

NJ4512GW

ey City,

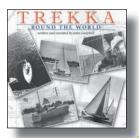
Shamkor

November/December 2007 Issue 57 www.goodoldboat.com

Sad

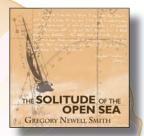


## Circumnavigations and other true sailing tales!



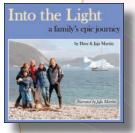
John Guzzwell: **Trekka Round** the World

Legendary sailor John Guzzwell narrates the adventures he had while circumnavigating in *Trekka*, the 20-foot yawl he built. This is a musthave release for all who now follow in his wake and those who dream of doing so.



Greg Newell Smith: The Solitude of the Open Sea

In this series of narrative essays, Greg Newell Smith reflects upon the many adventures he had and discoveries he made during his world circumnavigation. The Solitude of the Open Sea takes you to the most unexpected places.



Dave and Jaja Martin: Into the Light

Well-known circumnavigators, Dave and Jaja Martin possess the power to touch your heart and soul. The Martin family's true story of their travels in Iceland and Norway offers an honest look at life aboard in the best and in the worst of times.



**Russell Doubleday:** A Year in a Yawl

A Year in a Yawl is a true tale of four young men traveling the Great Circle Route of the eastern United States over 100 years ago. Their youthful enthusiasm and resourcefulness make this a powerful and well-told classic.



and boat ownership from the editorial pages of Good Old Boat will entertain you whenever you/miss being near your sailboat, as well as any time you're aboard or driving to the marina.

Good Old Boat: Bookends 50 View from Here and Last Tack columns

# These musings about sailing

Sailing Alone Around the World

Joshua Slocum: Sailing Alone Around the World In 1895 at the age of 51, Joshua Slocum began a threeyear circumnavigation aboard Spray. The first man to ever successfully complete a solo circumnavigation, he recounted the adventures he had along the way in this classic tale.

Have it your way!

Each book is available in CD format or, better yet, as a download 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 books is unabridged. Several are read by the authors.

#### So let us read you a story!

Easy listening as you drive to work or to your boat. Savor a sea story as you exercise ... or as you relax.

## www.AudioSeaStories.com

## GOOD OLD BOAT



## For the love of sailboats

#### **11 Cal 30**

A classic plastic shows us how to age with dignity BY ZUZANA PROCHAZKA

- **28** The pursuit of tender bliss Searching for the Holy Grail of yacht tenders BY MARGO REVEIL
- **32** The Seahopper folding dinghy Another candidate for the 'perfect tender' title BY GEOFFREY TOYE AND DON LAUNER

### **40** Catalina 30

Thirty years, 7,000 boats, and still going strong by BOB  $\ensuremath{\mathsf{Brintnall}}$ 

## **Speaking seriously**

#### **16** Docklines 101

Make sure they stretch and absorb shocks  $\ensuremath{\mathsf{BY}}$  don Launer

20 A bluewater-capable yacht, Part 3 Design considerations BY BETH LEONARD

#### **36** One little thing leads to another Getting comfy starts with hard work BY BILL HUDSON

- **44** Making sure the current flows An inexpensive electrical system to keep your lights on BY BERNARD HEISE
- **48** Shower solution Simple solar-heated system is gravity-fed BY REBECCA BURG

About the cover... While entering the harbor near Scituate, Massachusetts, Mary Jane Hayes deployed her camera to capture both the wariness and the beauty of navigating in fog.

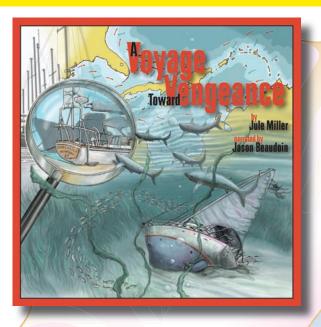








## Thrills, Chills, & Suspense at Sea!

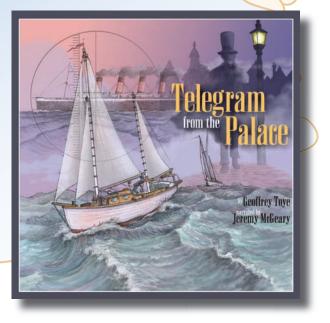


#### A Voyage Toward Vengeance by Jule Miller

Missing persons, murder, sunken vessels, unlikely comrades, and a couple of real sociopaths will frighten and entertain the adult listener of this nautical fiction by Jule Miller. There are plenty of realistic sailing scenes and good nautical detail but not enough to prevent the non-sailor from appreciating the tale. All readers with vivid imaginations will find it difficult to sleep at night while listening to this one. An audiobook for adults only.

#### Telegram from the Palace by Geoffrey Toye

Jack the Ripper in the 1880s. The sinking of the *Lusitania* during World War I. The British Royal family. Modern-day lovers enmeshed in a series of lifethreatening events over which they have no control and of which they have even less comprehension. You won't be sure until the very end who the good guys are and what motivates the heroes and villains. Sail along with narrator Jeremy McGeary on this adrenaline-filled thriller by Geoffrey Toye.



#### Have it your way!

Each book is available in CD format or, better yet, as a download 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 books is unabridged. Several are read by the authors.

#### So let us read you a story!

Easy listening as you drive to work or to your boat. Savor a sea story as you exercise ... or as you relax.

## www.AudioSeaStories.com



## **GOOD OLD BOAT**

November/December 2007

## **Just for fun**

- **51 The sailing bug bites hard** Updating skills learned in childhood BY THERESA MEIS
- 54 The Rescuers: Fighting entropy, Part 1 Two efforts to save old boats from our landfills BY SUSAN PETERSON GATELY
- **78** Nostalgia and retrospection Closing his shop conjures up decades of memories BY KITTY BENNETT
- 80 Chesapeake Bay BY DREW LANDMAN



## What's more

- 5 The view from here My first time – BY KAREN LARSON
- 6 Mail buoy
- **59** Good old classifieds
- 68 Simple solutions Getting back aboard – BY RICHARD SMITH Cheap scraping – BY ALFRED POOR
- 72 Quick and easy Wedge of silence – BY RICHARD SMITH In the bag – BY DAVID VANDENBURGH Bucket job – BY ALAN LUCAS Cleaner anchor chain – BY BOB STEADMAN
- 83 Last tack To knot, or not to knot? – BY JERRY POWLAS
- 85 Reflections A waypoint day – BY ROBERT HLADY









# Great listening for young sailors!

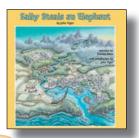


John Vigor: Danger, Dolphins, and Ginger Beer

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: Sally Steals an Elephant

Foxtrot Charlie just wants to get along with his foster family. But sometimes being an ordinary 13-yearold 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,



John Vigor: So Long, Foxtrot Charlie

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.

#### Have it your way!

Each book is available in CD format or, better yet, as a download 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 books is unabridged. Several are read by the authors.

www.AudioSeaStories.com



FOUNDER/EDITOR Karen Larson karen@goodoldboat.com FOUNDER/TECHNICAL EDITOR Jerry Powlas

jerry@goodoldboat.com PUBLISHER/ADVERTISING SALES DIRECTOR Michael Facius michael@goodoldboat.com 612-605-8319

> BUSINESS ADVISORY BOARD Bill Hammond, Chair Jack Culley • Bill Dorn RESEARCH EDITOR

Dan Spurr

CONTRIBUTING EDITORS Ted Brewer • Theresa Fort • Donald Launer Dave Martin • Gregg Nestor • Paul Ring Bill Sandifer • Richard Smith

> COPY EDITOR John Vigor CREATIVE DIRECTOR

Mary Endres

AD PRODUCTION Audrey Mikkelson

PRODUCTION EDITOR Cindy Christian Rogers

DIRECTOR OF CIRCULATION/RETAIL Mark Busta mark@goodoldboat.com

701-952-9433

CLASSIFIED ADS AND FINANCIAL MANAGER Karla Sandness karla@goodoldboat.com 701-952-9433

> EDITORIAL ASSISTANT Theresa Meis WEBMASTER

Jerry Stearns www.goodoldboat.com 57 – VOLUME 10, NUMBER 6

GOOD OLD BOAT (ISSN 1099-6354; USPS 019327) PUBLISHED BIMONTHLY BY

Poblished binioid field bi

EDITORIAL OFFICE: 7340 Niagara Ln. N. • Maple Grove, MN 55311-2655 Phone: 701-952-9433 • Fax: 701-952-9434

BUSINESS OFFICE: 1501 8th Ave. N.W. • Jamestown, ND 58401 Phone: 701-952-9433 • Fax: 701-952-9434 www.goodoldboat.com

Periodicals postage paid at Osseo, MN 55369, and at additional mailing offices.

POSTMASTER, SEND ADDRESS CHANGES TO: Good Old Boat 8810 27th Street Ct. N. Lake Elmo, MN 55042-9473

© 2007 BY PARTNERSHIP FOR EXCELLENCE, INC. All rights reserved. Reprinting in whole or part forbidden except by permission of the publisher. Printed in Canada.

Editorial contributions are handled with care, but no liability is accepted. Opinions expressed by the writers are not necessarily those of *Good Old Boat* magazine.

SUBSCRIPTION RATES (1, 2, 3 YEARS): U.S. AND CANADA - \$39.95/\$74.95/\$110us OVERSEAS - \$49.95/\$95.95us



#### The view from here

My first tin

### A not-to-be-forgotten experience on the dark sea

by Karen Larson

**E** VERYONE REMEMBERS HIS OR HER FIRST time with crystal clarity. Mine happened during the past summer, so it is particularly poignant. We had left Otter Cove in northern Lake Superior for a night crossing to the Slate Islands, approximately 70 miles to the east. The plan was to arrive at dawn. We'd been waiting out a windy frontal system in the shelter of the cove and wanted to arrive in the Slates before the next big wind would begin to blow right at us from the east.

So we left in the late afternoon, sailing in a sloppy sea of southwest waves that still had height, if not a lot of force, associated with them. Behind us. a beautiful sunset melted into a clear night. I always hope for northern lights on nights like that, but I am usually disappointed. Nonetheless, I am generally rewarded with a black night sky studded with stars. There are no significant city lights for miles around on this part of the lake, and the inky sky makes an amazing contrast to the night lights that blink on one by one. There were shooting stars galore. The sky was alive with emerging constellations as the heavens darkened around us. Even the gauzy-looking Milky Way was complete, as if a giant fairy had taken a wand and spread this magic carpet to the heavens.

#### My turn

When dinner was over, I took the helm for a while. The following seas were too large for the Autohelm, so the sailors who were aboard had to keep a hand in things. Jerry pointed out that there was a new lighthouse now visible on the horizon. It was the Slate Islands Light, right where we expected it to be. All was well with the world. I was feeling very contented with life in general.

Jerry hadn't been gone for more



than a minute or two before it happened. There was clearly something else directly in our path out there on the horizon. What *was* that light? It was very orange and growing closer by the minute. Another lighthouse? Another small town out there? If so, which one?

A couple of agonizing minutes later it became clear that an enormous moon would emerge from out of the sea. A large crescent, rather than a full round shape, it had emerged as a spear and not a globe. And it had emerged just as I've read it does for others: overlarge and frighteningly unexpected.

It rose rapidly, its light blotting out the Milky Way and many of the fainter stars. It gave me something simple to steer by for a while as it painted a path of gold across the water between *Mystic* and the far side of the lake. But it inched to starboard, and we carried on, ever onward, toward the Slate Islands still 30 miles to the east.

Many sailors have described their first horrified experience with the rising moon (a large ship? a town? a flying saucer? a fire? even an enemy during times of combat?). Jerry has his own tale of a similar experience on *Mystic* five or 10 years ago. But hearing about someone else's experience is never quite like experiencing it for yourself. As I went below for a couple of hours of sleep, I was still entranced with my own, very own, first time.



#### A grabrail question

My wife and I had to remove the old 90-plus-inch, nineloop grabrails on our Allied Seawind ketch. We are replacing them with two four-loopers on top and 3-3-1 arrangements from below. My question is about my temptation not to bung from the top and through-bolt, but rather to bung only from the bottom and use lag screws into the top with pre-drilled holes, thus making the top rails the backing plate, if you will.

On the one hand, it would prevent 18 bungs on the top and would probably make the system much more waterresistant. On the other hand, such a rail would be less sturdy if one were hanging a piano from it or strapping down a dinghy in an offshore blow.

Which way should I go?

Ed Verner Plant City, Fla.

#### **Jerry Powlas replies**

Our C&C 30 Mk I is built as you suggest. The only screws in the system are driven up through the cabin handrails into the cabintop handrails. I don't think this method is necessarily weaker than alternatives.

Use regular flat-headed wood screws. They should be as large as possible, perhaps #12 or, better yet, #14. You will have problems finding lag screws in the right alloy. The wood screws should be bronze, although I suspect brass will work just fine if the rails are sealed to the deckhouse properly. I would use a fairly strong sealant, such as 4200, for this task. Don't get the sealant in the screw holes; just seal around the holes. Lightly coat the screws with a thin oil. I like cooking oil spray for this. Let the screws drain off on a paper towel before you drive them in.

The one very critical issue is that the screws must not bottom out in a dead-end hole in the handrail. If the tip of the screw touches the bottom of the hole, you can expect the handrail to split (don't ask me how I know this). Calculate and measure everything carefully and cut the screws down so they stop a bit short, perhaps ½ or ¼ inch. The pointed tip of a wood screw may be safely removed and the threads cleaned up with a file without losing any strength at all. The point is for driving the screw without a pilot hole, which is rarely a good idea in higher-quality boatwork.

On our beloved *Mystic* I never replaced the lower bungs in the cabin and, while I had all the handrails off, I coated the cabin rails with epoxy, then varnish. While I was at it, I coated the exterior handrails with epoxy, then blue Brightside enamel to match our hull.

This leads to the oft-quoted story: a woman was varnishing the toerails of her Teak Goddess when a man from a few slips over came by. After they had chatted for a while, she asked him if he had a lot of topside teak on his boat. He replied, "No, it's not my first boat."

> Jerry Powlas Technical editor

#### People will ask

Just got my September 2007 issue of *Good Old Boat*; thanks for including the picture of Alison (in the Mail Buoy) as *Panache* was launched. She is taking the magazine to school tomorrow to show her teachers and friends. In case anyone is wondering about the tender in the second picture, Alison, Caitlin, and I made that a few winters ago in our basement (shown in photo at left). It is a Chesapeake Light Craft kit (we named her *MiniMe*). I was extremely impressed with the quality of the kit and how precisely it went together. I am a non-woodworker and really thought this would give me problems. None of us was experienced and this little craft (which we also sail) gets almost as many compliments as *Panache*.

Richard Charette Wadsworth, Ill.

#### **Lovely dinghy!**

Richard Charette's photo (in the September 2007 issue Mail Buoy) of his newly launched *Panache* shows a beautiful dinghy that I would be interested in building.

> Dennis Figley Ashland, Ohio

#### I knew they'd ask

The place to get information on the pram that I built is <a href="http://www.clcboats.com">http://www.clcboats.com</a>. I have also built the 16-foot canoe, and I am not a woodworker by any stretch of the imagination. The kits are computer-cut and go together very easily. They use a stitch-and-glue method. The kits are very complete and come with all the epoxy and cloth needed to glue as well as reinforce the underside of the hull. You can also purchase a video that shows the building of a kayak using this method. My two youngest daughters and I built our pram in our basement a few years ago. We also purchased the sailing package and this little pram is really neat to sail. **Richard Charette** 

#### I should have known!

Thanks for the introduction to Richard Charette. The dink was a kit made by Chesapeake Light Craft. I should have known because I built one of the 17-foot kayaks this past winter and have been learning to paddle since the ice went out. Good company, CLC. Thanks and keep up the good work on the magazine. It's the best.

**Dennis Figley** 

#### Water pump information, please

In the March 2007 issue there was an article about the refit of a 1978 Kittiwake 23. The owner had difficulty with the water pump and replaced it with a 12-volt electric water pump. I would appreciate more information on the pump he chose to use and how he installed it.

I have a 1979 Ericson 25 with an OMC Saildrive engine. I can't get to the impeller to replace it without pulling the boat out of the water. It's working now, but I am wondering if I could install a 12-volt electric water pump "inline" with the water hose coming from the lower part of the engine. I believe it would make a good emergency repair (should the current impeller fail).

Could you please give more information on what kind of water pump was used and what kind of amperage it draws, how many gallons per minute, as well as brand name, type, etc.? Further information and advice would be helpful.

> Jeffrey Ruhnke Woodbury, Minn.

#### **Larry Franklin replies**

The pump used is a Shurflo Aqua Tiger centrifugal pump, available in bronze or stainless-steel versions from several sources.

The 12-volt pump motor draws 6 amps at 10 pounds per square inch (psi) discharge pressure and 3 gallons per minute (gpm) flow. At the maximum flow rate of 22 gpm (open flow, i.e., zero psi), the pump motor draws 11 amps.

Since it is a centrifugal pump and therefore incapable of suction lift, it must have a flooded suction for prime. This means the pump suction port must be below the waterline. Also, the pump must not be run dry. Therefore, I have mounted a limit switch on the seacock that supplies water to the pump suction. This switch has a dual function: unless the valve is open, the pump will not run and power will not be supplied to the starter solenoid, thus preventing the engine from being started without the water pump running. I also had to install another interlock to shut off the power to the water pump when I engage the magneto grounding switch to kill the engine.

The physical mounting of the pump is shown in the bottom right photograph on Page 11 of the article (March 2007). Larry Franklin

Gore, Okla.

#### **Mast-shaking problem**

As a new owner of a J/32, I would like to ask Durkee Richards about a mast-shaking problem I have in light-to-moderate beam winds at the dock.

#### Thomas Reinsma Grand Haven, Mich.

If you're a reader from way back (or if you have the first of our back issue CDs), take a look at the Mail Buoy discussions about mast pumping in the June 1998 and September 1998 issues. These will prove very useful to anyone with this question.

#### **Durkee Richards replies**

We have owned our J/32 since 1999 and sailed it on Lake Superior and in the Pacific Northwest. During this time we have never experienced "mast pumping" of the form generally meant by this term. I attribute the lack of mast pumping to the generous mast prebend and the associated aft-swept spreaders. I have, however, experienced shaking of the rig that might feel like mast pumping. This will occur while driving hard to windward (during a race) if we are slow getting the jib sheeted home after a tack. The flogging jib will shake the rig rather vigorously. I suspect that this might also happen if the jib leech were fluttering because the leech line was not tight enough for the wind strength and the cut of the jib.

My wife and I recently experienced substantial rig shaking under bare poles. We were anchored in an otherwise well-protected basin just north of the Brooks Peninsula (west coast of Vancouver Island), waiting out the passage of a strong, fast-moving low. For a few hours the conditions were just right for katabatic winds to roll down the steep slopes into our anchorage. We observed several gusts above 50 knots. "Dark and stormy night" motions were occurring. Our 150 genny was on the furler. I suspect that the windage of that sail was enough to pump the rig, even though the sheets were set up hard to restrict movement of the forestay.

Rig tune may affect these types of rig shaking. My intuitive sense is that the shaking would be worse if the shrouds were set up too loose. I go by Brion Toss's guideline that the leeward shrouds should still have a "a taste of tension" when driving vigorously to windward.

> Durkee Richards Sequim, Wash.

#### What am I missing?

Yesterday's mail brought the latest *Good Old Boat* (September 2007). Beth Leonard's series on bluewater yachts, Part 2, included a comparison table with sample yachts. As we are the keepers of a Tartan 34, I was surprised to see the conclusion for the T34 in the table on Page 22 (within the shaded area). The T34's numbers were all above the recommended values stated. The IMS stability index was close at 120.9, just above the cutoff of 120 degrees. The Baltic 35 seems to miss on several criteria — IMS index <120, stability ratio < 2.0, and a borderline CSV at 2.07 — but is recommended.

What am I missing/not understanding?

Tom King – Charlottesville, Va.

#### **Oops! Thanks, Tom!**

You're not missing anything — in fact, you're the first person to catch an error in the book ... and it's already been through one reprint! The T34 is a great offshore boat — we've met many people who have done quite extraordinary voyages (including in the Southern Ocean) in this Gary Pitsenberger sent this Pamlico River osprey. Send us your Mail Buoy photo. If we run it we'll send you a *Good Old Boat* T-shirt or ball cap.

goodol

boat. The Catalina, Baltic, Hunter, and J should be shaded in the table. Thanks so much for writing in with your question; I apologize for the error.

#### Beth Leonard Gambier Islands, French Polynesia

#### What about the stanchions?

I got the new issue (September 2007) the other day. The article on a winter-tarp frame made out of PVC pipe was extremely timely. My boat had a cumbersome wood frame (built by the previous owner), which I became determined to chuck after last winter's assembly headache. I was thinking of PVC pipe but still puzzling about how to connect the ribs to the spine. Your article made the solution very clear.

The only thing I couldn't tell is what author Joe van Benten did about the stanchions: if he removed them, fit the pipes over them, or placed the pipes beside them. My inclination is to avoid connecting to the stanchions altogether because, even though they are bolted to the toerail on my 27, the leverage does put strain in the hull-to-deck joint.

> Douglas Hunter Port McNicoll, Ontario

#### Joe van Benten responds

I did insert the pipe over the lifeline stanchions. It does seem at least possible that the stanchions could be bent by loading in high winds. Maybe a safer approach would be to substitute stanchions made out of pipe or conduit, still utilizing the bases but not risking the stanchions. Alternately, you might sister them to the stanchions to simplify assembly of the frame and cut the tape after you have secured the tarp. I had no problems last winter, but that alone does not certify the method I used. You are going to love this frame. I have also discovered it takes up very little summer storage space. Let me know how you make out. I love improving this stuff.

Joe van Benten Chestnut Hill, Mass.

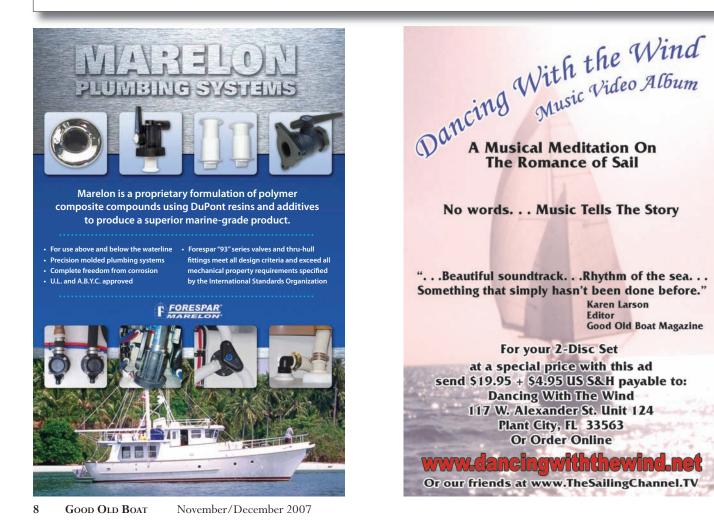
#### **Star-studded Ensign**

Nice article on the Ensign (September 2007) and thanks for my copy. You guys are great. We've been busy. It seems that [famous songwriter and singer] James Taylor is an old boat buff too. If you haven't heard his new song, "The Water Is Wide," go to iTunes and listen to it. It's great!

Also check out the song "Rolling Home" in Segment 4 of the show itself: <a href="http://prairiehome.publicradio.org/">http://prairiehome.publicradio.org/</a> programs/2007/06/30/>. Garrison Keillor wrote it about the New Ensign Classic, *Caroline*, which James gave to his wife for her birthday. We had a ball! It was a once-in-a-lifetime thing.

#### Zeke Durica, President Ensign Spars, Inc. Clearwater, Fla.

Zeke sent an August 10, 2007, clipping from the Tampa Bay Business Journal, which told of the goings-on surrounding the delivery of Caroline to James Taylor on June



30. James was performing at the Tanglewood Music Festival in Lenox, Massachusetts, as a guest on the Prairie Home Companion radio program. The boat was delivered to him there by Zeke and two other sailors who assisted with the christening. In recognition of this event, Garrison wrote and performed a song about the boat and James sang a couple of songs about sailing. The next day they took Caroline out sailing.

"It was just unbelievable," Zeke told the Tampa Bay Business Journal. "We splashed the boat in Lake Champlain the next day and sailed with James and his family."

#### **Rafting up**

We sail on the Ottawa River. In July we were anchored at Mohr Island on the Ottawa River and caught this raft-up (in the photo at right) of sailboats from the Britannia Yacht Club before the Mohr Island race.

> Terry Murdie and Rise Paquette Aylmer, Québec

#### My captain as first mate?

Of all the boat bills I get each year, yours is the one I don't mind. It's a bargain for the hours of enjoyment, dreaming, and knowledge you bring me with each issue. My good old boat is a 1978 Hunter 27 with all the problems and pride you would expect in a 29-year-old classic plastic. Each time I read or re-read your magazine, I find something that applies to *My Pleasure*. From time to time I wish *Good Old Boat* 

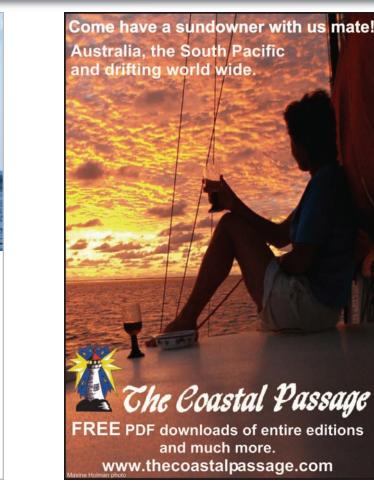


were monthly, but then I think I'd miss the anticipation of each new issue.

One subject I wish you'd address is how to entice a recalcitrant spouse to enjoy sailing. I can't involve her in the selection or in a purchase because the "other woman" is already here, but someday I hope my captain will become my first mate.

#### Howard Nelson Greenlawn, N.Y.

We wish we had a magic potion that would work for the reluctant wives of gung-ho sailors. I think even the wives would appreciate a way to be delivered easily "over to





MANUFACTURED AND SERVICED BY NORTH SAILS

#### **Mail buoy**

the other side," so to speak. They **want** to participate in the activities their husbands enjoy, but to ask them to enjoy sailing is somehow simply asking too much. (At this point, I ask must facetiously: "**What**? Some women **don't like** being wet, cold, and jounced around? Imagine!") But seriously, I wrote something on the subject in our January 2005 issue titled, "What Does Woman Want?" I also would recommend these two books: Dragged Aboard: A Cruising Guide for the Reluctant Mate, by Don Casey, and It's Your Boat Too: A Woman's Guide to Greater Enjoyment on the Water, by Suzanne Giesemann. Both books are available from the Good Old Bookshelf. **Karen Larson, Editor** 

#### Memories are made of this

This is a great magazine ... only one I subscribe to. The article on Bill Tripp especially intrigued me as I sail LeComte Medalist 33 #50 from 1962 on Lake Erie.

The article on the Scorpio 35 (May 2006) also got my attention. *Strider* was my previous boat, *Sequel*, from 1991 to 1999...and I was the third owner. Keep up the good work!

Wayne Huber Aylmer, Ontario

#### Ticon 30

We recently became owners of our first boat, a 1983 Ticon 30 — there are not many out there. The boat was in very good shape so we haven't had to do much except replace

the batteries, change the oil, give it a good cleaning and a fresh coat of wax, and change the name.

Thanks for the free copy of *Good Old Boat*. I occasionally pick up random sailing magazines off the rack, only to be disappointed by reviews of boats I'll never be able to own, islands I'll never visit, and 75-percent ads for things I 100-percent don't need. I paid my subscription to *Good Old Boat* today.

#### Tim Peever Sarnia, Ontario

#### Yes, how bad?

I just got the September 2007 issue, and the first thing I happened to come across was Phillip Reid's Reflections article. I ended up reading it in the hallway outside my office. I had picked up my mail and stood there reading ... never even making it back to my desk.

That article was an excellent choice by you. I may have been particularly susceptible to Phillip's philosophical rambling — I am just finishing up a major project and I am still several years from permanent departure, so I have been feeling particularly picked on by the sailing gods — but it was exactly what I needed.

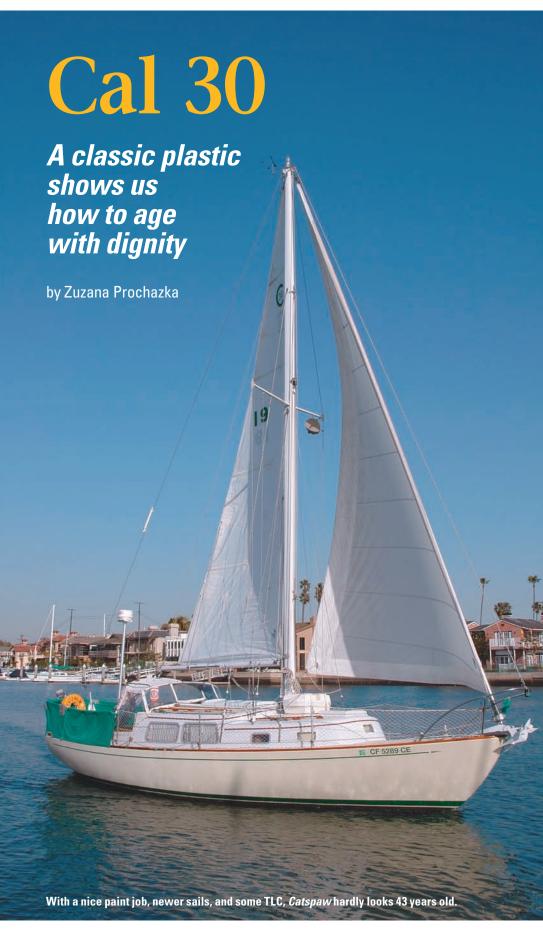
I am especially enamored of his sentence, "When we say 'I want,' life has a way of immediately responding, 'How bad?' "

Frank Mummert Midlothian, Va.

#### BETA MARINE US Ltd. SMOOTHER ... QUIETER! Our engines idle smoother and quieter because of our high inertia flywheel. This is one of the many Beta Marine exclusive features that make our diesel engines easier to live with. Dipstick Oil Change Pump Fuel Oil. Filter Raw Water Fuel Lift Pump Pump ube Oil Filter Model Shown BV1505 37.5HP What a concept! Engineered to be serviced easily · Beta Marine Superb Propulsion Engines, using Kubota Diesel • From 10 - 90hp including our famous Atomic 4 replacements · Also available: Marine generators up to 30Kw BETA MARINE US Ltd. PO Box 5, Arapahoe, NC 28510 800-682-8003 • 252-249-2473 • fax 252-249-0049 info@betamarinenc.com www.betamarine.net



#### **Boat review**



HE FIRST FIBERGLASS sailboats appeared in the late 1940s, right after World War II, but it wasn't until the late 1950s that the first auxiliaries appeared, notably the Rhodes Bounty 40. New Horizons 25, and Chinook 34. In the 1960s, the number of boatbuilders working in fiberglass exploded. Southern California, particularly Costa Mesa, was a hotbed of activity. Among the new generation of builders was a young engineer named Jack Jensen. Though boats built in the 1960s are admittedly growing a little long in the tooth, those that have been well cared for are still serviceable.

One such classic plastic in great shape is the Cal 30 owned by Holly Scott, a singlehander who has had a 23-year love affair with *Catspaw*, hull #19, launched in 1964 and our review boat.

