family cruises on the Great Lakes, which they continue to this day in their current boat, Sundew, *a Watkins 27.*

The saloon table has drawers built into its base and a support for the extending starboard settee berth.

Becoming Elizabeth Ann



Restoring the Catalina 27 was to a great extent a father-and-daughter affair, which is why there are two Elizabeth Anns in this picture.

The metamorphosis of a beat-up bargain boat

by James Herron

Small-boat sailing on the Severn River and Chesapeake Bay was a part of my life growing up in Maryland in the 1960s and '70s. I never owned a sailboat of my own but had always longed to do so. Fast forward 35 years. When we moved to Rockport, Maine, I was immediately drawn to the romance of sailing these magnificent waters on my own 40-foot Hinckley . . . but supposed I would settle for something, say, about 25 to 30 feet in length and maybe 95-percent less expensive.

One day, while reading the *Camden Herald*, my eyes darted to an ad about the 2005 Penobscot Bay YMCA Boat Auction. The local YMCA raises money each year by auctioning boats that have been donated. About 12 boats apparently did not sell at the annual auction and were still available to the highest bidder.

Not really being in a position to acquire a boat, I had not attended the auction in previous years. But I was drawn to the picture of a 1978 Catalina 27 left over following the auction held in 2005. I remembered the Catalina was a popular boat on the Chesapeake, one known to be a very good sailing craft. "Everything works . . . great boat for little money," the ad stated.

I decided to have a look and invited my good friend and neighbor, Frank, to join me. Frank is a true Mainer, an amazing sailor, and one of those rare people who seem able to fix or build anything.

We climbed the ladder and looked in the cabin. Yuck! The water down below was at least 8 inches deep. Cushions were floating in the smelly mess. We grabbed some high waders from my trunk and climbed in. We opened the engine access panel to find what appeared to be a rusted pile of junk. "I wouldn't take this bucket of bolts if it was given to me," Frank stated matter-of-factly.

I made an offer. At $900, the offer was so low it was embarrassing. The man at the Y said, "We can't accept that."

"Of course," I said. "I understand." But I told him I would wait patiently in the hope that, if the YMCA received no other offers, perhaps they'd reconsider. Three weeks later, I brought *Blue Moon* home.

What had I done?

This sort of project means work, money, and an understanding wife. I scored two out of the three criteria. Money was my only challenge. I started the restoration fund by selling extra sails from the Catalina along with odds and ends no longer needed around the house. As the fund grew, I began work.

My daughter, Elizabeth Ann, loves sailing and, while college takes up most of her time, she jumped in to help me gut the boat and begin the

Stripped of loose and movable parts, the galley came out of the boat to be taken to the workshop, below. The saloon too was largely disassembled for refinishing, right.

restoration process. We began by pulling everything out and removing every part we could unscrew or unbolt. We removed all the brightwork inside and out. We took that and most of the galley to my basement for restoration over the winter. We also removed the old head and the Atomic 4. A neighbor's backhoe lifted the Atomic 4 and galley out of the boat. At that point, we were left with a grubby, stinky, moldy cabin. After I performed a thorough inspection, Elizabeth Ann and I began to scrub and prepare *Blue Moon* for repairs and paint.

The Atomic 4 challenge

We began to dismantle the Atomic 4. It was obvious the engine had not been run for several years. As it was a straight saltwater-cooled rig (no heat exchanger), I wondered whether it was worth rebuilding. Might it have a cracked block, head, or manifold? Perhaps it had seized?

Frank and I began removing parts, slugging away with chisels, heat, and enthusiasm. The head looked good, the pistons appeared to be virtually unused and moved freely. But the exhaust manifold was toast; we noted a large crack. Somehow it had overheated. Frank drizzled acid through all the water channels, and we reamed out each passageway.

I began to make a list of parts that would be required to restore the Atomic 4. The major part was the exhaust manifold. I'm a fan of eBay, and discovered and purchased a used Atomic 4 exhaust manifold in excellent condition. The list continued: gaskets, bolts, plugs, plug wires, distributor, and so on. I found the remainder of the parts through Moyer Marine and my local auto parts store.