#### **History**

In 1956 Jack Jensen founded Jensen Marine, which eventually became one of the most successful fiberglass boat manufacturing companies in California, if not the world. From the start he collaborated with Bill Lapworth, an up-andcoming designer who was way ahead of his time. The L-36, built in wood, was the largest one-design class of ocean racers in the world. Its enviable performance had earned Bill the reputation as a hotshot designer.

Bill's first design for Jack was the Lapworth 24 (later renamed the California 24). It was a flat-bottomed centerboard design that blew the doors off its competition. Jack raced one himself; his name is first on the California 24 perpetual trophy. This is also the boat in which teenager Robin Lee Graham began his much-publicized circumnavigation, the subject of the book and movie, *Dove*.

#### **Boat review**



Holly Scott, above, owned and singlehanded *Catspaw* for 23 years. Mainsail sheeting is from the end of the boom to a traveler behind the helm. The box aft of the tiller houses a propane tank. Fitted out for serious cruising, *Catspaw* has both an autopilot and windvane, stern anchor, and weathercloths. Carrying a plow and second lightweight anchor, above right, enables one to choose the anchor better suited to a particular seabed. A manual Simpson Lawrence windlass is able to retrieve both anchors.

The very successful Lapworth/Jensen combination introduced some of the first affordable fiberglass oceangoing boats that could do double-duty as racers and cruisers. Throughout the '60s, '70s, and into the '80s, Jensen Marine was a leading builder with too many models to list here. They ranged from the still-popular Cal 20 and 25 to the groundbreaking Cal 40, notable for being one of the earliest pro-

duction boats to separate the rudder from the keel. The 40 won three consecutive Transpac races from California to Hawaii ('65, '66, '67) and still has its own class in that event.

Jensen Marine also built several serious cruising designs, the largest of which was the Cal 46 that, like the Cal 30, later was updated as the 2-46 and 3-46. When Jack retired, he took off to the South Pacific on a 46. He died of cancer in Tahiti. Bill Lapworth died in 2006 and was buried at sea.

For a quarter century, Cals were among the most popular boats in



The V-berth is open to the forepeak, where anchor rodes are stowed. With two anchors on *Catspaw's* bow, the canvas bag holds one rode separate to prevent tangles. Cleaning the rode on deck reduces odors below.

America, even though the company was sold to Bangor Punta in 1965, was moved to Florida, and was relocated once more to Massachusetts and resold to Lear Siegler. The company went out of business in 1989. One-time head of O'Day and Cal, Jim Hunt, blamed a shrinking sailboat market. But the sheer numbers of Cals sold — thousands of units in at least 39 models — keep them visible on the water to this day.

#### Design

There were approximately 200 Cal 30s built between 1962 and 1967 before it morphed into the Cal 2-30 in 1968 and into the 3-30 in the 1970s. *Satori* was hull #1. She crossed her first starting line a week after being launched and won or placed in every one of the 20 races she entered in her first six months.

Billed in the original literature as a light-displacement boat, the Cal 30's displacement/length ratio is 249, which today would be considered moderate. With 2,550 pounds of lead ballast, the ballast-to-displacement ratio is just 31 percent. To provide good form stability (also called initial stability), Bill Lapworth gave the boat a 10-foot beam, which was quite generous for the 1960s.

The underwater configuration is a full keel with sharply cutaway forefoot. The rudder is hung on the trailing edge of the keel. Soon afterward the Cal

#### h ft udis larger than a square foot.

2-30 and other Lapworth designs showed the shift to fin keels and spade rudders. The benefits of these changes are reduced wetted surface area and the ability to point

higher. The downsides include poorer tracking (ability to hold a course) and a rudder more vulnerable to damage from flotsam and groundings.

The Cal 30s came in short- and tallrig versions. *Catspaw* has a short rig and has been re-rigged three times: to add a removable inner forestay; to beef up the wire, turnbuckles, and hardware; and to lead all lines aft to the cockpit.

Designed as a high-performance ocean racer, the Cal 30 has two unusual features for its time. First, four large fixed ports and four opening portlights make for a bright cabin; however, for offshore sailing, storm shutters are a good idea whenever a portlight is larger than a square foot.

The second unusual feature is the original size of the cockpit drains, which are unusually small. For an open-water boat, these small drains could be unsafe. To fix this in *Catspaw*, Holly installed new scuppers, which in her words are now "double oversized."

The Cal 30 has a subtle and very pleasing spring in its sheer that is evident in some of Bill Lapworth's later designs as well. The stepped coachroof is a bit dated and the high cabin trunk makes visibility forward from the cockpit a bit difficult.

#### Construction

The Cal 30 hull is handlaid solid glass that is 1 to 1½ inches thick in places. The deck is one-piece molded glass with a marine plywood core. A through-bolted and glassed-over hullto-deck joint holds it all together.

There have been some issues with hull blistering on the 30s; at one point *Catspaw* had 600 small blisters that were ground out and filled. She has received bottom barrier coat treatment twice in about 20 years. Overall, however, Cal 30 hulls have held up incredibly well.

Marine plywood on older boats has been a source of problems with water seeping in via deck penetrations at hardware attachment points. This usually requires grinding out the affected sections, filling with epoxy, and glassing over a new deck skin. *Catspaw* has experienced none of these problems.

The Cal 30 keel is encapsulated in fiberglass and the design also includes four keel bolts. The foam-filled rudder is built around a bronze post. Foam rudders are notorious for problems with water intrusion over time; nevertheless, Holly says she has had no issues with the rudder or keel bolts.

The propeller placement is unique in that it is above the rudder, rather than in an aperture. This arrangement eliminates prop walk and makes for much easier backing. The standard prop was feathering, additional proof that the Cal 30 really was conceived as a hotshot racer.

There are six through-hulls, originally fitted with gate valves. Many owners have replaced these with ball valves.

The Cal 30 has a keel-stepped, masthead rig with single lower shrouds. Since the standing and running rigging on saltwater boats should be replaced every 10 to 15 years, depending on local conditions and boat use, most Cal 30s will have been re-rigged at least once. If not, it's something to consider when evaluating one for purchase. If nothing else, most owners have replaced the wire/rope halyards that were standard on most boats of this age with modern low-stretch cordage.

#### **Belowdecks**

The Cal 30 layout was designed for a family of four to six to cruise comfortably. The accommodations begin with a sizable V-berth that is open to the anchor locker. Aft and to starboard is



The Cal 30's 10-foot beam makes for a surprisingly spacious saloon for a 30-footer. The Aladdin kerosene mantle lamp, properly and necessarily secured with a downhaul, provides light to read by and takes the chill out of the air on a damp evening. The sideboard galley has sufficient counter space for food preparation, though sink draining while on port tack can be an issue. Many owners have replaced their original alcohol stoves with LPG stove/ovens. Note the nice job of tabbing the bulkheads to the deck.

#### **Boat review**





a hanging locker with drawers below. Across to port are an enclosed head with a sink, a convertible vanity seat, a hamper, and good stowage. There was no pressure-water option initially available, but some owners have made that upgrade.

The galley is in a straight line down the starboard side with an insulated icebox, a column of drawers, and a two-burner pressure alcohol stove. Many owners have since replaced that stove with a propane model with oven. On the Cal 2-30 and 3-30 models, which were completely new designs, the galley moved aft and to port and became L-shaped.

A convertible settee/dinette is to port. Originally, the Formica-covered table folded down to make a double bunk, but on *Catspaw* a larger teak table was added that no longer serves as a sleeping area. Two quarter berths, port and starboard, complete the arrangements. This layout doesn't leave much room for a navigation station, so many Cal owners have opted to mount electronics on swing arms that can be viewed from the cockpit as well as from below.

The original Monel water tank held 25 gallons and was located under the hanging locker. There's also a 25-gallon stainless-steel fuel tank under the port settee. Some owners have installed additional tanks and bladders to increase their cruising range.

Batteries are located under the settee aft of the saloon table; *Catspaw* has a total of 180 amp-hours, a 50-amp alternator, and a flexible solar panel to run all her toys, which include a VHF radio, radar, fathometer, GPS, and autopilot. Jensen Marine installed 30amp alternators and a 12-volt electrical system in the original boats. There was no shorepower option.

#### **On deck**

As noted, the Cal 30 was relatively beamy for its day, which not only makes for roomy cabins below but creates a large cockpit as well. Holly boasts that *Catspaw* has hosted 17 people in her cockpit...but six to seven would be more realistic.

Despite the fact that Bill Lapworth didn't like weight in the ends (to avoid hobbyhorsing), the Cal 30 has a sizable anchor locker forward that is accessed via the V-berth. There is also an aft lazarette. What's more, there is space between the tiller and the lazarette for a propane box.

Low maintenance is a major appeal of fiberglass, and the Cal 30 advertising capitalized on that feature. Aside from a narrow caprail, an accent brow on the cabintop, and some handholds, the Cal 30 has a minimum of exposed teak

One way to close off the forepeak, at top, is to throw all the pillows forward! The molded fiberglass head module, at left, makes cleanup easy. The view aft, below, shows a lot of critical gear accessible from the companionway: EPIRB, fire extinguisher, radar, and flares.



to oil or varnish. Non-skid and gelcoat surfaces dominate the clean look, all of which came as a relief to those

boatowners who were tired of maintaining wood. Jack Jensen and Bill Lapworth were some of the first to buck the idea that you had to have wood to be nautical and shippy. Besides adding to maintenance, excess wood trim adds weight, and they were looking for speed with this boat.

There are two sets of sailtracks, one on the caprail for the genoa sheets and one on the cabin. This second track was originally set up for a working jib but on *Catspaw* works nicely for the staysail. The bronze chainplates are set inboard on the cabin trunk to make for a clean deck.

Jensen Marine originally offered five sails as optional equipment: a main, working jib, lapper, genoa, and spinnaker. North Sails and Baxter & Cicero were the brands of choice, and none of the sails retailed for much over \$300. Like the rigging, those old sails should have been replaced by now, and it's likely they've been replaced more than once!

Bronze Merriman turnbuckles and toggles and bronze South Coast winches completed the original deck hardware. On *Catspaw*, a manual vertical Simpson Lawrence windlass retrieves the two bow anchors, and a Monitor windvane is a non-electric alternative to the autopilot.

#### Performance

"If you are not winning as many trophies as you should, try a Cal boat. It does make winning easier." That is the copy from a 1966 Jensen Marine ad for the Cal 30 that pitches the boat as a low-maintenance racer and family cruiser. Ad hype? Perhaps, but it was a rocket in its time.

The Cal 30 is described by owners as a well-behaved vessel with good balance on all points of sail. It will do 6 to 7 knots in 12 to 15 knots of wind on a beam reach. It points well despite its full keel but experiences a little weather helm when the winds kick up. Sheeting angles are tight for good upwind performance.

## Jack Jensen and Bill Lapworth were some of the first to buck the idea that you had to have wood to be nautical and shippy.

The few Cal 30s still racing have PHRF ratings between 192 and 195 seconds per mile. Other similar-sized boats of its era include the Columbia 29, which pokes along with ratings around 216 to 219, and the Morgan 30, which rates an identical 192 to 195. Speed was important to Bill Lapworth and also to Charley Morgan.

Under power the Cal 30 will make good about 6 knots. The first boats were offered with Onan 50-cubic-inch air-cooled engines, which had the reputation for lasting about two years. Jensen Marine soon replaced them with Atomic 4 gasoline engines. The ducting for the original air intake was



#### **Cal 30**

Designer: Bill Lapworth LOA: 30 feet 0 inches LWL: 24 feet 6 inches Beam: 10 feet 0 inches Draft: 4 feet 8 inches Displacement: 8,200 pounds Ballast: 2,550 pounds Sail area: 420 square feet Displ./LWL ratio: 249 SA/Displ. ratio: 16.5 molded right into the deck, and it makes for an interesting grate that continues to be visible in the cockpit.

To get away from the perceived risks associated with gas engines, many owners have repowered. *Catspaw* is on her third engine, a 4-cylinder Universal diesel. Unlike many Cals of other lengths, the 30s have a straight propeller shaft instead of a V-drive. Access to it and the engine are fairly good.

#### Conclusion

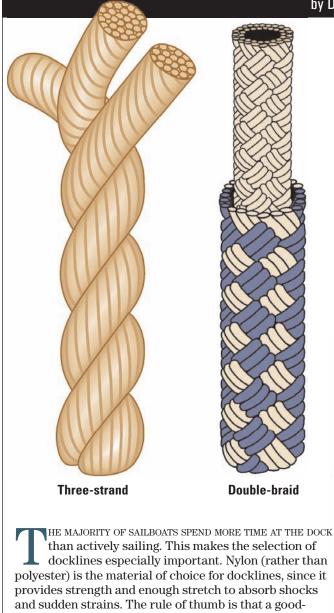
The 1962 brochure listed the base price as \$13,500. Today, Cal 30s move in the \$10,000 to \$20,000 range, with some boats going for less and others selling as high as \$30,000, depending on equipment and condition. That's a great story of value for Bill Lapworth and Jensen Marine and not a bad return on a 40-year-old investment for an original Cal 30 owner.

Jensen Marine's marketing copy pitched the Cal 30 as the boat for "the discriminating yachtsman who demands a high-performance ocean racer, the man who would rather sail than maintain a boat, and the sailing family which likes to cruise." Forty-five years later, the number of Cal 30s still plying the water speaks to the enduring success of the design on all three of these levels.

*Catspaw* was outfitted for longdistance cruising and, like other Cal 30s that have crossed oceans and gone to far-off places like New Zealand, she is eager to head out. Perhaps she will get to do so with her new owner. After 23 years of ownership, Holly has moved on to a new project boat. No surprise, it's another Cal, this time the famous Cal 40.

A boating writer and photographer, Zuzana Prochazka started boating as a kid with trailerboats and waterskiing weekends. For the past 12 years, she has been sailing the West Coast of the Pacific, South Pacific, and Caribbean. She is preparing to go cruising with her husband aboard their 48-foot ketch named Indigo. She holds a U.S. Coast Guard Master, 100-Tons License.

## Make sure they stretch and absorb shocks



KLINES 101

and sudden strains. The rule of thumb is that a goodquality nylon line will stretch 25 percent of its length at 50 percent of its breaking strength. At a mere 200 pounds of tension, a ¼-inch line 20 feet long can stretch 4 feet or more. Under the same tension, a ½-inch line 20 feet long will stretch about 1 foot. This stretch helps prevent a dockline from breaking and from putting sudden strains on dock and deck cleats.

Nylon docklines can be either three-stranded or braided. Although double-braided nylon line is 15 percent stronger than three-strand, it stretches less. The advantages of braided line are that it comes in attractive colors, rarely kinks, is easier to coil, and is easy on the hands. The downsides are that it tends to chafe more easily than

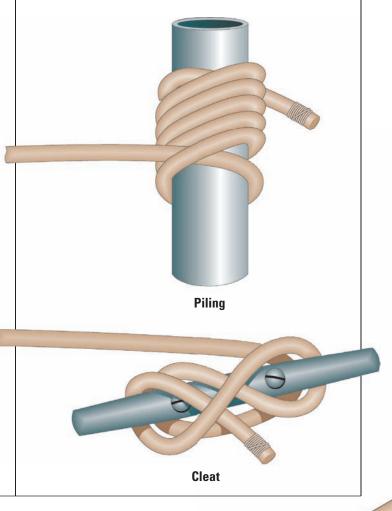
#### by Don Launer

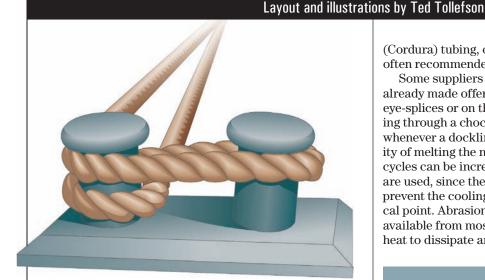
three-strand, is more expensive, and is difficult to splice. Most chandleries sell braided docklines with eye-splices that have been done by professionals.

#### **Storm conditions**

Docklines terminate in cleats on deck and are connected to pilings, cleats, or bollards on the dock. If possible, in storm conditions, your docklines should be around "permanent" pilings, with the added caveat that these lines should have some method of preventing them from coming off the top of these pilings in a high storm surge. In storm conditions it's a good idea to lead additional docklines around the deck cleat and then fasten them to a keelstepped mast (if your boat is so equipped), so that if the deck cleat is torn loose, the lines will remain attached to the boat.

Use large-diameter lines when a big blow is moving your way, either in place of or in addition to your normal





#### Bollard

lines. But remember, larger diameter offers less stretch. Double the diameter and you cut the stretch by a fourth. (The stretch is inversely proportional to the square of the diameter.) When you are setting up storm lines, you can take advantage of this lower stretch so wind and wave forces won't allow the boat to pound the dock, the pilings, or an adjoining boat. Larger diameter lines are also less likely to fail from chafing.

#### **Chafe prevention**

An unexpected finding by the Massachusetts Institute of Technology (MIT) after Hurricane Gloria, which plagued the East Coast in 1985, showed that many nylon lines angled across a chock failed internally when they melted from the friction created by the repeated stretch cycles. Most high-quality nylon lines are treated with a lubricant to reduce this type of failure, but this lubricant dissipates with age. So it's important that, whenever a nylon line is angled through a fixed object, the line be protected from chafe. As a chafe-preventer, leather, neoprene garden hose, heavy canvas, ballistic nylon

Woven polyester chafe-guard

(Cordura) tubing, or commercial chafe-protectors are often recommended.

Some suppliers who sell docklines with eye-splices already made offer the option of urethane dips for the eye-splices or on the section of line that will be passing through a chock. Although chafing gear is necessary whenever a dockline goes through a chock, the possibility of melting the nylon through the constant stretching cycles can be increased when some types of chafing gear are used, since they can trap the heat being created and prevent the cooling rain or spray from reaching this critical point. Abrasion-resistant woven polyester sleeves are available from most marine chandleries. These allow the heat to dissipate and let water in to cool the line.

Nylon docklines			
Line diameter	Boat length	Breaking strength	Safe working load
% inch	Under 20 feet	4,000 pounds	800 pounds
1/2 inch	20 to 30 feet	7,000 pounds	1,400 pounds
5/8 inch	30 to 40 feet	11,000 pounds	2,200 pounds
¾ inch	40 to 50 feet	15,000 pounds	3,000 pounds

#### **Characteristics of nylon line**

A little-known characteristic of nylon line is that it loses about 15 percent of its strength when wet. The strength returns when the line has dried out. Since we are most concerned with strength during storm conditions — when the line is wet — factor this into the equation when buying larger lines for use in storms. Colored line has slightly less strength than natural, so factor that characteristic in as well.

One last consideration is the question of quality of nylon lines. A wide range of nylon lines is available, with the cheaper nylon stretching more and having considerably less abrasion-resistance and internal lubrication, so don't skimp. Insurance companies estimate that up to half of the boat damage due to Hurricane Andrew, which hit Florida in August 1992, could have been prevented with adequate docklines. It's much cheaper to buy high-quality line than to buy a new boat.

Don Launer is a contributing editor with Good Old Boat magazine.

GOOD OLD BOAT

Fleece Vest Available in red (as shown) and blue. Sizes: S, M, L, XL, XXL (sizes run large!) \$26.75

Good Old Boat Magazine 7340 Niagara Lane North Maple Grove, MN 55311-2655 701-952-9433

Back Issue CDs The new 2001 CD is hot off the press! We also have CDs for 1998-99 and 2000. All in PDF format, searchable, Mac/PC compatible. Buy any CD for \$25, any 2 for \$45, all 3 for \$65! No shipping charge.

GOOD OLD BOAT

Half-Zip Fleece Sweatshirt Available in blue (as shown) and red. Sizes: S, M, L, XL, XXL, XXXL (sizes run large!) \$35.25

> **Denim Shirt** Summer-weight, long-sleeved. Sizes: S, M, L, XL, XXL \$32.50

Boat Museum T-shirt Off-white, 100% cotton, preshrunk, highquality fabric. Sizes: M, L, XL, XXL \$18.00

**Good Old Boat Pennant** Color-penetrated screen printing on white 14 x 20 nylon. Reinforced brass grommets and a canvas header. No shipping charge. \$19.00

nd n

18

Boat Parts T-shirt Off-white, 100% cotton, preshrunk, high-quality fabric. Sizes: M, L, XL, XXL \$19.00

Wear our logo proudly

# **SHIP'S STORE**

#### http://www.goodoldboat.com/ships store.html

**Nautical Books** 



#### **Blue Horizons** by Beth Leonard

Journey from Newfoundland to Norway, the Caribbean, Ireland, Cape Horn, the South Pacific, and British Columbia -50,000 miles and six years

a beautiful philosophical and insightful look into cruising the high latitudes.

179 pages ...... 3029 \$22.95



#### **Small Boats** on Green Waters

edited by Brian Anderson A gathering of the best writing by some of the greatest boating writers on small boats - sailboats, canoes, kayaks,

rowboats --- having grand adventures on protected waters. For every one who agrees with Ratty in The Wind in the Willows.

340 pages..... 5873 \$15.00

#### **Fifty Places to Sail Before You Die**

by Chris Santella Some of the world's bestknown sailors have contributed their personal favorite sailing destinations



and cruising grounds for this gorgeous volume of spectacular photos and descriptions of even more spectacular spots. From the Greek Isles to the Galapagos. Fabulous. \$24.95



#### Dancing With the Wind, musical sailing DVD and CD

bu Ed Verner No words are necessary. Come sailing with Ed Verner. An accomplished musician, Ed wrote and plays background music to



UCT TAPE

0000

0000

QUICK FIXES FOR EVERYDAY DISASTERS

word by Peter Spectre. Herreshoff presents a panoramic view of vacht-

ing, providing insightful introduction to the pleasures, the boats, the history of the sport, and a way of life gone by. Humorous, sarcastic, original.

187 pages ..... 5958 \$35.00

## TWENTY AFFORDABLE SAILBOATS

#### **Twenty Affordable** Sailboats to Take You Anywhere by Gregg Nestor

In-depth reviews of 20 affordable, comfortable, seaworthy sailboats ranging in

size from 30 to 38 feet. Used sailboats can be affordable jewels, allowing cruisers on a budget to get "out there." An authoritative guide brimming with information and expert opinions by one of Good Old Boat's contributing editors.

210 pages ..... 5754 \$19.95

OLD BOAT

#### Lessons from

My Good Old Boat by Don Launer This book, made up of the great many articles Don Launer has prepared over the past decade, speaks volumes

about this sailor's ability to communicate the knowledge he has gained over many vears. We're delighted to offer a regular forum for Don and his nautical talents. \$23.95

#### Sea Stories: A Classic **Illustrated Edition** compiled by Cooper Edens

Classic sea stories illustrated with historic vintage paintings and drawings. From "Three Men in a Boat"



by Mother Goose to Richard Starkey's "Octopus's Garden" to "When the Ship Comes In" by Bob Dylan.

144 pages ...... 5934 \$19.95



#### The Care and Feeding of Sailing Crew

by Lin and Larry Pardey Revised edition of an all-time favorite. Practical, current information on all facets of bluewater galley provisioning,

rough weather cooking, coping with differing dietary needs, seasickness, trash disposal, healthful eating, much more. Great stuff!

Sailing's Strangest



**Moments** by John Harding Endlessly entertaining, these

albums of mad miscellany abound with true tales of history's strangest characters

and events ... from potty potentates to dotty inventions. A mind-boggling excursion through the byways of the bizarre. 257 pages..... IPG006 \$13.00



express every mood aboard, from a tranquil

glass of wine at sunset to lively storm foot-

age. A new kind of sailing video. Get your

net>. Proceeds go to charity.

copy at <http://www.dancingwiththewind.

28 minutes..... \$19.95

and those who beg the first group for help.

This easy-to-follow guide will give anyone

the basics to tackle those frustrating (and

sometimes nerve-wracking) quandaries

that crop up. Just released!

When Duct Tape

Popular Mechanics knows

there are two types of peo-

ple in the world: those able

YACHTI

to fix whatever goes bust

Isn't Enough

by C.J. Petersen

# A bluewater-capable

## **Design considerations**

by Beth Leonard

This excerpt from Beth Leonard's new book, The Voyager's Handbook, second edition, is the last of a three-part series with a focus on selecting the right sailboat for extensive passagemaking. The first parts focused on the available designs, choosing the rightsized boat for your purposes, and stability and durability issues.

NCE YOU NARROW THE FIELD TO specific boats, you will want to do your own inspection of the boat to see how it matches up to your expectations. There are critical differences between a successful offshore voyager and a coastal cruiser. These details make for a safe, workable, comfortable cruising home; most apply to any monohull or multihull from less than 30 feet to more than 60 feet long.

The survey that follows will not help you assess the construction quality of a boat or allow you to identify potential defects. That needs to be left to a qualified surveyor performing a professional structural and mechanical survey after you've decided to make an offer. But it will help you evaluate how the boat will meet the demands of offshore voyaging and liveaboard cruising.

Whenever you look at a boat, ask for the owner's manual, all maintenance records, and the most recent survey available. The existence of an owner's manual and maintenance records suggests that the owner cares about the boat. The condition of the maintenance records and their content will give you a good feel for how well the boat has been cared for over the course of its life. If nothing else, it should tell you how many hours are on the engine and how well it has been serviced, at least by the current owner.

Although you cannot implicitly trust a survey that a buyer has in hand, its age and the comments in it can give you some useful information. If the survey is more than five years old, you should probably discount it completely except to see if the surveyor's recommendations, if any, were carried out by the owner. Any survey for offshore insurance purposes that is less than two years old will provide useful information.

Given a seaworthy, structurally sound hull capable of accommodating you and your proposed crew, almost everything else can be upgraded, changed, or fixed. But if the boat lacks most of the items in the bluewater survey that follows, the cost to make it offshore capable may prove prohibitive.

#### Sea-safe deck layout

The boat's decks become your entire world at sea. They must offer a safe, comfortable environment even when chaos reigns. Each area needs to be well designed to meet its function: the cockpit must keep crewmembers secure and comfortable, the sidedecks must allow free movement forward and aft, and the bow platform must facilitate anchoring.

The cockpit on this Cal 39 is properly sized for offshore work yet large enough for entertaining.



Secure cockpit. The cockpit gets used constantly at sea and in port. In port you might like to have a comfortable cockpit that holds a small crowd. But at sea, you must have a small cockpit that drains quickly. With a boat between 35 and 40 feet, a properly sized cockpit seats up to seven people comfortably without using the coamings or coachroof as auxiliary seating.

A good offshore cockpit on a monohull, as shown in the photo below, has a bridge deck or high sill to prevent a boarding wave from going below. The first or second hatchboard should come level with the top of the coamings to prevent downflooding into the interior, and you should be able to enter the cabin without removing those boards.

Cockpit drainage matters on every boat, but it matters most on smaller monohulls with poorly protected cockpits. Larger boats have enough buoyancy to support the weight of water their cockpits can hold, but smaller boats lose responsiveness and buoyancy if their cockpits are filled with water and may end up being rolled or flooded by a subsequent wave. Cockpit drains need to be large enough to empty the cockpit in 2 minutes or less after it has been filled to the level of the coamings by a large wave.

If there's a wheel, there should be at least 18 inches of standing room behind it and a way to brace your feet when the boat is heeled. On a catamaran, the helm should be positioned so the helmsman can see the bows and side of the boat for ease of docking. There should be a seat for the helmsman as well as comfortable watch positions under the dodger. On a monohull, the cockpit seats should be long enough to allow an adult to lie down on them and close enough together to brace your feet against one when sitting on the other. That means the seats should be about 6 feet long and a bit over 2 feet apart.

On most boats, the single biggest openings through the deck are for the cockpit lockers. Locker hatches should



be watertight, reasonably sized, well secured, and fully protected by the coamings. Ideally, the lockers should not communicate directly with spaces below and should drain overboard. Otherwise, a lost locker hatch could lead to a sinking in heavy weather.

On a daytime watch in the tropics, your primary concern will be shade. Many voyagers' second offshore boats include a well-ventilated hard dodger or pilothouse. Short of a permanent structure, the cockpit must include some provision for rigging a canvas shade that can be securely stowed in storm conditions.

**Safe decks.** A safe deck is one that keeps crew from going overboard in any ordinary circumstances at sea. The single most important element in helping crew stay on deck is not lifelines, stanchions, handholds, or footholds — since none of these will help a crewmember who loses his or her footing — but non-skid. A good non-skid pattern molded into the deck of the boat is ideal.

After good non-skid, deck safety depends upon a design that will keep

*Silk's* sidedeck, at right. *Hawk's* sidedeck, far right.

crew aboard at sea, as shown in the photos below. Both of these sidedecks include all of the following:

• Wide, unobstructed deck from bow to stern. A good offshore side deck measures at least 18 inches wide and is unobstructed from bow to stern. Boats with high coachroofs and steep cabin sides will need even wider decks to allow a person to pass along them when the boat is heeled.

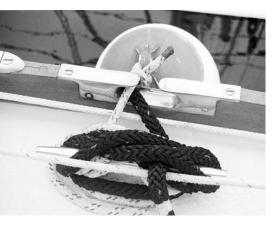


#### Jim and Sue Corenman completed a circumnavigation on their Carl Schumacherdesigned, custom Concordia 50, *Heart of Gold*.

To test the sidedecks, try walking the length of the lee sidedeck with the boat heeled 20 to 30 degrees.

- Strong handholds always within reach. A person should be able to reach a handhold strong enough to take his or her entire weight from any position on the deck. Acceptable handholds include dedicated handgrips along the coachroof, stays, stainless-steel bars near the mast, or stainless-steel cages over Dorade vents (which also keep sheets from fouling the cowl). Lifelines should never be used as handholds because of the chance of their breaking. Walk around the boat and consider the common problem areas: stepping onto the sidedeck over the coaming, between the coachroof and the staysail stay, and at the mast.
- High toerail or bulwark that does not trap water. When a monohull is heeled, footholds become as necessary as handholds. That means a toerail or bulwark at least 4 inches high and strong enough to support several hundred pounds of weight. To keep the toerail from trapping





water and increasing the likelihood of leaks aboard, an open toerail with holes every few inches (as on *Hawk*) works best. If the toerail or bulwark is solid, as on *Silk*, the sidedeck should have several scuppers to drain water off the deck.

 High lifelines with strong stanchions. Lifelines provide the last defense against going overboard, not the first. When the full weight of a person hits wires and stanchions, they all too often fail. However, they can serve to help you regain your balance if you still have one good handhold or foothold to support most of your weight. To be of any use, lifelines should be at least 28 inches high, well above knee level. Otherwise, they're more likely to assist a fall overboard than to prevent it. Stanchions should be strong enough that they won't bend if hit by the full weight of a person.

All too often, designers seem to treat mid-deck springline cleats as an afterthought. On many boats, they prove too small to be of any use with no way to make a line lead fair to them without chafing on the toerail. Or they get left off entirely. Given that, when in use, spring cleats hold two lines while other cleats hold one, they should be just as big as, if not bigger than, the bow and stern cleats a minimum of 8 inches long. Twelve inches is not excessive on a 45-foot boat (all Hawk's cleats are 16 inches). Chocks or hawseholes in the bulwarks need to be oriented to allow lines to reach spring cleats from almost any angle, as shown in the photo above at left.

#### Well-designed anchoring platform.

One of the easiest ways to distinguish a real cruising boat from its coastal counterpart is to look at the anchoring arrangements, as shown in the photos above center and right. Coastal and



*Silk's* spring cleat, at left, can hold two oversized lines in proper figure eights and has a solid chock that leads lines fair from any angle. Anchoring platform on a Hood 50, above, a 50-foot fiberglass boat used for coastal sailing and racing. Anchoring platform on a Waterline 48, at right, a 48-foot steel boat that has completed two Pacific circles.

racing boats spend most of their time tied up in marinas, and their crews rarely, if ever, actually set an anchor. Cruising boats spend most of their time at anchor, and their crews deploy and retrieve heavy anchors and hundreds of feet of chain on a daily basis. A properly constructed, well-thought-out anchoring platform makes handling that equipment straightforward.

To be fully functional an anchoring platform must be set up to allow two large anchors to be deployed or retrieved and should include all of the following:

• Two large, properly designed anchor mounts. On monohulls, the anchor mounts should be far enough forward of the stem of the boat so that anchors cannot swing into the topsides. A boat with a plumb bow will require a bowsprit. Bow rollers should be at least 3 inches wide, turn easily under pressure, fit snugly in the anchor mount without binding, and be strong enough not to compress or deform under large loads. The cheeks on either side of the roller should be well rounded and flared outward to prevent chafe when the rode is at an angle to the boat. Welded pipe makes excellent, chafe-free cheek plates. To keep the rode from



jumping out of the mount, the cheeks need to be at least 2 inches higher than the top of the bow roller, and there must be provision to secure the rode or anchor in the mount.

- Two or more big, stout cleats with proper fairleads. Cleats should be large enough to hold at least two docklines cleated in proper figure eights. A line or rode passing over the bow rollers should lead fair to the bow cleats. A chock through the toerail or a hawsehole through the bulwark, as shown above, should be designed to create a chafe-free lead to each cleat for docklines. Cleats should be strong enough to hold up to two-thirds the displacement of the boat, as they may be called upon to do just that if the boat ever lies to a parachute in a storm.
- Large windlass with both rope and chain gypsies. Boats more than 35 feet long should be equipped with a windlass, which should have rope and chain gypsies so it can be used to retrieve a mixed rode as well as to take someone up the mast. Powered windlasses must be equipped with a manual override system that generates sufficient power to retrieve the boat's normal ground tackle.
- Solid bow pulpit. The bow pulpit is used as a platform for trying to read coral waters and as a ladder to reach the jib. It should be strong enough to take the weight of a large adult without flexing.

In comparison, on the coastal boat, as shown in the photo above center, the stemhead fitting contains a single anchor mount for a 45-pound anchor with a small bow roller and no cheek plates. The cleats are small and not adequately secured to the deck, and the toerail lacks chocks for docklines. The decades-old windlass does not have a manual override and lacks the power to lift a big anchor and all-chain rode.

On many modern production boats, the windlass is installed in a recessed deck locker and the chain falls into a small, self-draining chain locker below. This creates far more problems than it solves. Such lockers are too small to hold adequate chain for an offshore boat. They are situated high in the front of the boat, the worst possible place to store heavy chain. But worse, when a bow wave rises up around the bow, the waterline rises as well, submerging the drain on many of these boats and causing water to flow into the locker to the level of the waterline when underway. This additional weight in the bow — along with the weight of the chain itself - will make the boat pitch much more than it should, slowing progress to windward.

In addition, a recessed windlass placement makes it virtually impossible to use for the second anchor, for taking someone up the mast, or for winching the boat into a dock using a bowline. The location of the cleats almost always means that the snubber runs across the locker, blocking the doors, and the small drain holes in the locker often get clogged with seaweed or mud, leaving the windlass submerged. Try to avoid buying a boat with this arrangement or look for ways to reconfigure the bow platform to overcome some of these deficiencies.

#### Seaworthy interior

All interiors that are safe and comfortable offshore share certain attributes. These include a well-laid-out seagoing galley, enough seaworthy bunks, and adequate handholds and footholds. We also prefer a light, bright interior to keep things from getting gloomy when sitting out a gale.



Seagoing galley. The photos at the bottom of this page show three galleys on boats ranging from 34 to 52 feet long. All three possess the essential attributes to make them usable and safe at sea. Unless you are planning to remodel the galley entirely, make sure you buy a boat with a layout that meets these basic parameters. Galley design is much less critical on a multihull, so most of what follows will not apply.

- U -, G- or aisleway galley layout. Almost every task in the galley reguires two hands, which means the combination of body bracing and footholds must be enough to hold the cook in position even when the boat is heeled to 30 degrees or rolling hard from side to side. A U- or G-shaped galley layout gives the cook plenty of options for wedging in securely while doing normal galley tasks. Such a galley can be fitted even on very small boats, though there will only be one position for the cook to work in. On larger boats, a galley that lies along either side of the passage leading to the aft cabin creates much more workspace, allowing more than one person to work in the galley at a time.
- Gimbaled propane stove that can be locked in place. A proper liveaboard stove should have three or four burners, should have an oven

Cal 39 galley, at left. Tartan 34 galley, center. Custom 52-foot catamaran galley, at right.



large enough to roast a holiday turkey, and should run on propane. A proper seagoing stove on a monohull should be gimbaled and able to swing freely to a 30-degree angle in either direction. It should also be fitted with a stout lock to secure it in rolly conditions in port or at sea. A crash bar should be mounted across the front of the stove to provide a strong point for the cook to lean against when working over the stovetop and to help prevent anyone from being thrown into an open flame.

- Deep double sinks as close to the centerline as possible. For offshore work on a monohull, the sinks need to be a minimum of 8 inches deep so you can keep enough water in them to wash dishes when heeled over. They should be located as close to the centerline as possible to ensure that they will drain and not backfill at any angle of heel. The sinks will provide one of your few secure places to put dishes, bowls, and ingredients when cooking at sea. Two are much better than one, though on a boat under 35 feet it may be difficult to find the room without sacrificing all counter space.
- Adequate footholds and bracing. When working in the galley, there's no way to adhere to the old adage, "One hand for the boat, one hand for yourself." Picture yourself getting something out of the hot oven while it swings in a rolly sea. You'll be crouched in front of the stove, making a safety belt useless, with both hands poised to catch whatever delicacy you've managed to create. To remain in position, you'll need solid footholds or something to brace your back against. The cabin sole needs to have a good non-skid surface olive oil spilled on a varnished



sole can turn a galley into a skating rink.

#### • Accessible lockers with high fiddles. From the safety-belted

position in front of the stove, the cook should be able to reach the back of every galley locker and the far corners of the icebox. Lockers located behind the gimbaled stove should not jeopardize important parts of the cook's anatomy, especially when the burners are lit. Lockers need high fiddles to prevent everything from falling out when opened. Sliding doors are preferable to hinged ones, as they will allow you to retrieve frequently used items without spilling the lot. Positive latches on all doors will keep them secure during gales.

Seaworthy bunks. No boat can become a permanent home without good, comfortable sleeping areas for use in port and on passage. To sleep well, you need to be able to stretch out completely. All berths should be at least 6 feet long and, ideally, 4 inches longer than the tallest person. Single berths for use in port should be a minimum of 24 inches wide; sea berths should be narrower to prevent the sleeper from being thrown around in rolly conditions - a minimum of 20 inches to a maximum of 24 inches. To comfortably sleep two, double berths need to be at least 4½ to 5 feet wide at the shoulders and  $2\frac{1}{2}$  feet wide at the foot.

Boat manufacturers tout how many people their boats can sleep, but they're only talking about sleeping when the boat is at rest. All too often, they overlook the need for berths that are usable when a boat is running downwind in a trade-wind sea or closereaching in heavy weather. Many large, modern boats with designer interiors — curved settees and separate seating nooks in the saloon and a walkaround

double bed in the forward or aft cabin — have no workable sea berths at all. Sea berths are vital equipment: they determine how well you sleep at sea, which influences your level of alertness and ultimately your safety. While "hot bunking"

— sharing a berth with an-

## Boat manufacturers tout how many people their boats can sleep, but they're only talking about sleeping when the boat is at rest.

other crewmember on a different watch — works fine on racing boats for short periods of time, it leaves crewmembers without any personal space and is not a viable solution for longer passages. Further, when becalmed, hove to waiting to enter a remote port, or in the most severe weather, all crewmembers are likely to be below and in sea berths at least part of the time. Therefore, each regular crewmember needs a good sea berth, and if you ever intend to take on extra crew, you will need enough sea berths to accommodate them as well.

The forepeak berth cannot be considered a usable sea berth on most monohulls. Trying to sleep forward of the mast on any boat under 60 feet or so in trade-wind conditions will mean spending half your time in the air — not an arrangement you'll want to live with for the long term.

To minimize motion at sea, good sea berths are parallel with the boat's centerline and as close to amidships as possible. On many boats, the settee seating doubles as sea berths with the addition of a leecloth. Curved settee seats do not work as sea berths; the settees need to be straight and long enough to accommodate a tall crewmember. Although the settee location may be the most comfortable, this puts the off-watch right in the middle of any on-watch activity and limits the usefulness of the saloon for other crewmembers.

On monohulls, pilot berths — berths located above and outboard of settee seating, against the hull sides — provide a private space out of the main traffic flow. They allow the main saloon to be used for its primary purpose, rather than becoming a tent camp during a passage, and they make excellent sea berths on any boat that's large enough not to require that space for stowage.

Larger boats will generally have an aft cabin with a single or double

berth, and many smaller boats will have a small quarter berth. While the motion aft is a bit more pronounced than in the middle of the boat, the aft cabin or quarter berth solution gives the off-watch real privacy and takes up less prime stowage area than pilot berths.

#### Adequate handholds and footholds.

Non-skid, handholds, and footholds are just as critical to safety below as they are on deck. The cabin sole needs to be made from a good non-skid material like teak and holly or cork, or it needs to be finished with a non-skid coating. You should be able to reach a good handhold from any point in the interior even when the boat is heeled over. A good handgrip provides a full-fisted grip, not a finger hold. Short crewmembers may have difficulty reaching handgrips mounted overhead when the boat is heeled over. Vertical posts at counter or table corners make much better all-weather grips. Handholds and footholds are inexpensive and easy to install.

Many catamarans lack handholds completely, and this is a mistake. Although you won't use them while coastal cruising or in calm offshore conditions, when things start to get boisterous they become just as essential as on a monohull.

Many traditional, all-wood interiors are so dark they can be claustrophobic. A white roof liner of molded plastic, or white paint on the cabin trunk, can change the entire feel of a boat. Beyond that, every area needs good lights for reading and working.

#### **Design and construction**

A boat can get the layout above and below right and still be wrong for

offshore voyaging. To make sure a boat will prove to be a comfortable and practical long-distance voyager, you need to look also at design and construction details hidden inside lockers and behind ceilings. These include adequate stowage, accessible spaces, a high-qual-

## Ideal ventilation by area for the tropics

Location	Hatches	Portlights	Dorades
Main living area	2 to 4 large, adjustable	2 to 4 on each side of boat	4
Galley	1	1	1
Heads	At least 2 of an	y type plus louver	ed door
Sleeping cabins	At least 2 of an	y type plus louver	ed door

ity engine installation, weatherproof ventilation, and watertight design and construction.

Adequate stowage. Most offshore boats carry an average of 2,000 pounds of personal belongings, food, fuel, water, and other things per crewmember. For that reason, an offshore boat needs much more of its interior volume devoted to stowage than a coastal cruiser of similar size.

To be most useful, that stowage should be divided into small compartments. Locker doors and drawers must all lock securely so they don't spill their contents at sea. Drawers should be notched on the bottom of the front edge so they must be lifted up before they will open. They should have a small block on the bottom of the back edge that will stop the drawer from pulling out entirely. When comparing boats, take a good look at the amount, location, and accessibility of stowage.

*Accessible spaces.* To fix anything, you first have to be able to get to it. Down below, that means complete access to the engine, every part of the bilge, every tank, every deck fitting, and every piece of equipment.

Good engine access means you can easily reach the oil dipstick; fuel and oil filters; air filter; water, fuel, and oil pumps; injectors; starter motor; and gear box. Good plumbing access means you can reach every tank, through-hull, and seacock. Good electrical access means you can find and inspect every bus bar, terminal, and switch. At some point you will also need to reach the steering system, autopilot ram, and windlass motor. Good access to mechanical equipment is near the top of the list for experienced voyagers buying second boats.

Bilge access is almost as critical. Can you access the entire bilge from bow to stern? Pull up floorboards and open the chain locker and the area under the forepeak bunk and uncover as much of the bilge as possible. You should be able to access every area of the bilge along the centerline of the boat — if not with your hand, then with a short length of wire rod. You should be able to reach all seacocks within a minute.

In addition to being accessible, a well-constructed bilge channels water

to a deep sump and keeps it there until it is pumped overboard. Many flatterbottom modern designs have small sumps, and water tends to overflow into the rest of the bilge and onto the cabin sole.

Limber holes should be drilled in all structural members that might otherwise trap water, and you need to be able to inspect those limber holes and clear them of trapped silt and sand. If the head has its own shower pan and a separate drain overboard, you still need to be able to access the bilge underneath. If not, you will have to find another way to clear the limber holes under the head pan liner.

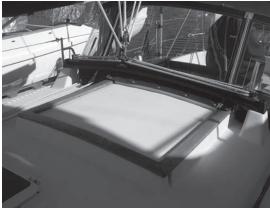
The bilge needs to drain from bow to stern without trapping water anywhere along the way. Take several buckets or a hose and pour water down the hawsepipe. Start from the chain locker and work back to the sump, tracing the path the water takes and noting where it pools and sits. Mold and mildew will grow in any area that traps water, eventually resulting in rot and unpleasant odors.

Bilge drainage has to work when the boat is at an angle, not just when it is flat. When you take a boat sailing, turn the bilge pump off and fill the sump. While beating on either tack, go below and figure out where the water has gone. It won't be in the sump! On most boats, water will pool amidships under settee berths or aft under the galley stove or nav station. Don't worry if a small amount of water is involved and returns to the sump quickly when you come back upright. But if more than a few gallons finds its way out of the sump and doesn't return when the boat comes upright, you will have to locate and drain the area that is retaining the water as part of your refit.

Dirty tanks are an occupational hazard of offshore voyaging. Often, you cannot be certain of the quality of water and fuel. Some minerals cause scaling and, on older boats, the tanks will probably need to be cleaned as part of a refit. Removable hatches allow tank access for inspection and cleaning; these hatches should be accessible without dismantling the interior.

Deck fittings should be easily accessible from below so that they can be rebedded. If fittings are not accessible, you may have to add access panels





### *Hawk's* wavebreaks, top. Sea hood with drainage channels protecting the hatch, above.

through bulkheads, ceiling liners, or locker trim pieces. Boats with no interior trim or moldings will be simpler to work on, but they may not be as aesthetically appealing. You will need to find a balance between appearance and convenience that works for you.

#### High-quality engine installation.

Proper engine installation and diesel tank construction will save untold heartaches down the line. To keep oil and diesel out of the bilge, the engine should be mounted over a solid fiberglass or metal engine pan. It should be bolted to mounts, which are bolted and glassed to structural frames. In the event of a capsize, there must be no chance of the engine breaking loose.

Contaminated fuel causes most engine problems. The diesel tank needs to have a sump — an indentation in the bottom of the tank where the dirt and water that settle out of the fuel can pool. The outflow from the diesel tank should be located above this level. This sump must be drainable, even at sea.

*Weatherproof ventilation.* Many production boats lack sufficient ventilation for the heat and humidity of the trop-



Strong, positively locking cockpit locker with drainage channels, top. Stanchion bases mounted on the toerail, above.

ics. Poor ventilation contributes to the growth of mold and mildew and makes for damp, uncomfortable berths at sea. In high latitudes, it leads to condensation. Offshore boats need large opening hatches, ideally one for each major living space aboard (see the table at the bottom of Page 24). High-quality opening ports should be located throughout the boat, but at a minimum in the head and galley. Catamarans with large saloon windows should have louvers or mesh screens fitted to keep the area from becoming a sauna in the tropics.

Ports and hatches cannot be used for ventilation on monohulls in boisterous conditions at sea. On most boats, Dorade vents are the only source of ventilation in heavy weather. Four large Dorades should be considered the minimum on a 35-foot boat. All ventilation, including Dorades, must be watertight in extreme conditions. Crews on boats with all the ventilation options shown in the table will never have difficulty keeping cool whether hove to in a gale at sea or tied up in a windless marina. Most production boats will need to have their ventilation upgraded to be comfortable in the tropics.

*Watertight construction.* A watertight boat starts with a strong, rigid, well-built hull that isn't prone to flexing and working. Older teak decks can be a major source of leaks, and replacing or removing them will involve a significant investment. On many newer boats, teak decks are vacuum-bagged in place without mechanical fastenings, making them much less prone to leaks. However, teak is heavy, hot in the tropics, expensive, environmentally unfriendly, increasingly difficult to obtain, and works no better as non-skid than various types of paint. Unless your taste runs to classic boats, you'll be better off avoiding teak decks altogether if you have the choice.

Beyond that, the following construction details all contribute to a dry boat:

- Strong, commercial, ocean-rated hatches with structural crosspieces supporting the Lexan or acrylic and either set on plinths above deck level or protected by wavebreaks (see photo at the top of Page 25).
- Ocean-rated opening portlights installed so they drain onto sidedecks instead of pooling water at the bottom of the port.
- A properly constructed companionway, which on monohulls includes a watertight sea hood surrounded by drainage channels (see photo on Page 25).

- A watertight way to seal the hawsehole at sea.
- Ultra-high-molecular-weight polyethylene (UHMWPE) rudder bearings.
- Dripless stuffing box.
- High-quality bronze (Marelon for metal boats) seacocks.
- Double stainless-steel hose clamps on all drainage, engine, and plumbing hoses.

Finally, make sure that diesel tank and water tank breathers are protected from flooding to prevent siphoning salt water into your tanks. The diesel tank breather on *Silk* was located in the cockpit, below the level of the cockpit seats. On one occasion, a breaking wave filled the cockpit, and salt water siphoned through the breather into the diesel tank. It took us half a day in rolly seas to pump out the diesel tank sump and bleed the engine.

Very few boats will have all of these construction details, and some boats that have successfully completed long voyages haven't had most of them. But the more of these items you can check off for the boat you eventually buy, the drier and safer it will be.

Smell offers the very best proof

## Unless your taste runs to classic boats, you'll be better off avoiding teak decks...

- A fully weatherproof door or strong, easy-to-use hatchboards that can be fixed in place at sea.
- Strong, positively locking hatches for all deck and cockpit lockers with channels around them to drain sea water, as shown above in the top photo.
- A hull-to-deck joint built with overlapping flanges or completely glassed over with several layers of fiberglass.
- Stanchion bases mounted on a solid toerail or on solid fiberglass pads raised above deck level to keep them out of water pooling on the deck, as shown in the second photo above.
- Solid stainless-steel backing plates installed wherever bolts go through the deck.

of a dry boat. Any hint of mildew or dampness in the air when you first open the boat up should make you dig deeper. But if it smells fresh and sweet after being shut up for several days or weeks, you can be almost sure that it will be watertight.

#### **Satisfying aesthetics**

No matter what this material suggests, acquiring a boat is not a linear process. You bring to it all sorts of preconceptions, experiences, prejudices, and knowledge. It often begins before the idea of going cruising has even been voiced aloud. At some point while walking along a dock in some marina, a boat caught your eye, and for an instant you could picture yourself at her helm approaching a distant landfall with her sails bellied out by trade-wind breezes. That moment will come back to mind when you make the decision to go cruising and begin actively searching for the right boat. Whatever boat you eventually decide upon should touch you in just that way.

Feeling good about your boat and finding it pleasing to the eye *do* matter. When asked about choosing a boat for offshore cruising, many experienced voyagers put aesthetics at the top of the list. That's because loving your boat will help you overlook her faults, and every boat has faults. If you get a thrill motoring up to your boat in the dinghy and think she's the best-looking yacht in a crowded tropical anchorage, you'll resent it less when the head clogs or the generator breaks down.

Some old salt likened finding the right boat to finding the right spouse: no matter how rational you try to be about it, at some point you may just fall head over heels in love. I hope it will be with a sturdy, seaworthy, well-built boat, and that the rest of your crew will feel the same way.

Beth Leonard and Evans Starzinger circumnavigated from 1992 to 1995. They spent three years ashore rebuilding their cruising kitty and building a boat capable of sailing in higher latitudes. In May 1998 they left aboard Hawk. Their itinerary consists simply of a list of places they'd like to visit.

#### For further reading...

The Voyager's Handbook: The Essential Guide to Bluewater Cruising, second edition, by Beth Leonard, is one of the best resources available



for those contemplating bluewater passages. This excerpt is a small part of a thorough reference tool. If you want more, the book is available at <http:// www.goodoldboat.com/bookshelf. html> or by calling 701-952-9433.

## STUCK IN THE PAST? FAST FORWARD WITH THE SILVERTIP TIME MACHINE

Suc (100mg

Just drop a SilverTip GelMagic non-sagging structural adhesive cartridge into a standard caulking gun, add a mixer tip, squeeze and apply. What could be easier? Only need a little bit and don't want to use a tip? Then squeeze out some into a cup, mix and apply. In either case the cartridge properly measures the resin and hardener and can never get the ratio wrong. Save time with SilverTip Marine Series products.



Helping you put it all together • SilverTip Laminating Resin • QuikFair • GelMagic • EZ-Fillet • MetiWeld • High Gloss Yacht Enamel • Get your Free Epoxy Book today, call: 800-333-5514 or visit us at: www.systemthree.com

## **Propane Detectors** keep your boat safe

Choose from simple self-contained to automatic shut-off with back-lit LCD function displays.

> Check www.es-web.com for more information or order by phone, toll-free: 1.800.668.2254

"The most reliable propane detectors we've ever handled" *Gary Peden, Dealer* 

"We switched to Electro Systems and eliminated complaints about false alarms"

Richard Edmundson, OEM



www.es-web.com or toll-free: 1.800.668.2254

ELECTRONICS

AWARD OF

EXCELLENCE

#### Tenders

# The pursuit of tender bliss

## Searching for the Holy Grail of yacht tenders

by Margo Reveil

A sunset at Cat Head shows off the Pygmy Boat kayak to great advantage. Frank Reveil built this one as a wedding present, but after testing her for part of a season, the family hated to part with her. (The family's Islander 37 is for sale. See Good Old Classifieds, Page 59.)

T ALL STARTED 11 YEARS AGO, THREE months before our wedding, when we bought our first home, a 1968 Islander 37. My husband, Frank, is French and suggested we name her *Bille en Tête*, which, very loosely translated from the French, means "hardheaded," a trait we are a little guilty of. Our hard-headed woman provided us affordable housing in Los Angeles with built-in exotic vacations to boot.

And while she's a good old boat, I have come to believe that the real pleasure of the sailing life depends mainly on the character of your tender. I suppose if we were cruising the Seven Seas, I'd be less concerned about our tender and obsessing more about things like watertight bulkheads, carbon-fiber masts, and an aft cabin, but *Bille en Tête* does nicely for one- to 12week trips, leaving me to obsess about our tender.

The selection of a tender is a very personal thing with a plethora of features and factors to weigh. If we had stopped to consider life with our first dinghy, we may never have come to any agreement, but ignorance is bliss and love forgives much. Only one thing mattered to us both: we entered matrimony with a common hatred for the outboard. We are, after all, sailors (not motorers). L.A. has enough smog as it is; one less two-stroke smog hazard would be our contribution to environmental health. Frank had sworn off outboards after years of fighting, greasing, and coaxing them into submission. This started with the first

outboard he found on a derelict dinghy far out at sea while sailing with his dad in the Mediterranean. It had been submerged and, like any 13-year-old, he relished tearing it apart piece by piece and putting it back together. I can picture the joy and amazement on a young Frank's face when it first started up.

#### **Summer project**

Youth quickly forgets the fact that the outboard ran only intermittently. To him it seemed no more cantankerous than his dad, and it provided a fascinating summer project to learn all there was to know about how engines function (and stall). After 17 years of fixing outboards, the thrill of discovery was gone. Frank would no longer tolerate anything more cantankerous than himself on board. Fixing outboards no longer felt like a pleasurable way to spend a shortened summer vacation.

To add injury to insult, over the years he's seen the chaos and maiming an outboard can cause: a dinghy zipping away, leaving a captain in its wake; a skipper with missing fingers; a kid with a mangled foot; and other heinous crimes. He hates having gasoline on board. He hates wrestling outboards over the rail. And I hate the thought of them giving up after you've motored farther away than you can paddle back. John Steinbeck regretted not "ridding the world of a mechanical cancer," his "Seacow ... who loved no one, trusted no one, and had no friends." Frank would argue that it's a genetic disease that afflicts all outboards.

Our distaste for outboards does present the interesting challenge of what to do for suitable ship-to-shore transportation. Without an outboard, an inflatable dinghy is too easily swept away with the wind; rowing even a hard-bottomed inflatable is a fairweather sport. And a true rowing dory would never stow well on a 37-foot sloop. A 60-foot schooner to go with the dory was not in our budget.

#### **Generous contributions**

As newlyweds, we met this challenge with verve and quickly agreed that a two-person sea kayak would do nicely. With the generous wedding contributions of relatives we purchased our first tender, a Folbot folding tandem kayak (65 pounds). We named her *Le Paradis*. This was the ultimate tender for a newlywed couple: easy to stow, 20 minutes to build, a solid, swift, red Cadillac of a kayak with a thick rubber gray interior. With two



### 6...I have come to believe that the real pleasure of the sailing life depends mainly on the character of your tender.

30-year-young paddling engines, we often passed by smaller outboards with a smug smile and a nod.

We could circumnavigate Santa Barbara Island in two hours (could, that is, except for the spectacular elephant seal and sea lion rookeries that often held us captivated for hours, making the trip a full-day adventure). We'd jet from the anchorage around the point to the nearest rookery, then sit with binoculars staring at the drama on the beach for hours, until the sun moved to a less comfortable position. Then we'd zip around to the shade of the next point, surfing a few large swells, stretching our arms a bit along the way, and settling in the nearest kelp bed to anchor us for a few more hours of seal watching.

There we witnessed large males battling in tooth-to-tooth combat, mothers nursing pups, preteens playing ding-dong-ditch-'em with our



kayak. There was ample room for a couple jugs of water, fishing gear, a loaf of bread, some Wasabi (hard bread), and a bottle of wine. Survival at sea was never better.

Our Folbot was wide and steady, inspiring confidence in me to continue to clamber in and out all the way up to my eighth month of pregnancy. We tested her with a 65-pound Labrador mix and decided there'd be ample room for growing human kids. When that first precious little package came along, he was amazingly light (8 pounds 9 ounces) and easy to lower down into the kayak by the handy lifejacket handle behind his head. Tightly zipped up, snoozing for hours. Inches from his food source, he was content (no Wasabi for him).

#### **Mangrove swamps**

The Folbot charmed our socks off during a three-month trip we took down the outer coast of Baja into the Sea of Cortez. We discovered hundreds of mangrove swamps on our first stop along the outer coast in Bahia Magdalena. These snaking, lush green, shady labyrinths are wide at the entrance and grow narrower with every switchback and turn. Sometimes we'd push on until even our slim craft could go no farther. We'd sit quietly waiting for the dryads and water nymphs to bring us a magical shrinking potion, but only sand dabs appeared, so we'd leave the

The Folbot, affectionately named *Le Paradis*, top, cheerfully carried two adults, a dog, and a small boy before she gave her life valiantly. *Dark Cloud*, both bottom photos, had a checkered past and a nasty disposition. She was better suited as a backyard swimming pool and finally a flower box. discovery of the end to smaller creatures. Other times the mangroves would grow sparse, giving longer and longer glimpses of a desert landscape beyond, past the lush green bushes on to a finale of blazing white sand

dunes. No other vessel is so well suited to the task of exploring tidal mangrove thickets.

Our kayak served equally well in the Sea of Cortez. We found her quite accommodating to the task of provisioning the boat with food, supplies, and visitors. We discovered that in a pinch (literally), we could squeeze four adults into the two seats, provided they had been well lubricated with margaritas.

Paradise was lost December 24, 1997. We'd sailed to Catalina Island, my father following in our wake in his Noble 45. Both boats were filled with food, friends, family, and presents. All were unloaded in Avalon and carted up the street to a rented house (with a large oven) that could accommodate our extended crew. We had a rollicking round of Pirates' Christmas. Frank had prepared a magnificent Christmas Eve feast. Before serving it up, my dad stepped outside, took a deep breath of



#### Tenders



Frank builds the Pygmy Boat kayak kit, above. At right below, Frank is in *Gull*, and Logan (then about age 6 or 7) is in *Ducky*. *Gull* is a one-person kayak designed by Frank. *Ducky* is one of two plastic kayaks that are training the next generation of Reveil paddlers.

warm, dry, evening air and, like any seasoned Southern California sailor, he panicked. Hot and dry in December is not a thing to be reveled in when moored or anchored on the east side of the island. It meant one thing to us. The wrong Santa had arrived: Santa Ana!

#### **Pregnant again**

He grabbed his wife, my brother, Frank, and a good friend to go save the two boats. I was pregnant once again (seven months) and stayed in the comfy condo with the now 2-year-old, so I can't tell the remainder of the story firsthand. Apparently, when they arrived at the dinghy dock, it had already departed. At the first sign of Santa Ana winds, the pontoon is normally towed in the lee of the jetty at the mouth of the harbor, dinghies and all. The harbormaster personally escorted the fleeing (hungry) pirates to their boats, through waves that were now breaking at the second row of mooring

### He passed the rainy days of February conceiving the ultimate tender ... The challenge: how to stow it.

cans. They spent a long sleepless night fighting their way around to the rugged backside of the island. They hove to at sea, waiting for daybreak to pull in to Cat Harbor and set the hook. At the time, we were all Luddites, with no cell phones in our possession. I'm told they ate a hearty pancake breakfast and slept the day away in the warm sunshine. I don't think they dreamed of the treasures they'd left behind.

Meanwhile back in Avalon, the winds had died down but the sea had not. Huge breakers were crashing against the pier where the dinghy dock had been. I worried, as only a pregnant mother can, about my husband, brother, and father all lost at sea ... and me a sorry widow (they had more than 90 years of sea time between them and had all battled far worse conditions, but there's no reasoning with those powerful hormones). A walk around the harbor did little to allay my fears; there we found the tattered remains of our kayak. She was crushed, squished like a banana, only recognizable by a single bent and broken aluminum support, with a bit of red canvas flapping in the Christmas wind, reaching desperately out of the water between the battered rails of two hard dinghies. Luckily, she was the only one lost at sea that night.

#### **Reserve tender**

After this loss, we tried a short stint with a fiberglass sailing/rowing dinghy. At 9 feet, she fit on the cabintop. She had a checkered past, once the tender Cloud to the sailboat Silver Lining, she had a pretty face and a wicked temper. We called her Dark Cloud. She loved to sink in the surf and to flatten fingers, and she had a nasty tendency to capsize, even in light winds. In her defense, she was never really intended as a family boat. We gave in to her love for the bottom and filled her with water, then later sand, in our backyard. She was a much kinder grandmother to the kids as kiddy pool and sandbox. This year she made a pretty little raised flowerbed.