We ground and seated the valves and, following a thorough cleaning inside and out, the engine was ready for paint.

The following spring, we completed the engine rebuild and the backhoe lifted it back into the boat. Remarkably, it cranked up immediately and ran cool and beautifully smooth. After just a few fine-tuning adjustments, it was "water worthy." What an amazing engine.

Ongoing beautification

The beautification program continued. Odds and ends in need of replacement included the head, plumbing hoses, and water hoses. I installed new cabin lights, rewired the panel, and installed a new bilge pump.

What was Catalina thinking, using that awful, cheap-looking, fake wood on the bulkheads, doors, galley top, and folding table? I took a page out of the Herreshoff design book and felt I could contrast the teak and other beautiful hardwoods with white. I began by replacing the galley laminate with white laminate. I trimmed the bulkheads and doors with white paint.

A key step in restoring *Elizabeth Ann* to working order was bringing the Atomic 4 back to life, left. The saloon received special attention — a new walnut table, white-painted bulkheads, and new carpeting, bottom far left, — while new white countertops freshened up the galley, bottom near left. Carolyn, the understanding wife, contributed new cushions, right, and the family enterprise is celebrated in a bright new name on the transom, far right. *Elizabeth Ann*, sitting pretty on her lines, has the last word, below.

I created a replacement table out of walnut from the leaves of an old table I found in a yard sale and crafted its leg from mahogany retrieved from a junk pile behind a local boatbuilder's shop. I fashioned a mahogany plaque to display the clock and barometer I snagged on eBay and crafted a dashboard for the radios and XM tuner using leftover lumber from the walnut table. This was fun.

My wife, Carolyn, is an amazing craftsperson and, most of all, she is generous. She set aside her passion for gardening while she created new cushions for the Catalina. We purchased new foam and fabric at half price from a local fabric store that was going out of business. Carolyn suggested that we use navy blue fabric with white piping. The cushions are beautiful.

I made a template out of paper for the cabin sole. I purchased outdoor carpet at Home Depot and took the template and carpet to a local carpet store to have it cut to size and the edges bound.

Bottom and topsides

Years of built-up bottom paint had to be removed. A sharp scraper worked best. Once all the paint was removed, I lightly sanded the bottom with 60-grit paper. The keel required a minor repair using a little fiberglass and Bondo. I taped the bootstripe and painted the bottom.

The hull itself was oxidized and in need of fresh paint. I had been talked into painting the topsides myself using the roll-and-tip method. I acquired Old Salem paint, along with brushes and rollers, on sale at Hamilton Marine. I sanded the hull lightly using 220-grit.

Josh, my next-door-neighbor, was kind enough to help with this step. Josh rolled while I followed up tipping. After a few passes, it was clear that something was not working. Our brush strokes were visible and the paint was drying too fast. We decided to regroup and start over.

I sanded off our first pass and then consulted with an old salt and paint expert at Hamilton Marine. When I described my problem, he said, "That will never work. You need brushing thinner, this brush, and these rollers. I've been painting boats for more than 40 years. If you follow my advice, your boat will look like glass. Thin the paint so it's almost like water. Tip with the brush at a 45-degree angle. Move fast, but smoothly."

Our second pass did the trick. The paint looked terrific. I applied a navy-blue bootstripe and she was completed.

A new name

Now she was restored, we decided to rename the boat. We chose *Elizabeth Ann*. The name acknowledges our daughter, my mother-in-law, and my sister . . . all wonderful women.

When my sailing friends learned that a name change was imminent, they impressed the fear of God upon me. "Don't launch her without the proper renaming ceremony," they warned. The needed ritual to ensure smooth sailing involved champagne and mumbo jumbo. (***Note:*** *For the details, go to <http://www.johnvigor.com> and click on "Denaming."* ***–Eds.***) Somehow, I think the champagne was the underlying reason for the celebration. Nonetheless, we duly carried out the renaming ceremony and successfully launched her in July 2008.