Next came the Mother of all Tenders or the Tender for all Mothers. Frank immediately took action. Realizing that I was reluctant to go to sea with two babies, he knew the answer to continued happy sea days was a secure and worry-free mother. He immediately set to work on a tender replacement project. With some software from Plyboats, he passed the rainy days of February conceiving the ultimate tender. Length gives you speed, width gives you stability. The challenge: how to stow it. He'd often looked wistfully at all that wasted space on the foredeck of our



Islander; he now had a plan to fill the 12 feet between the mast and the windlass. He decided on a removable transom so the dinghy would fit up over the top of our cabinhouse. He designed her so a mother carrying two babies could stand on the rail without tipping her over. Without the transom she could also serve as a diving platform.

#### **Big garage**

Meanwhile I was scouring the classified ads for houses within a 20-minute drive of my job in West L.A....one with a big garage for boat construction projects. Kid Number Two arrived March 1, 1998 (9 pounds 5 ounces...looking at the trend there, we decided to stop while we were ahead).

The tender, built on deck, was complete two weeks later (at 200 pounds, a bit heavier than the Folbot). She was 12 by 5 feet, not too fast, very stable ... what more could a mother ask? The *Barge* was born (see photo on Page 82). I could stand on the rail with both kids (with one in a front pack to free a hand for stability). She could be slowly rowed or sailed, but with lots of patience. As new parents, we were gaining a new respect for the quality of patience and, for a while, we were satisfied.

With all that room, the kids could run from side to side counting garibaldi damselfish; we could all lean over one side for an especially interesting sighting, like a flatfish skittering on the bottom. But our adventuresome days of circumnavigating islands and exploring the long channels of mangrove swamps were over. Just rounding the first point at Santa Barbara Island to watch the sea lions took a lot of back muscles and time. Yet the *Barge* seemed the perfect playpen for toddlers. They did not have the attention span to appreciate a grand circumnavigation anyway. The darting fish below and the curious preteen sea lions following kept them entertained.

The *Barge* was a brave boat. It was on the occasion of another surprise attack of the dreaded Santa Ana winds

Kennan and Logan, top, paddle *Froggy* together. The whole Reveil gang, center. *Pelican*, at right, takes the foreground, while *Ducky* and *Froggy* have deposited a couple of beachcoamers on the shore. *Pelican* is a 1.5-person kayak designed by Frank Reveil to meet the ongoing needs of his growing family. that, in her transomless configuration, she saved our stern anchor from the breakers. Frank used the anchor line to pull the *Barge* through the breakers, lifted the stern anchor off the bottom, and rowed like hell back to our boat. Too windy to hoist back on deck, she followed like a dream all the way back to Long Beach, dancing the tops of the waves like a skittering coot, shaking any water off her back when whitecaps washed her prow.

#### **Rolled under dinghy**

We had proved her unsinkable, but unfortunately the kids were not. This we learned a couple summers back on Santa Rosa Island when Kid Number Two, eager to feel the sand between his toes, jumped a little early and a 3-foot wave rolled him under the dinghy. Luckily, he came up laughing. But Frank and I gave each other the big round-eyed look as we tugged the Barge up the beach. Suddenly she seemed even heavier than ever. As the boys grew older and their attention span longer, running from side to side was not enough fun. They wanted the boat to go faster. The nice, stable, solid, leisurely playpen faded into a too heavy, too boring, sea slug.

In memory of the happy days zipping about in the Folbot, Frank designed *Continued on Page 82* 







# Seahopper folding dinghy

# Another candidate for the 'perfect tender' title

by Geoffrey Toye

I N THE MAY 2003 ISSUE OF THIS magazine there was an interesting and informative article by Don Launer: "The Gentle Art of Rowing." A sidebar mentioned Don's British-built folding dinghy, which had served him well through two decades of use. The article provoked a great deal of reader interest, so this past summer I drove to Somerset, England, to visit the people who still make that boat.

Dinghies have to be a compromise between capacity and seaworthiness, weight and dimensions for stowage. Folders have their particular advantages and disadvantages contrasted, as they usually are, with inflatables. Folding dinghies tend to handle better but are ultimately less seaworthy. They're his clients since the 1970s, when he began to build and sell his own folders, would say he was right. I wanted to see for myself.

When I met Steve, he and a friend, Geoff, arrived in a four-by-four with an object on the roof that looked like an oversized gun case. This was the latest incarnation of Don Launer's dinghy, reputed to row, motor, or sail. We went to the Exeter Canal, a rather charming stretch of waterway with barely a breath of wind, to test the boat's sailing capability.

#### **Taking shape**

The gun case came off the roof and I reached for my camera. By the time I had fitted a lens, the little boat was

Two people could easily carry this boat and — without the sailing rig — many would find it entirely possible to carry the boat singlehanded, especially when it's folded.

faster to deploy but may be not as compact. They're less buoyant but also less vulnerable to puncture.

Steve Rea, owner of the yard that makes the Seahopper folder, is an engineer who loves sailing. One day he sailed into a harbor where he saw the crew of a small sailboat assemble a folding dinghy on deck and row ashore. He was impressed by the idea with its engineering challenges but believed he could do better. Many of taking shape so quickly that I had to ask them to fold it up again so I could see and photograph the initial stages.

A group of bystanders had formed, so impressive was the rapidity with which the little craft took shape. The two started again. This time I was ready. The "case" was set down as you might stand a briefcase hinge-down on the ground. Then the briefcase opened its two parts down flat like a butterfly's wings, leaving a knee at the bow, a



Steve Rea, designer of the Seahopper, and his friend, Geoff, arrived with a tender on an SUV. Oversized gun case on the rooftop? Nope. That's the 7-foot 10-inch Seahopper in its compact state alongside its sailing rig. Geoff takes the middle-sized model for a spin, on facing page.

fixed daggerboard case, and a sternpost standing upright from a central keelson. Two inner boards hinged by fabric on their outer edges were then lifted to the vertical from the centerline — the body of the butterfly — declaring themselves as the side panels of a chined hull. The same stout fabric now closed off what would be the bow and stern transoms. The actual stern transom, two plywood panels hinged to the central wood sternpost, now folded outward and clipped to the side panels, while a loose panel was slid in place at the bow, each lending solidity to the ends of the boat.

In a matter of seconds, a flat pack was becoming a pram dinghy. Seats at bow and stern, plus a rowing seat amidships, formed the sides to a curve. Side seats completed the job. These were held in by wing nuts; all other parts had been secured by over-center latches.

A set of mast and spars, contained within the length of the folded boat, were quickly and simply rigged with tanbark sails. The rudder was shipped and a daggerboard made ready. The little boat was wheeled along the pontoon by means of a small slip-wheel set into the stern-skeg, then lowered into the water. That wheel can also be used to wheel the folded boat along a hard surface, but would not function well on soft sand. A larger sand-wheel mounted to a board that fits into the daggerboard case is an option.

#### Easy to carry

Two people could easily carry this boat and — without the sailing rig — many would find it entirely possible to carry the boat singlehanded, especially when it's folded. Of course, the boat can be carried to the water's edge in its constituent parts to spread the load. As an exercise in ingenuity, it was impressive.

The time for assembly without haste was maybe 15 or 20 minutes, including delays while I took pictures or asked questions. I would esti-

## Folding dinghies by the score

#### by Don Launer

There are several folding dinghies on the market. Many worthy contenders can be purchased either ready-to-launch or as do-it-yourself plans.

#### Seahopper Folding Boats (England)

<http://www.seahopperfoldingboats.com>

Seahoppers are made of mahogany marine plywood, with a unique overlapping fold that covers and protects the flexible membrane that joins the pieces together. All three sizes of Seahoppers can be rowed, motored, and sailed with the optional sailing rig, which can be reefed on gusty days. A skeg wheel on the transom makes it easy to wheel the boat to the water's edge, wheelbarrow-style.

Further photos of the Seahopper are available: <http://www.shorebase.co.uk/boating/dinghies.asp>.

	Small model (6 ft 8 in)	Midsize model (7 ft 10 in)	Large model (10 ft)
Size opened (w x d)	4 ft 2 in x 17 in	4 ft 2 in x 17 in	4 ft 8 in x 20 in
Size folded (w x d)	19 in x 5 in	19 in x 5 in	24 in x 5.25 in
Hull weight	48 lb	58 lb	75 lb
(with sailing rig)	58 lb	65 lb	80 lb
Capacity <sup>1</sup>	407 lb	429 lb	572 lb
Sailing rig	available as an accessory		
Material	marine plywood		
<sup>1</sup> Persons, gear, and motor			

#### Porta-Bote (U.S.)

#### <http://www.portabote.com>

Porta-Botes are made from a UV-resistant polypropylene and come in four sizes and three hull colors. They may be rowed, motored, or sailed with the optional sailing package. The sailing package offers a cat rig for the 8-footer; the 10-, 12-, and 14-footers have a lateen rig. The largest size has a capacity of up to five people.

	8-foot model	10-foot model	12-foot model	14-foot model
Size opened (w x d)	56 in x 22 in	60 in x 24 in	60 in x 24 in	60 in x 24 in
Draft	4 in	4 in	4 in	4 in
Size folded (w x d)	24 in x 4 in	24 in x 4 in	24 in x 4 in	24 in x 4 in
Hull weight	47 lb	58 lb	69 lb	96 lb
Capacity <sup>1</sup>	445 lb	585 lb	670 lb	807 lb
Sailing rig	available as an accessory			
Material	polypropylene			
<sup>1</sup> Persons, gear, and motor				

#### InstaBoat (France)

#### <http://www.instaboat.com>

The aluminum InstaBoat has built-in flotation and will not sink even when filled with water. The puncture-proof aluminum panels are joined with neoprene vulcanized into the aluminum. These boats may be rowed or powered (2 hp).

Size (opened): L: 10 ft 8 in, W: 44 in, D: 13.5 in Size (folded): L: 11 ft 4 in, W: 15 in, D: 6.5 in Hull weight: 66 lb Capacity (persons, gear, and motor): 450 lb Material: Aluminum and neoprene

**Continued on Page 34** 

#### **Tenders**

mate that, with practice, the boat could be unfolded and launched for rowing in less than five minutes.

An outboard bracket that

permits a small outboard motor to be shipped, even under sail, is available, as are an optional tiller extension and a large spray hood mounted over a ridge and providing shelter to the forward sections of the craft.

These boats are available as a 6-foot 8-inch tender and a 10-foot pure sailing dinghy. The 10-footer is somewhat similar to the popular Mirror class dinghy and can, if required, be supplied with its own rig or ready to accept the Mirror mast, spars, and sailing rig, which may be an interesting proposition for those who own old Mirror dinghies now succumbing to the entropy of age but that still have a sound sailing rig. The dinghy featured in this article is the middle-size 7-foot 10-inch model, just like Don's.

The timber in the boat is British Standard Specification marine ply. The hull is 6-mm 5-ply, with 9-mm, 12-mm, and 15-mm 6-ply boards making up the transoms and seats that lend rigidity to the boat. The ply is gaboon, although other kinds can be supplied, if required, with appropriate cost adjustment. A half-round solid timber section can be fitted at the gunwale. One well-heeled client had a boat built entirely of teak with, it is rumored, gold oarlocks to match the general tenor of his classic yacht.

#### Down the hole

Steve is commendably taciturn with regard to celebrity customers, but lists the London City Council Sewer Depart-

#### Folding dinghies, continued from Page 33

#### **Flatout Folding Boat (Australia)**

#### <http://www.flatoutboats.com>

The Flatout folding boat is constructed from a series of fiberglass panels (using resin infusion) that provide excellent abrasion and impact resistance. These panels are connected with continuous, waterproof hinges. Both sizes can be rowed or motored.

	10-footer	11-footer
Size opened	W: 5 ft 1 in	W: 5 ft 3 in
Size folded (w x d)	24.5 in x 4 in	24.5 in x 4 in
Hull weight	66 lb	74 lb
Material	fiberglass	

#### Websites for other folding boats

Micro Folding Dinghy

<http://www.microcruising.com/ding1.htm> Handy Andy Folding Dinghy

<http://www.svensons.com/boat/?p=RowBoats/Handy-Andy>

Flapdoodle Dinghy

<http://flapdoodledinghy.com>

#### WoodenWidget Folding Dinghy

<http://www.woodenwidget.com>

**Stowaway Boats** 

<http://www.cvsindigo.plus.com/stowaway/index.htm>

## One well-heeled client had a boat built entirely of teak with ... gold oarlocks ...

ment among his cherished clients. The folded boats can be passed down manholes swiftly enough to dodge the traffic and are dependable

in an environment where you really would not want less than total leakproof reliability.

The standard of construction of the test boat is good, and all parts fit well. All fastenings are marine-grade with, I noticed, some very neat boat-nail clenching in the bottom boards. Standard fittings are to marine grade and made by Holt. The boards of the hull are precisely castellated along their mating edges for rigidity, while water ingress is prevented by the PVC membrane. This membrane, reinforced by an integral weave, is said to resist oil and solar degradation, a claim that would seem to be borne out by the longevity of these boats. It is also claimed that the material has memory, implying a degree of self-healing property such that a puncture hole may effectively shrink. The fabric is glued to the wood with a two-part adhesive.

The boats are normally finished in marine varnish and boat names can be added if required. It is possible to purchase unfinished boats in various stages; the purchaser may elect to do the paint or varnish finish or perhaps some of the construction work. This will usually be for reasons of particular finish, or enthusiasm, rather than to save costs, as the main hull is cut to critical tolerances and formed over molds, work that has to be done at the yard whether for finished boats or those completed at home.

Buoyancy is provided by means of internally anchored *Continued on Page 84* 

#### **Acme Folding Boat**

<http://www.miamisburg.org/acme\_folding\_boat.htm> Glen-L Online Boatbuilder Fold Up <http://www.boatdesigns.com/products.asp?dept=272>

#### Folding kayaks and canoes

Most folding kayaks and canoes are skin-covered folding frame boats; that is, the folding frame supports the flexible outside covering. They are descendants of the skin-covered kayaks used by the Eskimos for thousands of years; however, the frames and joints are now often made from hardwood, aluminum, brass, bronze, high-density polyethylene, or polycarbonate. Internal air chambers, called sponsons, tighten the skin and add flotation. The following list represents a few of the many manufacturers and distributors: **Folbot (folding kayaks)** <http://www.folbot.com> **PouchBoats (folding kayaks)** 

chttp://www.pouchboats.com>
Feathercraft Kayaks (folding kayaks)
<http://www.foldingkayak.com>
Seavivor (folding kayaks)
<http://www.seavivor.com>
Pakboats (folding canoes)

<http://www.pakboats.com>







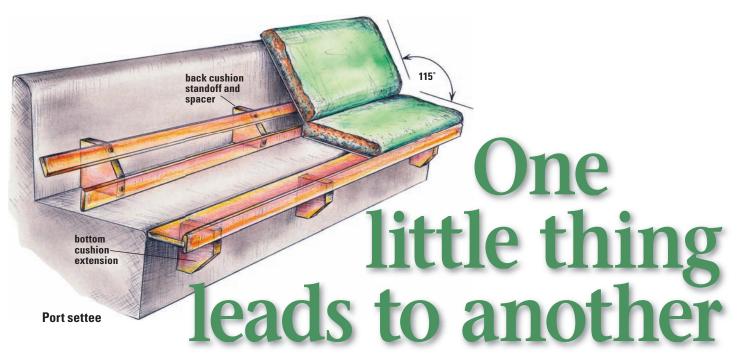


Assembly goes quickly. Set the "case" down (1), open it (2), and add seats to brace it (3, 4). Detail of the completed dinghy (5, 6). Wing nuts and over-center latches (7) hold the parts together without the need for a toolkit.









## Getting comfy starts with hard work

#### T WAS A COLD MARCH DAY ON THE Chesapeake when my wife, Marty, and I found the boat that was exactly right for us. We enjoyed sailing Take Five, our new-to-us 1982 Allmand 31, all spring. However, as we got to know her, something was not quite right. The settees were uncomfortable and the varnished table, while attractive, simply did not work. It was a drop-leaf design that lined up with the port and starboard settees with a fore-and-aft axis. Its center box and lid provided a perfect space for keeping navigation tools and keys. However, when the port side leaf was raised (because the table was located next to the port settee), it extended far enough to push into our middles. The starboard side leaf, on the other hand (because of the passageway between the table and the starboard settee), left about a 10-inch reach for anyone seated on that side. Something had to be done.

The great thing about a boat that is more than 20 years old is the realization that it's OK to modify it. If you make a change, you have not necessarily ruined your investment. You might just enhance its value at the same time that you increase functionality. The question was where to start.

We wanted our boat to be a comfortable place in which to relax. I started by collecting data. Why was our couch at home so inviting? I tried to measure the angle of the seatbackto-bottom cushion with a plastic semicircular protractor left over from my son's elementary school days. It wasn't easy to obtain an accurate measurement with such a small device. Using a cardboard box, I created a reasonable imitation of a couch-sized, two-armed protractor. Now I could use the plastic protractor, together with the cardboard pieces, to measure accurately. Our couch's seat-to-back cushion angle was 115 degrees. The Allmand's settee seatback angle was only 10 degrees past vertical at 100 degrees. On the by Bill Hudson

ion to achieve the intended seatback angle. Discarding the idea of having an unsecured  $2 \ge 4$ , I visited my local lumberyard and then crafted a combination cushion standoff and spacer.

Then came the unintended consequences of a theoretically simple design modification. To feel just right, the base of the back cushion needed to be 6 inches away from its original position. That adjustment made the bottom cushion too narrow. Our thighs were now unsupported. In order to address this new development, the

## The settees were uncomfortable and the varnished table, while attractive, simply did not work.

boat, we had been sitting nearly bolt upright. That's no way to relax. If we were going to get comfy, I would have to do some work.

#### First the port settee

A plan emerged. I began with the port settee. All I had to do was increase the seatback angle a few degrees to match the couch's angle. One way to achieve the desired rake of the back cushion would be by moving its bottom toward the center by placing a length of wood, such as a  $2 \ge 4$ , on the bottom cush-

bottom cushion would have to be repositioned 6 inches farther toward the center. This meant making a long settee extension so the bottom cushion could provide the necessary support. A suitable length of mahogany attached perpendicular to the plywood settee extension would look great and keep the cushions off the cabin sole. After consulting the folks at our local lumberyard once more, I fashioned and installed the port side extension and standoff. A retired sailing buddy has a drill press with a bit that makes a

back cushion standoff is removable

Never underestimate the impact of a "simple change." Bill learned that making the settees more comfortable meant making the dining table less comfortable ...and created domino-effect modifications.

tapered bung. We made enough bungs to fill the screw holes in the mahogany boards. I was ready for some serious sitting trials. The port settee turned out to be just right for relaxing...as long as you didn't need the table.

#### Next the starboard settee

While the drop-leaf table barely worked before the cushion modification, now it was useless. It had to go. It became clear that more work would be necessary before serious relaxing could begin.

First, I would have to work on the starboard settee. Until it was finished, I would not know the critical dimensions for the replacement table. While I was at it, a slide-out extension for the starboard settee would be a welcome addition to our accommodation plan. This would create a wide sleeping space in the main cabin for use on humid nights. I made another visit to our new friends at the lumberyard.

The width of the slide-out extension was determined by measuring the width of the bottom and back cushions side by side. Subtract the width of the fiberglass base, and you have the width needed for the plywood extension. Check to make sure you account for cushions that are not true rectangles. To keep the extension in place, I glued a pair of ½-inch dowels in the outboard corners of the plywood. Then I drilled corresponding holes into the fiberglass settee (seating position) and support board (sleeping position). I had already purchased the mahogany face board to keep the bottom cushion in place. I used a router to cut a <sup>3</sup>/<sub>4</sub>-inch slot the length of the board to fit the edge of the plywood extension.

I purchased three table legs at Home Depot to support the extension when pulled out to the sleeping position. These have a metal base with a large wood screw and a suitably long table leg. Each leg was then cut to ensure a horizontal sleeping surface. I cut the middle leg first, then the corner legs. (The sole is not as flat as one would think.) As I did for the port settee, I measured a back cushion rake angle and cut and assembled the standoff pieces. The starboard settee design was more complicated, due to the extension being farther out from the original position of the back of the settee. However, at this point both settees were comfortable.

#### Now the table

The great table design-elimination process began. Marty and I pored over old sailing magazines. We paid particular attention to various setups at the boat show. Our choices narrowed to a bulkhead-mounted table or a pedestal-base table. Intense discussions followed relating to how the table should open: hinge down and pull up or fold over. A friend argued for the fold-over design, pointing out the need to keep the passageway clear and the benefit of being able to open the table without moving guests who were already on the settee.

Our decision was also influenced by the fact that the prior table had a robust aluminum pedestal and there were bolt holes in the bulkhead and screw holes in the sole. Another consideration was that our 31 is rather beamy and a rigid pedestal table offers support and an additional handhold while underway. The final concept utilized a fold-over system mounted on a permanent pedestal and bolted to the bulkhead for additional strength. The new table would double the dining surface area.

Marty and I went to the boat with a discarded cardboard box about the size of a table. With tape, a straightedge, and a box-cutter knife, we created a mockup of a table for two with just the right amount of room at a comfortable height. We determined the length of our table bottom cushion extension

**Starboard settee** 



½" dowels lock into positions (sitting and sleeping)

back cushion

standoff when

not in use

L-shaped teak edging with rounded top for fiddles

flat-sided / C-shaped / teak edge molding

**Table for two** 

single-arm

leaf support

by sitting side by side and pretending to eat. We discovered that it's important to leave room for elbows. Our table ended up being 48 inches long. The distance from our stomachs to the table edge was identified by sitting in our eating spaces and holding our fists at table height against our torsos at several points along the settee. We could then make a mark on the cardboard template equal to that distance. After several marks, we were able to use the straightedge to define the table shape. Since the Allmand's cabin space is tapered, the after end of the table is 6 inches wider than where it is bolted to the bulkhead. The outboard edge follows the growing beam.

#### **Doubled the space**

Using the seam of the box as a centerline, we opened the cardboard to double the dining space. This

design permitted a standard table for two with an unrestricted passageway forward. We again visited our good friends at the lumberyard for a sheet of furniture-quality ash plywood. The base of the table is built of the same plywood as the tabletop sections. The width of the box was based on the top platform of the aluminum pedestal. We screwed and glued the box frame together using urethane glue, reputed to be exceptionally strong.

Because it froths and expands out from the glued joint, extra sanding is required. Based on my experience with it, I would not use urethane glue for a visible surface joint. The tabletop was glued to the frame and angle-screwed from underneath.

Teak edging would give the table a finished look. Fawcett's catalog had exactly what we were looking for. We chose a flat-sided C-shaped edge molding for the permanent non-folding table section. This allows the folded-over leaf to rest securely on the flat edging. We used teak edging with a rounded top surface on the leaf. The folded position is our usual table for two. The leaf was sawn to be exactly the same shape as the base tabletop. However, the two edge moldings have a slightly different profile. The C-shaped molding is thinner than the rounded L-shaped teak. I had to take 1/8 inch off the width of the table leaf to enable the table and leaf to nest evenly when folded. It's nice to have access to a table saw.

While the table and leaf nest evenly, they are not identical. The leaf was designed to be 7 inches away from the bulkhead to allow clearance for the mast compression post (not depicted in illustrations). We use this space between the mast support and the bulkhead for a 2-gallon container of

> bolted to the bulkhead for additional strength

**Table for four** 

spring water. The container is secured to the table and bulkhead. The rounded molding creates a lip of ½ inch for the leaf in its folded position. When the table is opened it has fiddles that are only ¼-inch proud of the table surface. Marty and I figured that most dining for four would be at anchor and we would, therefore, not need high fiddles.

It's important to know the distance from the midpoint of each table edge surface in the folded position if you want the hinge to function properly. That distance will determine the width of the piano hinge. West Marine had a selection of stainless hinges in 6-foot lengths, including one with screw holes 1½ inches apart. That was exactly the distance needed for our table. I used a metal cutting blade inserted in the saber saw to cut the hinge to a length of 34 inches. Judicious use of a grinding wheel rounded the sharp corners.

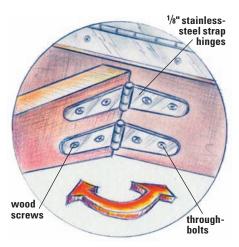
#### **One more thing**

Another issue was the leaf support. I chose a single arm for this. I glued together two thicknesses of ash plywood with urethane glue. My friend with the drill press also has a band saw that allowed me to easily shape the arm so it rests under the table overhang when not being used but when extended still allows clearance for a diner's knees. This is just another example of how boating supports adult friendships.

West Marine has a pair of stainless-steel strap hinges that are ¼-inch thick. They provide excellent support even when elbows are on the table. The hinges are through-bolted to the table frame. I used wood screws in the arm. I added a bit of leftover edge

molding at the end of the arm to mate with the radius of the edge molding from the fold-over leaf. This extra piece allows the leaf to lie flat when open. However, this meant that I had to grind the bottom of the edge molding on the base table to accept the raised piece at the end of the arm when folded in against the box frame (see detail illustration on facing page).

All the components were dry-fitted and screwed together. When everything fit, the wooden pieces were glued and screwed. There were 38 teak bungs to set and sand flush. We finished the table with five coats of clear polyurethane



**Detail of leaf support** 

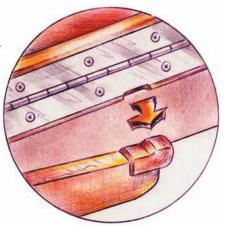
varnish. When the varnishing was completed, we drove down to the boat and attached the base table to the bulkhead and pedestal. Then I attached the piano hinge and leaf. The arm's strap hinges were screwed tight after varnishing. I bolted the arm to the table through the pre-drilled holes.

#### Wouldn't clear

When I opened the leaf, it was a mild surprise to discover that the leaf's edge facing the bulkhead would not clear the mast compression post at the top of the arc by just 1/16 inch. It appears that the post is not quite vertical. The table leaf would require one more trip back home for a quick touch with the saw and re-varnishing. The following weekend, however, a slightly modified table leaf was screwed to the piano hinge and tested. Not only did it clear all obstacles, but it also looked great. Finally, it was time to sit back and put that refreshing drink on a coaster. We now have a comfortable cabin where my wife and I can linger over a cup of coffee, plan a voyage, or seat four adults for dinner. We can sit back and relax with our weekend reading or even discuss a possible project discovered in magazines catering to boats of a certain age. All in all, not a bad outcome for a good old boat.

Bill and Marty Hudson have been sailing for more than 30 years on a variety of boats, starting with an old Moth that needed attention in order to float. Others included an 11-foot Robin, a Seafarer 26, a Columbia 29 in need of rehabilitation, and another Robin in need of a complete rebuild. Take Five, a 1982 Allmand 31, is now going through the renovation process.

More online ... More information, including photos, at <http://www. goodoldboat.com/settee\_table.html>.



Detail of notch in leaf support





#### **Boat review**

## Catalina 30

*Thirty years, 7,000 boats, and still going strong* 

by Bob Brintnall

These fine coastal cruisers are fun, family oriented, relatively cheap to maintain, easy to handle, and responsive. Anyone in search of more boat for less money should look them over. The Catalina 30 is the great inbetween boat. Not the boat to sail away forever, perhaps, but a good boat to own and sail until then. And this boat has a price and resale history that will allow those sailaway goals to remain as a solid plan, instead of just a daydream.

An early Catalina 30 offers many advantages, but number one is value. A 1970s-era boat needing a bit of care is usually available for less than \$15,000, with many around \$12,000. How cheap you should go depends on how handy you are ... and how lucky.

There are three basic areas to consider when looking for a boat of this vintage: sail-ability, repair-ability, and resale-ability. The early Catalina 30s measure well in all three.

#### Sail-ability

315

You have to look at sail-ability in a 30-foot cruiser as part of compatibility. Every boat does something better than some other boat...and something worse. You need to know what you want and what kind of sailing you're going to do. Then mark your personal spot on the balance beam between performance and comfort, heavy weather and light air, liveaboard cruiser and racer, and so on.

The Catalina 30's reputation as a large boat has overshadowed its performance characteristics, especially when matched against its peers. The first Catalina 30s introduced in 1974 and '75 won victories at the popular Marina del Ray-to-San Diego and Newport-to-Ensenada races. At the time it was built, the boat had it all: big and fast. Over the next two decades, production designs by its competitors eventually moved the relatively unchanged Catalina 30s to the less **30-year-old Singlehull White Fiberglass:** Looking for a little TLC. Much to offer in return.

sprightly side of the performance line. However, the boat's room below was still the standard to beat. Now, 30 years and 7,000 boats later, no one lists the Catalina 30 as an extremely fast boat, but it is still considered a big boat for its size and your money.

When it comes to comparing good old boats, you have to stir the waters lightly. Every sailor loves his baby, and there always exists one perfect set of conditions and sail plan that somebody's baby can hold better than most. The Tartan 30 that came out in 1979 was a faster cruiser than the Catalina 30, but it was also 10 inches narrower and a ton lighter with a smaller, less comfortable cockpit. The Catalina

Black Magic, a 1984 Catalina 30 Mk I owned by Paul Sharrow, this page. *Rootless* (from the bow) and *Blest*<sup>2</sup> (cockpit visible), on facing page. *Rootless* is a 1984 Mk I owned by Mike and Carol Morris. *Blest*<sup>2</sup> is a 1975 Mk I owned by Chick Marentette.

## Ability to upgrade is a big plus for the Catalina 30, due mostly to its unprecedented production run.

could beat the 1970s-era Hunter 30s. I've solidly beaten Islander 30s and

Pearsons of similar vintage with my old Catalina, just as I have been beaten by them. I would also consider Dufour and Seidelmann boats of the period to be peers in performance, though I would give advantage to the Catalina 30 in ease of management and stability.

After reading a dozen or so reviews of the Catalina 30's sailing characteristics, I find the common elements are these: a solid boat in heavy weather, doesn't want to heel, slow in light air, good in a strong breeze, designed to have a spinnaker for running off the wind (in review code this means that without a spinnaker she doesn't run so great), points surprisingly well (especially with a bit of a blow), handles well in the marina, no prop walk.

In my own experience, I have found that the boat sails well when rigged well, it does indeed point much better than I expected, and its inherent stability makes cruising spinnakers easier to fly.

#### **Repair-ability**

Repair-ability is one area that grows in importance with time. The new boat buyer seldom looks at an engine compartment and wonders how much fun it would be to yank the devil out or whether a glassed-in gas tank would have to be moved to replace the water hose fitting beneath it. However, the suitor for an old boat must add extra weight to the repair-ability factor and consider its three variables: upkeep, upgrades, and major repairs.

All boats need upkeep; the older they get the more they need. The Catalinas have pluses and minuses in this area and, by my math, come out about even. The old gelcoat is a minus. It cracks at corners and gets porous. making it hard to clean. The bilge is not finished particularly well and has many nooks and crannies to trap bilge crud. Windows are a minus: the frames are lightweight and annoving to remove and re-caulk. The electrical fittings and wiring are a slight minus. The fittings were cheap and hard to get at. Worse, over the years add-ons and re-routes have made the whole mess a mystery, as it is in most old cruisers.

Engine accessibility is a powerful plus. No matter which engine you have, it's fairly easy to get at. Try replacing a distributor on the Atomic 4 in an Erickson 32 of this vintage or its equivalent and you'll really appreciate the Catalina 30's engine accessibility. The battery compartment is a plus; it's big and sturdy and easy to work with. No marine head deserves a plus rating, but I've had fewer problems with my old Catalina 30's head than with the other cruisers I've owned. Interior wood scores even — the ma-

hogany drawers, shelf rails, and trim are nice, but the table, counter, and bulkhead are pretty blah. I might be too hard on the Catalina 30 by scoring it even overall on upkeep. The minuses are pretty minor and mostly cosmetic. Good engine accessibility is more important.

Ability to upgrade is a big plus for the Catalina 30, due mostly to its unprecedented production run. Need a gate stanchion? A screened hatchboard? A dodger frame? A cockpit table? No problem. You can buy many items right from the manufacturer. With 7,000 boats produced and many active owners' associations, many new and used parts are available.

#### Larger bolts

The factory upgrades that came out in the early boats include stainless-steel keel bolts starting around October 1977 and larger chainplate bolts and a new rudder in December 1978. Many of the early boats were tiller-steered but most have been modified to wheel steering.

The upgrade that most affects a boat's value is a diesel engine over the Atomic 4. However, be careful. To buy a boat with an Atomic 4, replace this with a diesel, and expect to make coinage on the resale is a pleasant fantasy that can lead to disappointment. If the







*Windancer's* interior with original cushion fabric and the dinette layout, above left. *Windancer* is author Bob Brintnall's 1976 Mk I. *Santana*, above right, is a 1991 Mk II with a newer interior décor and cabin layout, owned by Terry and Sheila Brown and their two cats, Murphy, pictured, and Molly, who has her own special cat shelf nestled under the starboard cockpit coaming.

block is good on an Atomic 4, there's no reason not to keep it. The engines are dependable and very fixable. If the block goes, consider replacing it with a diesel and try to get a decent used or rebuilt one. Even then, don't expect to get every penny back unless you can do the installation yourself and do well finding a used replacement.

Major repair is the scariest part of repair-ability. I have found that sometimes a boat sagging on a cradle with soft decks, a hole in the bow, and a grapefruit growing out of the keel is just too cheap to resist (see "Confessions of a Bottom Feeder," May 2006).

When you calculate major repair into a boat project, you are always taking a gamble. But if the boat is a Catalina 30, your odds improve. The main structural joints and glasswork — hull, deck, propeller-shaft strut seat, toerail joint, keel joint, and so on — were solidly built. Its glass is heavy and it's not prone to blister. Need a new keel, rudder, or mast? The 7,000 boats that have been built greatly increase the chances of finding major repair components in salvage or new.

Wondering if anyone has ever fixed what you're about to attempt? They have, and a bunch of them are more than ready to talk about it. Tech support archives, owners' forums, even the company itself will provide you with more information than you will know what to do with. But wade carefully; just because someone writes something on the Internet doesn't make it true. For the well-researched information on sailboat restoration, stick to magazines like *Good Old Boat*.



#### Catalina 30 Mk I

Designer: Frank Butler LOA: 29 feet 11 inches LWL: 25 feet 0 inches Beam: 10 feet 10 inches Draft: 5 feet 3 inches, 4 feet 4 inches (shoal) Displacement: 10,200 pounds Ballast: 4,200 pounds Sail area: 446 square feet, 505 square feet (tall rig) Displ./LWL ratio: 292 SA/Displ. ratio: 15.2

#### **Resale-ability**

The name Catalina is one of the few still left from the 1970s. Many will argue that the name of the manufacturer adds value to a boat, though I would generally argue that such value should be highlighted by the seller and ignored by the buyer.

However, a Catalina 30 has name recognition beyond the company because, in no insignificant way, the boat is one of the reasons the company has stayed at the top while others faded. Looking for another endorsement? In 2001 the Catalina 30 was inducted into the American Sailboat Hall of Fame. This honor mentioned excellent design and production ingenuity... a boat whose "sheer excellence has made the sport of sailing better." This is certainly a marker worth mentioning in any sales pitch.

In 2006, NADA put a 1976 Catalina 30 with gas engine and minimal equipment at a low retail of \$11,000 and an average of \$13,000. When running these numbers, however, you must remember that no matter what you tell your significant other or even yourself, boats are not really investments. The wise money doesn't truly expect to grow; the goal is to minimize expense and have as much boat as possible for every dollar spent.

With this more realistic philosophy in mind, buying an older Catalina 30 offers reasonable hope that you might actually do something spectacular. You could get back what you put in when you sell. While it may not sound like a very impressive accomplishment, just try it with a boat built in the last 10 years.

The only downside to Catalina resale is

competitive comparison. Anyone looking at a Catalina 30 will easily have the opportunity to look at several. If you're selling, you'll want yours to stand tall with its peers. Shine the brightwork, oil the teak, clean the bilge, and have the boat primped for every showing.

#### **Cruising course**

Last summer I was allowed to take a four-day American Sailing Association (ASA) cruising course for free. My classmates flew in from around the country and abroad to take this course. My impressive classmates included two PhDs, a well-known clergyman, a former Olympic wrestler, even a vegan musician. The captains were sailing legends. But when I arrived at the dock my heart swelled to see some old friends. All four boats used for this fairly intense accredited cruising course were Catalina 30s.

The Mark III my group sailed on looked like a very different boat than the much earlier version I own. The cockpit was sleeker with a walkthrough transom. It had built-in catbird seats. The diesel was shiny and new, the woodwork was fabulous, the hanging glass rack added class, the extra deck hatches added light and air. But the boat sailed the same, which means it sailed great. And I think my old front V-berth trapezoid with its 1970s-era gold-and-brown twill would have fit right into the Mark III's luxurious blue crushed-fleece V-berth cushions.

Bottom line: The difference between a fine 30-year-old Catalina 30 and a fabulous newish Catalina 30 Mark III isn't as much as you think, unless you're thinking dollars.

So if you're looking for a loving relationship with a good old boat, make a few dates with an early Catalina 30; it might just be your perfect match.

#### What to look for

If you've read its profile, like its picture, and now want a personal meeting to see if the boat holds any magic for you, here are some things to look for:

Before you check out any boat, try

## When you calculate major repair into a boat project, you are always taking a gamble. But if the boat is a Catalina 30, your odds improve.

to get all the information you can. Find out if the rig is tall or standard or has a bowsprit. The early boats were sold in all configurations. Ask for the hull number. If it's below 400, find out if the icebox is front- or top-loaded, whether the keelbolts are stainless or mild steel, and if the rudder has been upgraded.

With a hull number, you can go online to the Catalina 30 Yacht Owners Association and learn where other boats of the same vintage are today, who owns them, how they're equipped, and what their owners think of them. Expect some bias.

Now it's time to meet the boat. I always start on the deck. Do the softshoe two-step slowly around the top deck; shift your weight and look for movement, especially near add-on fittings. However, don't expect to find much deck rot on a Catalina 30; the boats weren't prone to it. Also check the deck for stress at the shroud and chainplates; some owners claim the seats underneath were a little weak. You can expect some gelcoat cracks at the corner molds, especially in the cockpit. And the cockpit lockers had weak hinges, which have either been replaced by the time the boat is 30 or are broken/about to break.

After the deck, I check the rigging. A Catalina 30 is as likely to have chafed shrouds and bad turnbuckles as any other oldish boat. Look the mast over but don't worry too much about it. It's basically an aluminum tree trunk; don't expect that you and your buddy will be able to move it. The split backstay is usually adjustable; check the rigging and rope carefully before you erect that tree trunk.

#### Give a tug

In the cabin give a little tug on the wooden shelves and cabinets to see if they move. If the owner is not watching, tug hard. Make sure to check whether the glassed-in gas tank looks like it has ever been removed, verify metallurgy of the keel bolts, and look for leak chase, especially aft of the bilge and around the gas tank, even more particularly if the gas tank looks like it has been removed and reseated. (Leak chase is the odd placement of various epoxies along the glass

edges of the bilge, strut post, glass seams, or any odd place. Like gum under a school desk, the color and placement may seem random, but it's all a bad sign.)

You want to hear the engine run from a cold start. Check the engine before the test to ensure the block is cool. Check that the Atomic 4 doesn't run hot, idles well, and doesn't stall under load. The diesels are all about compression, but it's a good sign if it'll start cold with relative ease. Take note of excessive run-on at shutdown.

Below the waterline, look for blisters, bad through-hulls, keel bulge, loose strut fittings, and the Catalina smile, a condition of cracking glass making a line forward on the keel at the keel/hull joint. Don't worry too much about the smile, but don't buy a boat with a keel bulge. If the strut's obviously loose, get the price lowered at least \$500. You shouldn't find many blisters or bad through-hulls; if you do, point them out as possible price reducers.

You never know what you'll find in an old boat; that's part of the mystery, so check everywhere. Mine had a very cool two-bottle wine rack hidden in the recess of the port cockpit coaming, above the aft galley counter. If the boat were not in such disrepair that I had been forced into every odd nook and cranny, I never would have found it.

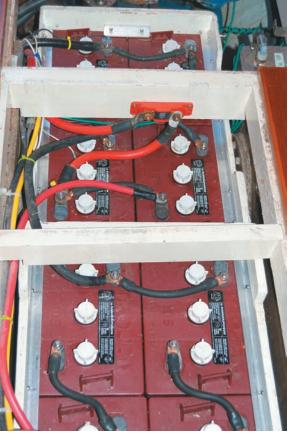
"30-year-old Catalina 30, easy going, good values, loves the water. In search of caring owners full of TLC and FUN."

Treat it well, and it'll do the same for you.  $\underline{\mathbb{N}}$ 

Bob Brintnall is a teacher and writer who sails in the neighborhood of Traverse City, Michigan, and beyond. These days he's sailing Windancer, a Catalina 30, but he's always stalking the boatyards, classified ads, and rumor mills for the next great adventure.

#### Resources

Catalina 30 owners' group <http://www.Catalina30.com>



## Making sure the current flows

An inexpensive electrical system to keep your lights on

by Bernard Heise

OR SAILBOAT OWNERS RETHINKING their vessel's electrical system, the broad and expensive range of equipment and technology touted by the industry as vital for their safety and comfort can be overwhelming. There is no single perfect electrical system for small sailboats. The system you need is determined by how much electricity you consume, and the system you get is determined by how much you are willing to spend. The two are not the same. You can empty your wallet to buy electrical components that will fulfill virtually any technician's desire and still not have the power you need, but you can also design a simple, safe, and robust electrical system that will fulfill your needs at a reasonable price.

I'm writing about this subject not as an electrical engineer but as someone who has lived and traveled with his family on a sailboat for about six years - first on the East Coast on a Pearson Triton and now on a Mason 43 in the Pacific. We've learned much during that time. And during that time we've spent fewer than 14 days plugged in at the dock. In fact, we spend so much time at anchor that we no longer have a dockside power cord. This does not mean that we're Luddites in matters electrical. While we certainly don't waste power, our addiction to electricity is undeniable.

For emergencies, we own a single hurricane lantern (I would need to

look for it). But the splendid kerosene trawler lamp that came with the boat proved to be as troublesome as it was beautiful and has been replaced by a fixture from Ikea - with an incandescent bulb, no less, because we like the glow. We run our laptops and navigation equipment; we charge our digital cameras and hand-held radio; we make plenty of use of the sewing machine; and, when the need arises, we use the drill, the angle grinder, the soldering iron, and the heat gun (admittedly, not all at the same time). In addition, we keep most of our perishables cool and some of them frozen.

In principle, our system — built around a large bank of batteries, a portable generator, and an inverter/charger — will work as well on a 28-foot boat as on a boat 48 feet long. I don't actually know how many amp-hours we consume. But, I am happy to report, neither do I find such knowledge necessary.

#### The biggest bank

The heart of a sailboat's electrical system is its batteries. Keeping in mind issues of weight, space, and location, it makes sense to get the biggest bank of batteries you can fit on your boat. Regardless of your expected daily load, the larger your bank of batteries, the less deeply they will be discharged and the longer they will accept high levels of charging. There is no good reason to divide your house batteries into two banks. Not only will this complicate your wiring, it actually increases the wear on individual batteries and makes charging less efficient. If problems develop with one of the batteries in your single bank, you can bypass it.

You don't need to get the most expensive batteries out there. On *Simplicissius* (our Triton), we had two expensive AGM batteries and spent plenty of time in the dark (for which, however, I can only blame our naive faith that solar panels alone would get us through fall on the Chesapeake Bay). On *Momo* we use eight Trojan 105s, which are standard, flooded, 6-volt golf-cart batteries, and have never had a problem. Theoretically, this bank yields 860 amphours and costs about \$720.

Nothing did more to convince us about the virtues of the Trojan 105 than watching it in action. In Ensenada we shared an anchorage with friends who were rebuilding their 120-foot ferrocement ketch. Using arc welders, drill presses, table saws, and other heavy equipment, they subjected their bank of Trojans to an abuse much more intense than any cruising sailboat could ever

When we bought our Mason 43, the batteries were located beneath the V-berth, not exactly the best place to carry such weight. After removing the water heater, we were able to fit eight batteries beneath the cabin sole, right on the centerline between the mast and the engine. deliver, torturing their batteries to the brink of death almost every single day, and they always recovered.

#### More power faster

Newer battery technologies, like gel or AGM, might very well be "better." They accept larger charging levels, deliver more power faster, and have a lower rate of self-discharge than flooded batteries, although this does not matter if you're actually using your batteries every day. Building a bank with gel or AGM batteries, however, costs more than twice as much as with flooded batteries, plus the larger your bank of batteries, the less significant are the advantages offered by newer battery technologies.

Your engine might very well start better using a single AGM battery than a single flooded battery. But if we have eight batteries, who cares? Likewise, you may be able to charge a single AGM battery more quickly than a single flooded battery. But the equipment needed to attain a similar degree of charging efficiency on a large bank of batteries is more than we can afford anyway. If you need to make a choice, it is better to have more amp-hours using flooded batteries than fewer amp-

hours using either gel or AGM batteries.

In two important respects, newer battery technologies are actually at a disadvantage when compared to their flooded counterparts. The first is that, because they are sealed, gel and AGM batteries can't tolerate being overcharged. If your system starts overcharging your expensive highperformance gel or AGM beauties, it will toast them. In contrast, flooded batteries require periodic over-charging as part of their

## This does not mean that we're Luddites in matters electrical. While we certainly don't waste power, our addiction to electricity is undeniable.

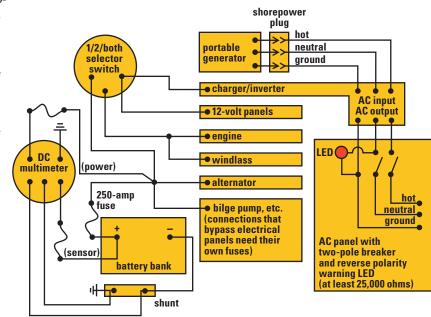
regular maintenance. During this process, called equalization, they vent off explosive gases — a fact that scares some people. But since these gases are lighter than air, as long as your battery boxes are ventilated, the gases will dissipate. Moreover, if your bank of batteries is large enough. I doubt vour charging system will ever bring them to a vigorous boil. Ours most certainly cannot. A second advantage that a battery like the Trojan 105 enjoys over its more sophisticated competitors is that people play golf all over the world, and they need golf carts. Thus, if you ever need to replace your batteries outside the United States, it will be much easier to find something that fits your boxes than if you used batteries with more exotic dimensions. You can compare the distribution networks of your favorite brand of marine batteries on the Internet.

#### Consider a single bank

That single bank of Trojan 105s is the only battery bank we have — we use it for everything, thereby defying conventional wisdom that stresses the importance of reserving a battery bank for the sole purpose of cranking the engine. In

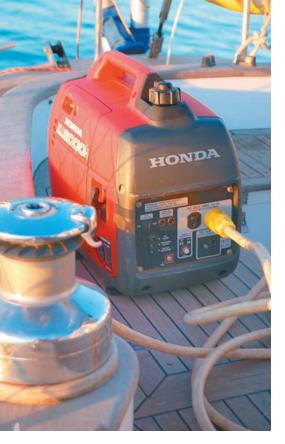
the past, we had two batteries dedicated to that task but found it irritating to carry around an extra 120 pounds that did absolutely nothing. When those batteries bit the dust, we simplified our wiring. While it is very important to have a way to start the engine if you run your house batteries into the ground, setting aside a dedicated battery bank is not the only way, nor is it necessarily the best.

Setting up two battery banks is not all that simple either. Doing so in a way that preserves their independence and assures that each gets the charging it needs is rather complicated and requires parts that are expensive and will eventually need to be replaced. Thus, it violates the axiom that "simple is good." One method involves the use of a second alternator (the cheapest Balmar alternator costs about \$450). Another method, using a single alternator, requires something like Balmar's Digital Duo Charge (\$250) or Blue Sea's BatteryLink ACR (\$93). Either way, you'll need to invest in battery switches (starting price around \$40 each), exten-



This diagram illustrates *Momo's* basic wiring. For the sake of clarity, the wiring for the alternator's voltage regulator has been left out.

sive lengths of heavyduty cable (1/0 gauge wire costs more than \$9 per foot), and other incidentals. Maybe you'll need Xantrex's ZapStop Alternator Protector (\$28). You might also want something like Xantrex's Digital Echo-Charge (\$130), which allows you to charge your starting batteries automatically through your inverter. Otherwise, you might find yourself in the same position we once did: with dead starting batteries because we sat around at anchor too long without running our engine.



Those interested in setting up two battery banks can find advice in any number of excellent guides to electricity and boats. But before you get smug about having a bulletproof two-bank system, let me just say that if you are relying on your engine to charge your batteries and if something goes seriously wrong with your engine's charging system or with the engine itself (let us count the ways), your second bank of batteries won't do you much good for very long.

#### Fairly straightforward

In contrast, setting up an electrical system from a single bank of batteries is comparatively straightforward. On *Momo*, the positive cable leads directly to a 250-amp fuse. (It is surprising how often, even on a vessel with plenty of complicated wiring, such a fundamental safety measure is overlooked.) From there it leads to a distribution post. The output from the alternator is wired directly to this distribution post; thus, it is impossible to break the alternator circuit while the alternator is running. This protects the alternator and makes a snubber like ZapStop superfluous. Another cable from the distribution post leads to a battery switch, which directs current to the engine starter or the electrical panels and inverter or both simultaneously. The battery switch is not strictly necessary, but if there is a major prob-

## The Honda 2000i is the workhorse of our charging system; it rarely breaks a sweat.

lem with the engine wiring or house wiring we can isolate it. (*Note:* Don't even think about not having a way to disconnect the battery bank from the loads. -Eds.) As far as the basic wiring goes, that's about it — the number of connections are minimal, as are the number of parts.

To monitor our electrical system, we splurged on Blue Sea's 12-volt digital multimeter, which costs a hefty \$220 (but you can make your own for considerably less). Whether we want to make sure that the multistage regulator is functioning properly or if we've left something on again, it tells us everything we need to know: the voltage of our battery bank, how many amps are flowing out, and how many amps are flowing in. And if the voltage falls too low, it sounds an alarm. Another \$100 will buy a battery monitor that will tell you more, but you must keep it properly calibrated (difficult if you don't regularly plug into the dock).

When we bought our boat, it had a

tial sums to optimize your engine's generating capacity, keep in mind that regularly using your engine for that purpose is unwise. Charging your batteries while motoring is fine. But few things lead more quickly to the premature demise of (very expensive) diesel engines than running them for long periods without sufficient load - in other words, repeatedly charging batteries with your engine while at anchor. Thus, if you have a limited amount of cash to spend on your charging system, don't stick it all in the engine compartment or you'll find yourself replacing the engine as well.

Certain authorities, eager to sell you things, suggest that your engine alternator's rating should be equal to 25 to 40 percent of your total battery capacity. Nonsense. On our boat, that would mean an alternator that puts out from 215 to 340 amps and costs between \$940 and \$1,850. Of course, we would need to invest in an appropriate regulator and heavy-duty wiring as well. Even if we were prepared to fork over that much cash, I don't think our little Perkins could handle it. High-

....stuffing all of the appliances needed to reproduce the American lifestyle onto a small sailboat is not only expensive, it is also bad for the waterline.

nifty monitor that also kept track of the battery bank's amp-hours, but not long after we left the dock it developed an increasingly powerful imagination. Soon it was reporting an abundance of power even as the lights were growing dim. In short, while a monitor that calculates amp-hours promises a direct report of the battery bank's remaining capacity, it cannot be completely trusted. Once you get used to the fluctuations of your system under various loads, you can gauge your system's health more reliably based on voltage and current readings alone.

#### Take pity on the engine

A sailboat's engine provides its most powerful means to charge its batteries. But before laying out substanoutput alternators are not always a good thing. In a tight engine compartment they can generate far more heat than can be dissipated and thus burn themselves up. They could also impose loads that your engine's belt-and-pulley system cannot withstand. Friends of ours on a 35-foot boat with a 30-hp Yanmar, fitted out for a tour through the South Pacific, found themselves regularly replacing the aluminum pulleys on their (admittedly aftermarket) water pump because their 70-amp Balmar imposed too great a load.

#### Never had a problem

Our alternator never puts out more than 70 amps. We've never had a problem and could get by with less. While motoring along for any length of time, a gentle and less expensive alternator will get the job done just as effectively and much less stressfully than a highoutput alternator. And if the boat is at anchor, you should probably find some other way to charge your batteries.

Our alternator is marine quality (for what it's worth) and uses a multistage external regulator. But I think that a heavy-duty automotive alternator would function just as well, particularly if hooked up to a decent external regulator. I've heard good reports from people using such alternators, disparaged though they are. While chandleries like to stress the rigors of the marine environment when touting expensive marine products, churning away under the hood of a vehicle for 200,000 miles through all kinds of weather and terrain is no mean feat.

I suspect that the major reason automotive alternatives are so much cheaper than marine alternators is that the former are mass-produced. Automotive alternators are generally not ignition-protected, which is a problem on boats with gasoline engines, but neither are all marine alternators (especially older ones). But don't despair, Delco Remy, the automotive industrial giant, also produces alternators that are ignition-protected, namely the 5SI (50 amps) and 7SI (70 amps), described as off-highway alternators suitable for marine applications. Priced around \$200, the Delco Remy 7SI costs less than half of a comparable alternator built by Balmar and its warranty lasts twice as long.

#### **Portable gasoline generator**

On *Momo* we don't like to charge the batteries using the engine unless we are actually motoring underway. Instead, we rely on a portable gaso-line generator — the Honda 2000i, which costs around \$1,000. I just saw a comparable Coleman generator at a big box store for less than \$500 and, although I can't vouch for it, for that price it is tempting to buy one as a spare.

Sure, a diesel genset sounds nice, and it is no longer that unusual to find one on boats 40 feet long and longer. But even a small genset like the Fischer Panda 4200 weighs more than 200 pounds and will set you back around \$10,000 before it is installed. And since a genset produces enough electricity to run a small factory, you'll want to install the appropriate appliances — air conditioner, microwave, dishwasher, washer/drier, deep freeze, trash compactor — to take advantage of it. But stuffing all of the appliances needed to reproduce the American lifestyle onto a small sailboat is not only expensive, it is also bad for the waterline. Like much of the American population, most cruising sailboats already struggle with their weight, raising their boot stripes an inch or two to mask their obesity. (True story: we once came across a 41-foot sailboat whose owners raised the boot stripe a whopping 13 inches.)

## **Another opinion**

We chose to publish Bernard's article even though I disagree with some points he makes and build my electrical systems quite differently, using many components that he does not like. Bernard uses a simple electrical system for longrange cruising. If you are going to do that kind of liveaboard cruising you may want to consider his solutions carefully. Even then, there are many alternatives to his approach.

We sail our C&C 30 on vacations of two and sometimes three weeks on Lake Superior. We normally have access to shorepower at the marinas where we keep our boat between outings, but seldom have access to it while we are cruising.

Mystic's system is built as follows:

- Two AGM batteries of 105 amphours capacity each, connected to a standard 1-2-both-off-style battery switch
- 100-amp Balmar alternator
- Freedom 10 inverter/charger
- Link 2000R battery monitor and three-stage regulator
- 00-gauge welding cable for all high-current wiring
- Automotive-style fuse panels located near significant groups of loads

Our dinghy is a kayak, which lets us avoid carrying gasoline. We have

Settling for a portable generator makes this struggle much easier. Our Honda weighs about 45 pounds. We can take it to the beach, lend it to friends, and keep it in a cockpit locker. (Note: The locker should be vented like a propane locker. -Eds.) It is reliable, efficient, and built by a company with a reputation for producing quality equipment for a mass market. As the basis of a system that charges our batteries, the generator is completely independent — it starts by hand and even uses a different kind of fuel from the engine (which is important since contaminated fuel knocks out diesel engines more than anything else).

**Continued on Page 67** 

#### by Jerry Powlas

diesel for the engine and alcohol for the stove. We have used this type of system for 15 years for extensive coastal cruising and like it. For the average coastal cruiser, an AGM battery is probably better than any other form. We have tried them all. In those 15 years we have charged our batteries at anchor once. There are ways to use the battery monitor to make this practice less harmful to the engine. The Freedom 10 inverter and Link 2000R battery monitor are very nice. I've had no trouble with them, except when they were hit by lightning. I replaced their smoking little bodies with exactly the same products because I liked them so much. The Balmar alternator is 15 years old; it took the lightning with a shrug.

We are extensively refitting another boat. She is going to be a "light cruiser," trailerable and intended for coastal cruising of up to two weeks without resupply. She will have one battery, the same inverter/ charger, a Link 1000 battery monitor, and a Honda genset like the one Bernard uses. The trailerable will have a gasoline outboard so we will have to carry the stuff anyway.

I only wish to point out here that there is more than one way to make a boat's electrical system. The main thing is to understand this stuff and choose the equipment that will work for your kind of sailing.



I 's known as the "shower dilemma." Most pocket cruisers and older boats are not equipped with the luxury of a hot, freshwater shower. It's up to the boatowner to find some way to keep clean while enjoying life under sail. Some rely on shoreside facilities or jump overboard. Others use solar shower bags, water heated on the stove, or plastic spray containers. More complex solutions involve electric or gas-heated water tanks or make use of the engine's heat exchanger. A few cruisers convert their dinghies into full-sized bubble baths.

The sailing life does not have to be like camping. A lover of life's creature comforts, I wasn't happy with existing shower methods. Solar bags and plastic containers aren't easy to refill and are awkward to store. Heating water on the stove is time-consuming, and I don't have the power requirements or storage space for a water heater. UnShower solution

## Simple solar-heated system is gravity-fed

by Rebecca Burg

deterred, I thought about how I could have an on-demand, private, indoor hot-water shower without electricity, running the engine, awkward refills, or space-hogging clutter. It had to be low-cost, elegant, and easy.

I found a solution that works in my Bayfield 29, Angel. This simple system is integrated into the boat with only minor changes. It's solar-heated and the water is gravity-fed. The water tank is conveniently refilled using the same manual foot pump that provides water to the sink's faucet. I refill the shower's hot-water tank from inside the cabin with my big toe. It's that easy. One disadvantage is that a series of dark and cloudy days will produce a lukewarm shower. In addition, hot water isn't available late at night or before sunrise. And finally, I had to drill a <sup>1</sup>/<sub>2</sub>-inch-diameter hole in the cabintop for the hardware installation.

#### The solution

I mounted a low-profile, 5-inch-tall box with a clear acrylic cover on *Angel's* cabintop in an unused area just forward of the spray hood (polycarbonate can be used in place of the acrylic). The box's footprint is no larger than the average hatch. It's lined with insulating foam around a 4-gallon solar bag, which serves as an unvented hot water tank. Weighing no more than 31 pounds when full, this solar tank is drained and refilled using a single through-deck fitting hidden by the box. Gravity routes the hot water belowdecks to a shower hose and lowpressure nozzle.

Plumbed into the boat's freshwater system, the solar tank is refilled from below with the help of the sink's manual pump. For an initial cost of about \$200, this permanent shower can be custom tailored to almost any vessel.

#### Solar tank

First, determine your desired water capacity and select an appropriatesized solar shower bag. Serving as the tank, the solar bag will be contained inside an insulated box. A 4-gallon bag was plenty for my small vessel. For the box material, I used StarBoard, a durable, user-friendly plastic. It's like working with wood, but without the splinters. To figure out how much StarBoard I needed, I filled a 4-gallon solar shower bag to capacity and took its measurements. The bag must fit





snugly inside the box without sliding. Allow enough room for at least an inch of foam insulation between the box and the bag. Thicker insulation may be needed for boats in cooler climates. No insulation is used over the box's solar-collecting, clear acrylic top face. A white 27- x 30-inch StarBoard sheet, %-inch thick, was enough to build *Angel's* box.

As an amateur in the world of building things, I first made a mockup of the box using foam core from a craft shop to check my measurements before cutting the StarBoard. I slanted the box's face back for aesthetics and ability to shed deck-sweeping waves. The end result was a 5-inch-high box with a 15- x 18-inch footprint and a top opening of 11 x 18 inches. Without access to a machine shop, I used basic tools to make the box in the cockpit while at anchor. A long metal ruler and wax pencil marked the pieces, and I was able to cut the plastic easily with a 20-inch crosscut hand saw. Rough edges can be squared and dry-sanded with a wood block. I used a hand drill, countersink bit, and stainless-steel flathead wood screws for assembly. Clamps or the helping hands of a friend are needed to hold the pieces together and line up the box's sides for drilling. I rounded the sharp corners and edges with sandpaper.

#### **Through-deck plumbing**

Next I needed a hole saw and an electric drill to cut a 1½-inch hole in the bottom of the StarBoard box for the through-deck plumbing. The location of this hole should be near an inside corner of the box close to the hose barb on the solar bag.

For the box's solar-collecting cover, I cut a  $\frac{1}{4}$ -inch-thick, clear acrylic sheet, measured to fit over the opening. I used a hand hacksaw, a bi-metal  $12 \ge 24$  blade, and a constant dribble of water on the blade while cutting the acrylic. Avoid flexing the brittle plastic while cutting it. Round the top edges of the acrylic cover by dry-sanding with 120-grit sandpaper. Next, locate

and drill the holes for attaching the acrylic lid to the finished box.

To fasten the top cover, I drilled the StarBoard for a #6 screw, but the acrylic must be treated differently. I drilled holes in the acrylic that were just larger than the diameter of the screws. The manual drill and a sharp bit worked well for the acrylic. Roundhead screws with finish washers hold the acrylic lid in place. The box does not have to be watertight.

Here's a handy plastic tip: when re-inserting a screw into plastic like StarBoard, first gently turn the screw in the opposite (counterclockwise) direction. It should "fall in" the existing thread. Once you locate the first thread this way, turn and insert the screw normally. This prevents stripping the threads, something that's easy to do on soft materials like plastic.

#### **Gravity-fed tank**

Using the finished box as your model, find a suitable spot on the cabintop or deck. Remember that this gravity-fed tank must be higher than the shower nozzle. Basically, the tank should be higher than your head when you're in your chosen shower spot inside the cabin. If you have a small boat you may have to shower sitting down.

Once the box's location is determined, install the through-deck plumbing. For *Angel*, I used a ¼-inch bronze pipe nipple (plastic may be used since it's well above the waterline) and two bronze hex bushings with ¼-inch female thread to ½-inch male thread. The length of the nipple depends on the thickness of the cabintop. A 2-inch length worked for *Angel*.