Elizabeth Ann looks terrific, and she sails like a dream.

James Herron is a voice actor who grew up in Maryland and, together with his wife, Carolyn, has made New England his home.

Resources

Moyer Marine
410-810-8920; www.moyermarine.com

Hamilton Marine
207-548-6302; www.hamiltonmarine.com

Sundew returns to bloom

Years of tender care revived a wilting Watkins

by Jim Shroeger

Barb Shroeger and Ellie May find *Sundew*'s refurbished cabin to their liking, at right. Jim made the cabin sole, at bottom, with oak and mahogany. To hold the sole planks down while the adhesive set up, he reconfigured bar clamps as spreaders, below.

Her name is *Sundew*. She's a 1978 Watkins 27 shoal-draft cruising sloop. She was named after an award-winning tulip in Holland. Sadly, when we found her she looked more like a faded rose than any kind of award winner. Her interior was crammed with gear, most of which was broken, antiquated, or just plain useless. She had been improperly placed on her cradle and the cradle supports were causing indentations in her hull.

We were interested because the price was right. The owner had been asking $15,000. After the survey report came back, we were able to buy her for only $5,000. She needed a lot of help — but with the money we saved and a willingness to put in whatever time was required to bring her back to life — I was sure *Sundew* could be an award winner again.

It took almost two truckloads to carry away the junk but, once we removed the clutter, we were able to assess the scope of the restoration project to which we had committed ourselves. We compiled a list of repairs and renovations that would take five years to complete. We began outside at the bottom and worked our way up.

The keel was saturated with water. We had to drill several holes through the fiberglass so the water could drain and it was almost two weeks before the interior of the keel dried out. This step was followed by grinding away fiberglass, laying in new glass, finishing, and finally applying new bottom paint. Surprisingly, the remainder of the hull exterior was in great condition and required no further attention. The indentations in the hull disappeared after she was repositioned on her cradle.

The next task was to replace the instruments that I'm sure were previously used by a fellow named Noah. We selected new Navman speed and depth gauges. Drilling holes through the hull to mount the new instruments' sending units was a bit traumatic, but things went as planned. Next, we added a new West Marine multi-channel VHF. After that, we turned our attention to the interior.

From the sole up

Sundew needed many things if we were going to turn her once more into a safe, enjoyable, and comfortable cruiser. The problem was where to start. Once again, we decided to start from the bottom, with the cabin sole. The previous owner had used self-stick carpet tiles to cover the sole. By the time we started our restoration, some of the tiles were missing and others had migrated to new neighborhoods. The cabin sole looked like a badly abused checkerboard. The first step was to remove and discard all the carpet tiles.

My goal was to create a traditional nautical cabin sole with materials we could easily obtain locally. We live in Michigan. At the time, I was working at our local Home Depot, which offered "cull" lumber. (Cull lumber is sold for considerably less than retail due to some defect.) I was able to procure 4½-inch oak base molding in random lengths for 10 cents on the dollar. It took about three weeks to accumulate the quantity of molding I needed. At that time, the store received some windows shipped on mahogany pallets (really!). As the pallets were usually discarded, the manager was willing to let me cart off as much pallet

mahogany as I wanted. With sufficient materials in hand, I was ready to begin work on the cabin sole.

I cut down the molding into 3½-inch-wide by ⅜-inch-thick planks with a shiplap joint. Between the planks I set ¾ x ⅛-inch mahogany inlays that produced a nice contrast with the oak planking. I also had to make several special shapes to frame out two bilge-access panels.

Once I had a sufficient amount of planking milled, I was able to begin the installation. I had decided not to use metal fasteners (I wanted no holes to drill in the fiberglass cabin sole and no screw holes to plug). The planking was to be fastened with 3M 5200. While 5200 is a great adhesive, it must be held solidly in place for 24 hours. This presented a problem since traditional clamps would not work. The solution was to use Irwin Quick Clamps, reversing one end. This converted the clamps into spreaders.

I used 36-inch clamps and, by adding 1 x 2-inch extensions of various lengths, I had spreaders that I could press against the overhead and exert sufficient pressure to hold the sole planks in place until the adhesive set. I found I could fit two or three planks per session. The entire cabin sole took three weeks to complete and turned out even better than I had hoped.

Deckhead embellishment

Moving upward, I thought the overhead in the main cabin was as plain as milk on a platter. The remedy was to install beams. To prevent the beams from looking cluttered, I divided the available overhead space into six equal sections, which placed the beams a little less than three feet apart. Each beam was made from two 2 x ¼-inch mahogany strips laminated together to create a 2 x ½-inch beam.

To determine the lengths of the beams, I made two 2 x ½ x 5-foot pine strips. I held these one on top of the other with three rubber bands that allowed the strips to slide along one another. I held the strips in the location where each beam was to be mounted and slid the pieces outward until the ends made contact with both sides of the cabin, then marked the strips to capture the length. When I laid each strip on the actual beam, I was able to mark and cut it.

I installed these beams with the help of the Irwin spreaders, using 5200 as the adhesive. In each case, I positioned the beam in its predetermined location and used the spreaders between the overhead and the cabin sole to apply pressure to the beam until the adhesive set up. I pre-finished these beams before installing them. This was much easier than trying to cut in the varnish coats afterward.

It took a little over a week to laminate the beams, make the measurement strips, and install all seven.

Jim thought the overhead looked bland, so he installed mahogany beams, at right. To hold them up while the glue set, he used the same technique as for the cabin sole, below.



***Sundew*'s new table, above left, folds against the bulkhead, where a hinged flap holds it in place, above center. Jim's flexible shower grating is a work of art, above right. Granite counters brightened up the galley, below left and center, and the head, below right.**



The completed project was yet another step in the creation of a nautical look for *Sundew*'s interior.

Furniture improvements

Next on the list was the dinette table. The original table resembled a cross between a fold-down ironing board and a Murphy bed. The legs had to be stored separately and were often buried when we wanted to use the table.

A trip to our local exotic-wood importer, plus $200, netted me a half sheet of ¾-inch African mahogany plywood, several 6-foot 4 x 4-inch mahogany planks, and one 2-foot 4 x 4 mahogany block.

Using the old table as a size pattern for the new one, I made the main table body from the mahogany plywood and the sea rails (or fiddles) and the legs from the 4 x 4-inch stock. I cut the sea rails to ⅜ x 2 inches and used a band saw to cut the special rounded corners out of the mahogany block. I rounded the table corners to fit the sea rails.

I joined the table halves with a brass piano hinge and attached the entire unit to a bulkhead-mounted shelving unit with another brass piano hinge. A hinged mahogany cover provided a final touch by hiding the unfinished table edges and giving us an anchor point to secure the table in its upright position.

Sundew's renovation also included new granite countertops in the head and galley. Normally, granite would be too heavy for use in a small sailboat. However, a company called Granite Transformations makes a granite product that is only ¼-inch thick and light enough to work well in marine applications. As this is a special product, we had technicians from Granite Transformations do the installation. The result was unique and beautiful.

Once the granite tops were installed, I dug out the rest of my mahogany and fitted additional sea rails around all the new countertop areas. I also installed a new partial partition, with a handhold, between the galley and settee area.

The next project, a small grating for the sole in the head, was featured in the May 2007 issue of *Good Old Boat*. *Sundew*'s head is a bit small, and the challenge was to create a grate flexible enough to fit the various curves and bends of the head sole. I used brass brazing rods as the base for the grate. Each piece (there were nearly 200) was ⅝ x ⅝ x 3 inches, with 3/16-inch holes drilled horizontally through each end. To assemble these, I first made a template of the head sole. I threaded the wooden pieces onto the brass rods in an alternating pattern until the shape of the grating matched the template. A dab of epoxy in each of the perimeter pieces kept the grating in its finished form.