I used a ½-inch drill bit and a rattail file to fair out the hole in the cabintop, which fit the pipe nipple perfectly. On boats with cored decks, the coring must be removed from around the inside of any hole drilled in the deck. Tape off and fill an oversized hole with epoxy. Then, once the epoxy has set, re-drill the hole the correct size. When tightening the bushings, I had to add one large fender washer to serve as a

Rebecca has it all: a low-cost, elegant, and easy-to-build shower in the head of her 29footer, as shown on top of facing page. The parts she used to create her shower, on facing page at left, and the on-deck container that holds the solar shower tank, this page at right. From top: The plumbing arrangement inside that container, the finished "hot water tank," and the overhead plumbing arrangement in the head. backing plate and spacer for the best fit. When tightened, both bushings should lock the nipple in place similar to installing a through-hull. The installation should be immovable and secure. I used BoatLife's Life Calk as the sealant.

The 1½-inch hole in the box's bottom should sit over the newly installed through-deck fitting. Assuring that the hole and fitting were lined up, I permanently mounted the box on the cabintop with four ¼-inch through-bolts, fender washers, and lock nuts. Feet made of leftover pieces of StarBoard accommodated *Angel's* curved surface. The solar shower bag is placed in







the box and attached to the through-deck fitting with a piece of hose and hose clamps.

Once installed, I padded the fittings to protect the solar bag from chafe. I also lined the inside of the box with closed-cell foam cut to fit. This serves as insulation, helping the water stay warm on cool, windy days and retaining heat for a while after sunset. Foam pads sold in the garden section of the hardware store as kneeling pads are an ideal source of closed-cell foam.

No air vent is required; the bladderlike solar tank is refilled and emptied through the same hose and fitting. To prevent annoying drips, especially between metal and nylon, I mated all threaded parts with Life Calk.

#### **Belowdecks**

solar-heated,

gravity-fed, on-deck

shower tank

through-deck

pipe nipple

main water tank

ventless,

I installed an ordinary ½-inch garden hose Y-valve under the sink counter. Using this valve, fresh water from *Angel's* foot pump can be directed to the sink faucet or diverted to refill the solar tank. As I was not sure about back pressure and possible stress on the foot pump, I installed an inline ½-inch check valve in the hose above

## For an indoor shower stall, I use a 17- x 23-inch-wide plastic tub that is 5 inches high.

the Y-valve on the shower pump-up side. Using the foot pump, I can effortlessly refill the shower from inside the cabin. At first, it took some guesswork to determine how many pumps would refill the bag, especially since the bag isn't completely emptied after I shower. *Angel's* common-sized marine foot pump produces 4.3 gallons per minute. Those who have boats with electric pumps may have to experiment to see how long it will take to fill the bag. I've found that overfilling simply causes the excess water to seep out of the shower bag's fill cap with no harm done.

I attached a ½-inch nylon female hose elbow to the interior end of the through-deck fitting. I ran opaque marine/RV ½-inch water hose from the elbow to the shower area and made a foam covering for the fitting that protruded belowdecks to protect unsuspecting guests' heads. Once the solar bag was pumped up for the first time, I pushed out all air bubbles that were trapped in the bag.

A shower hose and low-pressure nozzle with standard ½-inch pipe fittings were "teed" into the system along with an in-line garden hose on/off valve. For an indoor shower stall, I use a 17- x 23-inch-wide plastic tub that is 5 inches high. It catches the

on/off valve

tee

check valve

water flow to

solar tank)

(allows one-way

added on/off

valve at nozzle

water filter

water, which I pour into the sink after showering. Originally an under-bed storage bin found at a department

store, the tub's short height allows me to slide it out of the way when not in use. A plastic shower curtain protects the cabin. After it's dry, I bundle it up and secure it with Velcro in the corner where it's out of the way.

#### Adjusting solar energy levels

Slanting the front face of *Angel's* box reduced the size of the top opening and the amount of sunlight entering it. But this didn't seem to make a difference in my southern cruising grounds. On a sunny 70°F day, my solar box will show water temperatures higher than 122°F by noon. When cruising the tropics and subtropics, the water is able to get too hot and I partially cover the box with a snap-on piece of Sunbrella. Those in northern climates may wish to experiment with black lining inside the box and around the solar bag. Take care when experimenting with this; you don't want to end up creating a solar oven capable of melting a plastic shower bag. The simplest solar ovens will easily reach temps of more than 150°F. For boats in high latitudes, the box can be built with a wider top for greater exposure to sunlight.

This shower solution can be perfected and customized to meet the unique needs of your boat. With a bit of careful planning, creativity, and a few tools, you can be enjoying a luxurious hot shower with no electrical demands or refill hassles.

Rebecca Burg comes from a long line of fishermen, mariners, and coastal dwellers. An artist and writer, she singlehands and lives aboard her Bayfield 29 but never far from the Morgan Out Island singlehanded by Bill Robinson. Visit her website at <http://www.

> More online ... For a detailed parts list go to <http://www. goodoldboat.com/ shower.html>.

artoffshore.com>.

REBECCA BURG

## The sailing bug bites hard

## Updating skills learned in childhood

by Theresa Meis

Theresa docks the boat, her first assignment while taking the Sailboats Inc. Charter Certification Course in Bayfield, Wisconsin. Theresa and three other students practiced maneuvers using a C&C 29 named Jubilee.

NTIL RECENTLY, THE MAJORITY OF my sailing experience took place between the ages of nine and 16 aboard my father's 17-foot Siren, *Running Free.* Our family of five, plus our 35-pound terrier-mix, spent many wonderful afternoons aboard that boat sailing the small lakes of central Minnesota.

Once we children started heading off to college, *Running Free's* trips to the lake became fewer and fewer. Sailing was something we remembered fondly in passing as we hurried between work and school. In the blink of an eye, I saw seven years pass without setting foot aboard a sailboat.

Three years ago, I broke that dry streak. I was at a camping party at a friend's remote lake cabin. Someone had brought a broad-bottomed 15footer along and had it moored to the dock. When I saw it sitting there, the memories of the feel, the rush of sailing came flooding back. I got permission to take the boat out. I recruited a friend who had never set foot aboard a sailboat and the two of us somewhat awkwardly got under way.

My friend, a tenacious scrap of a girl, was soon howling right along with me as we heeled that little boat as far over as we could. The energy of the wind flowing through the sails, to the rigging, to my fingertips ... it was intoxicating. We had hardly set foot ashore when I was already hungry for another trip out.

The following year found me newly married, the proud owner of a new home, and the co-founder of a custom woodworking business. All of these major life changes took place over the short Minnesota summer. The year after that, my father and I promised each other that we would get *Running Free* out...no matter what. After all, I had been hired by *Good Old Boat* as an editorial assistant and web designer. Now I had another reason why I needed to spend some time on the water.

#### **Brooding sky**

Ultimately, we did take her out under a low, brooding sky with winds that were right at the threshold of our comfort zone. My dad tested me to see if I knew enough to captain the boat on my own. It was a big moment for me. Sure, he'd let me hold the rudder as a child or let me call a tack, but this was more than that. It was left to me to make the choices. He didn't say a word as I sheeted her in tight and tested the theory that she couldn't be capsized.

But the remainder of the summer ran away from us. I suppose it doesn't help that the home renovation business is seasonal. My husband, Chris, who had dutifully participated in the annual Father's Day scrub down of *Running Free*, still had never been sailing.

This past winter, we discovered the solution to that problem: the key to getting Chris aboard a sailboat is to schedule his trip several months in advance. At the Strictly Sail show in Chicago, *Good Old Boat* editors Karen and Jerry signed both of us up for sailing lessons through Sailboats Inc.

Sailboats Inc. is based in Superior, Wisconsin, and offers lessons in Superior, Bayfield, and Manitowoc, Wisconsin; Chicago, Illinois; and Lake City, Minnesota. Since we also were looking at our trip as the opportunity for a romantic getaway, we chose Bayfield, a quaint little town at the heart of the Apostle Islands National Lakeshore. The course lasted three days and was a combination of classroom and onthe-water lessons. The first thing I did when I got home from the boat show was block those dates off on our shared calendar. We both counted off the days with anticipation.

#### **Course materials**

A few weeks after we signed up, our course materials arrived in the mail. Included were a three-ring binder



containing notes corresponding with the online instructional video, a sailing overview DVD, a length of rope, a book (*The Complete Sailor*, by David Seidman), and pamphlets about Bayfield.

Chris, who has a remarkable photographic memory, immediately absorbed the materials and proceeded to walk around sounding as if he had been born with salt on his shoes. I had the advantage of having sailed before, so I could recall how certain maneuvers looked and felt. However, I also had to replace my nine-year-old notions with actual facts and real terms. *The Complete Sailor* is an excellent book for the inexperienced or rusty sailor. It is easy to read and is filled with clear illustrations.

The only hitch we encountered with the course materials was the online instructional video. We procrastinated on this part because we wanted to watch it together. By the time we discovered that the video isn't compatible with our Macs, it was the eve of our departure. Later we learned that there is a DVD version of the video that can substitute if the online presentation is incompatible for any reason.

Chris and I were both a little nervous about what we might be tested on, but our concerns were unfounded. When we arrived for our morning classroom instruction, we were greeted by our instructor, Jim Scannell (Captain Jim to us), and introduced to two fellow students who would be joining us: Tim Hansen and John Flack. The first piece of business was learning how to use navigation charts.

#### **Plotting courses**

Navigating by chart is something I had always wanted to learn to do, but I had never had the opportunity. I could The novice navigators determine where in the Apostle Islands they will take *Jubilee* during their practice cruise.

have plotted courses all day... It was a lot easier to pick up than I had ever imagined it would be.

After spending the morning working on the navigation exercises, we headed to the marina to familiarize ourselves with the boat and then to work on docking maneuvers. The boat was a C&C 29 named *Jubilee*. It was certainly larger than any boat I had sailed before. This would be my first time steering with a wheel, rather than a tiller. I wasn't sure how well I'd do, but I figured time would tell, as it would with everything yet to come.

I found out much sooner than I had anticipated. As we prepared to leave the dock, Captain Jim called out, "Theresa, why don't you back us out?" For the majority of that afternoon, we did touch-and-go docking maneuvers. Each time I got behind the wheel, I felt more at ease. Jim would let us know when we made a mistake and, most importantly, how to correct it. He explained the physics of the movement of the boat in the water in a way that made sense and helped us anticipate how the boat would respond to our turns of the wheel and movement of the throttle.

#### **Mixed feelings**

The day ended with an excursion out into the open water of Lake Superior. This was the moment I had been anticipating with mixed feelings. Chris suffers from motion sickness, and at the time I was newly pregnant, complete with morning sickness (which I now know without a doubt is a misnomer nausea can strike any time of the day). I was hoping that Chris' first chance to experience movement under sail power was going to be a good one, not one spent bent over the rail. And I had my own concerns: I didn't want to throw up in front of a bunch of strangers.

Fortunately, the motion of the sailboat was kind to both of us. I watched

As we prepared to leave the dock, Captain Jim called out, 'Theresa, why don't you back us out?' This was, without a doubt, the most intimidating part of the entire course.

This was, without a doubt, the most intimidating part of the entire course. Here I was, a 20-something female on a boat with three older, experienced sailing men and my husband, and I was to be the first to pull the boat out of the slip. I'd never steered a boat under power before, let alone in a space that seemed impossibly small. Jim, however, did an outstanding job instructing me. He calmly told me step-bystep what to do. His confidence in me inspired my own confidence in myself, and before I knew it. I'd backed the boat out of the slip and had her moving toward the open water within the marina.

Chris closely as we cut the engine and raised the sails. The wind caught hold, propelling us forward with greater and greater speed. His look wasn't one of abandon or wild joy; instead, he looked a bit shocked at first. When he finally spoke, his expression made sense: "I can't believe how quiet it is!" Later he explained that he was simply amazed at the speed and the power of the wind pushing us along with seemingly little effort. Having grown up on powerboats and jet skis, this was an entirely new experience for him.

Our first trip out onto the lake was a pleasurable one, though we were eventually spurred inland by a burst of rain. Fortunately, we'd all come prepared with foul weather gear (not to mention shorts, T-shirts, long pants, sweaters, long underwear, gloves, hats, and sunscreen — as Minnesotans, we knew that early June on Lake Superior could encompass all seasons within a single day). We docked the boat and went our separate ways for the evening, excited about the next day's lessons.

#### **Docking exercises**

The second day's course began with more docking exercises. (By this time I felt much more at ease behind the wheel, though I maintained a healthy fear of crashing the boat.) I was intrigued by how intuitive getting the boat up to the dock seemed to me. I tried to figure out why it should feel like such a natural thing to do, and my best guess was that years of ice skating had taught me how to intuitively figure speed, mass, and stopping distance.

From docking exercises, we moved to anchoring. This was a valuable lesson, since I had never really learned the theory of anchoring (as would be evident if you had ever seen me out fishing from my rowboat, drifting horribly and wondering why the anchor wouldn't set). I was shocked at first by the formula for how much rode to let out. In our case, it seemed like an awful lot of rode for such shallow water. With that one little formula, I suddenly found myself in possession of a bit of knowledge that would vastly improve my boating experiences for years to come.

As much as we were benefiting from the docking and anchoring exercises, we were all chomping at the bit to get back out on the lake. That afternoon, we were able to go out again. We all had a turn at the helm during our open-water lessons. We learned the man-overboard maneuver, practiced tacking and jibing, and experimented a bit with the various points of sail. Chris was even more astonished at how quiet a downwind run is.

The maneuver I thought was the most interesting was heaving to. I don't

#### Resources

Sailboats Inc. <http://www.sailboatsinc.com> recall ever doing anything quite like this aboard my dad's boat as a child (at least not on purpose). It really impressed us to learn that it was possible to bring the boat nearly to a standstill. I realize how odd it might sound that the two lessons that impressed me the most were lessons on how to stop the boat, but as any pilot will tell you, stopping is the hardest and most important lesson to learn.

#### **Clumsy moments**

The rest of the afternoon we sailed around under a clear blue sky. We had our clumsy moments as a crew, but with each tack we improved our efficiency. Jim was a hands-off instructor during this time, letting us choose our course and assign who would be working which station. He only stepped in to offer a kind critique of our progress when he saw room for improvement.

By the end of our second day, we'd covered the majority of the lessons necessary for charter certification. The third day promised to be a "free day," taking turns playing captain and cruising the waters near Bayfield.

This day dawned bright and sunny with a perfect breeze. We met at *Jubilee* and agreed that we'd like to plot a course and follow it. The chart came out and, between the four of us, we managed to get the course set. After we each took a final turn at docking the boat, we sailed out onto the lake.

This final outing was a lot of fun. We took turns at the wheel, though I admit that I spent more time with my face in the wind trying not to break my "haven't thrown up on the boat" streak. We played with the GPS equipment and practiced looking for landmarks based on the information from the chart. After more or less reaching our destination, we hove to and had lunch. While we ate, the weather that had been forecast for the afternoon started to move in, and we decided to cut our trip short in order to reach the marina before the rain broke.

#### **Torrential downpour**

We made it back about 10 minutes before a torrential downpour began. *Jubilee* was docked, cleaned, and ready for the next class to take her out. We gathered our belongings and then met on the dock to receive our certificates proclaiming that we had successfully completed the Sailboats Inc. Charter Certification Course. Chris and I grinned at each other as we clutched our certificates. I practically had to drag him away from the marina office where they had a list of yachts for sale, reminding him that we had a perfectly good boat that we could use at our whim as well as a baby on the way. (It's never fun to be the practical one, and I freely admit that I eyed several of those yachts with longing.)

As we drove the four hours back home the next day, we talked nonstop of all our plans — to take my dad's Siren out, to find a way to charter a boat with friends, and to someday try our hands at building our own boat. It's safe to say that the sailing bug has firmly burrowed its way into our hearts.

Theresa Meis recently joined the Good Old Boat staff as an editorial assistant, web designer, and audio manager. She has sailed a small Siren for years but now she's gaining that all-important good-old-cruising-boat experience also.

A satisfied Theresa at the helm. Is she smiling because she's got the wheel or because morning sickness never sent her running to the rail to feed the Lake Superior fish?





## THE Rescuers:

## Two efforts to save old

by Susan Peterson Gately

Soundings down and thought, 'I should give that lady a call.' " A month after discovering the article, he finally called. "We hit it off right away. She said she had several parties interested and was not going to give up her 'baby' without a personal interview." David made arrangements to meet with Ginger and spent a morning exchanging sea stories and boat anecdotes with her. "After a few hours, I said to Ginger 'Well, what do you think? Am I the right person?' She put her two thumbs in the air, and the deal was struck."

Like Ginger, David, now based in Marblehead, Massachusetts, is a longtime boater and admirer of "old things." (He and his wife, Nan, and two children took on the restoration of a fixer-upper home not long ago.) Unlike Ginger, who had been putting her newsletter together with a typewriter and a "database" of index cards, David was familiar with computers and their capacity for orga-

# and beautiful yachts are being rescued from the chain saw and landfill.

charge when a boat sold, that amount being equal to the last two digits of the boat's building date.

as a hard-copy newsletter listing the

tion. Ginger Marshall Martus started

destruction of several old unwanted,

but still salvageable, boats. Soon she

was getting the word out across the

United States and Canada through

newsletters. Additional revenue for

her subscription-supported quarterly

printing and mailing came from a flat

publishing it in 1996 after watching the

old and unwanted for sale or adop-

#### New skipper

Two years ago, Ginger turned her newsletter over to a new skipper, David Irving. As he tells it, he spotted a notice in *Soundings* about her desire for a change of watch. "I have a bachelor's degree in English, love to write, and have a background in information publishing," David says. "I put the issue of nizing and disseminating information. Before long, Bone Yard Boats had gone digital at <http://www.boneyard boats.com>. Here, David posts listings, rescue and restoration stories, and other information, while he continues to produce the hard-copy newsletter for subscribers. He charges readers \$19.95 to subscribe to the *Bone Yard Boats* newsletter. As subscribers, they are able to list boats for free.

Bone Yard Boats seeks new homes for all types of boats (power and sail)

This is the first of a two-part series about sailors who fall in love with old boats, particularly those made of wood, and are compelled to restore and sail them. Part 1 reports on two men who are passionate about finding and salvaging boatyard rejects through their roles as "matchmakers." Part 2 will focus on two people who are pouring their love into the restoration of one of these boats... a reject no longer.

E'VE ALL SEEN THEM. NEGLECTED unwanted old boats shoved off into the back corners of marinas, boatyards, and backyards are a common sight. Sometimes they're mildewed, grimy, fiberglass boats with clouded windows, crazed and cracked gelcoat, or graffiti-sprayed hulls. Sometimes paint peels from weathered gray planking or a dark stain of rot grows from the corner of a varnished transom.

These boatyard waifs, particularly the perishable wooden ones, face a bleak future. But thanks to the Internet and some dedicated (crazy?) individuals, a few of these once-proud and beautiful yachts are being rescued from the chain saw and landfill. Bone Yard Boats, founded in 1996 by a woman who grew up around old boats in her father's boatyard, and a more recent startup, the Wooden Boat Rescue Foundation, whose mission statement reads "placement, saving, locating, researching, wishing, learning, and dreaming of wooden boats," are recycling and restoring the unloved, one hull at a time.

The Bone Yard Boats' recycling effort has been highlighted for years on *Good Old Boat's* webpage listing free and inexpensive sailboats: <http://www.goodoldboat.com/fixeruppers.html>. Bone Yard Boats began boats from our landfills

built of wood and fiberglass. At the time of this writing, Bone Yard Boats had several wooden and fiberglass sailboats up for "adoption," along with a selection of powerboats. Not all the yachts listed are free, but they are generally too cheap and rundown to sell through traditional brokerage services and often are too tired to pass a survey for financing or insurance. Every now and then, though, a diamond in the rough comes along that simply needs a little polishing. A recent example was a 1948 Herreshoff H-28 ketch listed as free to a good home. This 28-footer had been saved from the chain saw several years ago, and her owner kept her active and afloat as a daysailer. She was professionally built by the Truscott Boat Works in Michigan. The newsletter ad read: "Now it's time for someone to come along and give this boat a good home and lots of elbow grease."

#### An unnecessary death

When I interviewed David, he had recently seen another salvageable boat die an unnecessary death. It was a 65-foot wooden motoryacht, afloat at a Maryland marina. The owner had vanished, and the yard needed the space for paying customers. A marine surveyor familiar with wooden boats heard of the still structurally sound and very restorable old timer's impending death sentence and alerted David. He promptly called ... only to learn that the marina had just paid \$7,000 to demolish the yacht and haul the remains to the local landfill. David recalls, "When the marina manager heard of the newsletter, he said, 'I wish I knew about you before.' He just kept repeating that."

But Bone Yard Boats also has happier outcomes to its credit. Last year a piece of maritime history, the 58-foot skipjack, *Ethel Lewis*, built as a working oysterman in 1906, was transported from a Brooklyn boatyard to a museum in Virginia, where she will be stabilized and placed on display. Other fortunate foundlings include a catboat that was purchased, completely restored, and listed for sale in a recent *Bone Yard Boats* newsletter.

ting entr

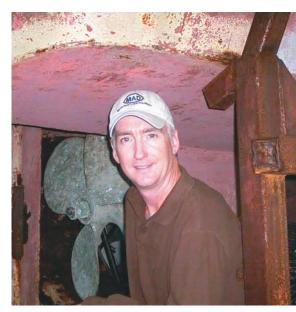
New orphans continue to land on David's doorstep. In the winter 2006 issue, he featured the Big T, a hapless 51-foot steel ketch that sank at her mooring on the Ashley River near Charleston, South Carolina, in 30 feet of water in 2004. After nine months on the bottom she was "adopted" and refloated, though not before a local news weekly voted her Best Shipwreck honors. As of this writing she was on the comeback trail. Another listing during the spring of 2006 was for a 40-footer, believed to be a Hinckley, built around 1960, also free to a good home.

Since its start 10 years ago, Bone Yard Boats has been written up in Classic Boat, Soundings, Wooden-Boat, and other regional and national publications. But the 65-foot motoryacht destroyed in Maryland has made David more determined than ever to get the word out. He is planning more upgrades and enhancements to the website and to the printed newsletter. Already the website and email updates and alerts have become the basis of a growing online "community" of old-boat rescuers. And, as the project's founder, Ginger Martus continues to lend a hand with publicity, articles for the newsletter, and boat placements.

#### **Connecting people**

Another recent old-boat rescue effort created through the Internet's ability to connect people is Bruce Elfstrom's Wooden Boat Rescue





One wooden sailboat on the comeback trail is Adamant, shown in her early stages, top two photos. David Irving, above, runs the Bone Yard Boats newsletter and website in an attempt to match old classics with new and energetic owners.









#### Adamant, a 1937 Interclub one-design, is a success story for all who wish to preserve old classics.

Foundation at <http://www.wooden boatrescue.org>. A boat named *Masuyo* started it all for Bruce. He simply couldn't stop thinking about her. The *Masuyo* was a Scottish-built double-ender lying in a boatyard in New Jersey. Bruce got word of her as a possible parts source for the 1927 cutter he was restoring. But when he saw the hull, he thought, "I can't cut this boat up for hardware. She's way too good." As he studied his find, he also had a vague and nagging sense that he somehow knew the boat from somewhere.

He drove back to his home in Connecticut thinking, "What can we do to keep this boat from being cut up?" And he continued to wonder what it was that seemed so familiar about her. Four days later, he remembered where he'd seen Masuyo before. "It was in a little book I had, Maynard Bray's field guide to wooden boats. I found the book, and there she was - same big old iron windlass, double-ender, and built in Scotland." Bruce "Googled" the name of the owner as given in the book, tracked him down, and called him up. "I said, 'Hey, I think I found your old boat.' The guy flipped. He said, 'Where is it? I want her!' "

The *Masuyo* ultimately ended up in Maine where her former owner eventually passed her on to another wooden boat devotee, who is now completing a successful restoration. As Bruce recalls, "This started the idea that I can find homes for these old boats."

Bruce grew up around boats. "I've sailed since I was tiny," he says with a laugh, when asked how he started sailing. "I used to sail up in Maine for three months in the summer. I sailed on a Drascombe Lugger, a Contessa, and a Bristol Channel Cutter. The funny thing is we never had many wooden sailboats — just one or two dories."

#### **Still educates**

After a spell in graduate school in New Mexico and some years of college classroom teaching, Bruce landed back in New England where he and his wife now live with their two daughters. He is still an educator but in a somewhat unorthodox way these days. He runs a business called Overland Experts to teach people how to use their four-wheel-drive vehicles in the best and most ethical fashion. Film crews, military personnel, foreign-aid workers, and weekend warriors learn to "drive well" and "go further," as his website, <http://www.overlandexperts. com> puts it.

The Elfstrom family resumed sailing because, as he explains it, "When I turned my hobby into a business, I needed another hobby." And somewhere along the way Bruce got hooked on wooden boats.

The appeal of the biodegradable boat is undeniable. Even people who are unwilling or unable to tackle a restoration or lack the discipline required for such a project look upon old boats as something special. "And," says Bruce, "now that there aren't very many of them left, people are starting to want them. I've seen a revival of interest in wooden boats."

A few months after the Masuyo incident, Bruce, again prowling the boatvards, found another unwanted boat waif. This was a Swedish-built sloop, a Koster class, clinker-planked, 26 feet long, and in need of a home. His first thought (perhaps predictably) was, "I gotta have that." But then reality set in. As he puts it, "You know, you can have too many boats." Faced with this highly irregular jolt of common sense, he thought, "OK, I'll find a home for her." But when he started trying to give the boat away, he found no easy method for doing so. The free boat/free ad space that WoodenBoat magazine makes available was limited and, at that time, had a four-month waiting list.

#### **Created website**

"So in one day I made the website and posted a notice on the *WoodenBoat* forum, and the first week we got 5,000 hits," he remembers. The Koster sloop

#### Resources

Bone Yard Boats <http://www.boneyardboats.com>

Wooden Boat Rescue Foundation <http://www.woodenboatrescue.org> soon had a new owner who began fixing her up.

Bruce created the Wooden Boat Rescue Foundation website database so people seeking or finding boats could post their own wants and requests. He was, he explains, far too busy with other projects (such as his business, his family, and the restoration of his 34-foot *Katarina*) to spend a lot of time being a webmaster. And it has worked. More than 50 boats have already found homes through the website. Bruce still prowls the boatyards in search of the unwanted and unloved wooden boat. But now other people are also out there playing matchmaker too.

Bruce takes pains to point out that he has no economic or personal involvement with the boats on his website. He doesn't own them or store them, and he has no involvement if money changes hands for them. Sometimes he never sees the boats listed. He does occasionally provide some guidance to those who are interested in an "adoption" boat," Bruce comments. To help counter that and the fear of undertaking a major repair job, he initiated another effort to save old boats: he organized a weekend boat-restoration seminar to be done under the guidance of a skilled shipwright. Recently, with the support of a waterfront landowner, he also established a "grass-roots wooden boatyard," as he calls it, where people can keep and work on their wooden boats and obtain occasional advice and instruction from professionals.

Bruce also suggests that the restoration logs on his website can provide guidance and inspiration to those tackling a big project. These, he notes, aren't \$300,000 restorations being done by a yard. These are real projects done by real people on real budgets. One notable example of a successful (and speedy) restoration is that of Don Salisbury's *Adamant*, an Interclub one-design built in 1937. Don, an experienced carpenter who had restored several other boats previously, got

## ...people are starting to want them. I've seen a revival of interest in wooden boats.

to be sure they understand fully what they're getting into. And he accepts cash donations for ads or moving costs involved in the boat-rescue efforts.

#### **Total amateur**

People occasionally contact Bruce for advice on restoring their old boats. He is guick to tell them he is not an expert woodworker: "I am a total amateur!" However, he isn't afraid to wade into a big project. This is clear in the restoration log for Katarina (posted under the articles section of his website). While Bruce says wooden boat repair isn't brain surgery, he did decide to seek out advice and guidance from an expert shipwright at Mystic Seaport who offers boatbuilding classes. This was prudent, for more than one "rescuer" has torn open a wooden boat with no overall plan for its restoration and then never managed to put it back together again.

"People think there's a sort of mystical aura about working on a wooden the *Adamant* in early 2005. By June he had replaced all 72 frames and 19 floors, and by early August he had her afloat in time for a local Rhode Island wooden boat show.

Since its modest start, the foundation, like Bone Yard Boats before it, has attracted national notice. Bruce mentioned that several people interested in saving old boats in other regions had told him they wanted websites similar to his site. (Both the Wooden Boat Rescue Foundation and Bone Yard Boats are East Coast-based efforts.)

#### History and craftsmanship

I asked Bruce and David about the appeal of old boats. David, who says he loves history and craftsmanship, finds both in old yachts. "There are some pretty nice boats being built today, but so many lack the element of nautical charm." Bruce agrees, saying that those who are willing to fix up a wooden boat seem to place a

## A quick word on insurance

As of this writing, there is no legal requirement to carry insurance on a pleasure boat in the United States; some people get by without insurance. In today's era of litigation, however, an unfortunate combination of aggressive lawyers and irresponsible boatowners has prompted the underwriters to reevaluate the level of risk associated with all types of boats, especially older and "odd" boats.

Some smaller boats may still be insured, at least for liability risk, under homeowners' policies, but a larger boat that deviates even slightly from the "norm" (the norm being less than 10 years old and made of fiberglass) is getting a harder look from the marine underwriters and may be refused coverage. Steel, wood, ferrocement, and older fiberglass boats may fail to meet the acceptable risk level.

Some American marinas reguire that tenants have insurance before they can rent a slip. Getting a good survey is the key to getting insurance on an older boat of any kind, as the underwriters rely on surveyors' opinions and expertise for deciding whether to cover a boat or not. Look for qualified surveyors on the Internet sites for the Society of Accredited Marine Surveyors (SAMS) and National Association of Marine Surveyors (NAMS), as their standards are generally acceptable to the insurance industry.

One professional boat restorer I spoke with suggested that as you repair your boat, you work with a surveyor to document the process. For those fixing up wooden boats, you might arrange for periodic visits by the surveyor to the worksite when you complete certain phases. Then the surveyor can do the documenting; otherwise, you can supply the needed information and/or photos as some of the work may later be impossible to see or verify when the boat is finished. Bruce Elfstrom, at right, founded the Wooden Boat Rescue Foundation not long ago. This website helps match would-be boatowners and restorers with boats destined for the landfill. Located on the East Coast, Bruce will help others start similar efforts in their geographic areas.

high value on aesthetics. Bruce, like many owners of older boats, also thinks that an old boat somehow absorbs a "soul factor" from past human associations as she is used (and worked on) through the decades. Perhaps a boat takes up that "soul," along with some of the blood, sweat, and occasional tears of frustration expended in keeping an old-timer functional.

Undertaking a major restoration of a boat, whatever her hull material, is an act of faith and hope. It also takes a certain amount of trust to take on an orphan that can't pass a survey. There are no guarantees out there in this weary old world. You do the best you can, and in the end, when you're out there miles from land, you have to know you did, and believe in it.

Susan Peterson Gateley has written three books that feature her association with a vintage 23-foot woodie and her good old plastic 32-footer. For updates on her refit of a 47-foot Tancook Schooner, Sara B, visit <http://www. sarab.brownroad.com>.







## GOOD OLD BOATS

#### We don't just insure them ...

#### ... we're owners of these boats.

We've been through the buying process, the restoration process, the upkeep.

We still scrape, sand, paint, varnish, reframe, refasten, and refinish our own boats.

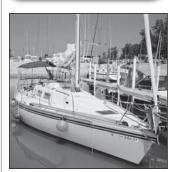
We sail them, cruise and race, we fish from them - we just plain enjoy them.

In short, we love Good Old Boats just like you do, and we understand what your boat means to you.

Call us to discuss insuring your good old fiberglass, wood, steel, or aluminum boat

1-800-959-3047 860-449-5915 (fax) P.O. Box 188 • Mystic, CT 06355

#### Boats



#### Morgan 36

1983 Nelson/Marek design. Sleeps 7, Universal diesel, 25-hp, 830 hours. Hydraulic backstay, new AP, depth finder, beam 11'10", draft 4'8". Survey Dec. '03 rated boat above average. Always in fresh water; stored covered in winter, 12,000-lb displ. Mainsail and 135 RF good cond. Keelstepped double-spreader mast. Beautiful teak/cherry interior, ST winches, boom vang. No delamination, engine in exc cond. Cradle. On Kentucky Lake. \$34,900.

Mike Browne 740-772-6378

#### Masthead sloop 27

1974 Tylercraft. Made in Long Island, N.Y. Draft 3.5' on twin keels. Mainsail, 130 genoa, working jib, double-axle trailer, electric brakes. No pox or soft spots in deck. Fully equipped, well-made fiberglass boat in good cond. \$3,800 w/o motor. Or \$4,500 w/'92 15-hp LS Everwood electric start, new coil and pickup, 2cycle. In Toledo, Ohio.

> Rick Orgel 419-242-4569



1973. Turnkey cond. Professionally maintained brightwork. Atomic 4, Edson wheel, Garmin GPS, VHF, stereo, pressurized water, rerigged '03, 5 good sails, Origo 2-burner stove, 2 anchors, 2 bilge pumps, holding tank, sleeps 5, ready to sail. In Noank, Conn. \$11,000 OBO.

> Richard Sise richardsise@aol.com 860-625-1728



#### Islander Wayfarer 37

1968. Very clean, classic cruising boat. Moving to larger boat and very motivated to sell this lovely old boat. An exceptionally welldesigned vessel offering spacious accommodations combined w/ good sail performance. Westerbeke diesel well maintained, very dependable. Decks recently painted. In good sailing cond. \$19,500.

> Frank Reveil billeentete@yahoo.com 310-968-3724 404-272-3925



#### Gulfstar 37

1977 aft-cockpit sloop, 1984 50-hp Perkins (rebuilt '03). Sails: main w/Dutchman, 140 genoa, and storm jib. Teak interior, 6'3" headroom, Lewmar ST winches, Harken traveler, ICOM VHF. Garmin GPS, Apelco depth, Autohelm 6000, windlass. New: Cruisair, Zodiac w/Nissan OB, captain's navy canvas. A beautiful good old boat. Great liveaboard cruiser, well maintained! Health issues force sale. \$44,000.

Jerry Wood woodjandn@netscape.com 850-984-0608

#### Baba 35

1981 cutter-rigged, lightly used bluewater cruiser in exceptional cond. Completely outfitted, including total rebuild of engine and transmission, custom dual filter system, all new rigging, electrical, galley systems, and tanks, LectraSan, watermaker, bedding, radar, GPS, chart plotter, Glacier Bay fridge, fantastic stove, etc. 6'4" headroom w/superb varnished teak joinery throughout.

Most of our classified ads appear on the **GOOD OLD BOAT** website: http://www.goodoldboat.com/classifieds.html

Survey available. In Savannah, Ga. \$83,500. Complete listing at <http://www.baba35forsale.com/ baba35forsale.html>. Clifton Crais

ccrais@emory.edu 404-272-3925



#### Allegra 24

Bare hull w/deck and ballast, bluewater pocket cruiser by Fred Bingham. Stored inside, exc cond. See *Good Old Boat*, Nov. '06. With or without EZ-Loader trailer. Located Pacific Northwest. \$8,000 w/o trailer or \$13,000 w/trailer. Reasonable offers considered. More photos and info available.

Dennis Burmeister dennyb@theofficenet.com 509-675-0253



#### Freedom 33

1982 cat ketch. Handsome, spacious, seaworthy, performance cruiser. Beautiful interior, generous headroom. 2 freestanding carbon masts w/tracks. Very good main and mizzen, new staysail. Lazy-jacks w/zippered sailcovers. 4'6" keel, 3 GM Yanmar diesel. AP, pressure water, 3-burner propane stove and oven. In Glen Cove, N.Y. \$30,000 OBO.

> Milton Thrush cthrush718@juno.com 516-933-1886

#### Catalina 30

1983. Tall rig, RF genoa, FB main. Lazy-jacks, wheel, new head system, new water heater, GPS, handbooks for all equip. 33-hp Atomic 4. Branford, Conn. Reduced price \$19,900. Pat Rosato 203-788-1677



#### **Bayfield 29**

1983. Rigged as sloop w/Profurl RF headsail, staysail in deck storage bag. Wonderfully cared for, freshwater boat all her life. New '05: Navman D/S, repeater, smart battery charger, deck and anchor lights, including new wiring. Radar, AP, VHF, and GPS, dodger, Bimini, Origo alcohol stove, pressurized water, CD player and radio. Completely equipped, ready to sail! Bayfield, Wis. \$30,000.

> Jim Beran jim@rohnind.com 612-850-0068 (cell) 763-572-8797 (evenings)



#### Lord Nelson 41

1982 cutter-rigged, full-keel cruiser. 75-hp Yanmar diesel (new '03 only 48 hours). Bottom layup '00. Gennaker (with sock) '02. Raytheon 4-kw radar/GPS/ chart plotter '01. Other upgrades too numerous to list. Marvelous galley and saloon layout, beautiful teak interior, great storage. Sleeps 7 and cruise-ready. In Bay City, Mich. Price reduced to \$144,900.

Alan and Joy Doss Fairwind2@earthlink.net 989-345-7619



**Henri Wauquiez Chance 37** 1973. Henri Wauquiez design. Fast, sturdy, beautiful. Solid glass hull and deck. No core to rot. No blisters. Proctor spars.

New Quantum sails incl. laminate genoa. New Yanmar 3YF (50 hours), 400-amp-hours battery bank, Balmar alternator, 2-bladed Maxprop. New telescoping whisker pole, custom awning, hydraulic belowdecks AP, GPS, radar, D/S, propane, nice interior. Photos at <http://www.jkelly. myphotoalbum.com>. Owners' website at <http://chance37.free. fr/repertoire.htm>. \$55,000.

Joseph Kelly jlkmd@yahoo.com 410-786-4592 (work) 443-994-0202 (home)



Alberg 30

1965 hull #72. Fully loaded classic cruiser in great cond. New gear includes Yanmar 3GM and drive train, shaft, prop, VHF, radar, windlass, wiring battery, CD/radio, compass, AP, much more. Heavily built, will take you anywhere! In Key Largo, Fla. \$17,500. Info and pictures: <http://ellenjohnandrubicon. blogspot.com/2006/05/rubi-high-and-dry.html>.

John Landrum Erlandrum@gmail.com 305-849-0646



Lazy Jack Schooner 32 1974. Classic Ted Hermann design. Hull #4. Full keel w/CB, 38-hp Perkins. Heat and air, new interior, steering, batteries, charger, cockpit enclosure. Complete list of upgrades/equip. See article January '06. In Charleston, S.C. \$29,900.

Manny Abraham 423-677-0604



Hinckley B40 1964 custom yawl, upgraded '89 Westerbeke 46, (1,620 hours), dark blue hull, white dodger, new sails and covers. New Simrad AP w/remote, new windlass w/remote, D/S, water temp, log, radar, bronze fireplace, sun shade, cockpit cover. In Ocean City, N.J. Reduced price \$110,000. More photos at <http://tinyurl. com/gfweq>.

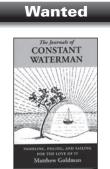
Joe Scafario homeportoc@aol.com 609-398-8400



Pearson 33

1970 cruiser/racer. Solid hull #143. Shallow draft 4', w/CB 6.9'. Careful restoration of bottom, deck, teak. New standing rigging, Schaefer RF. AP, cockpit controls. Yanmar 3GM diesel. Sail anywhere. Photos at <htp://picasa web.google.com/huizingaharry>. Boat details: Google blog search: Pearson 33 sailboat. In Mystic, Conn. \$19,500.

Harry Huizinga harrysail@yahoo.com 520-241-1043



Sailing readers

Good old boaters needed to read a new book: The Journals of Constant Waterman by Matthew Goldman. My last "Reflections' piece was May 2007. Who will want to read about Constant Waterman? Anyone who's ever paused to watch a water strider; anyone who's ever stood and listened to the sea; anyone who leans when they see a sloop heel; anyone who hopes to find a message in a bottle. Read more, buy a signed copy: <http://www. constantwaterman.com>. **Matthew Goldman** 

matthew@constant waterman.com

If you're a sailor, we have a site to see! **www.GoodOldBoat.com** 



www.tarsmell.com

www.cruisingsolutions.com













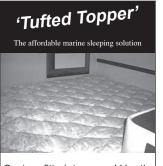
www.goodoldboat.com

#### Clothing



Stan and Kathy Sroga

#### Cushions/Bedding



Custom-fitted to your V-berth, aft cabin or dinette, this onepiece ultra-plush quilted pad promises a good night's sleep and will change the way your back feels in the morning.

Toll Free 888-989-6503 www.tuftedtopper.com

#### **Marine Art**

#### **The Perfect Gift!**

Immortalize your Good Old Boat as a scale model. The perfect gift for someone special . . . or yourself! A unique handmade replica will last long after the sailing is done! For commissioning info, contact:

Tom L. Thomas Nautic-Art PO Box 544 Kearney, MO 64060 Phone: 816-628-4336 http://www.nauticart.com

#### Websites

By-The-Sea An Online Boating Magazine Boatbuilders • Restorers Plans • Kits • Supplies Old boat brokers • Classifieds www.by-the-sea.com



#### Everything you wanted to know about...

Classified ads	Subscriber	Non-subscriber
Text (web only)	free	\$40
Photo and text (web only)	\$20	\$60
Text only (magazine and web)	\$35	\$75
Photo and text (magazine and web	) \$55	\$95

- Total word limit: 75 words.
- Web ads remain posted for approximately 90 days.
- Send email text to: classifieds@goodoldboat.com
- Or by post to: Good Old Boat, 1501 8th Ave. N.W., Jamestown, ND 58401.
- Photos may be emailed as jpgs or sent by post for scanning at *Good Old Boat*.
- Payment is made in advance by check or credit card.
- For full details, go to: <a href="http://www.goodoldboat.com/classified\_guide.html">http://www.goodoldboat.com/classified\_guide.html</a>> or call 701-952-9433.

#### Display classified ads (boxed product and service ads)

- \$38.50 per column inch, sold in half-inch increments.
- May not exceed 3 inches.
- Column width is 1<sup>5</sup>/<sub>8</sub> inches.
- Subscribers may have a \$35 discount once each year.
- Artwork to be scanned is an additional \$20 (one-time
- scanning charge).Classified display advertisers are invoiced following

publication of the issue containing their ads.

#### **Classified Deadlines**

Issue	
Jan. 2008	
Mar. 2008	
May 2008	

 Deadline
 Issue

 Nov. 1, 2007
 July 2008

 Jan. 2, 2008
 Sept. 2008

 Feb. 29, 2008
 Nov. 2008

De	a	lline
May	1,	2008
July	1,	2008
Aug. 2	9,	2008

## Most of our classified ads appear on the $\begin{array}{c} GOOD \\ ODD \\ Website: \end{array} BOAT$

http://www.goodoldboat.com/classifieds.html

#### Statement of ownership, management, and circulation

Publication title: Good Old Boat; Publication number: 019-327; Filing date: 9/1/07; Issue frequency: Bimonthly; Number of issues published annually: 6; Annual subscription price: \$39.95; Location of office of publication and headquarters or general business offices of the publisher: 7340 Niagara Lane North, Maple Grove, MN 55311-2655; Publisher, editor, and managing editor: Karen Larson; Owner: Partnership for Excellence, Inc., above address, jointly owned by Karen Larson and Jerry Powlas; Bondholders, mortgagees, and other security holders owning or holding one percent or more of total amount of bonds, mortgages, or other securities: None; Tax status for nonprofit organizations: N/A; Number of copies printed/total press run: 29,750 (31,250) 12-month average (Actual issue published nearest to filing date) • Paid outside county 11,005 (11,255) • Paid in-county 0 (0) • Dealer, vendor, counter, and other sales 6,841 (7,017) • Other classes mailed through the USPS 0 (0); Total paid and/or requested circulation: 17,846 (18,272); Free distribution by mail (samples complimentary, other free): Outside county 515 (582)  $\bullet$  In-county 0 (0)  $\bullet$  Other classes mailed through the USPS 0 (0); Free distribution outside the mail: 4,615 (5,903); Total free distribution: 5,130 (6,485); Total distribution: 22,976 (24,757); Copies not distributed: 6,774 (6,493); Total: 29,750 (31,250); Percent paid and/or requested circulation: 78% (74%); Publication of statement of ownership: November/December 2007

### Good Old Boat advertisers (bless 'em)

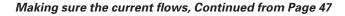
Alado Nautica USA64 www.aladous.com
Alpenglow Marine Lights72 www.alpenglowlights.com
American Rope & Tar60, 63 www.tarsmell.com
Atlantic Sail Traders64 www.atlanticsailtraders.com
ATN Inc/Topclimber63 www.atninc.com
Bargain Bedding84 www.bargainbeddinginc.com
Bebi Electronics Ltd61 www.bebi-electronics.com
Beta Marine US10 www.betamarine.net
Bingham Boat Works65 906-225-1427
Boaters' Resale Shop64 www.boatersresaleshopoftexas.com
Boating Direct/Rapid Response.65 www.boatingdirect.net
Boat Owner's World65 www.boatowners.com
Borel Manufacturing61, 63 www.borelmfg.com
Bo'sun Supplies
BottomSiders72 www.bottomsiders.com
Bristol Bronze
By-The-Sea website65 www.by-the-sea.com
Cajun Trading Company61 www.cajuntrading.ca
Cap'n Remo/tiller control69 www.capnremo.com
CDI (Cruising Design Inc.)73 www.sailcdi.com
Celestaire
Classic Rope Fenders63 231-882-4898
Cross Country Boat Transport63 651-437-2454
Cruising Direct/North Sails9 www.cruisingdirect.com
Cruising Solutions
Dancing With the Wind/ new sailing DVD8 www.dancingwiththewind.net
Durabak Company 10 www.durabakcompany.com
e-Marine, Inc62 www.emarineinc.com

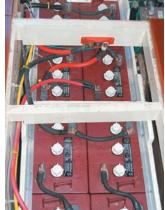
Electro Systems27 www.es-web.com	
Epoxy Polymers/ Progressive63 www.epoxyproducts.com	
Fatty Knees/Edey & Duff63 www.fattyknees.com	
Featherman Enterprises	
Fiberglass Supply75 www.fiberglasssupply.com	
Forespar Products	
Foss Foam Products62 www.newrudders.com	
Fuel Whistle Green Marine Products62 www.fuelwhistle.com	
Glen-L Marine Designs63 www.glen-l.com	
Good Old Boat Inside front cover, 2, 4, 18, 19, 74	
Great Lakes Marine61, 62 www.navstore.com	
Hamilton Marine73 www.hamiltonmarine.com	
Hayn Marine62 www.haynmarine.com	
Heat Shield/Everfair62 www.heatshieldmarine.com	
Heritage Marine Insurance58 www.heritagemarineinsurance.com	
Hitchcraft60 www.hitchcraft.net	
HotWire Enterprises62 www.svhotwire.com	
Indigo Electronics77 www.atomic4.com	
J.R. Overseas Co69 www.jroverseas.com	1
Knotstick60 www.knotstick.com	
LBI Inc/Fiberglass	
Lee Sails Northeast64 www.leesailsne.com	
Little Cod/Navigator Stove63 www.marinestove.com	
Long Beach Boat Company64 410-586-8255	i
Marine Cabin Fans63 www.marinecabinfans.com	1
Marine Diesel Direct	
Marine Fastener Warehouse62 www.marinefastenerwarehouse.com	1
Marine Mail Order/MMO76 www.marinemailorder.com	1

Marshall Catboats77
www.marshallcat.com
Mast Mate
Mauch's Sailboat Guide77 www.mauchs.com
Messing About/Design Works 65 www.messingabout.com
Minney's Yacht Surplus64 www.minneysyachtsurplus.com
Moor Electronics
Myerchin Gear60 www.myerchin.com
National Sail Supply64 www.nationalsail.com
Nautical Mind64 www.nauticalmind.com
Nautic-Art scale models65 www.nauticart.com
Navlight Indicators
NewGlass2
Noah's Fix it Warehouse61 www.noahsmarine.com
Northern Breezes Sailing School71 www.sailingbreezes.com
North Sail Outlet64 www.northsailoutlet.com
Performance Propellers
www.performancepropellers.com Porpoise Sailing Services64
www.performancepropellers.com Porpoise Sailing Services
www.performancepropellers.com Porpoise Sailing Services
www.performancepropellers.com Porpoise Sailing Services
www.performancepropellers.com Porpoise Sailing Services
www.performancepropellers.com Porpoise Sailing Services
www.performancepropellers.com         Porpoise Sailing Services
www.performancepropellers.com Porpoise Sailing Services
www.performancepropellers.com         Porpoise Sailing Services
www.performancepropellers.com         Porpoise Sailing Services

ScanMarine70 www.scanmarineusa.com
Sea-Cure/ World Wide Safes61 www.worldwidesafebrokers.com
Sea Frost
Seven Seas Books Online64 www.sevenseas-mn.com
Silent Paint Remover/Viking64 www.silentpaintremover.com
Small Craft Advisor magazine 77 www.smallcraftadvisor.com
Somerset Sails
Speedseal/ True Marine Direct61 www.speedseal.com
Sport-a-Seat
Sta-Lok/ Sailing Services, Inc61 www.sailingservices.com
Star Distributing/ epoxy sealer64 www.star-distributing.com
Superfurl/ Pacific Marine Rope64 www.superfurl.com
System Three Resins27 www.systemthree.com
Thai Teak Marine63 www.thaiteakmarine.com
The Coastal Passage
Tillermate
Tiller Watch
Tufted Topper         65           www.tuftedtopper.com         65
Unscrew-Ums/ T&L Tools61 www.tltools.com
Viking Trailers
Voyager Windvanes
Waterboot
White Water Marine76 www.whitewatermarineinc.com
Winchmate76 www.winchmate.com
Zarcor
Zephyrwerks/ Sheave Factory63 www.zephyrwerks.com

### www.goodoldboat.com





#### All the power needed

In a pinch, the generator will charge the batteries even if our charger fails. It generates all the power we need, loping along at less than half its rated capacity to run our battery charger at full

strength. Thus, when we run the generator, we usually make a point of charging all of our other battery-powered devices as well.

We plug the generator into the boat with a modified shorepower cord and charge our batteries with a Heart Interface EMS inverter/charger. The inverter draws from the batteries to deliver a maximum of 1,800 watts of 120-volt AC; as a charger it pumps about 60 amps back into the batteries, ramping down in stages according to the batteries' needs.

While we're happy with our inverter/charger, we wouldn't object to one with a capacity of 75 amps...but nothing higher. A comparable unit costs between \$1,000 to \$1,300. You can pay significantly more for units whose AC output is a pure sine wave, but we've never had any problems with our inverter's modified sine wave even when running our navigation computer, which uses a desktop power supply. You can buy stand-alone chargers for less, although they generally have less output as well. By the time you're looking at chargers that put out 50 amps or more, the price difference between chargers and inverter/chargers is negligible.

A number of sailors we've met who ran their generators through chargers that only delivered 20 or 40 amps regretted not having chargers with larger capacities. One friend who had only a 20-amp charger wound up charging his batteries with his engine much of the time - precisely what he was trying to avoid. A major reason why people left the dock with low-capacity chargers was because they had been warned that their generators would not be able to handle anything more powerful. Indeed, Xantrex insists that to operate a 50-amp charger at 12 volts, the generator needs to produce at least 3.5 kW, citing the difference between inductive and resistive loads. Faced with such science, I can only say that before we purchased our 2-kW Honda, we routinely ran our 60-amp charger on a 1-kW Yamaha generator without any problems. Poking around the Internet, I've discovered that others have had similar experiences. Go figure.

#### No "green" charging

As for "greener" charging technologies, such as solar panels, wind generators, or hydro generators, we don't have any. All three remain expensive and are at best supplemental sources of power. Wind generators are large and noisy, and hydro generators add a level of complexity to passagemaking we don't want. We like the idea of solar panels and used one on our Triton. But on *Momo*, although we have thought long and hard about the best way to mount them, we haven't found a solution we like. If we needed solar panels, we would have figured something out. In fact, the portable generator has proven to be so economical and easy to use that we've always found other ways to spend our money.

Generally, we run the generator every second or third day. We also run it while making passages, propping up one

end on a cockpit cushion to compensate for the boat's heel. Often we'll just run the generator in bursts. If we need to run it for more than hour, we'll wait until we watch a movie on the laptop — it's quiet enough that we only notice its purring when it stops. The only time we run the generator for longer than two hours is when we equalize the batteries, something we do every month or so to keep our batteries healthy.

#### Six-week supply

We carry two 6-gallon gasoline jugs, which our generator and small outboard need to share; this supply lasts around six weeks. On our trip to Alaska — during which the Perkins and its alternator saw plenty of action — those 12 gallons lasted more than three months.

Designing an electrical system on a limited budget means focusing on what you need to get the job done and resisting the allures of technological sophistication. Keep in mind not only the cost of your initial installation, but also the expense and difficulty of repairs and replacements. Before buying those vaunted AGM batteries, which were designed to withstand the *g*-forces of military aviation, ask yourself how frequently you'll be sailing your boat upside down. Before spending vast sums to set up the most powerful charging regime your batteries can withstand, consider that, even with a moderate charging capacity, it doesn't take long before your voltage regulator starts ramping current levels down anyway. And don't worry too much about not attaining self-sufficiency because you need to buy gasoline for your generator; remember that, every now and then, you need to buy groceries too.

Bernard Heise and his wife, Michelle, lived and cruised aboard a Pearson Triton along the Atlantic Coast before heading south aboard a Mason 43 with their larger family, which currently includes two young daughters, Lola and Jana. So far, they've sailed the waters of Mexico, Hawaii, British Columbia, and Alaska. Their website is <a href="http://www.madeonmomo.com">http://www.madeonmomo.com</a>>.

Most of our system's heavy-duty connections fit within this 8-inch by 8-inch square. The distribution posts were recycled from an old ammeter shunt.



### **Simple solutions**

Beginning the climb back on board, with a foot in the lower rope rung.







# Getting back aboard

## A better idea for a singlehander's ladder

by Richard Smith

O NE AFTERNOON, CONTEMPLATING THE FATE OF THE SOLO Sailor who winds up in the near-freezing waters of Puget Sound, I took Hervey Garrett Smith's excellent book, *The Marlinspike Sailor*, off the shelf and made a rope ladder. I slung it over a stern cleat where it swung under the canted transom and proved extremely difficult to use. I considered fixed or folding steps on the outboard rudder of our Ericson Cruising 31, but I didn't like the idea of drilling holes in the sandwich construction and the possibility of leaks. An ideal solution was elusive and, trusting to fate, I kept putting it off.

Then it occurred to me that I could improvise a solution with the over-the-gunwale stainless-steel boarding ladder that we use mainly for boarding the tender. It has J-shaped arms that loop over the gunwale and attach to deck-mounted brackets. All well and good, but the Cruising 31's gunwale curves up and over the rounded stern, posing a problem in mounting.

By a trial-and-error method of positioning the J ends in just the right place, I made chocks for the mounting brack-

ets so the ladder is nearly vertical when the tubular, rubber-footed standoffs touch the transom. The critical thing is getting the geometry right — the firm attachment of the J ends to the mounting brackets and the vertical arrangement of steps. It will be seen from the photographs that, ideally, the standoffs should be lengthened slightly to bring the ladder to a more nearly vertical position.

# When the ladder is ready for cruising, the rope rungs hang down to the waterline.

#### Not deep enough

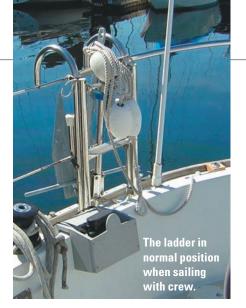
The lower part of the ladder folds up against the upper part while underway. When let down, the lowermost rung is just under water, not deep enough for a scared and tired swimmer to start the long haul from the water to the cockpit.



68 GOOD OLD BOAT

November/December 2007





My solution was to make a short, Hervey Garrett Smith-style, two-step rope ladder and lash it to the lower rung with about a 3-inch swath of ½-inch Dacron. When the ladder is ready for cruising, the rope rungs hang down to the waterline. The folded-up bottom part is tied to the top part by a strand of waxed sail twine. The person overboard pulls on the rope, breaking the twine, which brings the ladder down for boarding. The two rope steps sink below the waterline, easing the climb up.

Well, that's the idea. Now, when I go off on my own, I move the ladder to the stern and lash on the rope rungs. I've yet to use the ladder in anger and hope I never will, but at the very least, I feel a little better knowing I have a fighting chance of clambering back on board.

Richard Smith is a contributing eidtor with Good Old Boat. He has owned and built several boats, including an Atkin Red Onion sloop, a 30-foot Alan Pape steel cutter outfitted from a bare hull, an Atalanta 26, five dinghies, and an Ericson Cruising 31.



The ladder mounted in special stern chocks, above. The singlehanded cruising position with the rope ladder lashed to the stainless-steel ladder, with rope ends dangling in the water, at right. The rope ladder lashed to the lower stainless-steel ladder rung, below. Note the sail-twine tie. The singlehanded crew-overboard ladder deployed, below right.







## Marine Moisture Meters For Fiberglass and Wood

moisture levels in GRP and Wood. Simple to use, understand and evaluate. In stock are Electrophysics, Tramex Skipper Plus and Sovereign meters.



GRP-33 Moisture Meter To the trade from \$325.00

0



## **Cheap scraping**

## Remove old finishes an easier way

by Alfred Poor

I MADE A CONSCIOUS DECISION WHEN WE PURCHASED OUR GOOD old boat: it would have the minimum of wood trim on the exterior. Maybe it was too many spring weekends working on the brightwork of my father's boats when I was of an impressionable age, but I now admire a great varnish finish from afar...as far as possible.

Still, no boat is without some wood, be it a tiller or winch pad, or maybe even just a cup holder. And there comes a time when this requires a bit of attention, usually in the form of a fresh coating of your favorite finish. Before you can apply this fresh coat, you need to prepare the surface and, to most people, this means sanding.

Sanding is convenient, even though it may be tiresome. One problem with sanding is that it can also remove a lot of wood that you would rather leave attached to your boat. The good news is that there is a better way to remove old finish with a tool that has been used for centuries by fine woodworkers: a scraper.

A scraper is a thin metal rectangle that is set with a fine burr along the edge. If you push or drag the edge across the surface of a piece of wood, you are able to remove fine shavings. It is easy to control so that you can carefully remove just the finish and leave the wood. As a bonus, you get a smooth finish on the wood when you're done, finer than just about anything you can achieve by using multiple grades of sandpaper. You can buy scrapers for less than \$5 apiece from woodworking tool suppliers, such as Lee Valley Tools <a href="http://www.leevalley.com">http://www.leevalley.com</a>>.

#### Create your own

But what happens when you arrive at the boatyard and the weather turns out to be much better than forecast and you don't have a scraper in your toolkit? You can create a serviceable scraper from any worn-out hacksaw blade, which is an item that tends to be in ready supply in most boats' toolkits. All you need is a good flat file to turn it into a handy scraper.

Start by cutting or breaking the blade into a handy length. Most people find that 6 inches is a useful size, but I like to use the whole blade because the extra length means that I don't have to resharpen it as often.



<image><section-header><section-header><section-header><text><text><text>

Don't have a scraper aboard? Don't despair. You can make an excellent one using only a flat file and a hacksaw blade, top photo. Use the file to square off the top edge of the saw blade, second photo. The trick is in the third photo: use the tang of the file and rub it firmly along both top edges at a 30-degree angle to create a fine burr. Does this work? The fourth photo tells the story.

To sharpen the blade, start by dressing the top of the blade — the edge opposite the teeth — to make it smooth and square with its sides. Once the top is prepared, take the tang of the file — the handle end — and rub it firmly along the edge of the top. Woodworkers will debate the correct angle for this burnishing step, but I find that holding the tang at about 30 degrees works pretty well. Run the tang along both edges of the top of the blade to create fine burrs. You can test the burr by dragging it lightly across the back of a fingernail.

To use the scraper, some like to push and others prefer to pull. In either case, bend it slightly and then hold it at a slight angle leaning toward the direction of movement. Apply gentle pressure while moving the scraper over the surface. You should be rewarded with a thin, wispy shaving using a minimum of effort. A very few passes will quickly remove many layers of old finish and weathered wood, leaving you with a smooth surface that is clean and ready to accept a coat of your favorite finish.

Alfred Poor grew up sailing on the Chesapeake Bay on his father's boats and shares ownership of his second good old boat, Jambalaya, a 1973 Tartan 34C, which he sails out of the Bohemia River at the head of the Chesapeake.



763-542-9707 NorthernBreezesSchool.com SailingBreezes.com



### **Quick and easy**

# Wedge of silence

Just as annoying as the constant rolling back and forth of a stray pencil or flashlight is that perpetual "tap tap" of a loose cabinet door. Richard silences that troubling noise with a handy wedge at the ready.

### A simple way to mute that midnight noise

by Richard Smith

 $N \stackrel{\text{othing spoils a good night's sleep at anchor more}{\text{than the occasional rattling of cabinet sliding doors} \\ - usually in the galley or head enclosure. This annoyance is right up there with slatting halyards and the dinghy nudging up against the transom at slack tide: bonk!$ 

For relief, I've stuck wadded-up paper towels and clothespins between the offending doors as well as pages torn from magazines (but not *Good Old Boat*, of course), handkerchiefs, and old gloves — anything to silence the plywood chatter that stalks our dreams. But none of my clever and not-so-clever improvements has been appreciated as much as the little wedge of scrap teak that now hangs from a leather shoelace ready to do its job.

The wedge is 3 inches long by 1 inch wide and tapers from  $\frac{1}{2}$  to  $\frac{1}{2}$  inch. The shoelace is led through holes in the thick end of the wedge and cabinet framing above. Stopper knots hold it all in place.

Richard Smith's bio is on Page 69.



Bottom Siders 2305 Bay Avenue Hoquiam, WA 98550 Email:cushions@bottomsiders.com Fax: 360-533-4474

### Save Your Aft!

Using one of our 1400+ patterns, or your pattern, let our craftsmen create a comfortable, durable, and stylish set of all-weather cushions for your cockpit. Find your custom, closed cell foam cushions at **www.bottomsiders.com** or call us toll free at **800-438-0633** for more info.