Creature comforts

All these renovations were made with the intent of adding a nautical atmosphere to *Sundew*'s interior. Next, I turned my attention to dockside amenities and creature comforts.

Michigan's summers can deliver spells of 90-degree and hotter weather. We had cruised one summer when the temperature was between 90 and 100 degrees for almost two weeks. Sitting at a dock during a heat wave in a sailboat that has turned into a pizza oven is not a pleasant experience. That motivated me.

We found a room-sized air conditioner small enough to fit in the companionway and still allow us room to come and go. I shaped two filler boards to fit

around the AC unit, made a closed-cell Styrofoam pad to support the unit on the bridge deck, and used the remaining dropboards to secure the unit in place. Adding an interior leg (made from an old turnbuckle boot) completed the installation. The total job cost less than $100.

The AC didn't add much to the nautical look we were trying to achieve, but it sure made life belowdecks a lot more enjoyable. A more detailed account of this renovation was published in the July 2007 issue of *Good Old Boat*.

Another addition for dockside convenience was refrigeration. This was not the 12-volt, $1,500 system that replaces the old icebox. Our system was purchased at a yard sale for $20. It was a small dorm-sized refrigerator that I installed in an area that was used as a "collect all." By changing the location of a chart rack and a small rack for navigation tools, I was able to secure the refrigerator opposite the galley on a shelf where it's easily accessible.

Prior to acquiring the refrigerator, we paid nearly $20 each week for block ice when cruising. Instead, for approximately the cost of one week's ice supply, we were able to have dockside refrigeration! We found that, even when unplugged, the fridge could keep things cool for an entire day. This was perfect for our cruises from marina to marina, and we gained dry storage by converting the old icebox to a storage bin. For trips longer than a day, we simply reloaded the icebox with block ice and sailed off, knowing we could plug in again at the next marina. During our cruise last summer we saved close to $200.

Shade and safety

The final two upgrades have to do with cruising comfort and safe seamanship.

When we acquired *Sundew*, she was rigged so any sail change or adjustment had to be done on the foredeck. We have been in many bad weather situations where going forward was akin to taking a long walk on a short pier. No matter what you did, you were going to get wet! I decided to run all the lines aft. I led the mainsheet and jibsheet aft through several turning blocks and led the main halyard to a winch mounted on the cabintop. I also replaced the old Barients with two new self-tailing sheet winches. These changes made *Sundew* a comfort and a pleasure to sail.

The other improvement was to *Sundew*'s cockpit. She already had a dodger but I envisioned a more pleasant setting that required a Bimini. A representative from our local canvas shop took a few measurements and presently a new Bimini arrived. Weather curtains followed. They attach to the dodger and a stern curtain zips to the aft portion of the Bimini.

These curtains added protection from the weather but created an operational problem. *Sundew*'s mainsheet is attached to the aft end of the boom. With the Bimini in place it was not possible to use the mainsail. Under way, we could only use the jib. The solution to this little dilemma is the focus of our next project to be undertaken this year. We plan to install mid-boom sheeting. I am still researching the alternatives.

When we found *Sundew*, she was a faded rose. After five years of upgrades, renovations, and remodeling, she lives up to her namesake. *Sundew* has earned countless compliments and made us proud to be her owners.

Jim Shroeger began sailing more than 50 years ago in Jet 14s and progressed through a series of small to medium-sized daysailers including a Star. In the early 1970s, he and his wife, Barbara, and their two kids began their summer family cruises on the Great Lakes, which they continue to this day in Sundew, *their Watkins 27.*

Resources

Granite Transformations
www.granitetransformations.com

After making modifications that primarily enhanced *Sundew*'s belowdecks atmosphere, Jim turned to improving the comfort of the crew. A small air-conditioning unit fits neatly into the companionway dropboards, at left, and still allows ingress and egress. (The upper view is of the exterior, the lower view is of the interior.) In hot weather, shade is essential, so Jim added a dodger, a Bimini, and a foredeck awning, at right.