### Hand Crafted, High Efficiency Light New L.E.D. Night-Vision Option

Alpenglow Lights use the latest compact fluorescent and L.E.D. technology for unmatched efficiency and light quality. The attractive wood fixture is available in several models including night-vision and splash-proof. Prismatic lens designed for wide-angle illumination. Dual



power switch allows choice of bright light or gentle glow. Also, high-efficiency brass reading light. Brochure includes helpful information on selecting cabin lighting.

Alpenglow Marine Lights P.O. Box 415 • Eureka, MT 59917 • 406-889-3586 www.alpenglowlights.com



For more information & to order see www.tillermate.com

# **Boat Project? Project Boat?**

See us first!

Stainless Steel Marine Hardware Rigging & Fittings at Reasonable Prices

See our complete catalog and order on the Web:



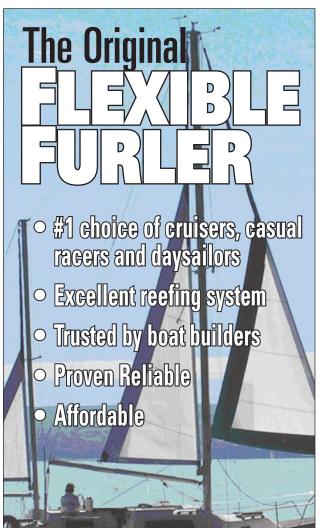
Or call toll-free for catalog and to order (888) 433-3484



Traditional Style Gunwale Guard Made with a heavy-duty, non-rotting polyester cover, which is vulcanized to a non-collapsing air-cell sponge rubber. If you want the old look in a new style, this is it.

> 3/4 Round List 9.85 TEM-1518-QR Order# 134053

800-639-2715 hamiltonmarine.com



Nimble • Catalina • Hutchins • Seaward • Precision MacGregor W.D.Schock • Stuart Marine • International Marine To name just a few of the builders who choose the Flexible Furler

### Cruising Design is now offering an affordably priced mainsail reefing system and a patented spinnaker furling system

The Flexible Furler is the original, tried and true, flexible reefing system. We designed the first Flexible Furler 12 years ago, and we've since learned even more about our product and the sailors who use it. It was a bulletproof design back then, and we have taken every opportunity to make the Flexible Furler even better over the years. The result is a *proven* yet updated reefing system designed for a lifetime of flawless service.

CRUISING DESIGN INC. 44 James St., Homer, NY 13077 Tel: 607-749-4599 Fax: 607-749-4604 e-mail: sailcdi@verizon.net • website: www.sailcdi.com



# Simple solution for hard-to-reach stowage

by David VanDenburgh

O DD-SHAPED AND DIFFICULT-TO-REACH STOWAGE COMPARTments present challenges to stowing and retrieving gear aboard. On *Ariel*, our 1979 Cape Dory 36, the bins located beneath the quarter berth provide much-needed stowage space, but their inaccessibility and shape make retrieving gear difficult and frustrating. We wanted a way to identify and grab gear quickly without turning the compartment inside out.

Our solution was simple and effective. We sewed several drawstring bags made of ripstop nylon and used compact discs — attached to the drawstrings — as oversized, durable labels. (Although we printed on adhesive labels using a computer, a permanent marker would work just as well.)

Now, retrieving the desired gear is a simple matter of grabbing the appropriate label and pulling the bag out of the compartment. And stowing the gear is just as simple: throw the gear in the bag, drop the bag in the compartment, leave the labels visible on top of the bags.

One word of caution: it is possible to make the bags too large. Bags need to be sized according to the bin opening. Making them larger than the opening will, of course, cause chafe or complicate retrieval. Making bags that are slightly smaller than the opening will maximize stowage space and make getting the gear a cinch.

Total cost for the project was around \$50, and it took us about two hours to sew the bags using a standard sewing machine. Those interested in saving time — and maybe even money — might be able to buy manufactured bags ready to go (such as mesh laundry bags).

We have used this method for more than five years to stow and organize our less-frequently-used gear, such as adhesives and sealants, plumbing parts, paint and finishing supplies — and the system is working great. One possible improvement, however, is the addition of a slight bevel to the inside edge of the bin to reduce chafe on the bags. Also, for boats with very deep lockers, it might be helpful to attach the drawstrings to hooks near the lid to hold them at the ready.

David VanDenburgh started sailing with his parents at the age of three and has been afloat ever since. He's now introducing his 4-year-old son, Jakob, to the world of sailing. A high school English teacher, he maintains and sails Ariel, his family's Cape Dory 36, and is completing the restoration of an Alberg 30 in his spare time.

Parts, tools, goops, and seldom-used gear can be stowed in any cavernous cockpit locker if you have a clever retrieval system.



### **'Tis the season. Books make great gifts!** Looking for something special for that special someone?

#### The Solitude of the Open Sea by Gregory Newell Smith



### Into the Light: A Family's Epic Journey by Dave and Jaja Martin



More than 3,000 books and videos — Sailing titles only

www.goodoldboat.com/bookshelf.html

### **Quick and easy**

How does that saying go? You can take the girl out of the country, but ... In this case, you can take the outboard out of the salt water, but can you take the salt water out of the motor? Alan Lucas says a freshwater flush in a bucket will do the job.

# Bucket job Being kind to your

outboard engine

OW-POWERED YACHT

by Alan Lucas

L tender outboards are often overworked and under-serviced. They rarely, if ever, enjoy a thorough freshwater flush. This can be addressed by, first, placing your outboard's stern rail mount high enough to slip a bucket under its leg and, second, by periodically filling the bucket with fresh water and running the engine in it. If it is a direct-drive, gearbox model, start and run the engine at idle to prevent the water from being displaced within seconds.

Alan Lucas, an Australian from New South Wales, has been cruising for 40 years, primarily south of the equator. He's authored several Australian cruising guides.

### SEA FROST<sup>®</sup>



ILLUSTRATION BY ALAN LUCAS

### CHILLING SECRETS

Make it cold. Make it efficient. Make it durable; and most of all back it up with the best product support in the industry. Simple as that. Whether it's the popular 12-volt BD or another from our full line of refrigeration systems, Sea Frost will build you a quality product custom tailored to fit your boat.

> Sea Frost — The Thrill of the Chill. 1-800-435-6708; sales@seafrost.com



## **SAILING INSTRUMENTS**

For over 30 years Moor/EMS has been making reliable marine instruments at an affordable price. We carry a full line of analog and digital instruments.

### SPEED • LOG • DEPTH • APPARENT WIND • WINDSPEED

11 models to choose from Prices start at around \$120. Call for a complete line Catalog.

Electronics, Inc. 95 Dorothy St. Buffalo, NY 14206 1-800-876-4971 or 716-821-5304 www.moorelectronics.com



Check out our catalog at: www.fiberglasssupply.com Or call: 509-493-3464 Located in Bingen, WA

# **Cleaner anchor chain**

# A cheap alternative to the washdown pump

by Bob Steadman

ASHDOWN PUMPS ARE GREAT WHEN A MUDDY ANCHOR CHAIN comes aboard. But there is a cheaper alternative. I took two scrub brushes and linked them together with a piece of plywood so that their bristles touched one another. Brushes with long bristles work the best. Another piece of plywood was hinged on the other side to provide access





for the chain. I used a piece of shock cord and a hood to keep the "door" closed, but any kind of latch or bolt will do. Next I drilled a hole at the top through which to attach a piece of light line and two 2-pound scuba weights to make it sink. Now, when we bring up the anchor, the scrubber is put around the chain and lowered to about 10 feet below the surface of the water. As the chain comes up, the brushes clear the mud and the chain comes on deck without all that goo. It really works well. 📐

Three years ago Bob Steadman and Kaye Nottbusch left Los Angeles. They went through the Panama Canal and worked north to Boston last summer. Currently they are in the Rio Dulce, Guatemala, hiding out from hurricanes. Their boat is a custom Cascade 36 that Bob built. It was launched in 1984.

Two brushes, hinged together so the anchor rode can be inserted, will clean a muddy chain nicely. The assembly is weighted and a short retrieval line is attached.



# Marine Mail Order Quality Marine Hardware at Discounted Prices

Portholes & Deadlights Cowls & Mushroom Vents **Gallows Frames & Bases Cabinet Hardware** Halogen & LED Lighting Forestay Levers & Bases Mast Steps

Windlasses Teak & Bronze Blocks Cleats, Deck Prisms Plumbing Hardware Deck Fills T-Track Stainless Steel Wheels

Visit our secure website: www.marinemailorder.com Or call for catalog: 707-745-4372 Toll free: 888-228-6758 • Fax: 707-745-1756



www.performancepropellers.com

cruise. So go ahead. Take a quick peek at our 15-, 18- and 22-footers. Proven designs for over 40 years. Visit our website or call for a brochure. www.marshallcat.com 508-994-0414 • Box P-266 • South Dartmouth, MA 02748 INDEPENDENT BACK SUPPORT At Helm Station Against Coaming On Foredeck The Ultimate in Sport Portable Seating Eight Sunbrella® Colors....\$94.95 Made in the US Imitated ... but never duplicated! Ph. 800-870-7328 • Fax. 703-723-3742 • www.SPORTASEAT.COM



In any breeze.



**NO MORE BARNACLES, too!** Improved engine performance can best be obtained with the right propeller. Introducing the **only** prop designed from the ground up for the direct drive Atomic 4. This 10" diameter by 7.4" pitch Bronze prop is guaranteed to increase RPM and power and reduce "prop walk" astern (as compared to a "Standard" 12 x 9 two-blade prop).

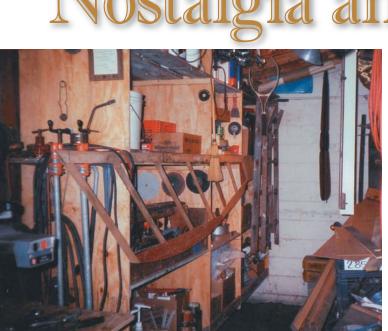
### **Only \$310**

Visit our Web site: www.atomic4.com or call 800-428-8569 for more information on this exciting new offering as well as how to operate barnacle-free all season. Also see our other tried and proven upgrade kits for the Atomic 4.

Indigo Electronics, Inc. 105 Pipe Kiln Ct. Williamsburg, VA 23185

#### www.goodoldboat.com 77

### **Cruising memories**



# *Closing his shop conjures up decades of memories*

### by Kitty Bennett

W HY AM I CRYING? IT'S MY HUSBAND'S SHOP THAT WE'RE dismantling after 21 years, and he's the one with the white-knuckled grip on the clamps, decrepit chisels, and other boatbuilding detritus that I'm attempting to liberate from his grasp. Still, I feel like we're both undergoing a radical life-ectomy as we prepare to relinquish this place. For us, this is hallowed ground. This is where our beloved ketch, *Equinox*, was born.

The boat was launched six years ago. We left our jobs and went cruising last year. If we can't fit our possessions into a 4- by 8-foot storage unit, then something's very wrong with our life.

On this we absolutely agree. Right? Sweetie?

"I think I'm going to go through your galley and start throwing stuff away," my husband mutters darkly.

Clyde, the saintly man who rented us this place at the back of his tile business 21 years ago for the boatbuilding project that was going to take two years, encouraged my husband to stay on, post-launch. "A man's got to have his own shop," he explained.

But Clyde has retired and turned the business over to his son. We are now on our second generation of landlords. The son has raised the rent and covets the space so he can

# retrospection

expand over the remains of my husband's shop. I'm guessing archaeologists will someday marvel at the little bronze bits of hardware, the hunks of caulking, and the thousands of scraps of sandpaper they discover under the Florida sand that is slowly burying all the evidence of his time here. They will discover the absolutely level concrete pad he poured to set the keel upon before the hull took shape. And when they do, the date he wrote in the wet concrete — 10 Jan. 1986 — may help them put it all in perspective. "As late as the 20th century," those archaeologists might intone, "some boats were still built of wood."

### Time to move on

It's time. We really do need to move on. Right? Sweetie?

"Don't pull those off there," Bob bristles as he re-nails our late dog's old tags to a wall. "My dog's heart and soul are here." At that, my eyes fill with tears, as I remember the day he found his old boatbuilding companion, Salty, dead in a corner of the yard, where she'd limped off to die, alone, after he left for the night.

"I know this is really hard," I offer, despite the fact I know nothing of the sort. "So much of your life is here."

As in 21 years of greeting cards: every card my husband has ever received has been stapled to the shop doors over the years. Birthday cards, anniversary cards, retirement cards, Father's Day cards from our sons. Our sons, now 33 and 35. The sons who were going to go cruising with us when we finished the boat in two years. Limp, faded from the sun, and partially shredded, the cards and the sentiments they convey fall away with the slightest encouragement, unsalvageable.

### It was his place to be alone, to ponder, plan, rage, despair, and exult ...

In hour seven of the Great Purge, the dismantling of the wood-storage rack begins. The different types of wood are all starting to look like one dull gray, somewhat termite-ridden, mass. The yellow pine that became our boat's frames is hard to distinguish from the cypress that became the planks or the teak that became a lot of other things. It all must be cut down to a size that will fit in the now-overflowing dumpster.



My husband fires up the radial-arm saw that entered our life when our older son was a 1-year-old. The switch breaks, the first time the saw has ever failed him. This is clearly a sign of something, although I think it best not to point it out.

### No electrical parts

There is more muttering about how he's already thrown out his bucket of spare electrical parts. Five minutes later, repair accomplished despite the obstacles, he makes a cut, stops, sniffs. Teak. We put it aside to be taken to the storage unit. You never know. And so it goes until there's no wood left but that one precious piece of teak. Best not to be tempted to begin another boatbuilding project.

We separate piles of stainless from bronze and brass in preparation for a trip to the metal salvager, every piece setting off memories like little explosions in our brains. A short length of keel bolt. Oh, yeah, that was the day I urged Bob to vigorously apply a large reciprocating saw to an area of rot near the keel. In an instant, he'd sliced through two bolts that held the keel to the rest of the hull. I cringe at these reminders of the Saw-Through-Keel-Bolt Disaster or the Replace-the-Rotten-Rib Incident and the ensuing foul, weeklong depressions they provoked. They made us think we'd never finish building the boat, but it seemed even more insane to give up.

My own memories are almost beside the point. It was his place, filled with his stuff, arranged according to his particular organizational scheme, a place where everything was **Some important part** of his being will be left behind here, in this dusty, hot, sandy corner of his world, surrounded by junkyards and barbed wire.

under his control in an uncontrollable and chaotic world. It was his place to be alone, to ponder, plan, rage, despair, and exult, usually accompanied by a few beers kept cold in his little, decidedly unhygienic refrigerator. Some important part of his being will be left behind here, in this dusty, hot, sandy corner of his world, surrounded by junkyards and barbed wire. I don't think there will be another place like it ever again in his life.

But it'll be great when this is over with. Right? Honey?

Kitty Bennett and her husband, Bob, spent nearly 20 years in Florida building and outfitting Equinox, their 36-foot wooden ketch, designed by L. Francis Herreshoff. They retired in early 2005 and have since cruised the East Coast from Florida to Massachusetts, including Chesapeake Bay.







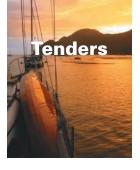












a sleek, thin, one-person kayak in the origami style, using a very thin fiberglass sheathing filled with foam. The *Gull* is big enough (or rather Frank's French posterior is skinny enough) to

carry him with one well-placed 5- to 8-year-old in his lap. For a while, this worked quite well. The need for speed and adventure (and escape) could be assuaged for one or two of us at a time. It provided quality time ... one-on-one with dad, a chance to hold cabin fever at bay ... and it kept brotherly love between the two boys alive for a few extra hours each day. The old *Barge* was always available as a solid swimstep, landing craft, and salvaging platform.

## Ah, the pursuit of tender bliss keeps our minds sharp and our muscles tuned.

Last Christmas we added two used short-and-broad Tupperware kayaks to our collection (*Ducky* and *Froggy* in honor of their colors and behavior on the water). We thought they'd be fun for the kids to mess about in. The boys actually did pretty well at paddling in perfectly calm weather the short distance to the shallow well-protected muddy beach in Cat Harbor. The kayaks qualify only as toy tenders, but practice will make perfect.

### New dilemma

As I write this, the 8-year-old will soon be nine. And while he does have his father's build, and while the *Gull's* width still accommodates their spiny arses, she will not house the rapidly expanding length of leg. Perhaps one triple kayak would suffice for the next two to three years, with the two kids in each other's laps in the middle. How long would the 6- and 8-year-old last in the same hole? How many years or how many hours... another dead end. Dinnertime conversation turned toward two tandem kayaks. Frank already has them named *Endeavor* and *Discovery*. I think it might be unlucky to name them prematurely.

As a practice run, Frank made a two-person plywood Pygmy Boat kit kayak as a wedding present for some good friends. We tried her out for a couple of trips to Catalina and Santa Barbara Island. She is beautiful and we're jealous of the newlyweds. Since we fabricated our own envy, we'll just have to fabricate a way out of it. But before we expend all that sweat and money, I have to stop and ask, will that solution really meet our needs? She's almost too pretty to mess about in. And how long would this solution last? One of my joys of go-

### Resources

<http://www.folbot.com> <http://www.plyboats.com> <http://www.pygmyboats.com> John Steinbeck: *The Log from the Sea of Cortez*  ing in tandem is the freedom to stop paddling now and then, knowing that my mate will pick up the slack for a little while and we'll still be making progress. The boys have turned this into an art form. One mother paddling a two-person kayak is quite a slog. My only hope is that as my arms give out, the boys will grow into strapping paddlers to take up the slack.

### **Tentative step**

The newlyweds took delivery of their gift, forcing Frank to take a tentative step toward our own tandem solution. He designed a 1.5-person kayak dubbed *Pelican*, expanding our flotilla to four kayaks. *Pelican* is more stable and roomy than *Gull*, which results in compromised speed. But she's easier than a tandem with a sightseer in the front seat.

By now you may be wondering how many dinghies a boat can hold...more than I thought, that's for sure. *Bille en Tête* is quite a picture sailing into an anchorage with the four kayaks on deck. The main victim is our requisite and delightful spinnaker run home. With all those tenders on deck, we're loath to fly it since the pole is stowed at the bottom of the pile. Realistically, our current state will last only another year or two. Time to commit to a new solution and reduce our fleet to two tandems. By the time they're built, the boys will be more active participants in the paddling task.

So what are the downsides of having two kayaks? Our backyard looks like a boatyard, I expect the zoning department to knock any day. Frank does not really need a new project of this size (we also own a home now that has its own thirsty projects). Kayaks don't make very good dive boats and the kelp forests around here are spectacular. Soon the boys will want more independence and speed. They'll be old enough to build their own kayaks or find their own outboard floating in the ocean. Ah, the pursuit of tender bliss keeps our minds sharp and our muscles tuned.

The only constant is change and *plus ça change*, *plus c'est la même chose*. A new tender every year and the same old question every year: "What's next?"

Margo Reveil is a building architect working in Los Angeles to fill the cruising kitty. She's been sailing since the age of three. She, her husband, and two boys (now 9 and 12) collectively have 100 years of sailing experience. They lived aboard for four years, then moved ashore when the younger son was born.

The family's stable and slow *Barge* had her moments when the children were small. The tender for all mothers, she made a great playpen until she was considered something more akin to a sea slug by a couple of boys who became more interested in speed than security.



### Last tack

# To knot, or not to knot?

## *That's the question. But is there an answer?*

by Jerry Powlas

VERY EARLY IN THE LIFE OF *GOOD OLD BOAT* MAGAZINE I learned to regret publishing any material about knots. Knots are difficult to understand and difficult to describe. Any description of how to tie a knot that goes beyond "tie the darned thing as shown in the illustration" will almost certainly be wasted words to most readers. Sadly, many illustrations are little better.

Knots also bring out odd elements in the personalities of otherwise pleasant and agreeably disposed sailors. Many sailors cannot tolerate the possibility that someone else may tie a knot differently than they do and call it by the same name. The ubiquitous bowline can be tied two ways, but I'd been sailing 35 years before I found a book on knots that allowed that either way was acceptable.

Several times each season someone will point to a knot on my boat and challenge, "What is the name of that knot?" The thought that it might not be "in Ashley's" is almost more than they can bear. The orthodoxy in the tying of knots exceeds all but perhaps the orthodoxy of religion. Very few "new" knots are devised by anybody over the age of five. And yet, the knots found in *Ashley's Book of Knots* were devised when only natural fibers were available. Natural fibers have a poor service life, but they have excellent coefficients of friction. I have found several knots that are improved by modifications that will allow them to be used with the more slippery lines currently popular.

Concerning the choice of doing a particular task with a knot or a device of some sort, sailors, like landsmen, are divided into two camps. Some sailors and most landsmen are limited to tying their shoes and little else. Other sailors glory in the use of knots for everything short of weather forecasting.

### **Knots are slower**

Any sailor who has raced a few seasons with pickup crew from the yacht club lawn knows that knot-tying skills vary from sailor to sailor. And any serious racing sailor knows that knots are inherently slower than the devices that replace them. Where speed in each task is all, the no-cost knot will be replaced by the \$30 snap shackle on all the winning boats. Eventually, he will have nary a knot left needed in the running of his boat.

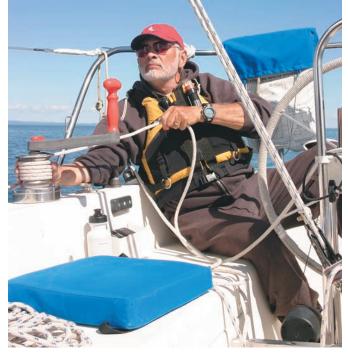
Yes, yes, yes. Knots are cheaper. They are safer. They are more seamanlike. But they are slower, and you and your crew have to know how to tie them. There is an aptitude problem with knots. Not everyone can be taught to tie every knot. I know of a woman who wrote an impassioned editorial about using knots instead of gizmos (see the July 2007 issue), and yet this otherwise skilled sailor will often tie the anchor line off to the deck cleat with the standing and hauling parts reversed. This is all the more peculiar considering she will make a proper cleat hitch in a mooring line and get it right every time.

In fact, the cleat hitch is not often made correctly. Take a walk down the pier at your local marina and you will note that nine out of 10 sailors and 11 out of 10 powerboaters can't make a cleat hitch. In fact, they can't make two hitches in a row that even look alike. Also, consider that even though there are nine or more bad cleat hitches for every one that is made correctly, very few badly tied vessels slip their mooring lines until their crews return and untie them.

So, learn to go easy on your fellow sailors, even the ones who put a granny knot in their shoelaces. The bowline can be tied two ways; the midshipman's hitch is improved with a few extra turns, as is the rolling hitch. It is not the knot that is important, it is securing the line that is important. For that, nothing beats a cam cleat.

I guess I'm really not a purist.







### The Seahopper folding dinghy, Continued from Page 34

inflatable bags or an external gunwale-mounted inflatable fender. The sail rig, a basic gunter with foresail, is straightforward to rig and use. The test boat had two mast-step positions, one aft so the boat could be sailed with both sails, the other forward for mainsail only.

### Very rigid

Aside from the rapidity of setting the boat up, two other features impressed me: the boat was a pretty craft and also very rigid. When we

picked her up and lowered her into the water, she felt exactly like a non-folding dinghy, an impression enhanced by the fact that the PVC fabric was largely concealed by the ply. Steve explained that the robustness of these boats is a function of the high strengthto-weight ratio of marine plywood coupled with the natural spring and flexibility in the design. Common sense suggested to me that this would be so, yet I could detect no flex at all.

Geoff sailed her in virtually no breeze for the camera, then I had a try. I discovered that primary stability was reassuring and secondary stability, as the chine bit into the water, excellent. This would of course be even better with the inflated sponson fitted, generating even more stability. The boat is light and rides high in the water with transoms clear, her beamy design and easy deadrise lending stability.

I was luckier than Geoff and found my little voyage of discovery blessed with somewhat more of a zephyr, but not much more, so I heeled the boat to leeward anyway to set the sails to a curve to catch what there was and soon found steerageway. She answered



her helm well and, in what were really quite challenging conditions for such a diminutive vessel, rewarded my efforts with the gift of an enjoyable sail.

She is a small boat, but by tender standards not too small. I would guess she could be rowed comfortably with two adults aboard, maybe even a third smaller person in sheltered conditions. At a push, two adults could sail her, depending on conditions, but one adult with a child or smaller adult would be more comfortable.

#### **Freak wave**

Several years ago, a mature couple were cruising the English channel when their vessel was inundated by a freak wave. They were attached by harness lines but had to release these as their boat was sinking rapidly. Then they spotted their little Seahopper floating by, still folded. They slid aboard and, without seats, used their bodies to brace the dinghy to a roughly unfolded shape. That buoyant little vessel kept them afloat in hard conditions for 15 hours until they were rescued. As courteous as they were courageous, they thanked Steve for saving their lives. Steve refitted the dinghy, which subsequently returned to service.

For serious sailing with two aboard, the 10-footer would be a better proposition, but the 7-foot 10-inch craft was surprisingly agile for a singlehander. Images of pleasant days spent in a light breeze exploring a sheltered anchorage or inlet came easily to mind.

This is exactly what I plan to do. When my current project boat nears completion I will follow in Don Launer's wake and invest in a Seahopper. The folded boat will stow nicely alongside my companionway hatch exactly as it does in Don's boat. In fact, I may just buy the boat a little sooner so I can keep my sailing hand in while working on the bigger ship. I hesitate for one reason only: that I would not be able to resist sailing that pretty little dinghy around the creek when I should be working on *Gwendoline*.

Geoffrey Toye, a writer and journalist, lives in a beach house in Wales and has been involved with small craft for more than 40 years. Good Old Boat has produced an audiobook version of his novel, Telegram from the Palace, a work of sailing fiction full of conspiracy and intrigue.



Call us toll free: 888-288-5195 Email: info@bargainbeddinginc.com Website: www.bargainbeddinginc.com

# A waypoint day

## One of those times to think of seasons and cycles

by Robert Hlady

T'S A FUNNY THING, THE WAY WE DECIDE THAT CERTAIN DAYS ARE unlike other days. I thought about this as I began powering my O'Day 30 away from her mooring. I was following everyday routine: always motor out at first, just in case the breeze wants to push you into a mooring ball or lobster pot. It was morning, bright and crisp. The breeze was just a hint of what it would be within an hour. It would have been a perfect sailing day.

Would have been. But on this day I had the sails stripped, running rigging stowed, boom on the floor of the main saloon, freshwater tanks empty, and rigger's tape wadded in the trash can. And I wasn't coming back. This date in November had been looming in my mind for weeks. Here it was, and it felt, well, different.

Not sad, exactly. Not sad at all, come to think of it. Pretty soon, the wind filled in, and Buzzards Bay was doing its famous impersonation of a washing machine. How hard was it blowing? Beats me - I had disconnected the masthead unit the day before. Who cares? The boat was frolicking and plunging like a tipsy porpoise. That diamond-bright morning crispness had turned sharp and cold, but to one who was bundled up in foul weather gear as I was, it was good. Landmarks slipped astern, just as they had on a hundred other days, but this day, a fugitive idea pushed to the surface.

"Sail on!" Maybe it was the ducks. Flocks of mergansers or buffleheads were all over the bay. They'd erupt out of the water and launch themselves south whenever I approached. Either the ducks were talking to me or the boat was. "Follow! Migrate!"

### Why not?

Why was I thinking this way? I had sailed all summer without giving much thought at all to making a break for it. And now today, despite the fact that I was driving a boat stripped and readied for winter embalming, the idea of sailing over the horizon was suddenly so real I could almost touch it. Why not?

Well, because *Slo'Day* is not really an offshore boat. And because I didn't want

to singlehand it that long. Besides, there were no sandwiches aboard. So I turned into Mattapoisett Harbor, But I promise you, making that turn required self-discipline.

I drove the boat onto the trailer, the poppets grabbed her, and all her life drained away. Strange. Today it felt unnatural to walk on a deck that wasn't moving. Today

I knew I wouldn't like the look of a dismasted sailboat on a trailer. So I pitched in to help the yardmen finish up quickly. And when they drove away, I felt...what?

Well, no time to figure that out. A moon low tide was coming in about an hour — a good time to pull my mooring ball and drop in the winter stick. Tools to gather. Chains and shackles. Death-defying gymnastics in a dinghy. And that pungent smell of algae and limpets and barnacles and all-purpose marine slime. Back at the launching ramp, there were the rituals of deflating and rolling up the dink, scraping the mooring ball with a quahog shell, and the huffing and puffing and muttering and knuckle-busting, and finally it was all over. And I felt ...

> I felt like walking down to the end of the ramp and just standing there for a while, watching the afternoon

fade away. Way out in the cove, there was a forlorn and empty spot where my boat used to ride her mooring. It looks toward trees that had recently looked like fireworks, now past their peak. The water, once warm and cloudy, was getting cold and clear ... and tending toward gray. For some reason, it was a day, unlike other days, to think about seasons and cycles and endings and beginnings. It was one of those waypoint days, on which some people end up feeling a little sad, a little resigned, and maybe a little old.

But not me. Not this year. Not yet.

Yet another apostate lawyer, Robert Hlady eked out sailing opportunities for years in the upper Rio Grande Valley, before relocating unexpectedly to the shores of Buzzards Bay. Life is good. He sails a 1979 O'Day 30, and if you ever see him out there, you'll know him by the deeply satisfied smile he wears whenever he's on the water.



Greetings from Sailrite



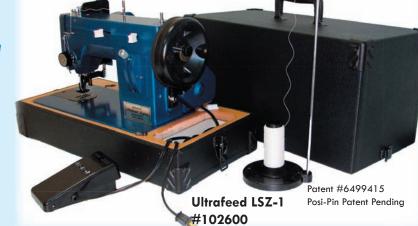
Canvaswork and Sailmaking are Sailrite's specialties and we're here to help you with your projects. Build it new, repair it, retro fit it— You can do it! Sailrite can help!

Call or email today to get a copy of our new 2007 Supply Catalog.

Matt Grant, Inventor of the Ultrafeed LSZ



Sailrite's World Famous Ultrafeed<sup>™</sup> machines feature a mechanical "walking foot" with built in welting tunnel for excellent material feeding and consistent stitch lengths. Whatever you need to dobuild a dodger, make an awning, cover a cushion, sew up a sail, it's easier on a Sailrite Sewing Machine!



Tools



Sailrite's catalog and websitewww.sailrite.com includes kits for sails, dodgers, biminis, covers, bags, Sunbrella<sup>™</sup>, Dacron<sup>®</sup>, ripstop nylon, mesh fabrics, foam, headliner, snaps, slugs, slides, grommets, thread, zippers, webbing, tools, instructions and much more.



"Your new catalogue is beautiful - and they get fatter every year! Have just flipped through it but I know it will be well thumbed in the coming months. Will also put the 2nd copy of the catalogue at our yacht club with a note about how excellent your service is. I think I'm just going to take my walking foot sewing machine down to the club to sew the zippers for the stack pack on to the sail and I'm sure I'll have lots of people ooh-ing and aah-ing over it :-)" -Bonnie & Ken, Canada



Sailrite Enterprises, Inc. • www.sailrite.com • 1-800-348-2769 • email: sailrite@sailrite.com 4506 South State Road 9-57 • Churubusco, Indiana 46723 Annapolis, MD 410-263-6732 • Churubusco, IN 260-693-2242 • Fort Lauderdale, FL 954-779-2227